

CALIFORNIA COASTAL COMMISSION

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REGULAR CALENDAR
STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-09-051

Applicant: City of Carlsbad Agent: Michelle Ferguson

Description: Reconfiguration and augmentation of an existing rock revetment and replacement of wing walls as a component of the larger project replacing Encinas Creek Bridge.

Site: West side of southbound Carlsbad Boulevard at Encinas Creek, Carlsbad, San Diego County

Substantive File Documents: Hydraulic Evaluation by Nolte Associates, Inc., dated February, 2009; City of Carlsbad's certified Local Coastal Program; City of Carlsbad CDP #08-09

Standard of Review: Chapter 3 Policies of the Coastal Act

Summary of Staff's Preliminary Recommendation:

Staff is recommending approval of the Coastal Development Permit with several special conditions. While the project as proposed by the City does not result in any immediate concerns regarding impacts to coastal resources, the project does not provide assurances that the rock revetment will not result in any future impacts to public access or marine resources. Staff is suggesting seven special conditions that serve to address these concerns.

I. PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

MOTION: *I move that the Commission approve Coastal Development Permit No. 6-09-051 pursuant to the staff recommendation.*

STAFF RECOMMENDATION OF APPROVAL:

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 TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the 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 would substantially lessen any significant adverse impacts of the development on the environment.

II. Standard Conditions.

See attached page.

III. Special Conditions.

The permit is subject to the following conditions:

1. Disposal of Export Material/Construction Debris. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall identify the location for the disposal of export material and construction debris. If the site is located within the coastal zone, a separate coastal development permit or permit amendment shall first be obtained from the California Coastal Commission or its successors in interest.

2. Long-Term Monitoring Program. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit for review and written approval of the Executive Director, a long-term monitoring plan for the existing shoreline protection. The purpose of the plan is to monitor and identify damage or changes to the revetment such that repair and maintenance is completed in a timely manner to avoid further encroachment of the revetment on the beach. The monitoring plan shall incorporate, but not be limited to the following:

- a. An evaluation of the current condition and performance of the revetment, addressing any migration or movement of rock which may have occurred on the site and any significant weathering or damage to the revetment that may adversely impact its future performance.

- b. Measurements taken from the benchmarks established in the survey as required in Special Condition #5 of CDP #6-09-051 to determine settling or seaward movement of the revetment. Changes in the beach profile fronting the site shall be noted and the potential impact of these changes on the effectiveness of the revetment evaluated.
- c. Recommendations on any necessary maintenance needs, changes or modifications to the revetment to assure its continued function and to assure no encroachment beyond the permitted toe.
- d. An agreement that the permittee shall apply for a coastal development permit within 90 days of submission of the report for any necessary maintenance, repair, changes or modifications to the project recommended by the report that require a coastal development permit and implement the repairs, changes, etc. approved in any such permit.

The above-cited monitoring information shall be summarized in a report prepared by a licensed engineer familiar with shoreline processes and submitted to the Executive Director for review and written approval. The report shall be submitted to the Executive Director and the City of Carlsbad Engineering Department yearly after each winter storm season but prior to the 1st of May, starting with May 1, 2010. Monitoring shall continue throughout the life of the revetment or until the revetment is removed or replaced under a separate coastal development permit.

The applicant shall undertake development in accordance with the approved monitoring program. Any proposed changes to the approved program shall be reported to the Executive Director. No changes to the program shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

3. Future Maintenance. The applicant shall maintain the existing revetment in its approved state. Any change in the design of the revetment or future additions/reinforcement of the revetment beyond exempt maintenance as defined in Section 13252 of Title 14 of the California Code of Regulations to restore the structure to its original condition will require a coastal development permit. **However, in all cases, if after inspection, it is apparent that repair and maintenance is necessary, the applicant shall contact the Executive Director to determine whether a coastal development permit or an amendment to this permit is legally required, and, if required, shall subsequently apply for a coastal development permit or permit amendment for the required maintenance.**

4. No Future Seaward Extension of Shoreline Protective Devices. By acceptance of this Permit, the applicant agrees, on behalf of itself and all successors and assigns, that no future repair or maintenance, enhancement, reinforcement, or any other activity affecting the existing shoreline protective device, shall be undertaken if such activity extends the footprint seaward of the existing device. By acceptance of this Permit, the applicant

waives, on behalf of itself and all successors and assigns, any rights to such activity that may exist under Public Resources Code Section 30235.

5. As Built Plans. Within 60 days of completion of the project, the applicant shall submit as-built plans for the approved revetment and associated structures and submit certification by a registered civil engineer, acceptable to the Executive Director, verifying the revetment and associated structures have been constructed in conformance with the approved plans for the project (drafted by the City of Carlsbad and received on October 8, 2009). The plans shall identify permanent benchmarks from fixed reference point(s) from which the elevation and seaward limit of the revetment can be referenced for measurements in the future.

6. Project Modifications. Only that work specifically described in this permit is authorized. Any additional work requires separate authorization from the Commission or Executive Director, if appropriate. **If, during construction, site conditions warrant changes to the project, the San Diego District office of the Coastal Commission shall be contacted immediately and before any changes are made to the project in the field.** No changes to the project shall occur without an amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

7. Assumption of Risk, Waiver of Liability and Indemnity Agreement

- A. By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from storm waves, flooding, and erosion; (ii) to assume the risks to the applicant 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 ANY CONVEYANCE OF THE PROPERTY THAT IS THE SUBJECT OF THIS COASTAL DEVELOPMENT PERMIT**, the applicant shall execute and record a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property (hereinafter referred to as the "Standard and Special Conditions"); and (2) imposing all Standard and Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The restriction shall include a legal description of the

applicant's entire parcel or parcels. It shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the Standard and Special Conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes – or any part, modification, or amendment thereof – remains in existence on or with respect to the subject property.

- C. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

IV. Findings and Declarations.

The Commission finds and declares as follows:

1. Detailed Project Description/History.

The project in its entirety is the replacement of a bridge over Encinas Creek. The bridge provides contiguous access for southbound Carlsbad Boulevard, a major coastal access route in the City of Carlsbad. The replacement of the bridge includes development in both the City of Carlsbad's and the Coastal Commission's jurisdictions. Through mutual cooperation, the City and Commission staff determined where the line between the two jurisdictions is located. Based on the information available at this time, it was determined that the bridge replacement is located within the City's LCP permit jurisdiction and the wing walls and rock revetment located west of the bridge are located within the Commission's area of original jurisdiction. The Commission retains jurisdiction for this portion of the project because portions of the revetment and wing walls are located west of the Mean High Tide Line (MHTL). As such, the Commission is reviewing the above stated portions of the project for consistency with Chapter 3 of the Coastal Act. However, because the bridge, wing walls, and revetment are innately connected, the project description includes all components of the project for clarity.

The project was initiated when Caltrans identified the need to remove and replace the Encinas Creek Bridge due to severe deterioration. Exposed reinforcing bars have become heavily corroded. For several years now Caltrans has classified the bridge as structurally deficient and in need of replacement. Due to severe deterioration of the structure on the west side, traffic has been shifted to the east side of the bridge where the girders are in much better condition. Additionally, due to the extent of the degradation, replacement is necessary as soon as possible.

The existing bridge, which according to the City was constructed in 1913, is a culvert-style concrete bridge approximately 69 feet wide. It would be replaced by a narrower bridge, made of a prefabricated concrete arch bridge structure approximately 45 feet in width, thereby reducing the overall width of the bridge by approximately 26 feet. This reduction in width is possible because the current bridge structure is oversized for the

provision of only the southbound traffic lanes it accommodates. The new bridge will be approximately 2 feet taller than the existing bridge, in order to accommodate 100-year storm flows. The new bridge will have pedestrian sidewalks with railings. The City is proposing the use of colored concrete for the bridge structure, consistent with the Carlsbad Seawall located along the coast of Carlsbad. The construction is expected to take up to 4 months. As proposed, no work will occur between Memorial Day weekend and Labor Day weekend. The existing bridge and roadway are currently protected by a pre-Coastal Act riprap revetment. Currently the revetment is in need of maintenance and augmentation.

Southbound Carlsbad Boulevard will be closed to through traffic during replacement of the bridge, wing walls, and revetment. A Detour Plan will be implemented and will reroute all southbound traffic of Carlsbad Boulevard at Palomar Airport Road to Avenida Encinas, Poinsettia Lane, and then back to Carlsbad Boulevard. South of Palomar Airport Road, access will be limited to local residential access of Solamar Drive.

There will be a temporary loss of 34 public parking spaces as a result of the road closure. The City of Carlsbad will mitigate for this loss by installing temporary recreational parking signs at a dirt lot at the intersection of Carlsbad Boulevard and Palomar Airport Road. This lot currently operates as an undesignated parking area for recreational beach users and can accommodate the additional temporary parking, given that the construction will be completed during the off-peak season.

The City approved the portion of the project within its permit jurisdiction on August 19, 2009. The portion in the City's jurisdiction was appealable to the Coastal Commission; however, no appeals were filed.

2. Project Description for Portion in the Coastal Commission's Jurisdiction

The portion of the project to be approved through this Coastal Development Permit application includes only the wing walls of the bridge and the rock revetment located west of Carlsbad Boulevard, both north and south of the bridge.

As proposed, the riprap requires reconfiguration to adequately protect Carlsbad Boulevard and the bridge from wave action. The existing riprap would be reconfigured and supplemented with an additional approximately 650 cubic yards of 4-ton rock, 650 cubic yards of 2-ton rock, and 700 cubic yards of one-quarter-ton rock. The riprap will be added for approximately 118 feet to the north of the bridge and approximately 149 feet south of the bridge in order to provide protection for the currently eroding roadway embankment. As required by the certification of the Environmental Impact Report (EIR), and thus, as proposed by the City, the new riprap will not extend beyond the limits of the existing riprap and is proposed at 1.5:1 slope to further limit encroachment onto the beach. Further, the City is proposing the wing walls to be placed parallel to the roadway, further decreasing potential impacts to public access.

During construction, sheet piling will be used on both sides of the bridge in order to control wave action and specify construction zones. In addition, safety fencing will be used to help protect the public while the bridge is being constructed. Temporary fences will also be placed to delineate construction limits, and no equipment will be stored on the beach overnight.

3. Shoreline Protective Devices. The City is proposing to augment an existing pre-Coastal rock revetment. The Coastal Act has two applicable policies addressing this issue which state, in part:

Section 30253

New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) 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.

Section 30235

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 of 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 or fish kills should be phased out or upgraded where feasible.

The City of Carlsbad also has policies within its certified LCP pertaining to shoreline protective devices, which are detailed below (used as guidance only):

Section 21.204.110 4b of the Coastal Shoreline Development Overlay zone 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.....Provisions for the maintenance of any permitted seawall shall be included as a condition of project approval.....Seawalls shall be constructed essentially parallel to the base of the bluff and shall not obstruct or interfere with the passage of people along the beach at any time.

In addition, The Mello II LUP contains policies that address coastal erosion. Policy 4-1 provides:

(a) Development along the Shoreline

For all new development along the shoreline, including additions to existing development, a site specific geologic investigation and analysis similar to that required by the Coastal Commission's Geologic Stability and Bluff Top Guidelines shall be required; for permitted development, this report must demonstrate bluff stability for 75 years, or the expected lifetime of the structure, whichever is greater. Additionally, permitted development shall incorporate, where feasible, subdrainage systems to remove groundwater from the bluffs, and shall use drought-resistant vegetation in landscaping, as well as adhering to the standards of erosion control contained in the Carlsbad Master Drainage Plan. A waiver of public liability shall be required for any permitted development for which an assurance of structural stability cannot be provided.

Again, to clarify, the project in its entirety consists of the replacement of an existing and deteriorated bridge providing southbound access for Carlsbad Boulevard crossing Encinas Creek and includes the replacement of the existing wing walls and revetment, both of which serve to protect the bridge and Carlsbad Boulevard. The proposed wing walls and revetment are located below the Mean High Tide Line and are thus within the Commission's retained jurisdiction. The remainder of the project, the bridge replacement itself, is within the City of Carlsbad's permit jurisdiction (and has been approved pursuant to Carlsbad CDP #09-08) and thus is only included in this review as background information.

The portion within the Commission's jurisdiction includes the reconfiguration of an existing pre-Coastal rock revetment. The revetment is necessary to protect Carlsbad Boulevard from erosion and overtopping by waves during storm events. The proposed reconfiguration includes augmenting the existing rock as well as supplementing approximately 650 cubic yards of 4-ton rock, 650 cubic yards of 2-ton rock, and 700 cubic yards of one-quarter-ton rock. The riprap will be added for approximately 118 feet to the north of the bridge and approximately 149 feet south of the bridge in order to stabilize the currently eroding roadway embankment. As required by the certified Environmental Impact Report (EIR), and thus, as proposed by the City, the new riprap will not extend beyond the limits of the existing riprap.

The current revetment includes rocks that have become dislodged from the revetment, and are now located on the remaining sandy beach and are thus encroaching upon the public beach. The revetment also includes various types of debris deposited over time to supplement the revetment. Most of this debris is made up of materials such as concrete and rebar, neither of which are considered to be desirable materials for a rock revetment. As such, the City is proposing to remove the rocks that have fallen and are taking up useable beach area and to remove all foreign debris from the existing revetment.

The Commission's engineering staff have reviewed the proposed project and concur that the revetment is necessary, is the minimum required, and has been designed appropriately to address both scour depth and sea level rise and thus, as proposed, will adequately protect Carlsbad Boulevard.

However, the City failed to address impacts associated with any future maintenance, improvements, or seaward expansion of the revetment. The reconfiguration of the revetment will serve to prolong the life of the revetment and as such all potential future impacts shall be included in the Commission's review. Future impacts may include the dislodging and/or scattering of revetment rock onto the public beach, resulting in potential impacts to public safety and public access. As such, Special Condition #5 requires the City to submit as built plans within 60 days of construction completion to identify the location of the benchmarks from fixed reference point(s) from which the elevation and seaward limit of the revetment can be calculated. Special Condition #2 requires the City to submit annual monitoring reports to the Commission to determine settling or seaward movement of the revetment to ensure the revetment continues to be configured to minimize impacts to public access. Special Condition #3 requires the applicant to contact the Executive Director if repair or maintenance is necessary to determine whether a coastal development permit is required, and Special Condition #4 requires the applicant to waive any rights to future seaward extension of the revetment.

Lastly, due to the inherent risk of shoreline development, Special Condition #7 requires the City waive liability and indemnify the Commission against damages that might result from the proposed shoreline devices or their construction. This special condition further requires the City to execute and record a deed restriction on the revetment prior to any conveyance of the property. The risks of the proposed development include that the proposed shoreline devices will not protect against damage to the street from waves, storm waves, flooding, and erosion. Although the Commission has sought to minimize these risks, the risks cannot be eliminated entirely. Given that the applicants have chosen to construct the proposed development despite these risks, the applicant and any future property owner must assume the risks. All of these special conditions will ensure that the revetment remains in a configuration that can be considered the least impactful to coastal resources, consistent with the above cited Chapter 3 policies of the Coastal Act.

4. Public Access. As stated above, the proposed project may result in impacts to public access. As such, the following Coastal Act policies are applicable and state, in part:

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 30212

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

- (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,
- (2) adequate access exists nearby, or,

[...]

Section 30212.5

Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

Section 30214

(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

- (1) Topographic and geologic site characteristics.
- (2) The capacity of the site to sustain use and at what level of intensity.
- (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.
- (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

Section 30252

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation,....

The replacement of Encinas Creek Bridge is intended to provide safe transportation along Carlsbad Boulevard over Encinas Creek. The current bridge is almost 100 years old and is classified by Caltrans as structurally deficient. Due to the severe deterioration of the structure, traffic was previously shifted to the east side of the bridge where the girders are in better condition. Therefore, the replacement of the bridge is necessary to protect public safety, and thus completion of the project in its entirety will result in an improvement to public access. Further, the completed bridge will include bike lanes to facilitate beach access to bicycle-riders. Also, the new bridge will be designed to accommodate 100-year flood flows, and decrease the number of closures of Carlsbad Boulevard do to wave and stormwater overtopping the roadway. All of these can be considered improvements to public access and therefore consistent with the Coastal Act.

However, some potential for impacts to public access are also associated with the proposed development. Again, the portion of the project specifically within the Commission's jurisdiction includes the construction of the wing walls, and the reconfiguration of the existing revetment. The wing walls border and provide support for a bridge that spans the outlet for Encinas Creek. The revetment is located between Carlsbad Boulevard and California State Beach lands, for a distance of approximately 270 feet. Carlsbad State Beach Campground is located directly to the north of the site, and a public beach parking lot housing 34 parking spaces is located directly to the south. As such, this project location and its surrounding areas can be considered to provide high-priority public access to the coast.

The project, as proposed, will require the closure of the existing beach parking lot for the entire four month construction period and includes improvements to a revetment currently occupying the sandy beach. Both of these may result in potentially significant impacts to public access. However, the City has included a number of measures to address these potential impacts. For example, the City proposes to limit all of the work to a four month window between late January 2010 and Memorial Day. All work has been prohibited between Memorial and Labor Day, or what is considered to be the peak beach season. Further, while the City did not propose additional parking to mitigate for the loss of 34 parking spaces, it did include additional signage directing the public to a dirt lot located nearby. Further, Special Condition #6 requires that the construction be carried out as described, thus if the City wants to lift the peak-season ban, or remove the signage

for the nearby unimproved parking lot, such modifications would require further review by the Commission. It is important to note that the closure of the parking lot is necessary for public safety and thus is considered an unavoidable, yet temporary impact. Thus, the combination of limiting all work to the non-peak summer months of the year and the increased signage at an existing public lot, provide adequate mitigation for the public access impacts that will be caused by this project, and it can therefore be found consistent with the applicable policies of the Coastal Act.

The existing revetment was originally constructed prior to the Coastal Act, and is necessary to protect Carlsbad Boulevard. However, the revetment is located on sandy beach, and the renovation of the revetment will extend the lifespan of the revetment, thus potential impacts to public access need to be reviewed.

As proposed by the City, the revetment will maintain the existing footprint, and will not encroach any further west. As such, the proposed revetment will not result in any *additional* impacts to public access. Furthermore, the City has indicated that currently a number of revetment rocks have been dislodged and are now encroaching on the sandy beach beyond the proposed revetment limits. To address this concern, the City proposes to remove/reuse any of the rock located west of the revetment. In addition, the City has designed the revetment with a 1.5:1 slope to further limit beach encroachment.

However, the City failed to address impacts associated with any future maintenance, improvements, or seaward expansion of the revetment. As previously stated, future impacts may include the dislodging and/or scattering of revetment rock onto the public beach, and, as such, Special Condition #5 requires the City to submit as built plans within 60 days of construction completion to document that the revetment has been constructed consistent with approved plans and to identify the location of the benchmarks from fixed reference point(s) from which the elevation and seaward limit of the revetment can be documented. Special Condition #2 requires the City to submit annual monitoring reports to the Commission to determine settling or seaward movement of the revetment to ensure the revetment continues to be configured to minimize impacts to public access. Special Condition # 3 requires the applicant to contact the Executive Director if repair or maintenance is necessary to determine whether a coastal development permit is required, and Special Condition #4 requires the applicant to waive any rights to future seaward extension of the revetment. All of these special conditions will ensure that the revetment remains in a configuration that can be considered the least impactful to public access, consistent with the above-cited Chapter 3 policies of the Coastal Act.

5. Water Quality and Marine Resources. The Coastal Act has several policies protection the quality of coastal waters and marine resource and state:

Section 30230

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

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

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 clean up facilities and procedures shall be provided for accidental spills that do occur.

The City of Carlsbad also has policies pertaining to water quality and marine resources that can be used as guidance and state:

Mello II Policy 3-1.2 Environmentally Sensitive Habitat Areas (ESHA)

Pursuant to Section 30240 of the Coastal Act, environmentally sensitive habitat areas, as defined in Section 30107.5 of the Coastal Act, shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

Mello II Policy 3-4 Grading and Landscaping Requirements

f) Development projects should be designed to comply with the following site design principles:

1. Protect slopes and channels to decrease potential for slopes and/or channels from eroding and impacting storm water runoff.

[...]

3. Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones. Land acquisition of such areas shall be encouraged.

4. Provide development free buffer zones for natural water bodies.

5. Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment.

[...]

9. Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

10. Design streets and circulation systems to reduce pollutants associated with vehicles and traffic resulting from development.

The portion of the project within the Commission's jurisdiction includes only the wing walls for the bridge and the rock revetment located west of Carlsbad Boulevard and immediately north and south of Encinas Creek. The proposed project is directly adjacent to the Pacific Ocean and spans Encinas Creek. Potential impacts to marine resources exist due to the use of concrete, the removal of debris from the existing revetment, and excavating into ground water that is below the Mean High Tide Line.

It is anticipated that groundwater will be encountered at a depth of nine feet below the existing ground surface. Ground water is expected to be encountered during excavation, especially during high tides or after periods of precipitation. It is likely that groundwater dewatering practices will be required during construction. The following series of Best Management Practices (BMPs) are proposed to address these concerns:

- Spoils, trash, or any debris remaining at the site after completion shall be removed and disposed of at an approved disposal facility
- No equipment refueling shall be located at the construction site outside of the designated areas. Fueling of construction equipment shall take place on existing paved roads and not within or adjacent to any drainages, wetlands, or native habitats.
- "Fueling Zones" shall be designated on construction maps and qualified biologists shall flag the limits of "fueling zones." These fueling zones shall be located at least 50 feet from all drainage features and wetlands
- All stockpiled soil should be stored in 55-gallon drums within the roadway (non-wetland areas).
- Stockpiles shall not remain on-site for more than one week

The City is also requiring a complete Storm Water Pollution Prevention Plan (SWPPP) for additional site specific concerns. Again, Special Condition #6 requires that the work either be carried-out precisely as proposed, or requires the City to come forward with the proposed changes for review and approval by the Commission or Executive Director, if appropriate. As such, the City is required to carry out all mitigation measures in the approved manner, thereby eliminating any significant water quality and marine resource impacts associated with the construction phase of the project.

A further concern regarding potential impacts to water quality and marine resources is associated with the removal of debris that has been previously deposited on top of the existing revetment. Large pieces of concrete and other materials have been added to the revetment overtime. The removal of this debris has been included in the project description. As such, assurances need to be made that the removed debris will be disposed of properly. Special Condition #1 requires the City to identify the disposal site for all debris to be removed and if located within the Coastal Zone, evidence of a valid coastal development permit for the disposal is required.

During construction, Encinas Creek will be temporarily dammed via sheet pilings to divert water around the bridge and then pumped onto the beach. As such, there is a potential for impacts to water quality and marine resources is the temporary dam fails while there are potential pollutants in the construction area. The City has included that the dam and pump system be monitored during any and all storm events to ensure that water damming does not reach volumes that could cause the sheet piling to fail. Again, Special Condition #6 requires the applicant to contact the Coastal Commission should any project modifications become necessary. As such, the project as conditioned can be found consistent with the applicable policies of the Coastal Act.

Lastly, the design of the bridge, while not a component of this permit review, will result in potential benefits to water quality and marine resources. The current bridge is wider than necessary, and the replacement bridge will be approximately 26 feet less in width, the result being some land returned back to an undeveloped state and revegetated with native plants. Further, the replacement bridge will be two feet taller in elevation to accommodate 100-year flood flows. Currently the bridge does not sit high enough above the channel to accommodate such flows, which, in combination with the vegetation naturally existing within the creek, leads to storm-water flows being impeded during storm events, thereby causing stagnant water to swell east of the bridge. Stagnant water can lead to significant impacts to water quality and marine resources, such as algal blooms and fish kills. By designing the replacement bridge to accommodate such flows, the proposed project will result in improvements to water quality and marine resources during storm events and is consistent with the Coastal Act.

6. Local Coastal Planning. The portion of the Encinas Creek Bridge replacement project addressed by this permit review is located in an area of the Coastal Commission's retained permit jurisdiction, and, as such the Chapter 3 policies of the Coastal Act are the standard of review. However, all applicable policies contained within the Mello II Segment of the City's Local Coastal Program have been included as guidance through this permit review process. Therefore, the Commission finds that approval of the proposed development, as conditioned, will not prejudice the ability of the City to continue implementation of its certified LCP.

7. Consistency with the California Environmental Quality Act (CEQA). Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, 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 proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including conditions addressing the future maintenance and/or reconfiguration of the revetment will minimize all adverse impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

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 permittee 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 permittee to bind all future owners and possessors of the subject property to the terms and conditions.

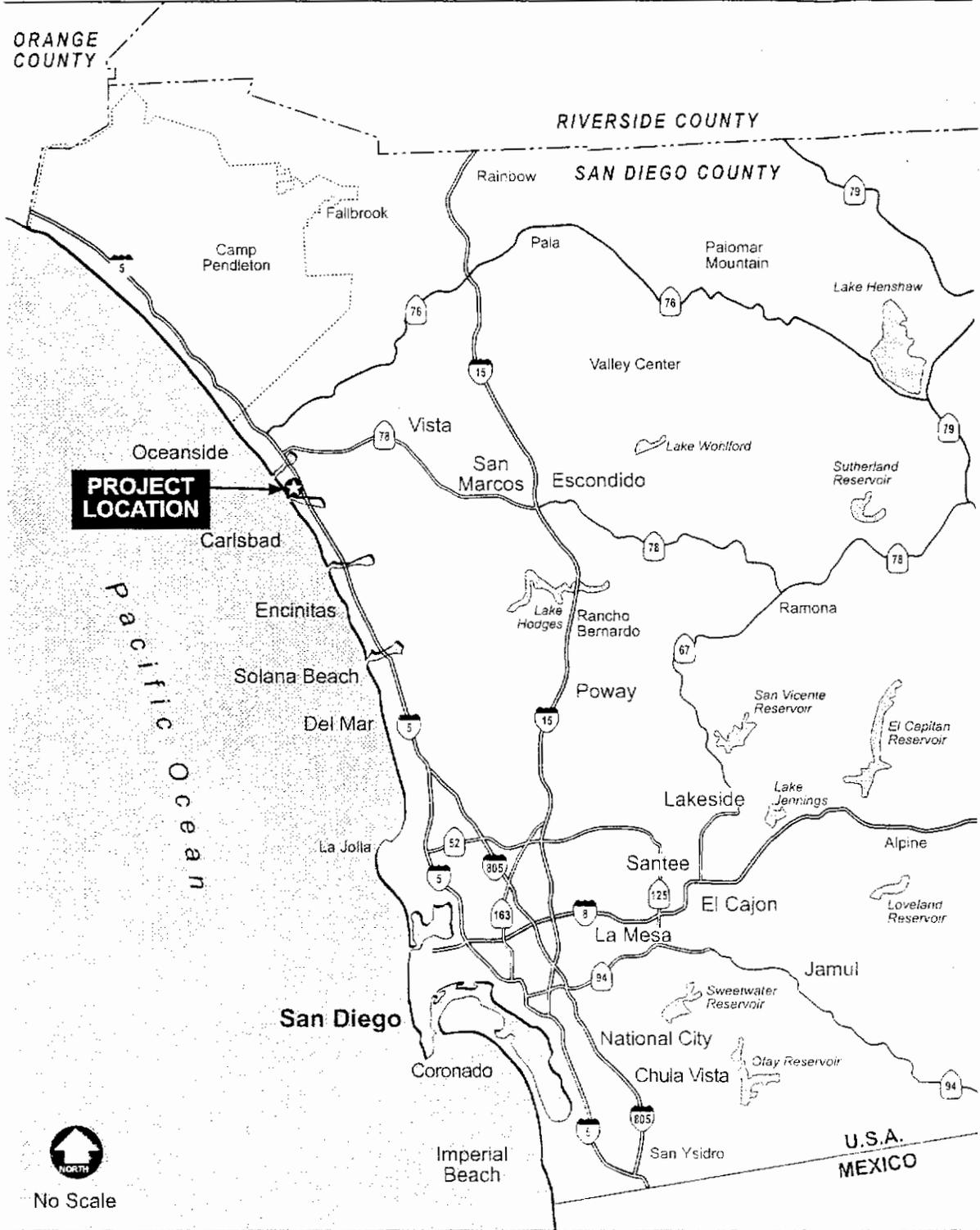


EXHIBIT NO. 1
APPLICATION NO.
6-09-051
Vicinity Map
California Coastal Commission

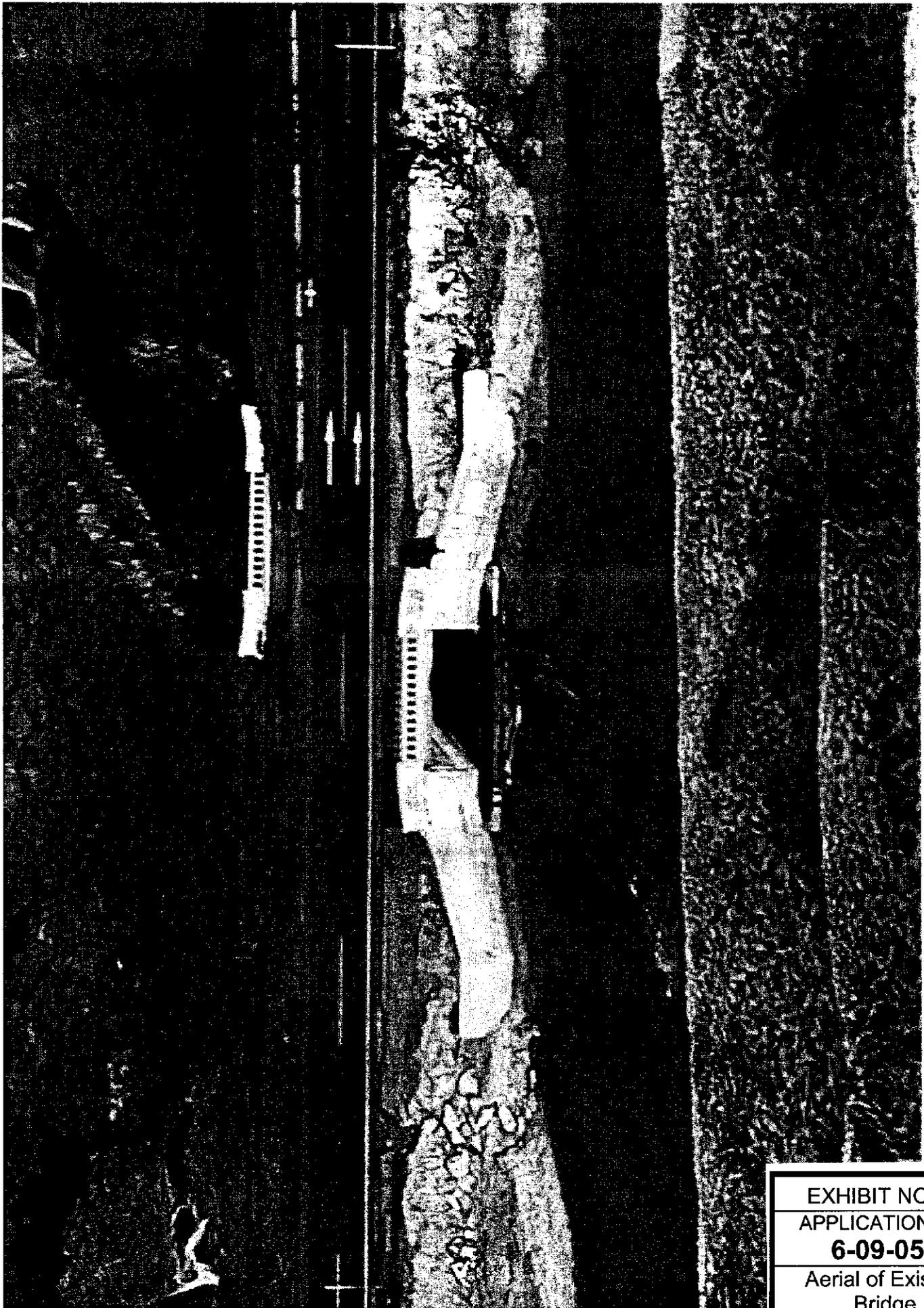


EXHIBIT NO. 4
APPLICATION NO.
6-09-051

Aerial of Existing
Bridge