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# Th20d

**Prepared August 1, 2013 (for August 15, 2013 hearing)**

**To:** Coastal Commissioners and Interested Persons  
**From:** Dan Carl, Central Coast District Director  
Susan Craig, Central Coast District Supervising Coastal Planner  
**Subject:** **University of California at Santa Cruz Coastal Long Range Development Plan Amendment Number 1.**

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## SUMMARY OF STAFF RECOMMENDATION

The University of California at Santa Cruz (UCSC) is proposing to amend its certified Coastal Long Range Development Plan (CLRDP) to: 1) make revisions to the CLRDP to reflect the incorporation of additional lands into the Younger Lagoon Reserve (YLR) in 2008, as required by the CLRDP; 2) expand the boundaries and associated buffers of several wetlands to reflect a recent wetland delineation update, as required by the CLRDP; 3) modify the requirements for landscaping and restoration plantings in accordance with recommendations of the Scientific Advisory Committee (SAC) for the CLRDP Resource Management Plan (RMP); 4) revise the routes of public access trails in the middle Campus area to reduce impacts to restoration areas; 5) modify the route of the new campus entry road and associated utilities; 6) adjust the timing of certain wetland restoration activities; 7) reflect the refinements in Campus planning for the Marine Science Campus; and 8) provide increased flexibility in how Campus parking demand is accommodated.

The proposed amendment will adjust CLRDP text and figures in order to reflect changing environmental conditions, changed YLR boundaries, SAC input, refined Campus planning, and related measures, including as explicitly required by the CLRDP itself in order to keep it updated and current. Staff recommends that the Commission find the proposed CLRDP amendment consistent with and adequate to carry out the policies of the Coastal Act, and that the Commission approve the amendment as submitted. The necessary motion and resolution to effect this staff recommendation are found on page 2 below.

### **Staff Note: CLRDP Amendment Action Deadline**

This proposed CLRDP amendment was filed as complete on July 8, 2013. The 90-day action deadline is October 6, 2013. Thus, unless the Commission extends the action deadline (it may be extended by up to one year), the Commission has until October 6, 2013 to take a final action on this CLRDP amendment.

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### EXHIBITS

- Exhibit 1: Location Map and Aerial Photograph of UCSC Marine Science Campus
- Exhibit 2: Proposed CLRDP Text Amendments
- Exhibit 3: Proposed CLRDP Figure and Table Amendments
- Exhibit 4: Applicable Coastal Act Policies
- Exhibit 5: Referenced CLRDP Sections and Implementation Measures
- Exhibit 6: Original and Revised Boundaries of Younger Lagoon Reserve

### I. MOTION AND RESOLUTION

Staff recommends that the Commission, after public hearing, approve the proposed CLRDP amendment as submitted. To implement this recommendation, Staff recommends a **YES** vote on the motion below. Passage of the motion will result in the certification of the CLRDP amendment as submitted and adoption of the following resolution and findings. The motion passes only by an affirmative vote of a majority of the appointed Commissioners.

***Motion:** I move that the Commission certify UCSC CLRDP Amendment Number 1 as submitted, and I recommend a yes vote.*

***Resolution:** The Commission hereby certifies UCSC CLRDP Amendment Number 1 as submitted and adopts the findings set forth below on the grounds that the amendment as submitted is consistent with Chapter 3 of the Coastal Act. Certification of the amendment as submitted complies with the California Environmental Quality Act because there are no further feasible alternatives or mitigation measures that would substantially lessen any significant adverse impacts of plan on the environment.*

## II. FINDINGS AND DECLARATIONS

### A. UCSC CLRDP

As an alternative to project-by-project coastal permit review, Coastal Act Section 30605 allows for universities to develop long range development plans for Coastal Commission certification. Once certified, each university is the primary entity responsible for ensuring that future development on the site is consistent with the certified coastal long range development plan, subject to ongoing Commission oversight. UCSC's Marine Science Campus CLRDP was certified by the Coastal Commission on January 7, 2009.

#### UCSC's Marine Science Campus

UCSC's Marine Science Campus (Campus) site is located directly adjacent to the Monterey Bay National Marine Sanctuary (Sanctuary) just within the western border of the City of Santa Cruz in Santa Cruz County (see Exhibit 1 for a location map and for an aerial photo of the Campus site). The Campus site has been known locally for many years as Terrace Point. The main UCSC campus is located roughly two miles inland of the Campus in the rolling foothills northwest of downtown Santa Cruz. The Marine Science Campus is located at the outskirts of the City, seaward of Highway One, at the transitional boundary between the urbanized City area to the east and the rural north coast of the unincorporated County to the west. The Santa Cruz County north coast area is well known to the Commission for its sweeping vistas of both coastal agricultural fields and natural landscapes framed by the undulating coastal range. Much of this area is in extensive State Park and other rural public land holdings, and all of it is traversed by a rural stretch of Highway One. Although there are some limited residential enclaves (e.g., Davenport along the coast, and Bonny Doon in the mountains) in these mostly pastoral areas, this north coast area is part of the stretch of largely agricultural and undeveloped coastal lands extending nearly 50 miles to Half Moon Bay upcoast. The Campus site is located at the beginning of this stretch of coast as one heads upcoast out of the City of Santa Cruz and, by extension, out of the urbanized portion of northern Monterey Bay.

The Campus site is primarily made up of a relatively flat terrace area (roughly 73 acres) sloping gently from north to south (to the ocean) with the remainder occupied by a large arroyo feature (roughly 25 acres) on the west of the site, at the base of which lies Younger Lagoon, an estuarine lagoon that connects (at times) to the ocean. A sandy beach area fronts Younger Lagoon below the terrace. The lagoon, the beach, the arroyo and a portion of the terrace make up Younger Lagoon Reserve. The terrace portion of the site includes within it a 2.5 acre federally-owned parcel completely surrounded by UCSC property. Altogether, the Campus (including the federal in-holding and the Younger Lagoon Reserve) is about 100 acres.

In the general Campus vicinity, agricultural land extends to the west along the coast beyond the Younger Lagoon Reserve and the western Campus boundary. To the north are the Union Pacific Railroad tracks, the Raytek industrial facility, and Highway One. To the south lies the Sanctuary and the Pacific Ocean, and to the east is Antonelli Pond (north of Delaware Avenue) and the densely packed De Anza Mobile Home Park (south of Delaware Avenue), beyond which is Natural Bridges State Park and past that West Cliff Drive in the City of Santa Cruz.

### **UCSC'S Marine Science Campus CLRDP**

UCSC's Marine Science Campus CLRDP was certified by the Coastal Commission on January 7, 2009. The CLRDP provides a blueprint for future development of the site including a maximum increase of about 600,000 square feet of new Campus facilities mostly within four distinct development zones (occupying about one-third of the terrace area) for an expanded Marine Science Campus. The CLRDP provides for roughly 340,000 gross square feet of potential new facilities within the four development zones in new one- and two-story buildings up to 36 feet tall, with the remainder in outdoor research and support areas. The CLRDP also accounts for additional areas of roads, and some natural drainage ponds, outside of the four development nodes. Overall, and at full buildout, the CLRDP allows for the Campus to grow by about three times its size at certification. In addition to the building program, the CLRDP also provides for an expanded public access trail system and natural habitat restoration in those wetland and open space areas on the terrace that are not part of the proposed development zones (roughly 47 acres), and that, per the CLRDP, have been recently added to Younger Lagoon Reserve.

In the time since CLRDP certification, four NOIDs for development under the CLRDP have been acted on by the Commission. This is the first CLRDP amendment proposed by the University.

### **B. DESCRIPTION OF PROPOSED CLRDP AMENDMENT**

Since final approval of the CLRDP in January 2009, the University has continued to refine plans for near-term development on the Marine Science Campus and for long-term restoration efforts for the terrace lands of the Younger Lagoon Reserve (YLR). Adoption of these refinements into the CLRDP require a number of relatively minor amendments to the CLRDP, which were submitted together to be considered as Amendment Number 1 to the CLRDP. As identified for each item discussed below, some of the proposed amendments are related to and would be required for CLRDP consistency for one or more of the projects proposed as part of an upcoming and related NOID (e.g., proposed changes to the entry road route, which is included in the project plans for proposed NOID-6). Other amendments are proposed in order to comply with CLRDP requirements (e.g., a CLRDP requirement that the CLRDP be amended to reflect Younger Lagoon Reserve boundary changes). Still others are needed to conform the CLRDP with planning refinements that have taken place since CLRDP approval (e.g., refinement in proposed trail routes). And finally, some of the proposed amendments are in response to the evolution of the CLRDP's Resource Management Plan (RMP) under the guidance of the Scientific Advisory Committee (SAC) that was established to guide YLR restoration efforts, as required by the CLRDP.

Specifically, the proposed amendment would:

1. Incorporate into the YLR all of the Terrace Lands located outside of development areas.
2. Provide a distinction in the CLRDP text between "Original YLR" and "YLR Terrace Lands".

3. Expand the boundaries and associated buffers of certain wetlands (and correspondingly reduce developable areas) on the Campus site to reflect an updated and revised wetland delineation that shows additional wetland areas on the Campus.
4. Change references to “windbreak trees” to “windbreak vegetation,” and allow the use of tall native shrubs or other appropriate native plants in place of trees for the screening of Campus development and development activity.
5. Expand the allowable source locations for native plant material to be used in restoration activities on the Campus.
6. Eliminate some of the previously-envisioned east-west trails in the eastern half of the Middle Terrace to avoid fragmentation and potential human intrusion into terrace habitat restoration areas.
7. Realign the main entry road into the Campus.
8. Modify utility requirements to place the future underground utility main lines within the realigned main entry road corridor.
9. Indicate that the reconnection of wetlands 1 and 2 and re-vegetation planting of wildlife corridors will be undertaken during Specific Resource Plan Phase 1, but will not necessarily be completed in conjunction with the first development located north of the Delaware Avenue Extension.
10. Remove conflicting language regarding satisfying parking demand on Campus, and add clarifying language reflecting the CLRDP’s objective that Campus parking demand not impact coastal access or public parking on nearby streets.

Please see Exhibit 2 for the proposed amendment text changes (new language is shown in **bold**; deleted language is shown in ~~strikethrough~~), and Exhibit 3 for the proposed changes to CLRDP figures and tables.

## **C. CONSISTENCY ANALYSIS**

### **Standard of Review**

The standard of review for the proposed amendment to the certified CLRDP, pursuant to Sections 30605, 30512(c), and 30514(b) of the Coastal Act, is that the proposed amendment meets the requirements of and is in conformance with the Chapter 3 policies of the Coastal Act.

### **Applicable Policies**

The proposed amendment includes changes to the CLRDP that affect public access, parking and other infrastructure (such as roads and utilities), scenic views, and sensitive habitats on the site. The amendment thus involves a number of Coastal Act policies, including: Coastal Act Sections 30210 through 30214 and 30220 through 30223 that address public access and recreational opportunities; the development siting and public service policies that are mainly the purview of Coastal Act Sections 30250, 30252 and 30254; Coastal Act Section 30251 that provides for the

protection of scenic views; and Coastal Act Section 30240 that establishes a high standard for protection of areas that are identified as environmentally sensitive. Please see Exhibit 4 for these Coastal Act policies. Please see Exhibit 5 for all the CLRDP Policies, Sections, and Implementation Measures cited in the findings below.

### **Consistency Analysis**

Each proposed amendment component to the CLRDP is discussed in detail below:

#### **1. Incorporate all terrace lands in Campus areas not designated as “Research and Development, Mixed Use” into the Younger Lagoon Reserve.**

Younger Lagoon Reserve (YLR) was established in 1987 and is one of the 36 reserves that make up the University of California’s Natural Reserve System. These lands consist of preserved and protected areas, and include areas that are available for university-level instruction, research, and public outreach. Originally, the YLR consisted of approximately 25 acres encompassing the lagoon itself and the upland habitat on the slopes surrounding the lagoon. An additional 47 acres of natural area located on the terrace portion of the Campus outside of the allowed development zones were incorporated into YLR in July 2008, bringing the current size of the YLR to approximately 72 acres (see Exhibit 6 for boundaries of the “Original Younger Lagoon Reserve” and the “Younger Lagoon Reserve Terrace Lands”). In other words, the vast majority of the Campus is now part of YLR. CLRDP Implementation Measure 3.14.1 (see Exhibit 5) requires that the University submit to the Coastal Commission an amendment to the CLRDP to update it with respect to the revised configuration of Younger Lagoon Reserve and the natural areas. The proposed amendment satisfies this requirement of the CLRDP. The proposed amendment acknowledges the previous incorporation of sensitive terrace lands into the protected YLR, will serve to ensure that CLRDP policies that protect such habitat areas will explicitly apply to these areas, and thus this component of the proposed amendment is consistent with the Coastal Act.

#### **2. Amend all references to Younger Lagoon Reserve in CLRDP text and Implementation Measures (except for the references in IM 3.14.1 – see Exhibit 5) to distinguish between the Original Younger Lagoon Reserve lands and the Younger Lagoon Reserve Terrace lands.** See pages 1-17 of Exhibit 2 for these proposed changes.

CLRDP Policies 3.5 and 3.6 (Exhibit 5) explicitly set forth development protections for the Younger Lagoon Reserve. These policies were intended to apply to the YLR as it existed at the time the CLRDP was drafted (i.e., the original 25 acres of YLR land encompassing only the lagoon itself and the upland habitat on slopes surrounding the lagoon). Other CLRDP policies provided protection to the terrace lands located outside of development zones. Since that time, 47 acres of terrace lands have been incorporated into YLR (see amendment #1 above and Exhibit 6). As a result, references within the CLRDP to YLR, including the specific protection and implementation measures, now extend to the terrace lands but do not always make sense in that context (e.g., IM 3.5.7 requires that movement associated with development not be visible from the YLR; IM 3.4.3 specifies that the YLR shall not be exposed to noise generated by human activity on the terrace portion of the Campus in excess of a certain decibel level; etc.). These provisions were intended to protect the Lagoon and the lands immediately surrounding the Lagoon and were drafted specifically for this purpose. Similarly, terrace land protection policies

were drafted specifically for the terrace lands and to address their physical context. The amendment resolves this internal inconsistency by designating the terrace land portion of the new YLR as “YLR Terrace Lands,” and the Lagoon and associated upland habitat as “Original YLR.” The amendment does not substantively alter the CLRDP protective policies that apply to these areas, and it will not reduce the intended protection of these areas as set forth in the CLRDP. Thus, this component of the proposed amendment will continue to protect all areas outside of developable areas, all of which are now included in YLR, consistent with the CLRDP and consistent with the Coastal Act.

**3. Amend the CLRDP to update and expand the boundaries and associated buffers of specific wetlands on the site (and to correspondingly reduce developable areas) to reflect an updated and revised wetland evaluation completed in 2011 that expands the area of wetlands known on the Campus.** See pages 1-2 of Exhibit 3 for the existing land use diagram and the depiction of the expanded wetlands and wetland buffer areas.

CLRDP IM 3.3.1 (see Exhibit 5) requires a wetlands biologist to conduct a pre-development reevaluation of all Campus wetlands prior to each development project. As noted above, the University is moving forward with NOID-6, which includes, among other things, development of a “Coastal Biology” building and associated infrastructure in the Middle Terrace area of the Campus as envisioned by the CLRDP. Given this impending development, the University undertook the CLRDP-required wetland evaluation in 2011. The wetland survey performed in 2011 found that Wetland W2 has slightly expanded to the east and Wetland 3 has expanded slightly to the north. Wetland W5 has expanded along the southwestern edge and the southern arm of that wetland (see page 2 of Exhibit 3 for a depiction of the expanded wetland areas). The Commission’s Senior Ecologist, Dr. John Dixon, was heavily involved in the original wetland delineations associated with CLRDP development and leading up to CLRDP certification in January 2009, including because Campus wetland delineation was the subject of significant debate and controversy at that time. His involvement included significant field work at the site, as well as review of applicable reports and documentation, and participation in multiple meetings. CLRDP development zones were established based on avoiding wetlands and habitat and associated buffers at that time.

To address the potential for wetlands to change in size and scope, and to avoid a “static” document that wasn’t able to respond to changes since then, the CLRDP was structured to allow for changes in wetland and ESHA to be accounted for at the time of impending development. Importantly, the CLRDP was and is structured such that such subsequent evaluation could only lead to reductions in developable area, and could not be used to expand into protected areas (i.e., an argument that wetlands and/or ESHA had contracted cannot be used to expand areas of development). Thus, the wetland changes identified in 2011 must be understood within that context, and the corresponding CLRDP changes to address them only propose to increase the size of delineated wetlands and therefore to reduce developable area on the Campus.

Dr. Dixon has reviewed the revised wetland delineation and related materials and concurs with its methodology and conclusions, indicating that, if anything, it is conservative and errs on the side of increased resource protection. As such, the expanded wetland boundaries have been appropriately identified, and the corresponding CLRDP changes that implement these new

delineations are appropriate and consistent with the requirements of CLRDP IM 3.3.2 (see Exhibit 5). The University has provided a figure of the additional wetland areas (page 2 of Exhibit 3), along with an illustrative depiction of the additional area of buffer required per the CLRDP (i.e., a 150-foot buffer from wetland W5 and a 100-foot buffer from all other wetlands). The University is preparing updated CLRDP figures for Executive Director review and approval that conform all applicable CLRDP figures to the updated wetland configuration and required 100 and 150-foot buffers, including designating the additional wetland areas as “Resource Protection” and additional buffer areas as “Resource Protection Buffer”. Thus, this component of the proposed amendment updates the CLRDP in light of expanded wetlands on the Campus, enhances resource protection on the Marine Science Campus and YLR, and is consistent with the Coastal Act.

**4. Change all references in the CLRDP to “windbreak trees” to “windbreak vegetation,” and allow the use of tall native shrubs or other appropriate native plants in place of trees for the screening of new development and development activities. Allow for the removal of existing Monterey cypress trees on the Campus site, and replacement of these trees with tall shrubs or other appropriate native vegetation in conjunction with earthen berms as needed to obtain appropriate height for screening and viewshed protection purposes. See pages 10, 12, 18-22 of Exhibit 2 for these proposed changes.**

The CLRDP identifies a variety of tree species (Monterey cypress, Monterey pine, Bishop pine, Gray pine, Torrey pine, and Western hemlock) that can be used to help screen development and otherwise protect public views; to help provide a buffer between developed areas and resource protection areas, including the YLR; and as part of habitat restoration projects on the Campus. In the time since CLRDP certification, an enhanced understanding of Campus ecology has been developed, including through the work of the CLRDP Scientific Advisory Committee (or SAC), which is made up of restoration ecologists and experts in a variety of applicable fields that have been approved by the Commission’s Executive Director as established by the certified CLRDP. The SAC has determined that the above species are not native to the site, tend to be invasive on the site, and therefore should not be planted on the Campus. In their stead, the SAC has recommended that other tall vegetation that is native to the site be used to serve the functions that the trees were intended to serve. Additionally, a number of Monterey cypress are found on the site, and the proposed amendment would allow for their removal for similar reasons, provided they be replaced with appropriate tall and other vegetation that can likewise help achieve CLRDP objectives in this respect. This component of the amendment will ensure that appropriate plant species that are specifically native to the Campus site are planted on the site, which will provide a more ecologically-sound planting palette for the site at the same time as achieving the same objectives attributed to tree planting originally. Thus, this component of the proposed amendment is consistent with the Coastal Act.

**5. Amend CLRDP IM 3.2.14 to allow for native plant materials used on the site to be gathered from a wider geographic area than currently allowed. See page 23 of Exhibit 2 for the proposed amendment language.**

Currently, the CLRDP requires that any native plant material that is going to be used on the site be collected from coastal habitats that are located within about one mile of the Campus and

seaward of Highway 1. In the time since the CLRDP was certified, it has become increasingly clear that this requirement is both impractical and unnecessary to serve the purpose of maintaining appropriate ecological integrity for protected areas of the site, including restoration areas. The SAC recommends that the collection area be expanded to include similar habitats on the first and lower reaches of the second marine terraces along the coast of western Santa Cruz County and southern San Mateo County. This expanded collection area will provide appropriate plant sources, and will increase the practicality of required and otherwise proposed replanting on the Campus. Thus, this amendment component is consistent with the Coastal Act.

**6. Amend the CLRDP to eliminate a subset of east-west trails in the eastern half of the Middle Terrace. The proposed amendment also provides names for each of the specific trail segments (instead of referring to them as “Group 1,” “Group 2,” “Group 3,” as is currently the case).** See page 24 of Exhibit 2 for the proposed text amendments. See pages 3-6 of Exhibit 3 for the proposed amendments to Figures 5.6 and 9.1.

The University proposes to slightly revise the layout of CLRDP public access trails that are shown on CLRDP Figures 5.6 and 9.1. These figures identify fairly specific public access trail alignments that the University is required to install and maintain. The CLRDP allows for some flexibility in such alignments, but it is intended to be prescriptive as regards trail segments (i.e., the flexibility does not extend to eliminating identified segments).

In the time since CLRDP certification, the SAC and the YLR manager have recommended that east-west trails near the Middle Terrace area be eliminated to avoid fragmentation and potential human intrusion into protected areas located there that are currently being restored, as is required by the CLRDP (see pages 3-6 of Exhibit 3 for depictions of existing and proposed CLRDP trail locations in this area). Modifying the trails in this area as proposed will better protect these habitat restoration areas, but it will also decrease the utility of the overall trail system somewhat because it will be harder to access the trails on the eastern and ocean side of the property from the Middle Terrace development node. Currently, this is not a significant issue as the Middle Terrace development zone has not yet been developed, but it could become more of an issue in the future, including because the CLRDP allows for future development of a small conference center in this the eastern portion of the Middle Terrace nearest the ocean, and increased use of that area may lead to “volunteer” trails for those trying to access the De Anza trail along the Campus’ eastern property line and/or the ocean overlook near the bluff. Additional trails could be contemplated at that time, or should Campus circulation patterns dictate. The proposed revised trail configuration appears adequate to provide appropriate trail connectivity through the Campus, including access to views of the ocean and several overlook areas. Thus, this component of the proposed amendment is consistent with the Coastal Act.

**7. Amend the CLRDP to show a revised route for the main entry road.** See pages 7-8 of Exhibit 3 for proposed amended Figure 5.5.

CLDRP Section 5.5.1 and IM 5.1.6 require that the existing main entry road to the Campus be abandoned and restored as a pedestrian trail, and that a new entry road be developed as a means of better protecting habitat areas in the northern part of the site, better providing for public access, and providing a more direct entry to the Campus overall. The CLRDP explicitly requires

the new main entry road route to be configured as shown on Figure 5.5. The University is now proposing (as a component of NOID-6) a modified entry road that curves somewhat to the southwest across the Campus, rather than heading due west and then perpendicularly due south. The revised route represents a slight change to the previously prescribed route that will not significantly alter its utility in terms of meeting the above described CLRDP objectives, and that will work better for the University in terms of its development program. Also, under the existing CLRDP road alignment, future buildings in Subarea #2 on the site could be located on both sides (i.e., north and south) of the entry road. With the realigned road, buildings would be confined to the south side of the road, helping to minimize impacts to public views from the road itself (looking upcoast upon entering the Campus) as well as from trails in this area of the site. Thus, this component of the proposed amendment is consistent with the Coastal Act.

**8. Amend the CLRDP to reflect utility corridor revisions.** See pages 9-10 of Exhibit 3 for the proposed revisions to CLRDP Figure 5.7.

The CLRDP requires the main utility lines to be placed underground within the entry road corridor, and prescribes a specific location in this regard (see CLRDP Figure 5.7 in Exhibit 3). If the main access road location is changed, this figure needs to be changed to conform to the new road location. Thus, this component of the proposed amendment would simply identify the new location for the underground utility main lines within the realigned entry road corridor as described above. This change does not alter any of the CLRDP's resource protection requirements and will not substantively alter any basic provisions. Thus, this component of the proposed amendment is consistent with the Coastal Act.

**9. Amend the CLRDP to indicate that the reconnection of Wetlands W1 and W2 and associated wildlife corridor enhancements will be undertaken with Specific Resource Plan (SRP) Phase 1, but will not necessarily be completed in conjunction with the first development located north of the Delaware Avenue Extension.** See pages 11-12 of Exhibit 3 for the proposed amended tables.

Implementation Measure 3.2.10 (see Exhibit 5) allows the Scientific Advisory Committee (SAC) to refine timing for the implementation of each element of the CLRDP's Resource Management Plan (RMP), subject to Executive Director review and approval. Currently, the reconnection of Wetlands W1 and W2 in the northern part of the site and vegetation restoration in wetlands W1, W2, and W6 are to be implemented in conjunction with completion of any drainage improvements for the first development project that is located north of the Delaware Avenue Extension. Specifically, the concept of reestablishing the hydrologic connection and related utility of the W1-W2 wetlands area was identified at the time of CLRDP certification as a significant wetland enhancement, and it was thus identified as a near-term mitigation project in the CLRDP and its RMP.

Similarly, CLRDP IM 3.2.3 (see Exhibit 5) and RMP PS 27 (see pages 11-12 of Exhibit 3) call for vegetation enhancement of wildlife corridors along the railroad tracks and the east-west corridor south of the to-be-developed storage yard, in the vicinity of the above-mentioned wetlands. These requirements would be triggered by drainage improvements associated with the development of the Upper Terrace Storage Yard. However, the wetland reconnection and

corridor restoration work may not be fully implemented under Phase 1 of the RMP.<sup>1</sup> In particular, the required wetland reconnection may require several iterations to achieve optimal functioning, and these adjustments could continue into SRP Phase 2 (i.e., years 8-14 post-CLDRP certification).

The University has also experienced some difficulty in obtaining the required resource agency signs-offs necessary to implement the new hydrologic connection, and the SAC has recommended allowing this component to be completed on a slightly longer time table for this reason as well. Although it would be preferable for the connection to be achieved sooner, it is clear that the University has made great strides in its restoration efforts under the RMP, including implementing many of the restoration activities ahead of CLRDP schedule, with preliminary results showing that this restoration is thriving. Allowing some flexibility for the W1-W2 hydrologic connection to be made through Phase 2 seems appropriate in this context, including because the University indicates that it will still strive to implement the W1-W2 connection as soon as possible. The change alters the timing for W1-W2 connectivity, but does not alter the basic framework that requires this connection, and the overall restoration required under the CLRDP will still be achieved. Thus, this component of the proposed amendment is consistent with Coastal Act Section 30240.

**10. Remove conflicting language regarding satisfying parking demand on Campus (IM 5.3.7), and add clarifying language reflecting the CLRDP's objective that Campus parking demand not impact coastal access or public parking on nearby streets.** See pages 25-26 of Exhibit 2 for the proposed text changes.

The CLRDP contains numerous provisions regarding parking (see Policy 5.5 and IMs 5.5.1 et seq. in Exhibit 5), including parking management strategies for temporary events, reserved parking spaces for carpools and vanpools, requiring parking permits for Campus staff, parking spaces set aside to be used exclusively for public coastal access, etc. The CLRDP also contains numerous provisions (see also Exhibit 5) regarding Transportation Demand Management (TDM), which are also intended to promote all available forms of alternative transportation to site users and visitors. Thus, the CLRDP contains numerous provisions designed to encourage alternative transportation modes other than single-occupancy vehicles and as such reduce the demand for motor vehicle parking on the Campus, while still providing parking that allows for coastal access. Accordingly, the CLRDP does not envision that the Campus will provide parking spaces to accommodate all visitors, employees, and researchers who might come to the Campus in a single-occupancy vehicle. However, IM 5.3.7 inadvertently includes language that states that all parking demand is to be satisfied on Campus. This language conflicts with the CLRDP's objectives and other requirements with respect to the alternative transportation options discussed above. Thus, the proposed amendment to IM 5.3.7 is appropriate, and is more representative of the intent of the CLRDP with respect to onsite parking, while still protecting coastal access to the

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<sup>1</sup> Restoration and enhancement efforts are organized into two seven-year phases and one six-year phase – a total of twenty years for all three phases. Within each phase, approximately one-third of the area outside of development zones will be restored and enhanced. At the end of the last phase, all of the natural areas will have been restored and enhanced and management of these areas will continue indefinitely.

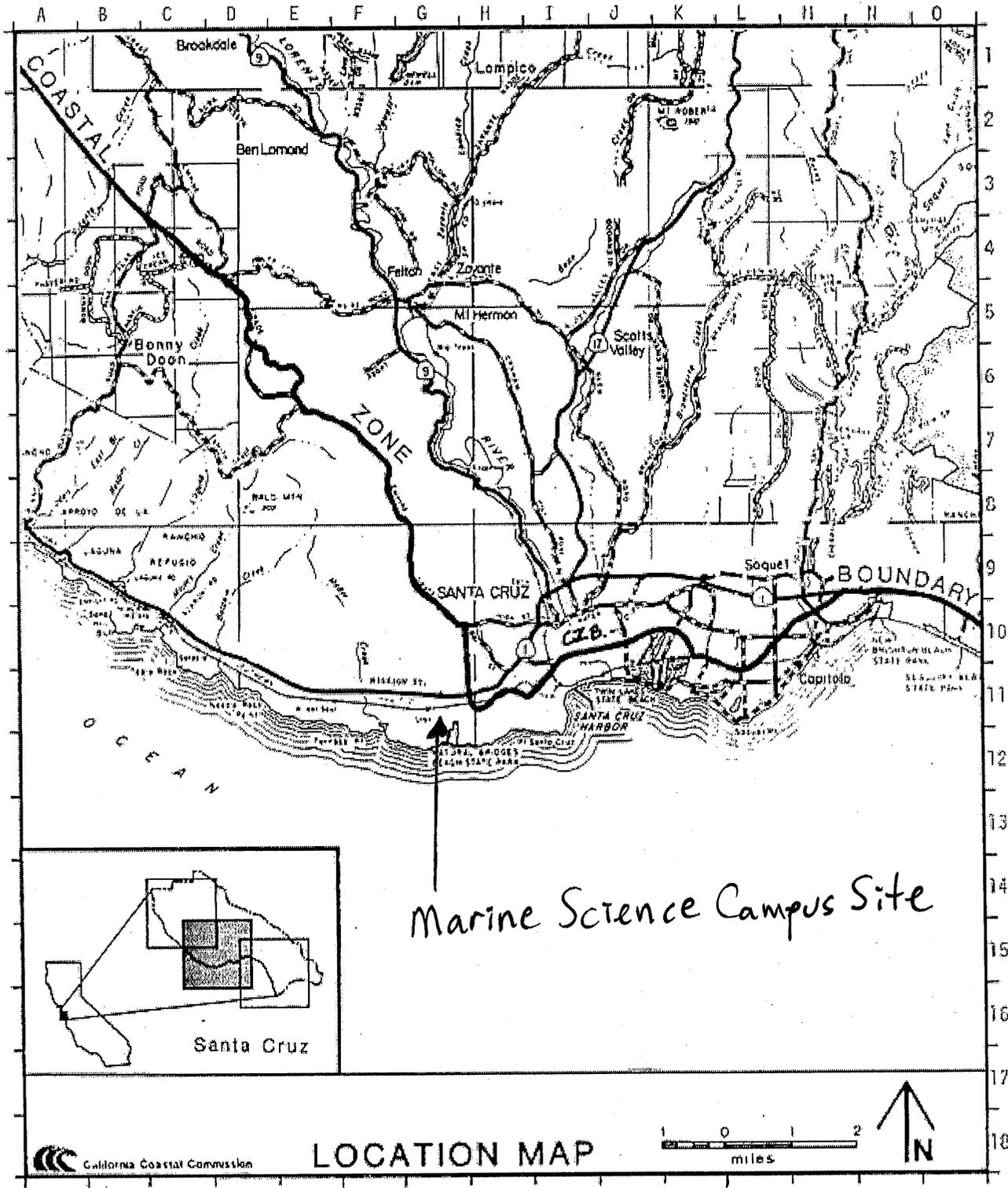
Campus. Therefore, the proposed amendment is consistent with the public access and recreation policies of the Coastal Act.

#### **D. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

Pursuant to Section 21080.9 of the California Environmental Quality Act (“CEQA”), the Coastal Commission is the lead agency responsible for reviewing Long Range Development Plans and Notices of Impending Development for compliance with CEQA. The Coastal Commission’s review and development process for CLRDPs and CLRDP amendments has been certified by the Secretary of Resources as being the functional equivalent of the environmental review required by CEQA. Universities are not required to undertake environmental analysis of proposed CLRDP amendments, although the Commission can and does use any environmental information that the University has developed. CEQA requires that alternatives to the proposed action be reviewed and considered for their potential impact on the environment and that the least damaging feasible alternative be chosen as the alternative to undertake.

The University, as the lead agency under CEQA, certified a Final EIR (FEIR) for the CLRDP in September 2004. In November 2006, the University certified an addendum to the FEIR to respond to changes in the CLRDP in the time since the original FEIR certification, including changes stemming from Coastal Commission review of the CLRDP prior to certification. The University also, and again as the lead agency under CEQA, certified a FEIR for upcoming Marine Science Campus projects on January 18, 2012. This CLRDP amendment was evaluated in that FEIR. In certifying the FEIR, the University found that the amendment would not have significant adverse environmental impacts. This report has discussed the relevant coastal resource issues with the proposed amendment. All public comments received to date have been addressed in the findings above. All above findings are incorporated herein in their entirety by reference.

As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the amendment would have on the environment within the meaning of CEQA. Thus, the proposed amendment will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A).



County of Santa Cruz

Sheet 2 of 3

# UCSC MARINE SCIENCE CAMPUS



## Long Range Land Use Development Plan

exclusively for public coastal access parking, per Policy 5.3 and its implementation measures. Parking facilities include all driveways and sidewalks necessary to access parking spaces.

### Temporary Facilities

These are facilities that are allowed on the Campus on a temporary basis only. Any square footage associated with these facilities shall count towards the 254,500 square feet of facilities identified under Marine Research and Education Facilities above. These facilities are limited to:

- A temporary small-scale desalinization research facility has been permitted and may be constructed within Subarea #13 (only) provided such facility is removed and the disturbed area restored as described in the permit.
- Within the first seven years following the date of CLRDP certification, 11 existing greenhouses are allowed to remain in place within Subareas #6 and #7 (only) provided that within seven years of certification or by December 31, 2013, whichever comes sooner, either: (a) such greenhouses are removed and the disturbed area restored; or (b) such greenhouses are made to conform to all CLRDP requirements, including design guidelines.
- At the time of CLRDP certification, a temporary ground-level storage area existed in Subareas #6 and #7 in the area located between the greenhouses and **the original** Younger Lagoon Reserve. This temporary storage area is allowed to remain in place in that configuration and at that level of use (i.e., pre-CLRDP certification level and configuration) for the first five years following CLRDP certification provided that: (a) the perimeter of this area where it is adjacent to **the original** Younger Lagoon Reserve (i.e., generally its west and southwest sides) is planted with species appropriate to the upland Reserve landscape and capable of screening the area from view from the Reserve (**original YLR**) (e.g., an extension of the willows providing a similar screen to the north); and (b) such storage area is removed and the disturbed area restored, or such storage area is made to conform to all CLRDP requirements (including design guidelines), within five years of CLRDP certification or when it or the sites adjacent to it are redeveloped (i.e., the greenhouses and/or the avian facility) whichever comes first.
- Within the first five years following the date of CLRDP certification, temporary parking and/or ground-level storage areas may be allowed within the Middle Terrace development zone (only) provided that within five years of certification either: (a) such parking and/or ground-level storage areas are removed and the disturbed area restored; or (b) such parking and/or ground-level storage areas are made to conform to all CLRDP requirements, including design guidelines.

### Campus Entrance Facilities

These are facilities that would be installed and/or upgraded in the Campus Entrance development zone adjacent to the intersection of Delaware Avenue and Shaffer Road, and are limited to an entrance kiosk (no taller in height than 12 feet as measured from existing grade, and no more than 125 square feet in size) and a gate that shall remain open during daylight hours but that can be closed during nighttime hours.

### **5.2.2. Land Use Designations and Diagram**

Five land use designations have been created for the UCSC Marine Science Campus: 1) research and education mixed use, 2) resource protection, 3) resource protection buffer, 4) wildlife corridor, and 5) open space. Figure 5.2, Land Use Diagram, shows the geographic location of these designations on the Marine Science Campus. The full-size version of this diagram is included in a pocket behind the back cover of the CLRDP. Figure 5.3, Locational Restrictions for Building Program, provides additional control over the location of individual building program elements within the Research and Education Mixed Use designation. The intended effect of the designations established by this subsection, the location of these designations and of uses within these designations, and the uses allowed within each are set forth below.

#### **Research and Education Mixed Use**

The primary purpose of this land use designation is to accommodate existing permitted uses and the building program elements set forth in Subsection 5.2.1 above. The building program elements allowed in each of the four areas designated for Research and Education Mixed Use and their maximum allowed intensities are specified in Figure 5.1. Additionally, utilities, lighting, signage, trails, drainage facilities, and landscaping are allowed in this designation.

The distribution of building program elements among the Lower, Middle, and Upper Terrace development zones, as shown in Figure 5.3, reflects the allocation of developable campus land that directly borders the sea primarily to new development that is most coastal dependent: the seawater system, marine research and education, coastal public access and recreation, and limited parking related to these uses. The other building program uses, which support these more coastal-dependent uses, are precluded from the Lower Terrace. The one exception is the caretaker housing units, which may be located close to the outdoor research areas located in the Lower Terrace. In addition, temporary desalinization research and organic agriculture uses and development are allowed in this designation on an interim basis as described above. Campus entrance facilities are limited to the campus entry development zone.

#### **Resource Protection**

The primary purpose of this designation is to protect wetlands and Environmentally Sensitive Habitat Areas (ESHA). Areas that are identified in this CLRDP as Resource Protection include most of the **original** Younger Lagoon Reserve, intertidal areas along the coast, and the delineated seasonal wetlands on the upland terrace. Uses and development allowed in the Resource Protection designation shall include adequate measures to ensure that resources are protected against any significant disruption of habitat values and are limited to:

- Habitat creation, enhancement, and restoration,
- Scientific and educational study,
- Nature/interpretative study,
- Other resource-dependent activities,

### 5.2.3. Land Use Policies

#### Stable Urban/Rural Boundary

##### Policy 2.1 Maintaining a Stable Urban/Rural Boundary

*Development and use of the site shall be carried out in a manner designed to limit urban development north and west of the campus.*

Implementation Measure 2.1.1 – Oversizing of Utility Lines Prohibited. *Utilities on the campus shall be limited to the size necessary to serve only the projected needs of the campus.*

Implementation Measure 2.1.2 – Utility Prohibition Zone. *New sewer and/or water utility lines and/or expansion of existing lines shall be prohibited within the utility prohibition zone at the western edge of the Campus (see Figure 5.7).*

##### Policy 2.2 Strengthening the Urban/Rural Boundary through the Protection of Adjacent Agricultural Resources

*The urban/rural boundary shall be strengthened by avoiding conflicts with adjacent agricultural uses.*

Implementation Measure 2.2.1 – Setback of Development and Uses from Adjacent Agricultural Use. *All caretaker accommodations shall be located no closer than 500 feet from the western Campus property line. All other development and uses shall be located no closer than 300 feet from established crop lines (as shown on Figure 3.15) and no closer than 200 feet from the western Campus property line, whichever is the greater distance, except that existing (i.e., pre-CLRDP certification) development and uses (and/or redevelopment and/or reuse of same, including minor expansion of the California Department of Fish and Game facility); ancillary unoccupied structures that support research activities; and public access and recreation facilities and features shown in Figure 5.6 and/or described in Section 5.6 in these agricultural setback areas shall be allowed without restriction with respect to agricultural setback. Short-term accommodations may be located in the area between the 300-foot/200-foot setback and the 500-foot setback only if users of such accommodations are prohibited from staying in the accommodations for more than one week at a time.*

##### Policy 2.3 Designing for the Urban Edge

*Development on the Marine Science Campus shall be sited and designed to sustain a logical transition from urban landscape to rural and agricultural landscape.*

Implementation Measure 2.3.1 – Cluster Development. *Except for allowed drainage facilities, development shall be clustered within, and open space shall be preserved outside of, areas designated for Research and Education Mixed Use including through such means as building clustering, building articulation and scale reduction at the boundary of development zones, rural/agricultural building design, limited lighting, and vegetative and other screening of development, as well as by use of agricultural setbacks, habitat buffers, natural habitats, view corridors, and open space areas. Among other things, this siting and design approach is intended to reinforce the sense of urban edge created by the canyon topography of the original Younger Lagoon Reserve, existing development, and the Santa Cruz city limit.*

Implementation Measure 2.3.2 – Impervious Coverage. *At least 30 percent of land area within the Lower and Middle Terrace development zones shall be maintained in a pervious state and free of impervious surfaces. One hundred percent of the land area within the Upper Terrace and Campus Entrance development zones may be developed with impervious surface as long as water quality standards are met.*

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*The square footage of any such development that is so converted shall not be counted against the Building Program maximums provided for Marine Research and Education Facilities in Section 5.2 and Figure 5.1 provided that an equivalent square foot reduction in the Building Program maximums allotted for short-term and/or caretaker accommodations, respectively, is made an enforceable component of any such change in use.*

## **Campus Land Uses Limited to Marine/Coastal Research and Education, Resource Protection, and Public Access**

### **Policy 2.5 Ensuring Appropriate Land Uses on the Marine Science Campus**

*All development and uses on the Marine Science Campus shall be limited to marine/coastal research and education, resource protection, and public access development and uses, including primarily coastal dependent and coastal related development and uses. All other development and uses on the Marine Science Campus shall be prohibited.*

## **5.3 Natural Resource Protection**

This section sets forth plans, policies, and implementation measures related to the protection of natural resources on the Marine Science Campus.

### **5.3.1 Protection, Enhancement, and Restoration of Natural Resources**

Land use decisions affecting the natural resources of the Marine Science Campus are guided by the overarching goal of the University to protect, maintain, enhance and restore the natural resources of the campus. For the Younger Lagoon Reserve (YLR) portion of the site, which is a component of the University's Natural Reserve System, decisions are also guided by the UCSC Natural Reserves office and the Natural Reserve System's additional goal of providing the best possible environment for coastal-dependent and coastal-related research and education activities that: 1) are supportive of the University of California, Santa Cruz campus' academic plan, 2) are consistent with the mission and goals of the University of California Natural Reserve System, and 3) serve the best interests of the citizens of California.

The plan for managing natural resources on the terrace portion of the Marine Science Campus is set forth in Appendix A, Resource Management Plan. It is the intent of the University through this Resource Management Plan to restore, enhance, and manage all areas located outside of defined development zones (except for streets and trails) as high-quality open space and natural habitat area. One important feature of the Resource Management Plan is the restoration of wetlands on the northwestern part of the site. The primary purposes of this wetland restoration program are to restore wetlands located in this part of the Marine Science Campus to their historic functional value, to enhance the area's suitability to serve as a corridor for wildlife movement to YLR (**original YLR**), and to establish a stable boundary between wetlands and urban uses on this part of the Marine Science Campus.

The Resource Management Plan also contains measures designed to protect and enhance other seasonal wetlands, maintain open space areas, facilitate wildlife movement, protect special-status species, enhance public access, and provide long-term maintenance and monitoring of habitats.

The resource protection policies, implementation measures, and other provisions set forth below address both the terrace portion of the Marine Science Campus and the **original** Younger Lagoon Reserve. For the terrace portion of the site, the resource protection policies and implementation measures set forth below rely in some cases on the Resource Management Plan, and this plan in turn

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contains detailed management measures and other provisions to carry out the policies and implementation measures.

For the purposes of this CLRDP, environmentally sensitive habitat area (ESHA) is any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. The following areas shall be considered ESHA, unless there is compelling site-specific evidence to the contrary:

- Any habitat area that is rare or especially valuable from a local, regional, or statewide basis.
- Habitat areas that contribute to the viability of plant or animal species designated or candidates for listing as rare, threatened, or endangered under State or Federal law.
- Habitat areas that contribute to the viability of species designated as Fully Protected or Species of Special Concern under State law or regulations.
- Habitat areas that contribute to the viability of plant species for which there is compelling evidence of rarity, for example, those designated 1b (Rare or endangered in California and elsewhere) or 2 (rare, threatened or endangered in California but more common elsewhere) by the California Native Plant Society.
- Areas that are designated as an Area of Special Biological Significance or a Marine Protected Area.

The term "wetland" is defined by Section 30121 of the Coastal Act as lands within the coastal zone that may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

It is clear that the Campus is home to significant natural resources, including wetland areas and ESHA areas (including wetlands that are ESHA). The Resource Protection designation has been applied to various resource areas. These include ESHA and wetland areas that were identified at the time of CLRDP certification. The dynamic nature of sensitive habitats and wetlands is recognized by the CLRDP, and the policies below also include the requirement that project areas be evaluated at the time of proposed development to determine whether circumstances that existed at the time of CLRDP preparation have substantially changed in a manner that would necessitate further protections for these resources.

It is also clear that there are certain designated resource and resource buffer areas in which the CLRDP envisions some amount of public access, and it will be important to appropriately balance such public access with resource protection. These include such areas as the realigned main Campus road area, the YLR (**original YLR**) and wetland overlooks, the trails extending through such areas, and the Younger Lagoon beach area. With respect to the latter specifically, the CLRDP provides for supervised access to this area, subject to an approved set of access parameters that are established through a development project review process on a five-year renewal cycle. The Younger Lagoon beach area boundary is located at the approximate location of the beginning of back beach dune morphology and significant vegetation (to the north), the toe of the bluffs to the east, the toe of the

bluffs and the lagoon outlet to the west, and the Pacific Ocean to the south. Any five-year plan, including any use protocols or guidelines shall consider the entirety of the beach area, whether it ultimately allows or disallows certain types of access to certain areas of it. The location of trail access to the beach area is shown in Figure 5.6. At the time of CLRDP certification, the entire beach area and its access trails were recognized as appropriate for supervised tours only (and it would not be open to any kind of general public access). This limitation was applied at that time in order to both protect beach area and adjacent resources within the Reserve (**original YLR**) and to allow for implementation of an applied research program within the Reserve (**original YLR**). At the same time, the CLRDP recognizes that different access supervision parameters, whether more or less restrictive, may be the outcome of any subsequent required five-year review.

### 5.3.2 Natural Resource Protection Policies

#### General

##### Policy 3.1 Protection of the Marine Environment

*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.*

Implementation Measure 3.1.1 – Seawater System. *The Campus seawater system may be maintained and may be expanded consistent with Subsection 5.2.1 to supply the Marine Science Campus with fresh seawater for research and education uses, provided such maintenance/expansion is consistent otherwise with the CLRDP and proceeds in a manner that maintains, enhances, and where feasible restores marine resources. Entrainment and impingement shall be avoided to the maximum extent feasible, and all development that increases the seawater intake flow rate beyond that that existed at the time of CLRDP certification shall include all feasible measures to avoid entrainment and impingement. In addition, any proposed expansion of the seawater system that increases the seawater intake flow rate capability beyond 2,000 gallons per minute or that requires new ocean intake pipelines shall include a comprehensive entrainment/impingement study necessary to determine the extent of entrainment/impingement caused by the intake. Such study shall include an evaluation of methods (including alternative projects and/or project designs) that could be used to avoid or minimize entrainment and impingement, and shall identify all underlying study assumptions and methodologies. Any entrainment or impingement that can not feasibly be avoided shall be mitigated at levels necessary to minimize adverse impacts.*

Implementation Measure 3.1.2 – Discharge of Drainage/Stormwater. *The Campus drainage system shall be maintained and may be expanded consistent with Section 5.7, provided such maintenance/expansion proceeds in a manner that maintains, enhances, and where feasible restores marine resources.*

##### Policy 3.2 Protection and Restoration of Habitat Areas

*The biological productivity and the quality of coastal waters, streams, and wetlands, appropriate to maintain the 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 wastewater discharges, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural watercourses. Campus natural areas (i.e., areas outside of defined development zones) shall be protected, restored, enhanced, and managed as high-quality open space and natural habitat areas.*

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Implementation Measure 3.2.1 – Restoration of Wetlands on the Marine Science Campus. *As part of the University's comprehensive effort to manage natural resources on the Marine Science Campus, wetlands on the northern part of the site shall be connected, expanded, and restored to enhance their functional values. Such restoration program shall include integrating the hydrology of Wetlands W1 and W2 and expanding this consolidated area to provide enhanced biological values. The areas both east and west of the combined Wetland W1/W2 hydrologic corridor shall be restored as functioning wetland upland/transitional habitat, including as described in Appendix A (Resource Management Plan). The restoration program shall also enhance plant biology in Wetlands W1, W2, and W6 to create a consolidated north-south corridor for wildlife movement to YLR (original YLR). As part of any development project involving wetland manipulation, a restoration plan shall be prepared consistent with this CLRDP including its Resource Management Plan (Appendix A) and submitted to the California Coastal Commission, California Department of Fish and Game, and the U.S. Fish and Wildlife Service for review and comment.*

Implementation Measure 3.2.2 – Management of Terrace Wetlands. *The terrace wetlands shall be protected and enhanced by improving surface water flow, removing non-native and invasive plants, promoting the abundance and diversity of native plant species through small-scale plantings, creating buffers, implementing the Drainage Concept Plan (Appendix B), controlling access by humans and non-native animals, and implementing other enhancement measures in accordance with the provisions of this CLRDP, including its Resource Management Plan (Appendix A).*

Implementation Measure 3.2.3 – Protection and Enhancement of Wildlife Movement. *Wildlife movement across the site shall be facilitated and enhanced by establishing two enhanced wildlife corridors and associated buffers adjacent to the Upper Terrace development area (as shown in Figure 5.2) that provide enhanced habitat value and wildlife connectivity in the area between the original Younger Lagoon Reserve and the Moore Creek/Antonelli Pond system east of the Campus. Conditions for wildlife movement in these areas shall be enhanced by eliminating invasive weeds, planting native species to provide better protective cover and visual screening for wildlife than existing vegetation, controlling access by humans and non-native animals, providing fencing/building elements at the development zone boundary that screen Upper Terrace development zone noise, lights, and activities from wildlife in the corridors/buffers, and other enhancement measures in accordance with the provisions of this CLRDP, including its Resource Management Plan (Appendix A). The University shall also coordinate with the owners of the properties immediately east of Shaffer Road and the City of Santa Cruz (in the case of Shaffer Road itself) to promote the extension of the wildlife corridors and wildlife corridor buffers across Shaffer Road and to Moore Creek/Antonelli Pond in the manner most protective of wildlife (see also parameters for wildlife corridors in the Resource Management Plan (Appendix A)).*

Implementation Measure 3.2.4 – Management of Special Status Species Habitat. *Special status animal species and their habitats shall be protected, and their habitats enhanced consistent with the Resource Management Plan (Appendix A), including through protection and enhancement of wetland habitats (including for California red-legged frog) and grassland/scrub-grassland habitats outside of development zones (including for special status bird species), through protection from non-native predators, and through implementation of other enhancement measures in accordance with the provisions of this CLRDP.*

Implementation Measure 3.2.5 – Protect Habitat Areas From Human Intrusion. *Habitat areas on the Marine Science Campus shall be protected against degradation from human intrusion by developing trails and interpretive signs, managing trail use, and implementing other enhancement measures in accordance with the provisions of this CLRDP.*

Implementation Measure 3.2.6 – Natural Area Management. *The University shall restore, enhance, and manage all areas located outside of defined development zones (except for approved streets and trails) as high-quality open space and natural habitat area.*

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Implementation Measure 3.2.7 – Management of Water Quality and Drainage Features. *Water quality shall be protected and enhanced and erosion shall be minimized by means including implementation of the Drainage Concept Plan contained in this CLRDP (see Appendix B). The vegetated stormwater basins, vegetated filter strips, vegetated swales, and other natural drainage features to be installed per the Drainage Concept Plan may exhibit ephemeral wetland and/or habitat characteristics over time, but their primary function is for water quality filtration and treatment, flow control, and infiltration. As such, maintenance within them on a regular basis is expected and necessary in this respect, and is allowed per this CLRDP (see maintenance parameters in the Drainage Concept Plan). It is the intent of the California Coastal Commission in approving installation of these drainage features that they not be treated as wetlands including for purposes of Implementation Measure 3.2.9, except that site specific mitigation measures other than setbacks may be required for development proposed adjacent to such features, to minimize impacts of construction and development on any sensitive resources identified pursuant to Implementation Measures 3.3.1 and 3.4.4.*

Implementation Measure 3.2.8 – Maintenance and Monitoring of Terrace Habitats. *Long-term maintenance and monitoring programs for the terrace habitats shall be developed and implemented in accordance with the provisions of this CLRDP.*

Implementation Measure 3.2.9 – Wetland Buffers. *Buffers for wetlands delineated at the time of CLRDP certification shall be as shown on Figure 5.2 and in no case shall they be reduced. For any new wetlands identified and delineated pursuant to Implementation Measure 3.3.1, development shall be sited and designed to minimize wetland impacts, and development shall be prohibited within a 100 foot buffer of any such wetlands unless it is development allowed within areas designated Resource Protection Buffer, except that a reduced or greater buffer distance may be applied if supported by a site-specific biological evaluation indicating that a reduced buffer would not result in a significant adverse effect to the wetland, or that a greater buffer distance is needed. To the extent that new wetland areas are identified pursuant to Implementation Measure 3.3.1 and the appropriate buffer area is not already designated Resource Protection Buffer on Figure 5.2, the Resource Protection Buffer designation shall be applied to the wetland buffer area.*

Implementation Measure 3.2.10 – Natural Areas Habitat Management. *Within six (6) months of CLRDP certification, the University in consultation with the Executive Director of the California Coastal Commission shall convene a scientific advisory committee (SAC) to guide the restoration, enhancement, and management of natural areas (i.e., all areas outside defined development zones, except for **the original** Younger Lagoon Reserve) on the Marine Science Campus (see Appendix A). Natural areas restoration, enhancement, and management may be completed in up to three phases corresponding to dividing the natural area into thirds (i.e., where Phase 1 accounts for at least one-third of the natural area, Phase 1 plus Phase 2 accounts for at least two-thirds, and all of the three phases together account for all of the natural area). All restoration, enhancement, and management activities shall be guided by Specific Resource Plans developed by the University in accordance with the SAC and the criteria contained in the Resource Management Plan (Appendix A) and current professional standards for such plans. The SAC shall be responsible for guiding development of Specific Resource Plans and shall complete its work on the Specific Resource Plan for Phase I restoration and enhancement efforts within four (4) months of convening. The content of Specific Resource Plans shall be consistent with the performance standards set forth in Appendix A, which may be adapted periodically based on findings from ongoing restoration work. The University shall file a Notice of Impending Development for Phase I work within one (1) year of CLRDP certification. All natural areas restoration and enhancement shall be completed within 20 years of CLRDP certification, with interim benchmarks that at least one-third of the restoration and enhancement shall be completed within seven years of CLRDP certification and that at least two-thirds shall be completed within 14 years of CLRDP certification.*

*areas are identified during this process that are not already designated Resource Protection on Figure 5.2, the Resource Protection designation shall be applied to the newly identified wetland area and uses and development limited in accordance with that designation (see Section 5.2.2, Resource Protection). For any newly identified wetland area, an appropriate buffer shall be established, based upon site-specific conditions in accordance with Implementation Measure 3.2.9.*

*Implementation Measure 3.3.2 – Update CLRDP With Respect to Wetlands. For any wetlands and wetland buffers identified pursuant to implementation measures 3.3.1 and 3.2.9, the University shall amend the CLRDP to reflect the newly identified wetlands and wetland buffers, including all relevant CLRDP text, figures, and use and development restrictions applicable to those areas, and to remove those areas from development zones. The CLRDP amendment shall be submitted to the Coastal Commission before the effective date of the related development project authorization.*

**Policy 3.4 Protection of Environmentally Sensitive Habitat Areas (ESHAs)**

*Environmentally sensitive habitat areas (ESHAs) shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Development in areas adjacent to environmentally sensitive habitat areas shall be sited and designed to prevent impacts that would significantly degrade those areas, and shall be compatible with the continuance of those habitat areas. ESHAs have been designated as "Resource Protection" in this CLRDP, and the uses and development allowed in this designation are identified in Section 5.2.2. ESHAs shall be buffered from urban uses as shown in Figure 5.2 and described in Section 5.2.2 (Resource Protection Buffer subsection).*

*Implementation Measure 3.4.1 – Additional Measures to Protect Habitat Areas. Buffering of sensitive habitat areas shall also be achieved through development restrictions consistent with the policies and programs of this CLRDP, including those that regulate the location of windows, lighting, access, signage, and noise-generating equipment that would disrupt protected habitat values.*

*Implementation Measure 3.4.2 – Noise Intrusion into Terrace ESHA. Development shall be sited and designed so that noise sources are no closer than 100 feet from designated Resource Protection areas located in the terrace portion of the Marine Science Campus (other than development, such as paths, that may include minimal noise sources and that is planned and/or located within 100 feet of these areas and where measures are taken so that noise potentially audible from within these areas is limited to the maximum extent feasible). Use of Campus facilities shall occur in a manner that does not result in undue noise into designated terrace area Resource Protection areas. Noise shall be monitored periodically or upon complaint and appropriate noise attenuation measures shall be immediately implemented to lower any unacceptable noise generation.*

*Implementation Measure 3.4.3 – Noise Intrusion into YLR (original YLR). YLR (original YLR) shall not be exposed to noise generated by human activity on the terrace portion of the Marine Science Campus in excess of 60 dBA CNEL, as measured at the boundary of the YLR (original YLR). For the purposes of this measure, "dBA CNEL" means a 24-hour energy equivalent level derived from a variety of single noise events, with weighting factors of 5 and 10 dBA applied to the evening (7pm to 10pm) and nighttime (10pm to 7am) periods, respectively, to allow for the greater sensitivity to noise during these hours.*

*Implementation Measure 3.4.4 -- Pre-development Evaluation of ESHA Conditions. An evaluation of the development area shall be conducted prior to each development project. The evaluation shall include changed site conditions that may affect ESHA values and new information that was not known at the time of the original ESHA determination. To the extent ESHA areas are identified during this process that are not already designated Resource Protection on Figure 5.2, the Resource Protection designation shall be applied to the newly identified ESHA and uses*

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*and development limited in accordance with that designation (see section 5.2.2, Resource Protection). For any newly identified ESHA area, an appropriate buffer shall be established, based on site-specific biological evaluation, and designated as Resource Protection Buffer.*

Implementation Measure 3.4.5 – Update CLRDP With Respect to ESHA. *For any ESHA and ESHA buffers identified pursuant to implementation measures 3.4.4, the University shall amend the CLRDP to reflect the newly identified ESHA and ESHA buffers, including all relevant CLRDP text, figures, and use and development restrictions applicable to those areas, and to remove those areas from development zones. The CLRDP amendment shall be submitted to the Coastal Commission before the effective date of the related development project authorization.*

### Younger Lagoon Reserve

#### Policy 3.5 Special Protection for the Original Younger Lagoon Reserve

*The University recognizes the special biological significance of the original Younger Lagoon Reserve for habitat value and for research and education and therefore shall continue to provide special protection for the property by retaining it as part of the University's Natural Reserve System and protecting it consistent with this CLRDP.*

Implementation Measure 3.5.1 – Protection and Enhancement of YLR Habitats. *The native plant and animal habitats of Younger Lagoon Reserve (original YLR) shall be protected and enhanced by controlling and removing non-native and invasive plant species, promoting the abundance and diversity of native plant species through small-scale plantings and re-vegetation of areas where exotics and/or invasives have been removed, implementing the Drainage Concept Plan (Appendix B), maintaining and installing fencing/barriers consistent with this CLRDP to control trespass from the terrace portion of the site into YLR (original YLR), limiting access by humans (except access otherwise allowed by this CLRDP), prohibiting domestic pets, and other appropriate means that may become available.*

Implementation Measure 3.5.2 – Protection of Special Status Species in YLR. *Habitats for special status animal species that use Younger Lagoon Reserve (original YLR) shall be protected and enhanced.*

Implementation Measure 3.5.3 – Protection of YLR Resources. *The biological productivity and quality of YLR (original YLR) shall be protected, including by minimizing the effects of stormwater discharges and entrainment, controlling runoff, preventing depletion of ground water supplies, maintaining natural vegetation buffers areas and minimizing alteration of natural features.*

Implementation Measure 3.5.4 – Development of Monitoring and Maintenance Program. *Long-term maintenance and monitoring programs for Younger Lagoon Reserve (original YLR) shall be developed and implemented to assist in long-term preservation of species and habitats in accordance with the provisions of this CLRDP.*

Implementation Measure 3.5.5 – Siting of Windbreak/~~Screening Trees~~ **Vegetation**. *The ~~windbreaks/screening trees~~ **vegetation** required by this CLRDP in connection with new development in the terrace portion of the site (see for example Section 6.5 and Figure 6.6) shall be sited to maximize their ability to screen terrace development as seen from Younger Lagoon Reserve (original YLR).*

Implementation Measure 3.5.6 – YLR Manager Consultation. *Development shall not be authorized by the University without consultation with the YLR Manager. Development shall incorporate measures to address issues and impacts identified through the consultation.*

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Implementation Measure 3.5.7 – Movement Not Visible From YLR (**original YLR**). *Movement associated with development (including within outdoor activity/research areas and buildings, and including all windows in buildings) shall not be visible from within YLR (original YLR).*

Implementation Measure 3.5.8 – Protective Measures for YLR (**original YLR**) in Middle Terrace. *In conjunction with building construction west of McAllister Way in the Middle Terrace development zone, the University shall construct and/or plant protective barriers along the eastern edge of YLR (original YLR) in Development Subarea #7 and, if appropriate, extending south to connect to the existing berm. Such barriers may include fencing, dense vegetation, and/or an earthen berm. If an earthen berm is developed, it shall be sized so that no soil importation is required from outside the Marine Science Campus (i.e., the soil required to construct it would be less than or equal to the amount of soil that becomes available within the campus as a result of grading to prepare development sites), unless importation of additional soil is necessary to ensure proper berm function/configuration; and such soil is demonstrably clean and free of contaminants (including foreign seed stock). Any such berm shall be planted with native grasses and herbaceous shrubs consistent with CLRDP Appendix B, Resource Management Plan.*

### Policy 3.6 Public Access to and within YLR (Original YLR)

*Access to the original Younger Lagoon Reserve may be controlled consistent with the need to protect YLR resources from disruption and degradation and to provide maximum public access consistent with the Coastal Act.*

Implementation Measure 3.6.1 – Provision of Controlled Access within YLR (**Original YLR**). *Physical access within YLR (original YLR) by authorized management, emergency, research, student personnel, and/or docent-led general public consistent with the public access and recreation diagram and policies contained in this CLRDP shall be provided.*

Implementation Measure 3.6.2 – Visual Access to YLR (**Original YLR**). *Visual access to YLR (original YLR) shall be provided for the general public through overlooks (see Figure 5.5), at least one of which shall be available for unescorted (i.e., non-docent) public use.*

Implementation Measure 3.6.3 - Public Beach Access within YLR (**Original YLR**). *Supervised beach access to Younger Lagoon beach shall be provided to the general public consistent with and pursuant to a management plan for such access that is based on the best possible assessment of the capacity of the beach area to sustain use and the level of intensity of such use when considered in light of the fragility of the beach area and adjacent resources and ongoing research. Within six months of CLRDP certification, and at five-year intervals post-certification after that, the University shall submit a Notice of Impending Development to the Coastal Commission with all necessary supporting information for a development project to implement such a beach access management plan for the next five years. Each such management plan shall at a minimum include:*

- *A regular schedule of guided, educational tours to the beach area that is coordinated with and similar to other Marine Science Campus education and docent programs and designed to introduce visitors to the special aspects of beach ecology without causing deterioration of that ecology or loss of opportunity for feeding or breeding of beach dependent species. These tours may be weekly weather permitting, but shall be offered a minimum of two times per month.*
- *Identification of all parameters for beach access, including a clear depiction of the area within which such access is allowed, and a clear description of all related implementing measures (e.g., trail alignments, trail design, barriers/fencing, signage, timing restrictions, supervision requirements, etc.). Access shall be by way of controlled*

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Implementation Measure 4.2.8 – Building Setbacks. *New buildings on the Marine Science Campus shall be located no closer than 15 feet from campus streets and no closer than 20 feet from the pavement edge of Shaffer Road, as improved per Implementation Measure 5.1.3.*

Implementation Measure 4.2.9 – Building Length Limitations. *New building sections constructed on the Marine Science Campus shall not exceed 175 feet in continuous building length adjacent to a street or parking area.*

Implementation Measure 4.2.10 – Placement of Utility Lines Underground. *All utility lines on the Marine Science Campus shall be located underground.*

Implementation Measure 4.2.11 – Windbreak/~~Screening~~ Trees **Vegetation**. *The windbreak/~~screening trees~~ **vegetation** required by this CLRDP in connection with new development in the terrace portion of the site (see Section 6.5 and Figure 6.6) shall be sited to screen development from public view without interfering with that portion of the public view not encumbered by development (e.g., maintaining ocean/horizon views over and around buildings).*

Implementation Measure 4.2.12 – Development in Northernmost Portion of Middle Terrace. *Development in that portion of the Middle Terrace development zone that is located in development Subarea #2, as identified in Figure 5.4, shall be sited and designed to minimize impacts to public views as seen from the Group 2 public trail segments, as identified in Figure 9.1.*

Implementation Measure 4.2.13 – Development Along Edge of Lower Terrace. *Development in that portion of the Lower Terrace development zone that is located in Subareas #13 or #14, as identified in Figure 5.4, shall be limited to low intensity uses and facilities sited and designed to minimize impacts to public views as seen from trails and other access and recreation facilities and features shown on Figure 5.6 and/or described in Section 5.6. Development located in Subarea #14 shall be limited to the seawater system, circulation, and public access improvements and shall not exceed the elevation of the existing seawater facilities. Development in Subareas #13 and #14 shall not significantly block public views and shall, if located within the footprint of the berm (along the western edge of the zone), be no taller than the top of the berm at the time of CLRDP certification.*

Implementation Measure 4.2.14 – Building Development West of McAllister Way in Lower Terrace. *Building development in that portion of the Lower Terrace development zone that is located west of the location of McAllister Way at the time of CLRDP certification shall be limited to uses that integrally relate to existing development or research activities in the development zone, need a location adjacent to YLR (**original YLR**), or otherwise require a more isolated location.*

Implementation Measure 4.2.15 – Building Development West of McAllister Way in Middle Terrace. *Development in Subarea #6 shall be limited to uses that would benefit from a more isolated location, and development in Subarea #7 shall be limited to extension of the pre-CLRDP certification earthen berm, overlook improvements, natural drainage system components, fencing, and/or landscaping.*

Implementation Measure 4.2.16 – Building Development Outside of Subareas Prohibited. *Building development located outside of the subareas shown in Figure 5.4 shall be prohibited. Development located outside of subareas and inside of development zones shall be limited to at-grade development (e.g., streets, parking areas, etc.), unless it is an above-grade development explicitly identified as appropriate in this CLRDP (e.g. an earthen berm extension), where any associated above-grade development and structures (e.g., fencing, light standards, etc.), shall not exceed the scale, including the height, established for such development and structures in the CLRDP.*

**Policy 4.3 Visual Intrusion and Lighting**

*Development shall be sited and designed so that the impacts of activity and direct light on wildlife and public views outside of development zones is limited to the maximum extent feasible.*

Implementation Measure 4.3.1 – Visual Intrusion into YLR (**Original YLR**). *Development adjacent to YLR (**original YLR**) shall be sited and designed so that activity and direct light will not be visible from within YLR (**original YLR**).*

Implementation Measure 4.3.2 – Visual Intrusion into ~~Terrace ESHA and Other Areas Outside of Development Zones~~ **YLR (Terrace Lands)**. *Development shall be sited and designed so that activity and direct light that may be visible from outside of development zones is limited to the maximum extent feasible, and so that any activity and/or direct light that is unavoidably visible is minimized in its intensity. In determining the measures needed to limit visual intrusion to the maximum extent feasible, the University shall consult with the manager of Younger Lagoon Reserve and the California Department of Fish and Game.*

Implementation Measure 4.3.3 – All Lighting. *Lighting on the Marine Science Campus shall be provided at the lowest footcandle levels necessary to achieve safety and efficient navigation.*

Implementation Measure 4.3.4 – Building Lighting. *Exterior lighting shall be located only at building entries and usable interior courtyards. No other exterior lighting of buildings, such as façade or accent lighting, shall be allowed, except where necessary for safety. Interior lighting shall be located so as to minimize the potential for light and glare to be visible from within Resource Protection, Resource Protection Buffer, and Wildlife Corridor areas and be consistent with the Uniform Building Code.*

Implementation Measure 4.3.5 – Street and Trail Lighting. *Streets on the Marine Science Campus may only be lighted within the development zones of the campus. Trails shall be lighted only to the extent needed for safety. Only low-intensity lights attached to low-height, wood bollards (i.e., up to 36" maximum height) shall be used for trail lighting, and all trail lighting shall be downward directed.*

Implementation Measure 4.3.6 – Parking Lot and Maintenance Yard Lighting. *Lighting in parking lots and maintenance yards shall be the lowest lighting intensity levels necessary to provide safety and security. All parking lot and maintenance yard lighting shall be full cut-off type lighting and shall be downward directed. Pole mounted lighting shall be limited to the maximum extent feasible (in number, height, and bulk) and shall not exceed 12 feet in height.*

Implementation Measure 4.3.7 – Sign Lighting. *Sign lighting on campus shall be limited to signs identifying important destinations, restricted areas, and/or dangerous terrain. All sign lighting shall be the minimum necessary to achieve design objectives. No backlighting of signs or use of neon shall be allowed.*

Implementation Measure 4.3.8 – Lighting Plan Required. *New development that includes lighting shall be authorized by the University only if it includes a lighting plan that details the manner in which the development individually and cumulatively is consistent with and implements the lighting parameters of this CLRDP, including Policy 4.3 and its implementing measures, and including long-term lighting system monitoring and maintenance.*

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be separated from the street by a minimum 5-foot strip of vegetation designed to buffer trail users from vehicles. Public trails shall be constructed of compacted decomposed granite or similar materials. Boardwalks, stairs, and/or bridges may be utilized if appropriate (e.g., where trails cross habitat features, uneven topography, etc.). Public access to these trails shall be free from restrictions, except those regarding hours of use and domestic animals set forth in the policies of this subsection. The public trails are provided to allow for low-intensity use that will not significantly disrupt the habitat values of Campus resource protection areas.

### **Public Overlooks**

The primary purpose of this public access designation is to provide points of visual access to the ocean, the **original** Younger Lagoon Reserve, and the seasonal pond north of Seymour Marine Discovery Center. Some overlooks are located in controlled access areas, and the provisions of that designation also govern access to such overlooks. All overlooks except overlooks C and D are available for general public use during daylight hours. Overlooks shall include interpretive signs and related information. Illustrative plans for the design of new and improved overlooks on the Marine Science Campus are presented in Chapter 7.

### **Controlled Access Areas**

The primary purpose of this designation is to provide pedestrian access to scenic and coastal resource areas of the Marine Science Campus in a manner consistent with safety, security, and protection of sensitive coastal resources and research areas. Controlled access areas may be accessed only by authorized personnel for scientific or educational purposes; by authorized personnel for the construction, repair, or maintenance of facilities; by authorized visitors; by members of the public as part of a supervised tour; and, where Public Trails extend through Controlled Access Areas as shown on Figure 5.6, by the general public. For the Younger Lagoon beach area specifically, supervised access shall be allowed within this controlled access area consistent with and pursuant to a management plan for such access. The Controlled Access Area designation applies to portions of the Marine Science Campus that contain environmentally sensitive habitat and/or resource buffers or within which sensitive outdoor research activity is undertaken.

### **Controlled Access Trails**

The primary purpose of this public access designation is to provide pedestrian access to overlooks and the Younger lagoon beach area that are located in Controlled Access Areas of the Marine Science Campus. Because the overlooks exist or are to be sited in areas that include sensitive coastal resources, research facilities and activities, and steep ocean cliffs, use of the overlook trails shall be limited to authorized personnel for scientific or educational purposes or for the construction, repair, or maintenance of facilities. Because access to the Younger Lagoon beach area is only allowed consistent with and pursuant to a management plan for such access, use of the beach access trails shall be subject to the provisions of such management plan. These areas may also be accessed by members of the public as part of a supervised tour or education program (e.g., those conducted by Seymour Marine Discovery Center or Younger Lagoon Reserve staff of the terrace areas and Younger Lagoon beach). Controlled Access Trails shall be ADA compliant (unless topography and/or sensitive natural resources preclude compliance) and constructed of compacted decomposed granite or similar materials.

## 5.7. Hydrology and Water Quality

This section sets forth plans, policies, and implementation measures related to hydrology and water quality on the Marine Science Campus and, as applicable, offsite.

### 5.7.1. Drainage Concept Plan

The governing plan for hydrology and water quality on the Marine Science Campus is the Marine Science Campus Drainage Concept Plan (Drainage Concept Plan), which is included as part of this CLRDP as Appendix B. The Drainage Concept Plan recognizes that stormwater and other runoff from the Marine Science Campus ultimately enters important natural resource areas on and adjacent to the site, including the original Younger Lagoon Reserve, terrace wetlands, and the Monterey Bay National Marine Sanctuary. Stormwater runoff is vital to the maintenance of habitat values in wet areas on Campus, but with development of the site there is also potential for harm caused by increased energy flows, altered flow regimes, and urban pollutants.

Overall, the implementation of the Drainage Concept Plan should be a significant improvement over the existing (at the time of CLRDP certification) drainage system for the Marine Science Campus. First, the plan calls for the correction of various then-existing drainage deficiencies on the Marine Science Campus (e.g., the deposition of eroded soil caused by historical erosion problems on the bluffs of Younger Lagoon Reserve adjacent to the NOAA inholding) early in the implementation of this CLRDP.

Second, the plan protects sensitive habitat areas from the effects of future development by using a combination of natural drainage systems and engineered filtration systems. The natural systems, which are referred to as Best Management Practices (or BMPs) will be used in series, where possible, connecting vegetated filter strips to grassy swales that are in turn connected to vegetated stormwater basins. Each of these mechanisms serves to filter and treat stormwater and other runoff so the quality of water leaving the system should be of relatively high quality. In addition to providing a high level of water quality, these natural systems will augment groundwater supplies by providing ample opportunities for groundwater recharge. Natural systems will be supplemented with engineered filtration system BMPs that will be used in parking lot and other vehicular use areas, and in maintenance/laydown areas, to ensure cleansing of runoff prior to it entering the natural systems in series, including ultimately the vegetated stormwater basins. The "in ground" natural and engineered treatment and filtration systems will also be supplemented by source control (such as a Campus-wide stormwater educational program, use of less polluting materials, etc.) and operational BMPs (such as regular maintenance, street sweeping/vacuuming, etc.). Thus, the Drainage Concept Plan represents a state of the art "treatment train" BMP approach that is both sensitive to the site design aesthetic and designed to produce the highest possible quality of site runoff possible.

The Drainage Concept Plan has six key components:

- Use of natural and engineered treatment/filtration BMPs in concert with source control and operational BMPs in a "treatment train" approach designed to effectively remove typical urban pollutants from site runoff and to allow the filtered and treated runoff to be used to maintain and enhance habitat areas.

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- Maintenance of pre-development drainage peak flows in the post-development drainage system.
- Treatment of stormwater and other runoff to meet defined water quality success criteria (including the requirements set forth in “California’s Management Measures for Polluted Runoff,” Section 6217 (g) of the Coastal Zone Amendment and Reauthorization Act, and the Central Coast Region Basin Plan).
- Maintenance of BMPs and monitoring of filtered and treated stormwater and other runoff to ensure that the drainage system is able to provide effective control of water quantity and quality consistent with plan objectives.
- Maintenance of groundwater recharge at pre-CLRDP levels to the maximum extent practicable.
- Correction of erosion and sedimentation problems in **the original** Younger Lagoon Reserve caused by drainage from the terrace portion of the site.

Policies and implementation measures upon which the Drainage Concept Plan is based are provided below. In carrying out the Drainage Concept Plan, decisions are to be guided by, and achieve consistency with these policies and implementation measures, and the Drainage Concept Plan.

### 5.7.2. Drainage Management Policies

#### Policy 7.1 Productivity and Quality of Coastal Waters

*The Marine Science Campus shall be developed and used in a manner that shall sustain and, where feasible, enhance and restore, the biological productivity and quality of coastal waters on and adjacent to the Campus through controlling, filtering, and treating runoff and other non-point sources of pollution, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging wastewater reclamation, and maintaining natural vegetation buffer areas that protect riparian habitats.*

Implementation Measure 7.1.1 – Management of Stormwater and Other Runoff. *The stormwater and other runoff drainage system on the Marine Science Campus shall be sited and designed using a combination of good site planning, source control, and filtration/treatment best management practices (including engineered storm water treatment systems) to achieve water quality objectives, as detailed in the Drainage Concept Plan (Appendix B). Low Impact Development (LID) BMP strategies and techniques shall be used in all system design (e.g., maximizing infiltration in BMP design, reducing the hydraulic connectivity of impervious surfaces, etc.). The drainage system shall be designed to filter and treat (i.e., to remove typical and expected urban runoff pollutants) all site runoff prior to its use for on-site habitat enhancement, infiltration, and/or landscape irrigation, and/or prior to its discharge otherwise. The drainage system shall be sized to accommodate the volume of runoff produced from all applied water (such as for irrigation) and from each and every storm and/or precipitation event up to and including the 85th percentile 24-hour runoff event for volume-based BMPs. Drainage shall be directed to vegetated stormwater basins through vegetated filter strips and swales to further improve water quality prior to its discharge to receiving areas. The drainage system for equipment/vehicle use areas (i.e., parking lots, maintenance and laydown areas, etc.) shall also include engineered treatment systems and/or equivalent systems designed to filter and treat contaminants expected to be present in the runoff relating to the specific type of equipment/vehicle use.*

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result in new drainage inputs to established drainage system components shall clearly identify the drainage system components that are designed to accommodate project drainage and address CLRDP water quality requirements. These components shall be considered a "BMP treatment train" for purposes of CLRDP water quality monitoring (see Appendix B). For each BMP treatment train so identified, its final discharge point and a representative initial input point shall be designated for purposes of CLRDP water quality monitoring.

### Policy 7.2 Long-Term Maintenance and Monitoring

The University shall maintain and monitor the drainage system for stormwater and other runoff on the Marine Science Campus to provide control of water quantity and quality in a manner which maintains the quality and biological productivity of coastal waters and habitats on and adjacent to the Campus.

Implementation Measure 7.2.1 – Drainage System Monitoring and Maintenance. The University shall regularly inspect and maintain Marine Science Campus drainage systems, and shall regularly monitor system discharge, consistent with the requirements of the Drainage Concept Plan to ensure that the integrity of the drainage system is maintained, to verify that the drainage system is improving the quality of the water draining from the site, and to ensure that discharge has been adequately filtered and treated to meet CLRDP water quality objectives.

Implementation Measure 7.2.2 – Stormwater System Natural Features Maintenance. The vegetated stormwater basins, vegetated filter strips, vegetated swales, and other natural drainage features to be created per the Drainage Concept Plan may exhibit wetland and/or habitat characteristics over time, but their primary function is for water quality filtration and treatment, flow control, and infiltration. As such, maintenance within them on a regular basis is expected and necessary in this respect, and is allowed per this CLRDP (see maintenance parameters in the Drainage Concept Plan).

Implementation Measure 7.2.3 – Drainage System Sampling. The University shall sample stormwater runoff within, and discharges from, each development zone (i.e., Upper, Middle, and Lower Terrace, and Campus Entrance) on the Marine Science Campus and in YLR in a manner consistent with the Drainage Concept Plan. Stormwater shall be tested to ensure that the BMPs incorporated into the drainage system are functioning consistent with the Drainage Concept Plan. If discharge water quality does not meet the objectives set forth in the Drainage Concept Plan, the University shall take action to determine the cause and make modifications as necessary to address the identified water quality issue and to meet the required water quality objectives. The results of stormwater sampling shall be made available to researchers investigating the performance of BMPs in California.

Implementation Measure 7.2.4 – Long-Term Maintenance of Stormwater System. The University shall regularly maintain all components of the campus drainage system, as specified in the Drainage Concept Plan.

### Policy 7.3 Drainage Discharge Points

The number of individual drainage discharge points shall be as specified in the Drainage Concept Plan. The University shall make improvements to them as necessary to correct existing erosion and/or other problems detrimental to maintenance of beneficial hydrology or water quality. Additional discharge points not identified in the Drainage Concept Plan shall not be created unless required to replace an identified discharge point, the improvement of which would cause a significant impact on the environment, and unless the creation of a new discharge point would have less impact than improving the existing discharge point.

Implementation Measure 7.3.1 – Discharge to the original Younger Lagoon Reserve. Stormwater discharge facilities that discharge into the original Younger Lagoon Reserve shall be designed to accommodate the 100-year storm event if otherwise consistent with the provisions of this CLRDP, including the Drainage Concept Plan.

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Implementation Measure 2.3.3 – ~~Windbreak/Screening Trees~~ **Vegetation**. *Development sited adjacent to windbreak/screening trees **vegetation** shall include as part of it, installation of and long-term maintenance parameters for the designated windbreak/screening trees **vegetation**.*

Implementation Measure 2.3.4 – Buildout Planning. *Development shall not interfere with the ability to site and design future buildings and other development in a manner than can fully conform to the CLRDP, and shall not interfere with the University's ability to meet all commitments identified in the CLRDP.*

Implementation Measure 2.3.5 – Interim Weed Abatement Measures for Undeveloped Land Within Development Zones. *In conjunction with management measures RMP MM 1 and RMP MM 2 (see Appendix A), the University shall remove high priority weeds and control other weedy invasive annual grasses and herbs within the undeveloped portions of development zones until such time as the areas are developed.*

### Short-Term and Caretaker Accommodations

#### Policy 2.4 Short-Term and Caretaker Accommodations

*As demand presents itself, short-term and caretaker accommodations may be developed on the Marine Science Campus solely for use by Marine Science Campus users.*

Implementation Measure 2.4.1 – Short-Term Accommodation Use Restrictions. *All short-term accommodations on the Marine Science Campus (researcher rooms and overnight accommodations) shall be solely for the use of faculty, researchers, affiliates, staff, students and visitors who are working on site or directly involved with Campus marine research programs that require their on-site presence on a regular and substantial basis. All such accommodations shall be for short-term rental or lease where users shall be limited to a maximum stay of up to one year for researcher rooms and up to 30 days for overnight accommodations and only as long as they remain directly involved with marine research programs that require their on-site presence on a regular and substantial basis. The eligibility, rental/lease, and length of stay terms stated in this measure above shall be incorporated into, and made enforceable parts of, all rental or equivalent agreements applicable to Campus short-term accommodations.*

Implementation Measure 2.4.2 – Caretaker Accommodations. *A maximum of two caretaker units shall be allowed on the Campus, and these units shall be limited to locations in the Middle Terrace or Lower Terrace development zones, consistent with the additional restrictions set forth in Figure 5.3. All such caretaker units shall be designed to emulate adjacent marine research and education buildings (including an absence of publicly visible outdoor residential development and yard space) and shall be seamlessly integrated into adjacent marine research and education buildings. The two existing (at the time of CLRDP certification) temporary caretaker units and related development (e.g., fencing, decking, landscaping, etc.) in the Lower Terrace development zone do not conform to the above-described design parameters and shall be replaced by units that do conform concurrent with any development in the Lower Terrace development zone that involves the footprint of the temporary caretaker units. If the temporary caretaker units and related development have not been replaced as described herein within five years of CLRDP certification, then the exterior of the caretaker units (i.e., siding, roofs, windows, etc.) and all related development shall be modified at that time to emulate the design of adjacent marine research and education buildings as described above. This caretaker unit requirement specific to the Lower Terrace development zone shall be made a condition of approval of the first development project authorized pursuant to the certified CLRDP.*

Implementation Measure 2.4.3 – Use Conversion. *Short-term and/or caretaker accommodations that have been constructed pursuant to CLRDP authorization may be converted to Research and Education Mixed Use uses.*

**6.5.1. Intent**

The intent of this section is to provide guidelines for landscaping natural drainage features and areas adjacent to, connecting, and within development zones. Where new planting in these areas is proposed at the Marine Science Campus the intent is:

- To use plant material (for both natural and ornamental areas) that is native to the Northern and Central California coast, and if possible native to the Terrace Point area.
- To plant material that is drought tolerant, non-invasive, low maintenance, and fire retardant.
- To plant native materials that are from the same gene pool.

**6.5.2. Planting Design Guidelines**

Guidelines for planting in and adjacent to developed areas and in areas serving a drainage function are discussed below. Figure 6.6, Landscape Design, generally illustrates the concept for siting landscape design elements for the developed areas of the Marine Science Campus. Figure 6.6 is not intended to represent the only way to realize the landscape concepts, but rather it is intended to provide a generalized illustration of how the concepts would be applied to developed areas of the site.

**Stormwater Basins, Swales, and Filter Strips**

Vegetated stormwater basins, swales, and filter strips to be installed for site drainage are intended to reinforce the natural dendritic pattern of the coastal landscape that is both naturally occurring and found along rural roadways. These new drainage features will be planted with materials that will assist in the treatment of stormwater runoff (including, as appropriate, plant species that are capable of improving particulate settling and uptake of dissolved contaminants) and that are also complementary to the surrounding rural/natural environment (see also Appendix B, Drainage Concept Plan, for additional specific planting and other related design guidance).

**Windbreak/Screening-Trees Vegetation**

~~Trees~~ Tall native shrubs or other appropriate native plants will be planted in rows as windbreaks on the Campus whose purpose is to reinforce views, provide visual screening of buildings and parking, enhance site aesthetics, and mitigate winds.

~~Tall native shrubs or trees shall be used at windbreaks. Trees that are not native to the site-~~ A single species, such as Monterey Cypress, ~~is preferred for the windbreaks, but multiple complementary species, such as Monterey Pine, Bishop Pine, Gray Pine, Torrey Pine, and Western Hemlock, may shall not be used if the same general effect can be achieved. A single species is preferred.~~ If multiple species are used on the site, individual rows of trees plants (or sets of rows in parallel) shall still be mono-species unless a mixture of species better satisfies the purpose of the windbreak plantings and other CLRDP requirements. ~~Major tree species-Vegetation that are~~ is planted as windbreaks will generally be used in strategic locations associated with building groupings and shall only be placed in a north/south linear orientation. ~~They~~ Windbreaks shall not be planted in an east/west direction or used to completely surround or screen individual buildings, as planting trees in such a manner is not typical of the rural/agricultural coastal landscape. Furthermore, such an

application would reduce the legibility of the ~~trees~~ windbreaks as major landscape “structure” and reduce the opportunity to focus views to the ocean, the Monterey Peninsula, or major inland features. Existing Monterey cypress, which are not native and are invasive, may be removed and replaced with native trees, tall shrubs or other appropriate native vegetation in conjunction with earthen berms as needed to obtain appropriate height.

### Transitional Landscape

The transitional landscape area is defined as the area within development zones that is within 50 feet of the development zone perimeter. Development consistent with the CLRDP is not precluded within the transitional landscape area and planting in the transitional landscape area is intended to:

- Reduce the perceived scale of buildings.
- Provide a planted buffer between buildings and natural areas.
- Provide additional shrub and tree cover for wildlife habitat.

Where buildings are low scaled (up to 15 feet), plantings in the transition zone shall be an extension of the surrounding landscape, extending to the foundation of the building (depending upon the design of the building). This will be true in both areas adjacent to open grassland areas and in areas with taller vegetation such as adjacent to Younger Lagoon. In these areas, buildings shall be designed to appear as an integral feature of the landscape (see also design guidelines for buildings).

Elsewhere, where taller buildings are adjacent to major site natural areas and open spaces, the transition zone shall contain small trees and large shrubs whose primary purpose is to reduce the apparent height of the building. Strong continuous simple masses of plantings similar to those found throughout the rural coastal landscape shall be used.

It is not intended that plantings form a full-height visual screen around all tall buildings or building groups on the campus. This would depend on large-scale trees, which would take many years to grow to achieve their goal. Furthermore such treatment would be out of character with prevailing coastal rural character and would block views from within the buildings on campus.

Rather it is envisioned that transitional plantings will range in height from 3-12 feet, thereby reducing the apparent scale of buildings by visually “removing” and/or mottling the ground floor as seen from on and off site. These transitional plantings will also generally be tallest nearest the buildings with the height of species generally “ramping down” to shorter and shorter species as the transitional plantings extend toward the surrounding natural areas and open spaces (and approximating the height/density of plantings in this regard upon reaching the outward edge of the transitional planting area). This is typically seen in large-scale buildings throughout the Northern California coastal region. Plant species shall be limited to locally-collected native species. Individual specimen trees may also be used in the transitional landscape area to reduce the apparent scale of a building, or to provide a screen or break in the façade or corner at a strategic location. A group of no more than three trees should be used for this purpose. Tree species used should be similar to those utilized for the windbreak/screening ~~trees~~ described above.

Finally, transitional plantings in the Upper Terrace development zone shall be chosen for their ability to effectively screen development (including associated noise, lights, and activity) to ensure it does

## Appendix A – Resource Management Plan

Performance standards for these management measures are presented in Table A.8. Table A.2 lists the non-native weeds (classified there as high, medium, and low priority for removal) identified for removal, and Table A.3 identifies appropriate species for the planting, as described in these management measures.

Language regarding fencing is not part of this amendment.

**RMP MM 30.** Remove existing (at CLRDP certification) chain link fencing and install ~~new solid~~ ~~fencing~~ and/or additional berm along or just outside of the YLR boundary (see also Fencing Design in CLRDP Section 6.8). ~~Augment the screening provided by the berm with visually permeable fencing and vegetative screening on the McAllister Way side of the berm such that YLR is screened from noise and activity consistent with RMP PS 31 criteria.~~ Plant windbreak and linear mass ~~trees-tall shrubs~~ in a north-south orientation to enhance screening of terrace noise, lights, and activities from YLR (see also Landscape Design in CLRDP Section 6.5). Plant appropriate native shrub species (see Table A.3) to soften the appearance of any fencing and/or berming and to augment the screening capabilities of the fencing, berming and tree screens.

Language regarding "tall shrubs" is part of this amendment.

**RMP MM 31.** Remove high priority invasive weeds other than poison hemlock (see Table A.2) using appropriate methods. Weed removal should be coordinated with management activities in YLR and should be accomplished prior to seedset.

**RMP MM 32.** Remove poison hemlock in selected areas each year using appropriate methods. Weed removal should be coordinated with management activities in YLR and should be accomplished prior to seedset.

**RMP MM 33.** Reduce seedset in stands of poison hemlock using appropriate methods.

**RMP MM 34.** Plant appropriate native grasses, herbs, and shrubs (see Table A.3) in weeded and open areas of buffer.

**RMP MM 35.** If adjacent to trails or in other areas subject to disturbance, protect areas undergoing planting until vegetation is established. As appropriate, place low fencing and signs informing people of ongoing revegetation efforts around the planted areas.

**RMP MM 36.** Control/retain drainage into the small erosion gully west of the Campus access road across from the NOAA building (above YLR) and revegetate gully as necessary to reduce the potential for increased gullying and sedimentation and/or turbidity impacts to Younger Lagoon.



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Implementation Measure 3.2.11 – CRLF Protection. *Surveys for California red-legged frog shall be conducted prior to authorization of any development project within 100 meters of an identified wetland resource. All authorized development shall include construction and post-construction safe passage and other mitigation measures (e.g., barriers along development perimeters) as appropriate.*

Implementation Measure 3.2.12 – USFWS Consultation Required. *Development project authorizations shall include either (1) evidence of authorization by the U.S. Fish and Wildlife Service, including but not limited to a Habitat Conservation Plan/incidental take permit; or (2) evidence from the USFWS that no authorization is required.*

Implementation Measure 3.2.13 – Rodenticides. *Rodents on the Campus may be controlled as necessary to maintain public health and safety. Rodenticide use shall be prohibited outside of developed areas within development zones. The impacts on non-target species from any rodenticide used on the Campus shall be minimized to the maximum extent feasible. Rodent control areas shall be reviewed for the potential presence of non-target species – including special-status species – and the rodent control methods tailored to minimize non-target species impacts. When chemical control is required, the use shall be guided by label restrictions and any advisories published by the California Department of Pesticide Regulation or the County Agricultural Commission. In areas occupied by burrowing owls, fumigants shall not be used unless specifically determined safe by a qualified biologist. If necessary, alternative methods of rodent control shall be determined by a qualified biologist. The rodenticide applicator shall remove carcasses of poisoned animals, when they are found, to minimize secondary toxic effects on raptors or other wildlife. Carcass survey and disposal shall be performed in the treated area and the area surrounding it beginning on the third day following the initial exposure of toxic baits. Any exposed carcasses shall be disposed of in a manner inaccessible to wildlife. Carcass surveys shall continue for at least five days after toxic baiting has ceased and thereafter until no more carcasses are found.*

Implementation Measure 3.2.14 – Non-Invasive Native Plant Species Required. *All landscaping and vegetation on the Campus (including restoration and enhancement plantings, screening vegetation, stormwater system plantings, ornamental plantings, and all other plant material) shall be limited to non-invasive native plant species that are appropriate to the habitat and region and that are grown from seeds or vegetative materials obtained from local natural habitats so as to protect the genetic makeup of natural populations. Horticultural varieties shall not be used. ~~Except for the planting of Monterey cypress,~~ Only locally collected seed, cuttings, and/or other propagules shall be used for landscaping. If feasible, materials should be collected from **similar habitats on the first and lower reaches of the second marine terraces along the coast of western Santa Cruz County and southern San Mateo County coastal habitats that are located within approximately one mile of the Campus and seaward of Highway 1.***

### Policy 3.3 Use and Protection of Coastal Waters and Wetlands

*The diking, filling, or dredging of open coastal waters and wetlands shall be permitted 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: (1) incidental public service purposes, including but not limited to, burying cables and pipes or inspection of existing intake and outfall lines, (2) restoration purposes, and (3) nature study, aquaculture, or similar resource dependent activities. In addition, the diking, filling, or dredging of existing wetlands shall maintain or enhance the functional capacity of the wetland.*

Implementation Measure 3.3.1 – Pre-development Evaluation of Wetland Conditions. *An evaluation of the development area shall be conducted prior to each development project. The evaluation shall include any changed site conditions that could affect wetland values protected by this CLRDP. A wetland evaluation shall be completed in the proposed development area (i.e., the proposed development footprint and a surrounding 200-foot buffer area) in consultation with the Executive Director, using the Coastal Act 30121 wetland definition. To the extent wetland*

Fig. 9.2 Timing of Public Trail Improvements (see Figure 9.1)

| <i>Trail Group</i> | <i>Timing of Improvement</i>   |
|--------------------|--|
| Group 1            | Improvement of <del>this group of trail segments</del> <b>the De Anza Trail, the Bluff Trail, the Discovery Trail, Middle Terrace Walk and Ocean Shore Railroad Trail</b> shall be undertaken and completed concurrent with the development of any new building in the Lower or Middle Terrace development zones.  |
| Group 2            | Improvement of <del>this group of trail segments</del> <b>Construction of additional east-west trails between the Middle Terrace Qalk and McAllister Way</b> shall be undertaken and completed concurrent with the development of <del>the realigned "Major Campus Street."</del> <b>adjacent new buildings on the Middle Terrace.</b>   |
| Group 3            | <del>Improvement of this group of trail segments</del> <b>Construction of the Upper Terrace trail segments</b> shall be undertaken and completed concurrent with any new development in the Upper Terrace development zone, or when the first 10% of the new building floor area (square footage) contained in the Campus building program set forth in subsection 5.2.1 is completed. |

**9.1.2 Overlooks**

The University shall construct new overlooks and improve existing overlooks on the Marine Science Campus consistent with the parameters for such overlook improvements specified in this CLRDP, including Section 5.6 and Chapter 7. The improvements at Overlook B shall encompass the areas adjacent to the overlook as described in Chapter 7. These new and improved overlooks shall be completed as shown in Figure 9.3

Fig. 9.3 Timing of Overlook Improvements

| <i>Overlook</i>          | <i>Timing of Improvement</i>   |
|--------------------------|--|
| All Overlooks (A – F)    | Unless required to be completed earlier by the timing described in the remainder of this figure, at a minimum, all overlook improvements shall be completed when the first ten percent of new building floor area (square footage) contained in the Marine Science Campus Building Program set forth in Subsection 5.2.1 is completed. |
| Overlooks A, C, D, and E | All overlook improvements shall be completed within 12 months of CLRDP certification.  |

hours of 8:00 am and 5:00 pm only, the University may use permits, meters, or other similar methods for managing such public coastal access parking spaces (except for public coastal access parking spaces in the Campus Entrance development zone where such parking shall be provided without such encumbrances) provided such methods are easily understood and followed (including that points of acquisition for any required placards, permits, meter slugs, etc. are conveniently located and operated with respect to public access visitors) and provided such methods provide an easy means of allowing parking space users who arrived prior to 8:00 am to continue to park in the public coastal access parking spaces without being penalized for early arrival. All public coastal access parking spaces are to be provided pursuant to the timing identified in Figure 9.4.

Implementation Measure 5.3.3 – Campus Entrance Public Coastal Access Parking. *A minimum of fifteen public coastal access parking spaces shall be provided adjacent to the intersection of Shaffer Road and Delaware Avenue in the Campus Entrance development zone.*

Implementation Measure 5.3.4 – Middle Terrace Public Coastal Access Parking. *A minimum of five public coastal access parking spaces shall be provided: (1) in that portion of subarea 9 (Figure 5.4) that is adjacent to any Campus support facilities in subarea 9 and that provides the easiest and most direct access to the public trails extending outside of the Middle Terrace development zone; or (2) in a location that provides the easiest and most direct access to Overlook E (Figure 9.1) and the public trail connection to Overlook E.*

Implementation Measure 5.3.5 – Lower Terrace Dual Use Parking (Public Coastal Access Parking and Discovery Center Parking). *A minimum of forty parking spaces in the Lower Terrace development zone shall be available and reserved exclusively for public coastal access parking and for parking by visitors to the Seymour Marine Discovery Center.*

Implementation Measure 5.3.6 – Lower Terrace Public Coastal Access Parking. *A minimum of ten public coastal access parking spaces shall be provided in the Lower Terrace development zone in a location that provides the easiest and most direct access to public coastal access amenities (e.g., in the parking bay along the east side of McAllister Way opposite the Ocean Health Building).*

Implementation Measure 5.3.7 – Parking Demand Satisfied On-Campus. *All parking demand shall be satisfied on Campus, and nNew development shall include adequate and enforceable measures to ensure that all parking demand associated with CLRDP development does not impact public parking or coastal access on streets adjacent to the MSC, including Delaware Avenue. is satisfied on Campus.*

Implementation Measure 5.3.8 – Free and/or Low Cost Public Coastal Access Parking. *Public coastal access parking spaces shall be available at no cost unless a Campus parking program is authorized as a development project pursuant to this CLRDP that requires a nominal fee for all or portions of such parking (except for public coastal access parking in the Campus Entrance development zone, where parking fees are prohibited), and only if such fee does not negatively impact public access.*

#### **Policy 5.4 Parking Supply**

*The University shall regulate existing parking and develop new parking on the Marine Science Campus to ensure that parking spaces are provided in an amount commensurate with the requirements of Policy 5.3 and its implementation measures, and the demand created by new development.*

Implementation Measure 5.4.1 – Development of New Parking. *New parking shall be developed as demand warrants up to a maximum of 795 spaces Campus wide. No new parking spaces shall be developed until existing*

## 5.5. Circulation and Parking

This section sets forth plans, policies, and implementation measures related to circulation and parking on the Marine Science Campus.

### 5.5.1 Circulation and Parking Discussion

The development of circulation and parking facilities on the Marine Science Campus is primarily guided by the objectives, design principles, and land use concepts of Chapter 4 and by the policies of Chapter 5. Design standards for campus streets and parking are set forth in Chapter 6 (Section 6.2, Campus Street Design and Section 6.3, Parking Design). The location of campus streets is explicitly identified in the next section, which includes Figure 5.5, Circulation and Parking Diagram. The location of parking facilities is not explicitly identified in this section, because such siting is more dependent upon how the Campus develops over time and the relationship of buildings, streets, and other Campus facilities to potential parking lot locations.

#### **New Main Campus Street and Abandonment of Part of Former Access Road**

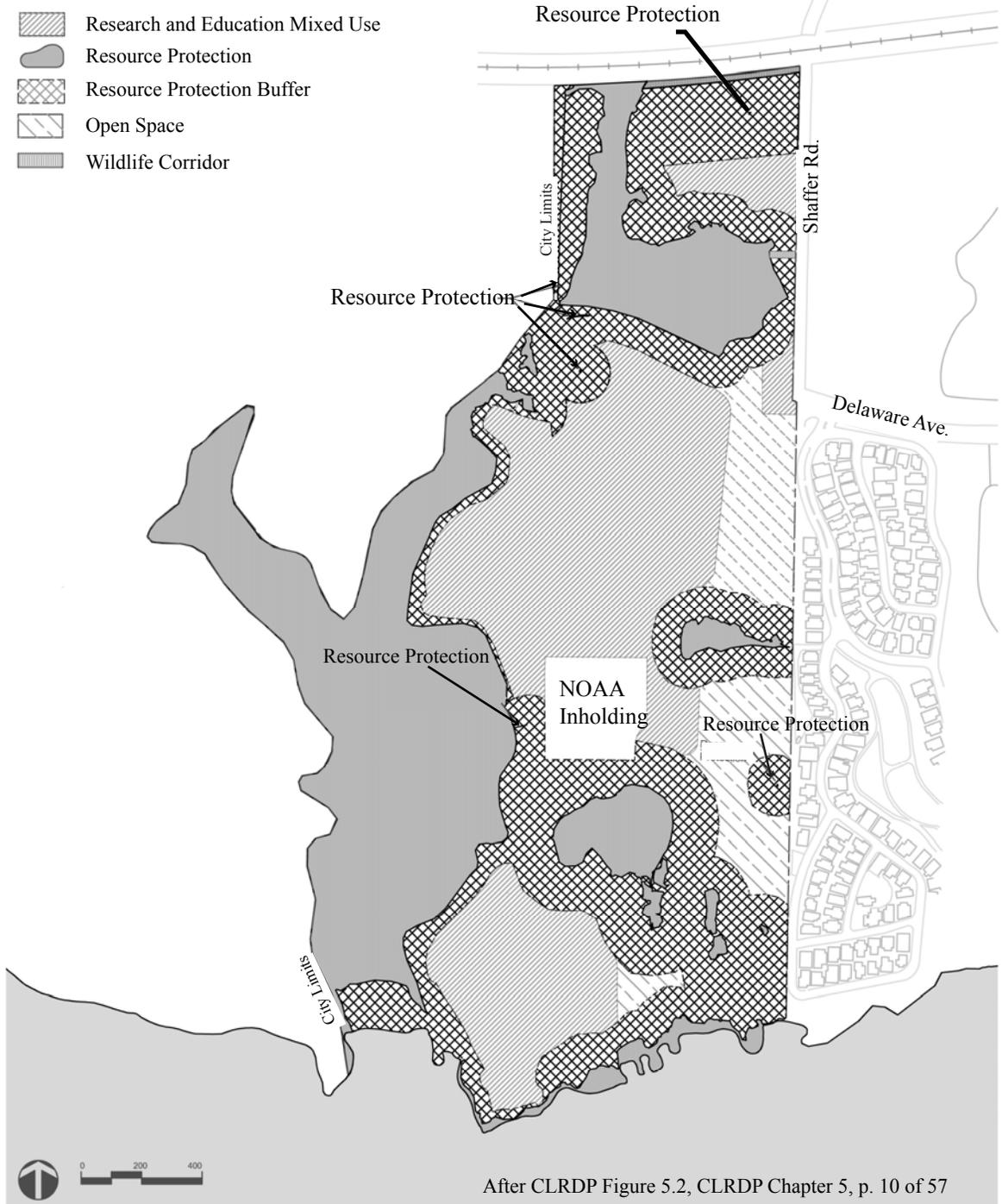
One key feature of the circulation plan for the Marine Science Campus is a new main access street section mostly located east of the existing Campus Street (see Figure 5.5) and the abandonment of a section of McAllister Way/Delaware Avenue Extension between Shaffer Road and the California Department of Fish and Game facility. This abandonment will take place concurrent with the construction of the new portion of the campus street shown in Figure 5.5. The majority of the existing pavement along this alignment will be removed except for a curvilinear portion of it that will remain to become a public access pathway. The roadbed fill will be retained to maintain terrace wetland hydrology, and the disturbed areas will be replanted with appropriate wetland and wetland buffer plant species.

#### **Parking for Campus Use and Public Access**

Another key feature of the circulation plan is the development of parking for campus use and public coastal access. Parking on the Marine Science Campus is limited at buildout under this CLRDP to a total of up to 795 spaces, and the University may control almost all of this parking through the use of programmatic means (e.g., including possibly parking permits and/or parking meters) to ensure that spaces are available for high-priority users such as visitors seeking coastal access and campus teachers, researchers, and staff. Without such controls, demand for parking by students could overwhelm capacity and result in parking shortages for higher priority users.

Parking to be provided on the Campus is purposefully limited so as to avoid covering large portions of the Campus with parking areas (thus better protecting on-site resources) and to reduce Campus reliance on automobile transportation (thus reducing its attendant adverse impacts on and off-site). Because of this parking space limitation, and because ~~all Campus parking demand is to be accommodated on-site,~~ **may not impact public parking or coastal access on streets adjacent to the MSC,** the CLRDP includes aggressive transportation demand management programs designed to bring Campus users to the Campus by means other than automobiles, and if by automobile, by alternatives to the single-occupant vehicle automobile. To ensure that parking controls and parking space limitations have the minimum impact on public coastal access, the CLRDP policies in Section 5.5.3 below also include provisions for dedicated and shared public coastal access parking areas.

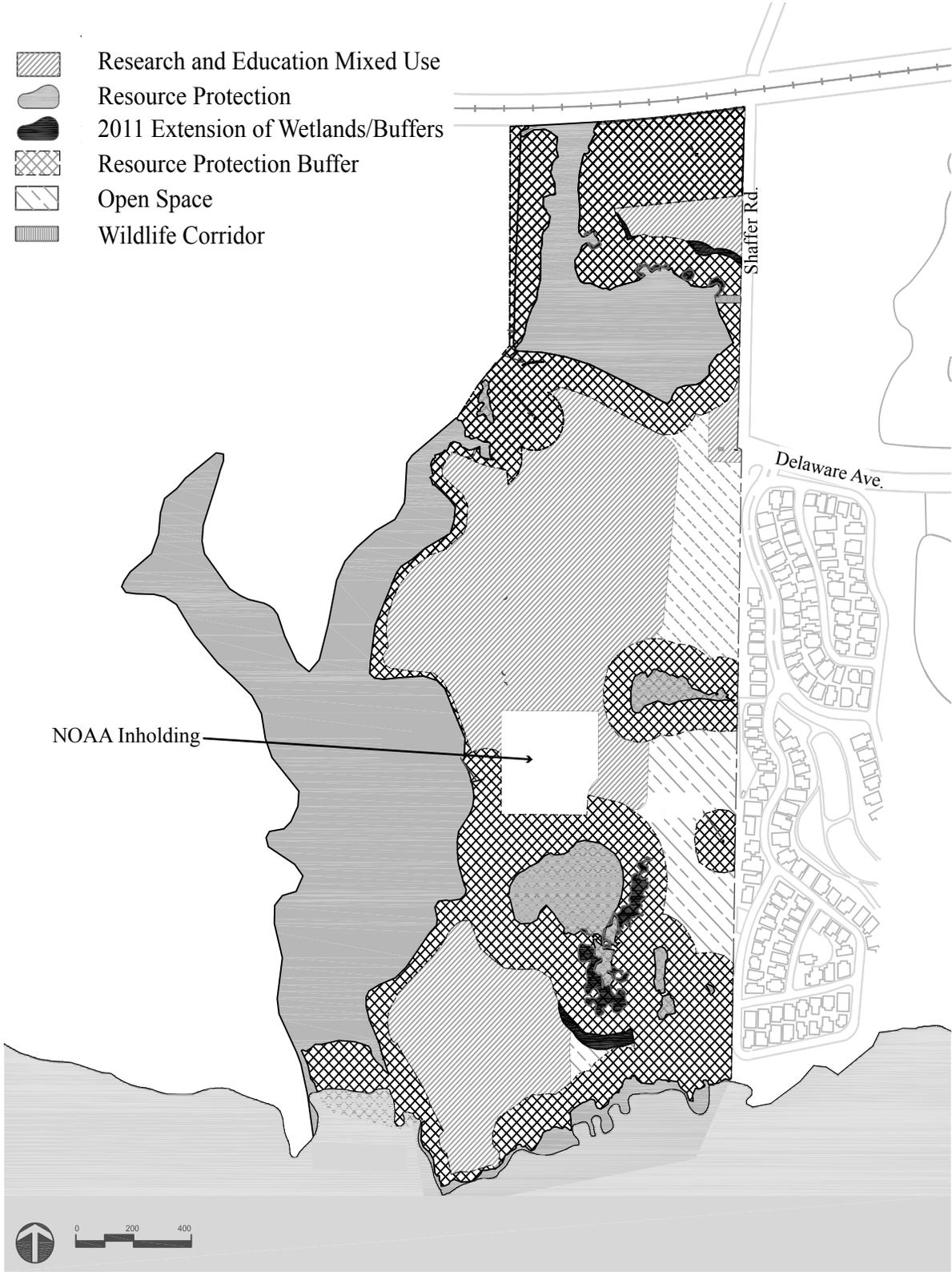
CLRDP Figure 5.2 Land Use Diagram



After CLRDP Figure 5.2, CLRDP Chapter 5, p. 10 of 57

|   |  |                       |
|---|--|-----------------------|
| <p>UC Santa Cruz Marine Science Campus<br/>Coastal Biology Building<br/>and Infrastructure Improvements<br/>Final Environmental Impact Report November 2011</p> | <p>CLRDP Figure 5.2,<br/>Land Use Diagram as<br/>Previously Approved</p> | <p>Figure<br/>A-1</p> |
|---|--|-----------------------|

CLRDP Figure 5.2 Land Use Diagram (revised)

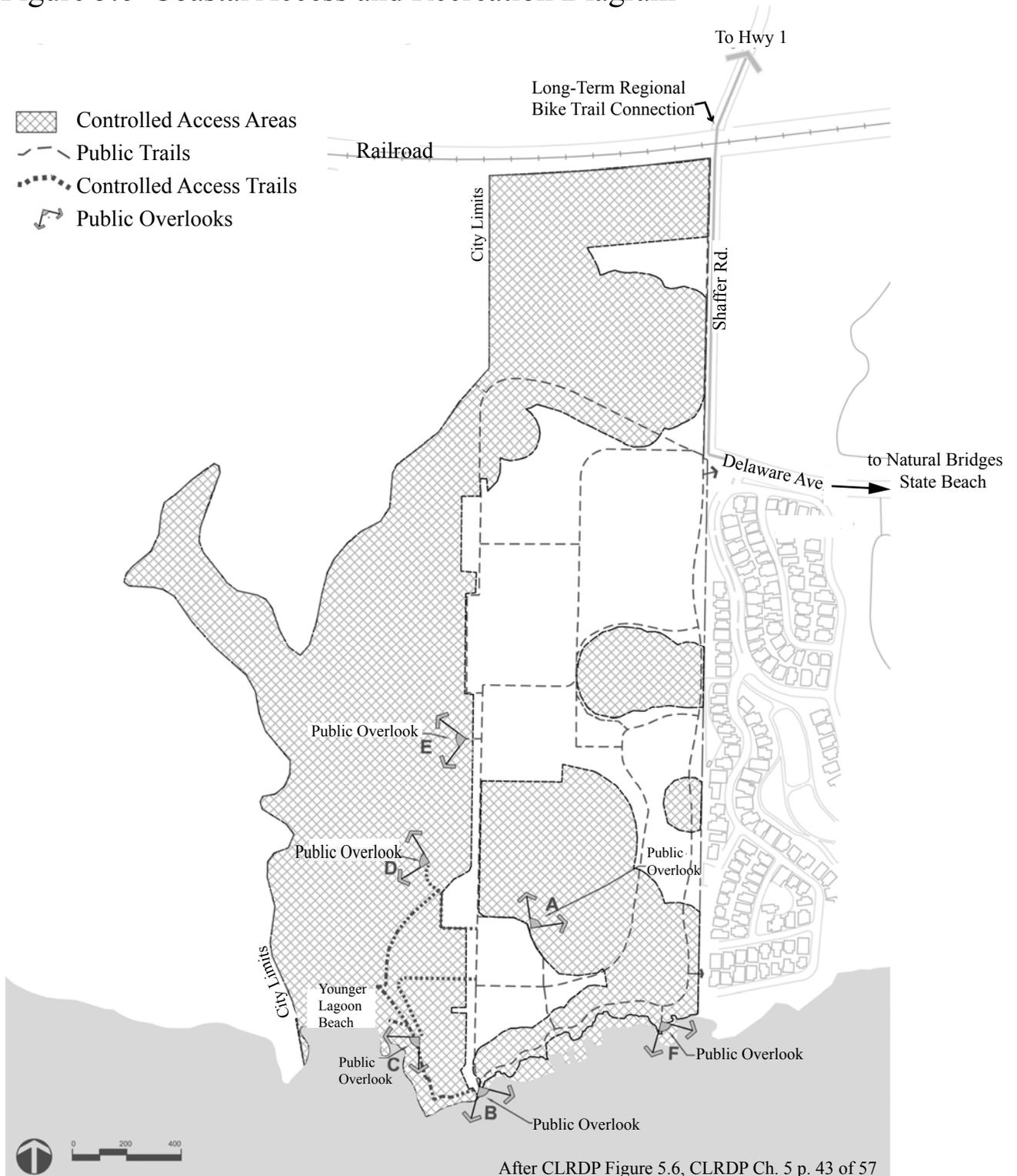


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Proposed CLRDP Amendment 1, Action 3:  
 Revise CLRDP Figure 5.2 with 2011  
 Expansion of Wetlands and Wetland Buffers

Figure  
 A-3

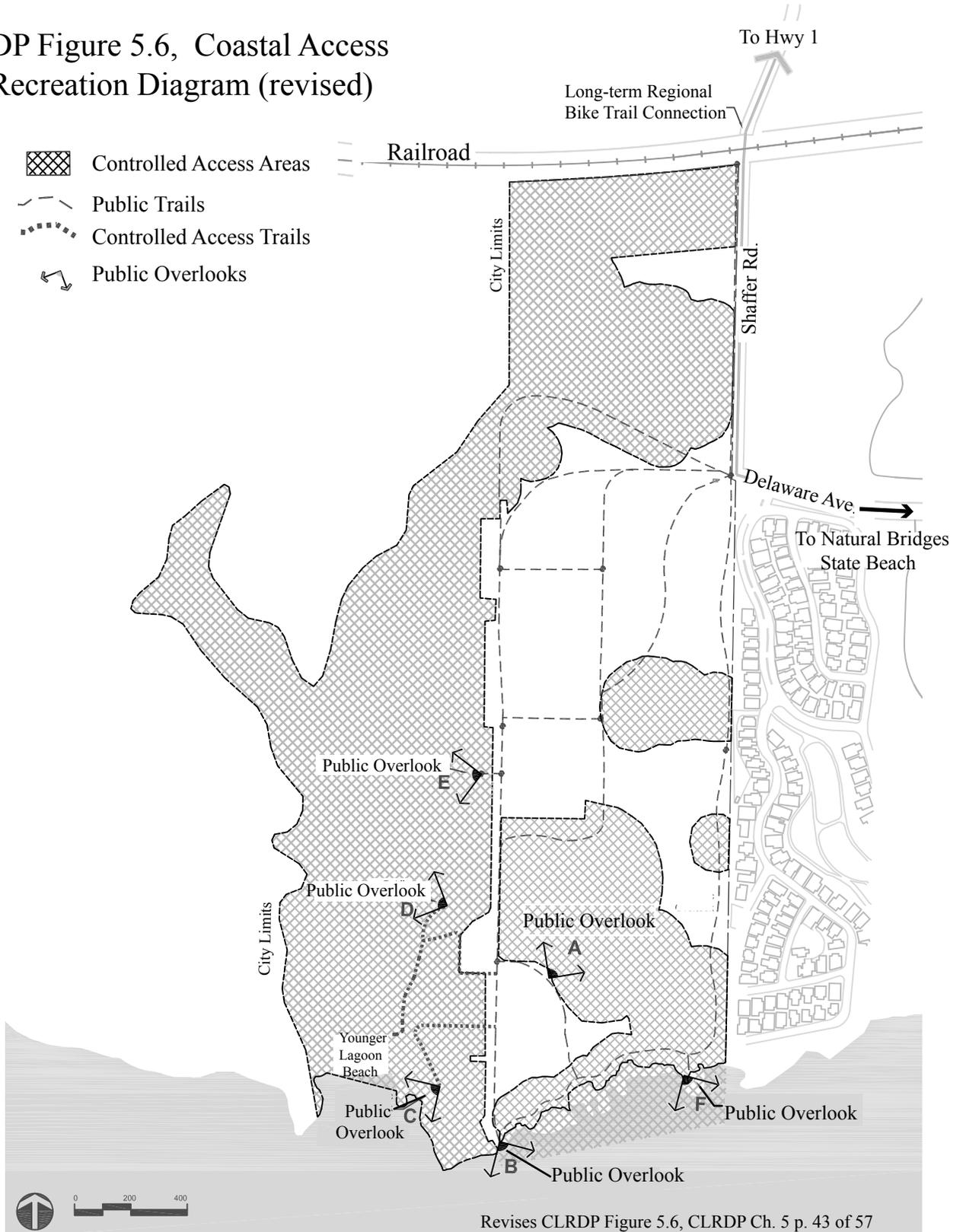
Figure 5.6 Coastal Access and Recreation Diagram



After CLRDP Figure 5.6, CLRDP Ch. 5 p. 43 of 57

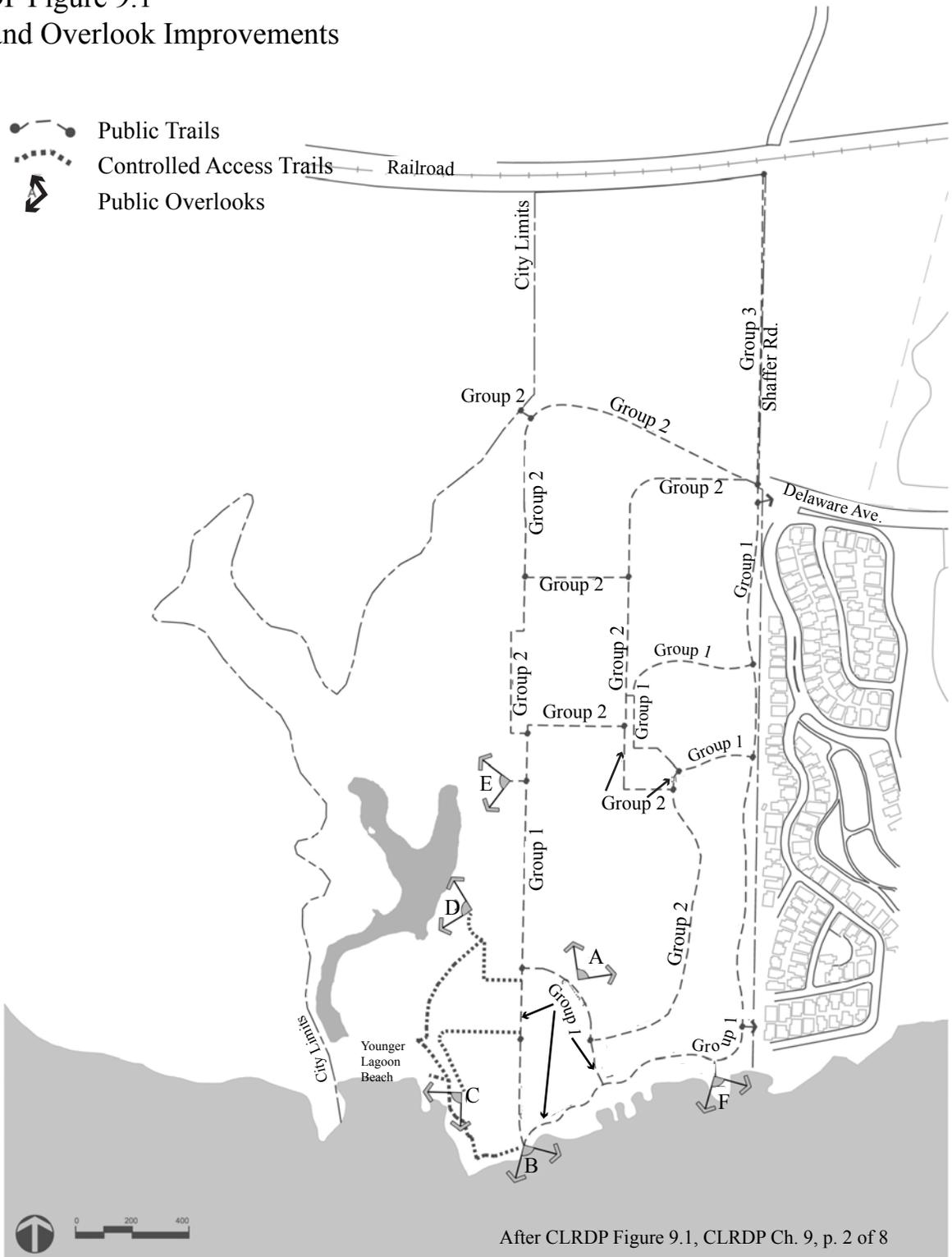
|  |  |  |
|--|--|--|
| <p>UC Santa Cruz Marine Science Campus<br/>                 Coastal Biology Building<br/>                 and Infrastructure Improvements<br/>                 Final Environmental Impact Report November 2011</p> | <p>CLRDP Figure 5.6<br/>                 Coastal Access and Recreation<br/>                 Diagram as Previously Approved</p> | <p>Figure<br/>                 A-4<br/> <b>Exhibit 3</b></p> |
|--|--|--|

# CLRDP Figure 5.6, Coastal Access and Recreation Diagram (revised)



|  |  |                                |
|--|--|--------------------------------|
| <p>UC Santa Cruz Marine Science Campus<br/>         Coastal Biology Building<br/>         and Infrastructure Improvements<br/>         Final Environmental Impact Report November 2011</p> | <p>Proposed CLRDP Amendment 1,<br/>         Action 6 : Revise CLRDP<br/>         Figure 5.6 Trails</p> | <p>Figure<br/>         A-5</p> |
|--|--|--------------------------------|

CLRDP Figure 9.1  
Trail and Overlook Improvements



|   |  |                       |
|---|--|-----------------------|
| <p>UC Santa Cruz Marine Science Campus<br/>Coastal Biology Building<br/>and Infrastructure Improvements<br/>Final Environmental Impact Report November 2011</p> | <p>CLRDP Figure 9.1<br/>Trail and Overlook Improvements<br/>as Previously Approved</p> | <p>Figure<br/>A-6</p> |
|---|--|-----------------------|

**Exhibit 3**

# CLRDP Figure 9.1, Trail and Overlook Improvements (revised)

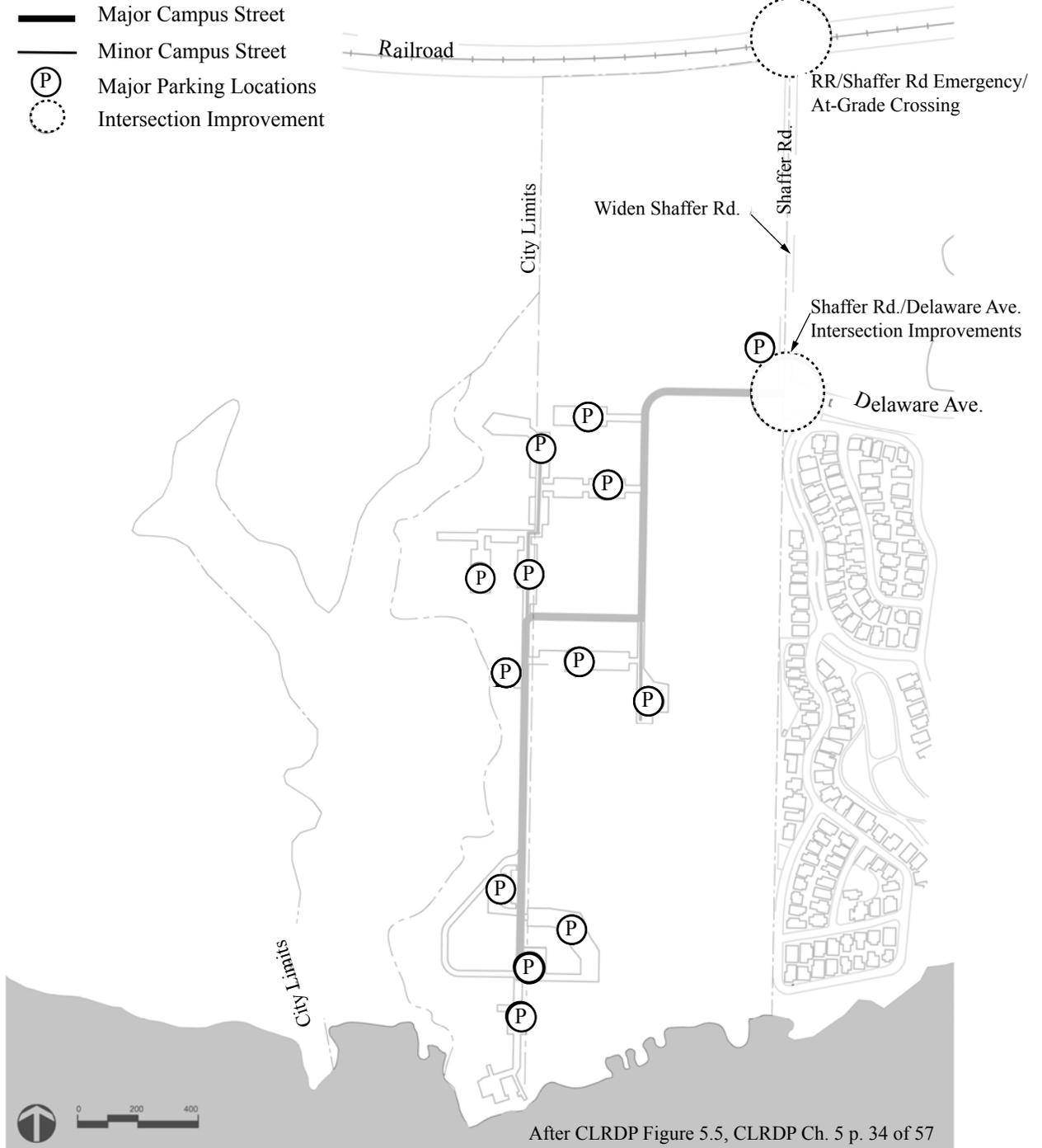
-  Controlled Access Areas
-  Public Trails
-  Controlled Access Trails
-  Public Overlooks



Revises CLRDP Figure 9.1, CLRDP Ch. 9, p. 2 of 8

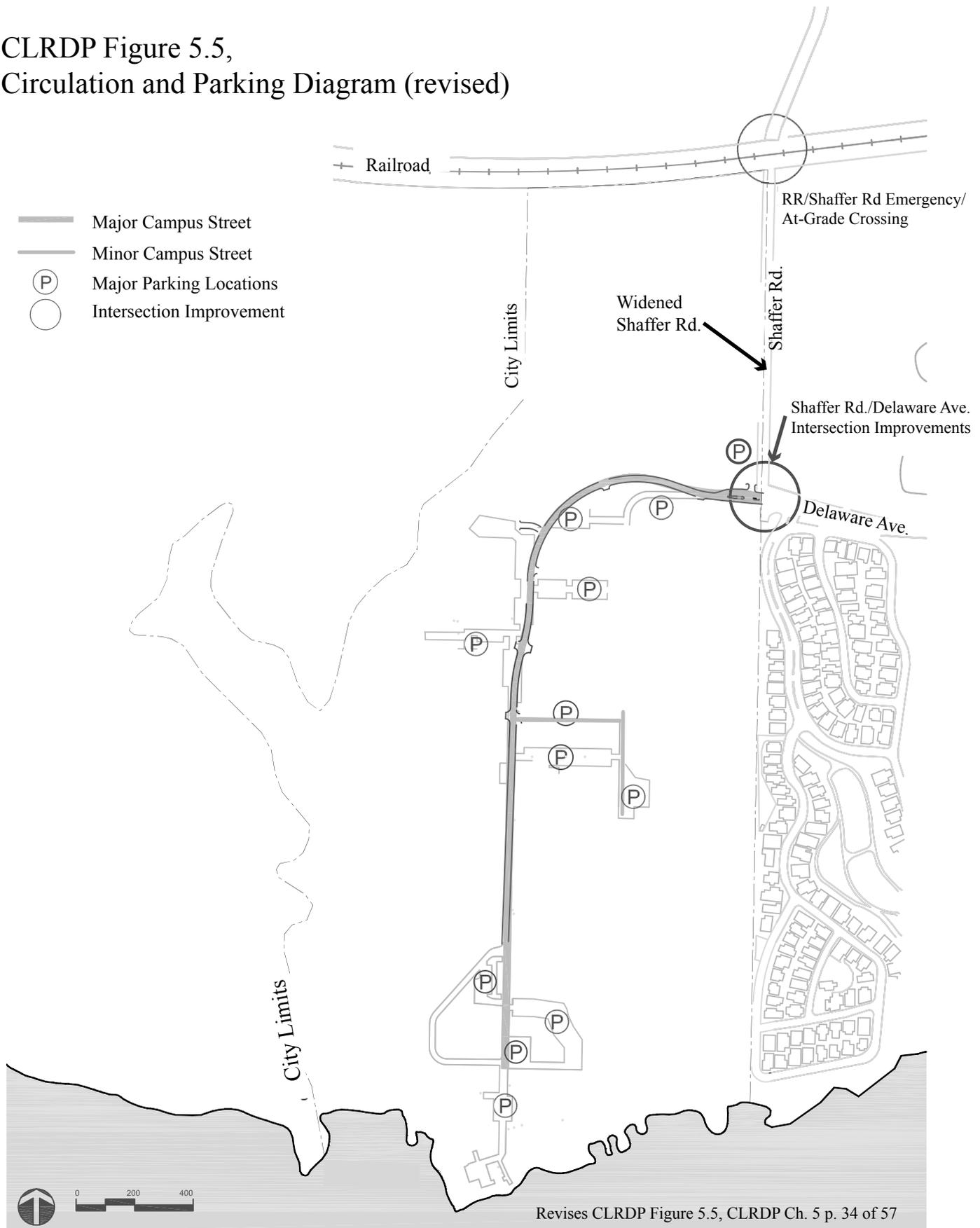
|   |   |                       |
|---|---|-----------------------|
| <p>UC Santa Cruz Marine Science Campus<br/>Coastal Biology Building<br/>and Infrastructure Improvements<br/>Final Environmental Impact Report November 2011</p> | <p>Proposed CLRDP Amendment 1,<br/>Action 6: Revise CLRDP Figure 9.1<br/>Trail Improvements</p> | <p>Figure<br/>A-7</p> |
|---|---|-----------------------|

CLRDP Figure 5.5 Circulation and Parking Diagram



|   |  |               |
|---|--|---------------|
| UC Santa Cruz Marine Science Campus<br>Coastal Biology Building<br>and Infrastructure Improvements<br>Final Environmental Impact Report November 2011 | CLRDP Figure 5.5,<br>Circulation and Parking<br>as Previously Approved | Figure<br>A-8 |
|---|--|---------------|

CLRDP Figure 5.5,  
Circulation and Parking Diagram (revised)



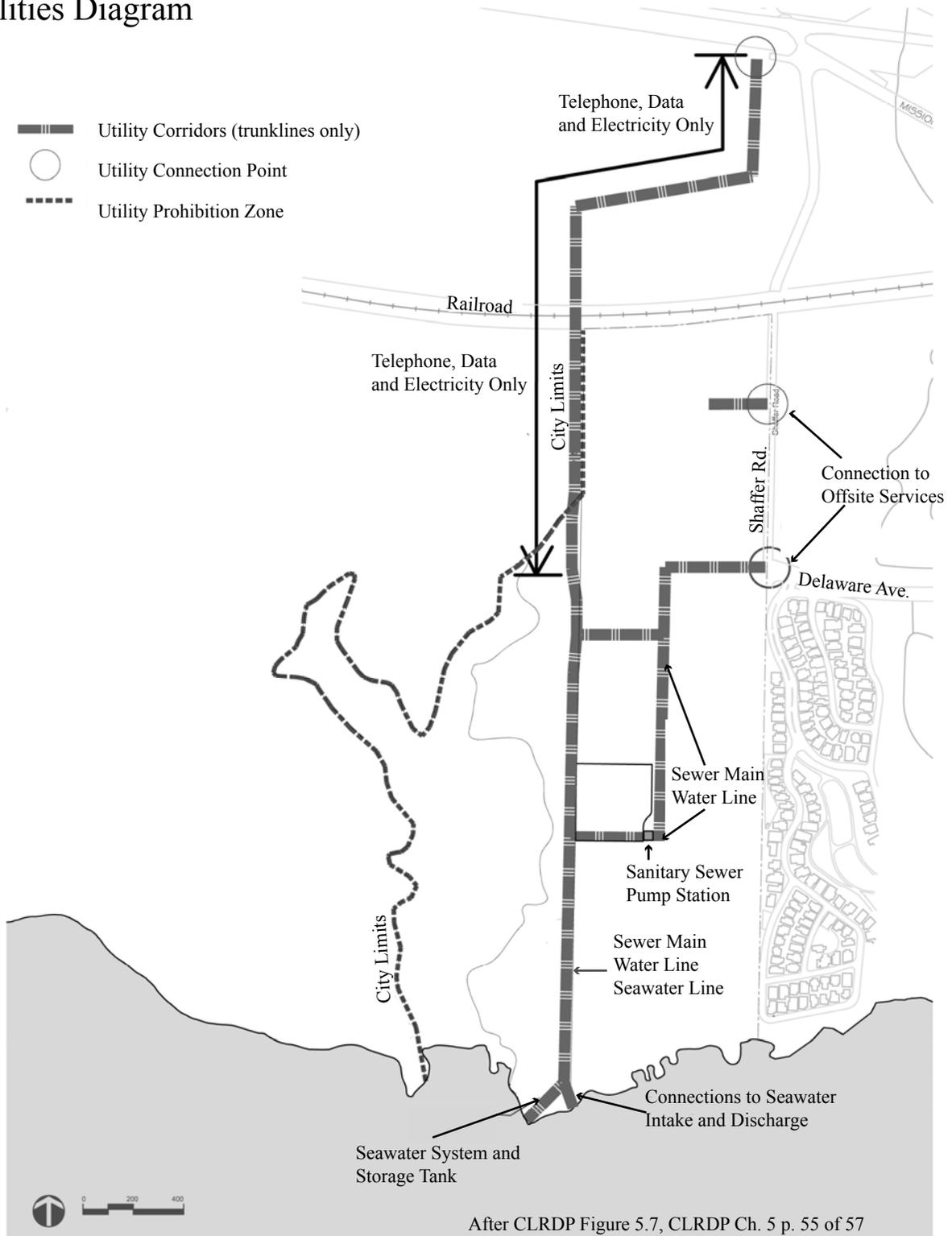
UC Santa Cruz Marine Science Campus  
Coastal Biology Building  
and Infrastructure Improvements  
Final Environmental Impact Report November 2011

Proposed CLRDP Amendment 1,  
Action 7: Revise CLRDP  
Figure 5.5 Circulation Routes

Figure  
A-9

**Exhibit 3**

CLRDP Figure 5.7  
Utilities Diagram

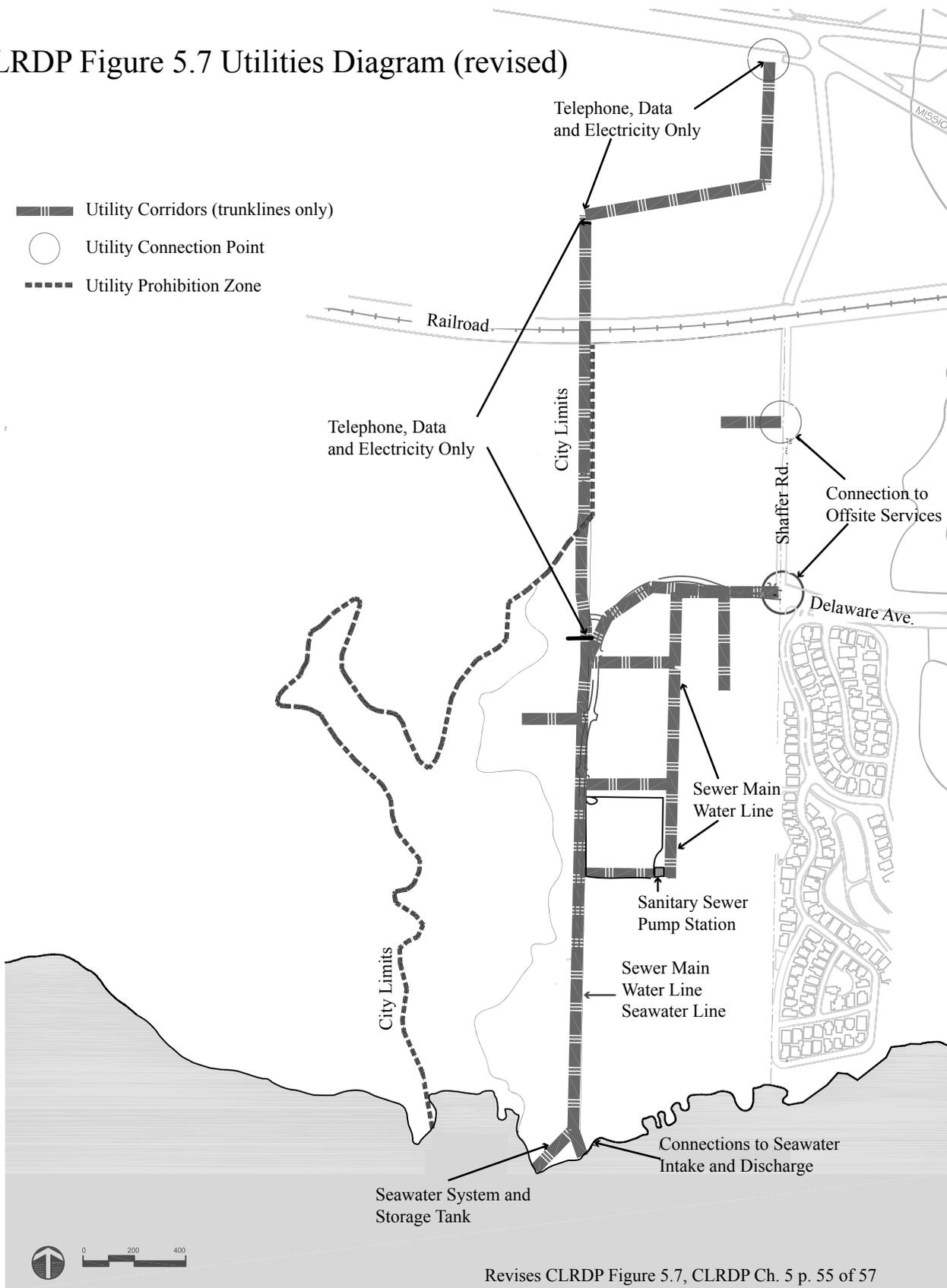


UC Santa Cruz Marine Science Campus  
Coastal Biology Building  
and Infrastructure Improvements  
Final Environmental Impact Report November 2011

CLRDP Figure 5.7  
Utilities Diagram  
as Previously Approved

Figure  
A-10

# CLRDP Figure 5.7 Utilities Diagram (revised)



Revises CLRDP Figure 5.7, CLRDP Ch. 5 p. 55 of 57

|   |  |                        |
|---|--|------------------------|
| <p>UC Santa Cruz Marine Science Campus<br/>Coastal Biology Building<br/>and Infrastructure Improvements<br/>Final Environmental Impact Report November 2011</p> | <p>Proposed Addendum 1, Action 8:<br/>Revise CLRDP Figure 5.7<br/>Utilities Routes</p> | <p>Figure<br/>A-11</p> |
|---|--|------------------------|

Table A.12 Timing Guidelines for Implementation of Protection and Enhancement Management Measures on the Terrace\*

Management Measure

Year\*\* or Other Time Frame

20

\*\*

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 \*

**Grassland, Ruderal, and Coyote Brush Scrub-Grassland Habitats**

|  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RMP MM 1 (Priority 1 weed removal)       | x  | x |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| RMP MM 2 (Priority 2 and 3 weed control) | x  | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| RMP MM 3 (Revegetation planting)         | x  | x |   |   | x |   |   |   |   | x |   |   |   |   | x |   |   |   |   | x |
|  | For areas disturbed by construction activities, as soon as possible in fall/winter |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| RMP MM 4 (Protection of planted areas)   | Until vegetation is established  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**Coastal Bluffs**

|   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| RMP MM 5 (Priority 1 weed removal, except iceplant)   | x   | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RMP MM 5 (Iceplant removal)                           | Prior to first rainy season following initiation of construction for first development project in Lower Terrace development zone or sooner, if IM 3.2.10 process dictates otherwise |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RMP MM 6 (Revegetation planting – bare areas)         | Prior to first rainy season following initiation of construction for first development project in Lower Terrace development zone or sooner, if IM 3.2.10 process dictates otherwise |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RMP MM 7 (Revegetation planting -- inland from trail) | Prior to first rainy season following initiation of construction for first development project in Lower Terrace development zone or sooner, if IM 3.2.10 process dictates otherwise |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RMP MM 8 (Post informational signage)                 | x   | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Wetlands**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RMP MMs 9 & 10 (Wetland restoration)          | <b>When To be initiated with</b> drainage improvements for the first development project north of Delaware Avenue Extension are constructed or sooner, if IM 3.2.10 process dictates otherwise. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| RMP MM 11 (Priority 1 weed removal)           | x   | x |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| RMP MM 12 (Priority 2 and 3 weed control)     | x   | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| RMP MM 13 (Revegetation planting)             | Prior to first rainy season following wetland W2 flow diversion   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| RMP MM 14 (Protect wetlands from disturbance) | x   | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| RMP MM 15 (Minimize changes to drainage)      | x   | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |

Management Measure

Year\*\* or Other Time Frame

20  
\*\*

|  | 1  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | * |
|--|--|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|---|
| patterns)  |  |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| <b>Wetland Buffers</b>   |  |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 16 (Construct new Campus access road/restore abandoned road area) | Upon completion of any new building construction in the Middle Terrace, or when the first 10% (square footage) of Campus development under the CLRDP is completed, whichever comes first           |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 17 (Priority 1 weed removal)                                      | x  | x |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 18 (Priority 2 and 3 weed control)                                | x  | x | x | x | x | x | x | x | x | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x |
| RMP MM 19 (Create berm at wetland W5 buffer)                             | Upon completion of any new construction in the Middle Terrace, or when the first 10% (square footage) of Campus development under the CLRDP is completed, whichever comes first                    |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 19 (Berm planting in W5 buffer)                                   | Prior to first rainy season following creation of berm   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 20 (Vegetation of trail edge at wetland W4)                       | x  | x |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 21 (Revegetation planting in W4 and W5 buffers)                   | x  | x |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 22 (Protection of revegetated areas)                              | Until vegetation is established  |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 23 (Post informational signage)                                   | x  | x |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 24 (Minimize changes to drainage patterns)                        | x  | x | x | x | x | x | x | x | x | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x |
| <b>Wildlife Corridors and Wildlife Corridor Buffers</b>                  |  |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 25 (Priority 1 weed removal)                                      | x  | x |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 26 (Revegetation planting)  | When <del>To be initiated</del> with drainage improvements for the first development project north of Delaware Avenue Extension are constructed or sooner, if IM 3.2.10 process dictates otherwise |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |
| RMP MM 27 (Minimize changes to drainage patterns)                        | x  | x | x | x | x | x | x | x | x | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x |
| RMP MM 28 (Protect wildlife corridors/buffers)                           | x  | x | x | x | x | x | x | x | x | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x |
| RMP MM 29 (Safe wildlife conveyance across Shaffer Road)                 | When improvements and/or modifications to Shaffer Road are constructed (in areas where the corridor/buffer areas intersect the improvements)   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |   |

## APPLICABLE COASTAL ACT SECTIONS

**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.*

**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.*

**30212(a):** *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects....*

**30213:** *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.*

**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....*

**30220:** *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

**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.*

**30222.5:** *Oceanfront land that is suitable for coastal dependent aquaculture shall be protected for that use, and proposals for aquaculture facilities located on those sites shall be given priority, except over other coastal dependent developments or uses.*

**30223:** *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

**30240:** *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

**30250** *(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to,*

*existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels. (b) Where feasible, new hazardous industrial development shall be located away from existing developed areas. (c) Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.*

**30251:** *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.*

**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, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.*

**30254:** *New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.*

## **CITED CLRDP POLICIES AND IMPLEMENTATION MEASURES**

**Policy 3.5 - Special Protection for Younger Lagoon Reserve.** The University recognizes the special biological significance of Younger Lagoon Reserve for habitat value and for research and education and therefore shall continue to provide special protection for the property by retaining it as part of the University's Natural Reserve System and protecting it consistent with this CLRDP.

**Policy 3.6 Public Access to and within YLR.** Access to Younger Lagoon Reserve may be controlled consistent with the need to protect YLR resources from disruption and degradation and to provide maximum public access consistent with the Coastal Act.

### **Implementation Measure 3.2.3 – Protection and Enhancement of Wildlife Movement.**

Wildlife movement across the site shall be facilitated and enhanced by establishing two enhanced wildlife corridors and associated buffers adjacent to the Upper Terrace development area (as shown in Figure 5.2) that provide enhanced habitat value and wildlife connectivity in the area between Younger Lagoon Reserve and the Moore Creek/Antonelli Pond system east of the Campus. Conditions for wildlife movement in these areas shall be enhanced by eliminating invasive weeds, planting native species to provide better protective cover and visual screening for wildlife than existing vegetation, controlling access by humans and non-native animals, providing fencing/building elements at the development zone boundary that screen Upper Terrace development zone noise, lights, and activities from wildlife in the corridors/buffers, and other enhancement measures in accordance with the provisions of this CLRDP, including its Resource Management Plan (Appendix A). The University shall also coordinate with the owners of the properties immediately east of Shaffer Road and the City of Santa Cruz (in the case of Shaffer Road itself) to promote the extension of the wildlife corridors and wildlife corridor buffers across Shaffer Road and to Moore Creek/Antonelli Pond in the manner most protective of wildlife (see also parameters for wildlife corridors in the Resource Management Plan (Appendix A)).

**Implementation Measure 3.2.10 - Natural Areas Habitat Management.** Within six (6) months of CLRDP certification, the University in consultation with the Executive Director of the California Coastal Commission shall convene a scientific advisory committee (SAC) to guide the restoration, enhancement, and management of natural areas (i.e., all areas outside defined development zones, except for Younger Lagoon Reserve) on the Marine Science Campus (see Appendix A). Natural areas restoration, enhancement, and management may be completed in up to three phases corresponding to dividing the natural area into thirds (i.e., where Phase 1 accounts for at least one-third of the natural area, Phase 1 plus Phase 2 accounts for at least two-thirds, and all of the three phases together account for all of the natural area). All restoration, enhancement, and management activities shall be guided by Specific Resource Plans developed by the University in accordance with the SAC and the criteria contained in the Resource Management Plan (Appendix A) and current professional standards for such plans. The SAC

shall be responsible for guiding development of Specific Resource Plans and shall complete its work on the Specific Resource Plan for Phase I restoration and enhancement efforts within four (4) months of convening. The content of Specific Resource Plans shall be consistent with the performance standards set forth in Appendix A, which may be adapted periodically based on findings from ongoing restoration work. The University shall file a Notice of Impending Development for Phase I work within one (1) year of CLRDP certification. All natural areas restoration and enhancement shall be completed within 20 years of CLRDP certification, with interim benchmarks that at least one-third of the restoration and enhancement shall be completed within seven years of CLRDP certification and that at least two-thirds shall be completed within 14 years of CLRDP certification.

**Implementation Measure 3.3.1 – Pre-development Evaluation of Wetland Conditions.** An evaluation of the development area shall be conducted prior to each development project. The evaluation shall include any changed site conditions that could affect wetland values protected by this CLRDP. A wetland evaluation shall be completed in the proposed development area (i.e., the proposed development footprint and a surrounding 200-foot buffer area) in consultation with the Executive Director, using the Coastal Act 30121 wetland definition. To the extent wetland areas are identified during this process that are not already designated Resource Protection on Figure 5.2, the Resource Protection designation shall be applied to the newly identified wetland area and uses and development limited in accordance with that designation (see Section 5.2.2, Resource Protection). For any newly identified wetland area, an appropriate buffer shall be established, based upon site-specific conditions in accordance with Implementation Measure 3.2.9.

**Implementation Measure 3.3.2 – Update CLRDP With Respect to Wetlands.** For any wetlands and wetland buffers identified pursuant to implementation measures 3.3.1 and 3.2.9, the University shall amend the CLRDP to reflect the newly identified wetlands and wetland buffers, including all relevant CLRDP text, figures, and use and development restrictions applicable to those areas, and to remove those areas from development zones. The CLRDP amendment shall be submitted to the Coastal Commission before the effective date of the related development project authorization.

**Implementation Measure 3.4.3 – Noise Intrusion into YLR.** YLR shall not be exposed to noise generated by human activity on the terrace portion of the Marine Science Campus in excess of 60 dBA CNEL, as measured at the boundary of the YLR. For the purposes of this measure, “dBA CNEL” means a 24-hour energy equivalent level derived from a variety of single noise events, with weighting factors of 5 and 10 dBA applied to the evening (7pm to 10pm) and nighttime (10pm to 7am) periods, respectively, to allow for the greater sensitivity to noise during these hours.

**Implementation Measure 3.5.7 – Movement Not Visible From YLR.** Movement associated with development (including within outdoor activity/research areas and buildings, and including all windows in buildings) shall not be visible from within YLR.

**Implementation Measure 3.14.1 - Natural Areas Protection.** Within two years of CLRDP certification, all Campus natural areas (i.e. all areas outside of the four designated development zones) shall be incorporated into the University of California Natural Reserve System as an integral part of Younger Lagoon Reserve. Within two years and six months of CLRDP certification, the University shall submit to the Coastal Commission an amendment to the CLRDP to update it with respect to the revised configuration of Younger Lagoon Reserve and the natural areas. In addition, if any area within the four designated development zones as they are configured at the time of CLRDP certification is subsequently excluded from the designated development zones in the future (pursuant to Implementation Measures 3.3.1, 3.3.2, 3.4.4, and 3.4.5), then such area shall likewise be incorporated into Younger Lagoon Reserve within the same time frames and pursuant to the same parameters identified above with respect to the initial Reserve incorporation, but timed from the date that the required CLRDP amendment (required pursuant to Implementation Measures 3.3.2 and 3.4.5) is certified by the Coastal Commission.

**Implementation Measure 5.1.6 – Use of Former Access Road.** The existing (at the time of CLRDP certification) portion of McAllister Way/Delaware Avenue Extension between Shaffer Road and the California Department of Fish and Game facility, shall be abandoned as a campus street and restored as a public trail and habitat buffer area (i.e., the majority of the existing pavement shall be removed in this area except for a curvilinear portion of it that will remain to become a public access pathway; the roadbed fill elevation shall be retained to maintain terrace wetland hydrology; and the disturbed areas shall be replanted with appropriate wetland and wetland buffer plant species). The University shall consult with the U.S. Fish and Wildlife Service and the Executive Director at the time

**Policy 5.2 Travel Mode Split -** The University shall pursue a goal of having at least 40 percent of all person-trips to the Marine Science Campus made using alternatives to the single-occupant automobile.

**Implementation Measure 5.2.1 – Encourage Alternatives to the Single-Occupant Vehicle.** The University shall enforce policies and implement measures to encourage alternatives to the single-occupant automobile.

**Implementation Measure 5.2.2 – Alternatives to the Single-Occupant Vehicle.** As part of each development project, the University shall clearly identify the methods to be used to encourage non-single-occupancy vehicle trips for that development in order to meet CLRDP circulation and parking requirements individually and cumulatively.

**Policy 5.5 Parking Management.** Parking on the Marine Science Campus shall be managed by UCSC Transportation and Parking Services (TAPS) or its equivalent, which will administer

parking permits, operate shuttle service, disseminate commuter information, and monitor parking utilization annually. TAPS may regulate parking on the UCSC Marine Science Campus through the use of parking permits and time-limited parking in a manner consistent with this CLRDP.

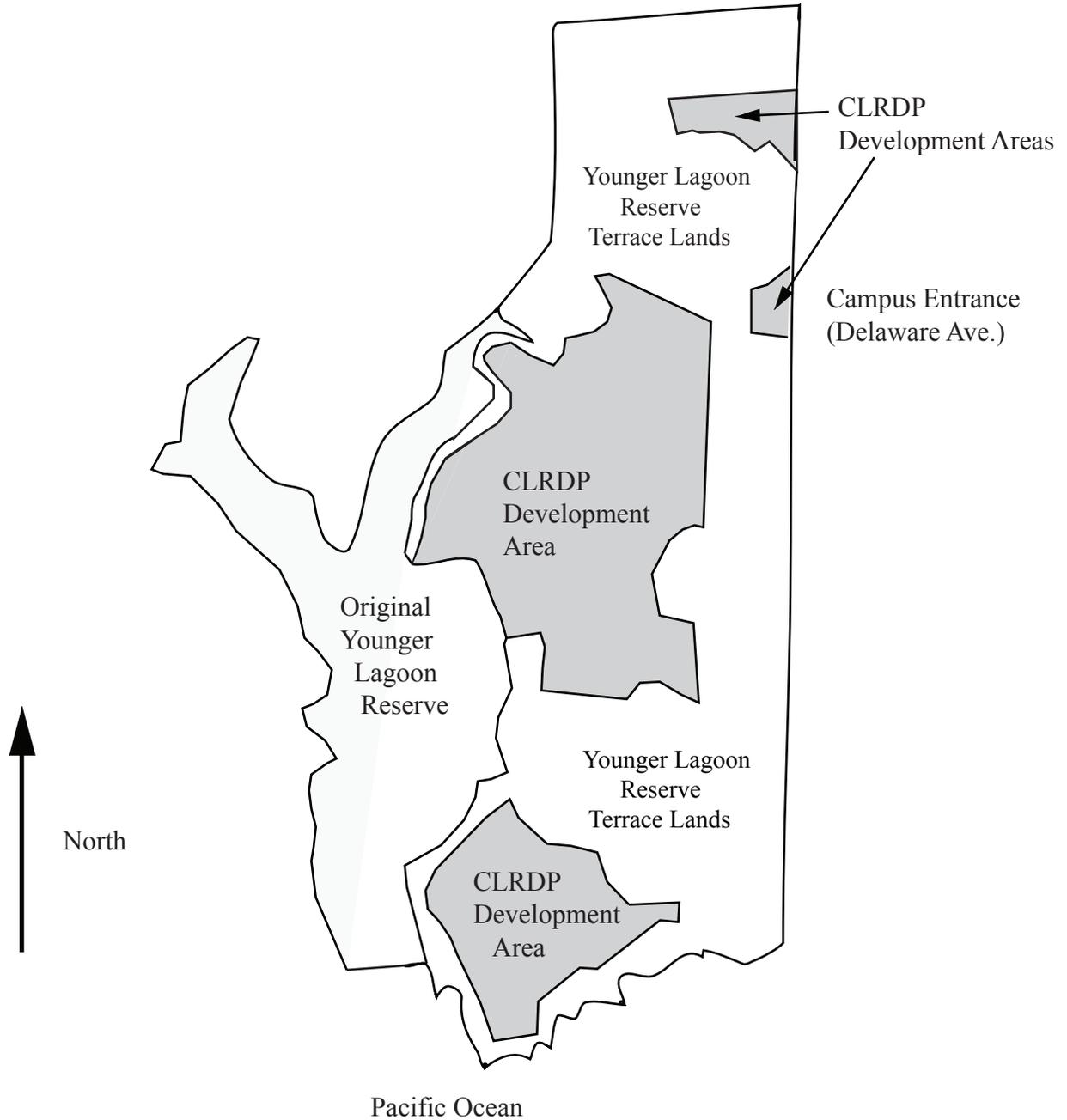
**Implementation Measure 5.5.1 – Permits Required.** With the exception of public coastal access parking spaces provided at the campus entrance at the intersection of Shaffer Road and Delaware Avenue, parking permits shall be required for the use of each parking space on the UCSC Marine Science Campus between the hours of 8:00 am and 5:00 pm each non-holiday weekday, provided a parking program that defines the permit distribution and use framework for the Campus has been authorized as a development project. Meters may be used in lieu of permits.

**Implementation Measure 5.5.2 – Public Coastal Access Parking.** Dedicated parking for public coastal access shall be clustered close to coastal access points (see also Policy 5.3 and its implementation measures and Figure 5.5), and clear signage and related measures (e.g., stencils, etc.) shall be provided to indicate that each such public coastal access parking space is for public coastal access parking only.

**Implementation Measure 5.5.3 – Carpools and Vanpools.** Reserved parking spaces may be set-aside for persons traveling to the site in registered carpools or vanpools. TAPS may institute reduced parking permit fees for carpool and vanpool users if necessary to achieve consistency with Policy 5.2.

**Implementation Measure 5.5.4 – Parking Management Strategy for Special and/or Temporary Events.** The University shall develop a strategy for managing parking demand for occasional special and/or temporary events, including rescue operations at the Marine Wildlife Center. Such strategy shall not substantially impact public coastal access and shall only be implemented if it is consistent with the parking policies, implementation measures, and other related standards contained in this CLRDP, and such strategy is authorized as a development project.

Schematic Diagram of Marine Science Campus  
 based on CLRDP Figure 5.2 Land Use Diagram



UC Santa Cruz Marine Science Campus  
 Coastal Biology Building  
 and Infrastructure Improvements  
 Final Environmental Impact Report November 2011

Proposed CLRDP Amendment 1,  
 Actions 1 and 2: Incorporate Terrace Lands  
 into Younger Lagoon Reserve

Figure  
 A-2