Dan Carl, District Director
California Coastal Commission
725 Front Street suite 300
Santa Cruz, CA 95060

January 11, 2010

Dear Dan and others at the California Coastal Commission,

I am writing to express my views AGAINST the proposed construction of the "Broadway-Brommer Bike Project " through Arana Gulch. I know that the CCC has the power to stop this project and to help protect and enhance this natural area.

This proposed project cause "significant and unavoidable impact" to the habitat of the native tar plant. Santa Cruz City has shown no mechanism to ensure long term management of the tar plant which is found on the endangered plant list.

In addition the "Broadway-Brommer Bike Project " will violate an environmentally sensitive habitat area as defined in the CA Coastal Act. The City of Santa Cruz has failed to demonstrate that this proposed project is "resource dependent" as specified by the act.

Please, we urge you to only approve the Arana Gulch Master Plan CONTINGENT upon the removal of the "Broadway-Brommer Bike Project " Please consider alternatives that leave Arana Gulch in a more natural state allowing the natural resources and un-altered beauty of the area to thrive. Please instruct the city of Santa Cruz to seek other alternatives outside the Arana Gulch Area for the proposed bike connection Project.

Please, I ask you to let the few open spaces that remain to exist without being altered by paved paths and increased traffic. I have lived here my whole life and seen the Santa Cruz open spaces slowly slip away. I want my children and my grandchildren and their children to experience the untouched beauty of Arana Gulch.

Sincerely,

Lauren Cross

280 Beach Pines Dr

Aptos Ca 95003

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RESPRESENTATIVE FORM
LETTER RECEIVED FROM 5
SEPARATE INDIVIDUALS

Exhibit I

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CENTRAL COAST AREA

10/9/09

Mr. Dan Carl,

Please vote against the Broadway-Brommer Master Plan as it stands now. There is so much a stake! There will be significant and unavoidable impact to the habitat. This path is also a violation of the E.S.H.A (Environmentally Sensitive Habitat Area) as defined in the CA Coastal Act (policy 30240). The city of Santa Cruz has failed to demonstrate that this proposal project is "resource-dependent" as specified by the act. There is no long term funding for the protection of the Tar Plant.

Please we URGE you to approve ONLY the Arana Gulch Master Plan ***contingent*** on the ***removal*** of the Broadway-Brommer Bicycle Path Connection project (as found in six public use objectives on page 30 of the Draft Master Plan, as well as proportions of Section 3.4)

There are other alternatives outside of Arana Gulch for and proposed east-west bike connection.

Once you take away this beautiful open space, it can never recover. There are other places for bike paths but there are only limited spaces for endangered species and natural habitat.

Thank you for your immediate attention

Sincerely,

Katie Huckaby
241 Forest Ave
Santa Cruz, CA 95062

RESPRESENTATIVE FORM LETTER RECEIVED FROM 29 SEPARATE INDIVIDUALS

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COASTAL COMMISSION
CENTRAL COAST AREA

December 22, 2009
Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060
RE: Arana Gulch Master Plan

Dear Coastal Commission Staff and Commissioners:

Please include the following comments in your staff report for the Arana Gulch Master Plan. I also ask that the Commissioners take serious the threats posed by the paving sections of this Plan not only to the long term survival of the federally and state listed Santa Cruz tarplant but also to the equally serious threat this poses to weakening the Coastal Act's ability to provide protection to all of its Environmentally Sensitive Habitat Areas (ESHA).

1. The proposed Broadway-Brommer Bike project (now called an "interpretive trail") will cause "significant and unavoidable impact" to habitat of the endangered and threatened Santa Cruz tarplant (Holocarpha macradenia). These impacts include changes in hydrology, destruction of habitat and seedbank, fragmentation of the historic subpopulations, inadequate measures to protect the species from the huge increase in human/bicycle access, and greatly complicating and decreasing the effectiveness of the best practices for long term methods of managing the threats posed by thatch and weeds.

2. The B-B Bike project ("interpretive trail") will violate an Environmentally Sensitive Habitat Area (ESHA) as defined in the CA Coastal Act (Policy 30240). The City of Santa Cruz has failed to demonstrate that this proposed project is "resource-dependent," as specified by the Act.

3. The tarplant population in Arana Gulch has declined precipitously due to lack of management. In the Draft Master Plan document, the City ties management of tarplant habitat to the B-B Bike project, but the City has no funding mechanism to ensure long-term management of the Santa Cruz tarplant.

I urge that the CCC only approve the Arana Gulch Master Plan contingent on the removal of the Broadway-Brommer Bicycle Path Connection project (as found in six Public Use objectives on page 30 of the Draft Master Plan, as well as portions of Sec. 3.4).

Finally, I ask that the CCC instruct the City to consider alternatives outside of Arana Gulch for any proposed east-west bike connection.

Thank you for your time and consideration.
Vince Cheap
4160 Jade St. #112
Capitola, CA 95010

RESPRESENTATIVE FORM
LETTER RECEIVED FROM 5
SEPARATE INDIVIDUALS

Exhibit I

SIERRA CLUB
FOUNDED 1892

SANTA CRUZ COUNTY GROUP
----------Of The Ventana Chapter----------
P.O. Box 604, Santa Cruz, CA 95061 phone (831) ~~426-4453~~ 460-1538
www.ventana.org e-mail: scscrg@cruzio.com

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FEB 23 2010
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February 22, 2010

California Coastal Commission
725 Front Street
Santa Cruz, CA 95060

Re: Thursday, March 11, 2010
Item 7.a. Application No. 3-09-068 (City of Santa Cruz) Arana Gulch Master Plan

Dear Commission Members:

We want to register our strong opposition to the approval of a Master Plan for the Arana Gulch Green Belt which includes the construction of a multi-million dollar bicycle roadway through an area that contains extensive sensitive habitats. We are supportive of the rest of the Master Plan, except for the bikeway project.

The application before you essentially is a transportation project wrapped into a Master Plan, giving the impression that the two are intertwined and inseparable. In fact, however, the bicycle roadway is a totally separate project that needs to be examined on its own merit. This paved roadway will necessitate substantial land form alterations, construction of switch-backs, construction of major bridges over two creeks, construction in riparian areas and buffer zones, retaining walls, fences, and other appurtenances that will drastically alter the natural habitat of this otherwise undisturbed natural preserve.

The bicycle roadway is a transportation project that will do nothing to improve coastal access and is not a resource dependent use. In addition, there are several existing and planned alternative bicycle routes that skirt Arana Gulch without increasing the bicycle trip by any significant amount of time. The bicycle roadway through Arana Gulch is a use that will impact the natural resources of Arana Gulch in an extremely adverse manner and set a destructive precedent for the following reasons:

1. It will introduce an extensive amount of concrete and steel necessary for its construction (including bridges and retaining walls) in an area that has all the attributes and characteristics of an Environmentally Sensitive Habitat Area and is identified in the City's General Plan as an ESHA.

2. It will bisect the natural habitat and divide it into four distinct parts. The north-south alignment runs through one historic tarplant subpopulation and the east-west alignment jeopardizes two other subpopulations because of hardened surfaces and inadequate buffering from increased human and bike impacts. The hardened alignments of these bikeways will destroy critical habitat and seed bank and result in significant impact to surrounding habitat and plants from hydrologic changes and the fragmentation of the natural setting.

3. The bikeway project will disturb and ultimately pave over a portion of the 100-foot riparian setback on Port District property that was previously noticed by the Coastal Commission as requiring to be protected and restored with native plantings.

4. The switchbacks required in the East-West portion of the Project will permanently alter the sloping hillside within the riparian corridor of Arana Creek.

We believe that Arana Gulch has all the attributes of an ESHA and therefore, as provided in Public Resource Code, Section 30240, there should not be any significant disruption of habitat values and no uses should be permitted that are not dependent on the natural resources of the area. As noted above, the bikeway project will:

Substantially alter existing land forms;
Fragment the natural habitat into separate and disconnected areas;
Invade and infringe upon a required 100-foot riparian setback;
Introduce millions of dollars worth of concrete and steel into a natural habitat;
Violate the protections afforded by the Coastal Act to environmentally sensitive habitats.

For all of these reasons, we strongly urge you to sever the bikeway project from the Master Plan, reject the Bikeway Project and approve the rest of the Master Plan. Thank you for your consideration of these comments.

Sincerely,

Aldo Giacchino

Aldo Giacchino, Chair
Sierra Club--Santa Cruz County Group

Exhibit I

No Funding for Management from B-B project

Since the City of Santa Cruz insists that it is the Broadway-Brommer transportation project -- and it alone -- that will provide funding for resource management at Arana Gulch greenbelt, shouldn't the City be required to substantiate that statement? Such a statement is **contradicted by** the administrative record and was contradicted again at the recent RTC public hearing on AG's Broadway-Brommer Bike/Ped project (January 14, 2010).

In the 2006 Final EIR (page 25), in answer to your April 24, 2006 question on the funding mechanisms for "management components of the Master Plan" (page 18) the document says that **"local funding would likely be the source for on-going resource management."**

And on page 48 of the Draft AG Master Plan document, the City says **"In order to ensure long-term management of the Santa Cruz tarplant, a sustained funding program must be established within the City. This program would be separate from the ongoing annual maintenance funding and Capital Improvement Projects."**

So, in both documents we find the City saying that resource management in an ESHA of the coastal zone will be from local funding and/or the sale of City owned property, not from funding for the B-B project.

Furthermore, at the January 14th RTC public hearing on the Broadway-Brommer project, in answer to a question about ongoing maintenance after the bridges and bikeways infrastructure was completed (from Commissioner Kirby Nicol) Public Works Director Chris Schneiter told the RTC that the City would most likely be selling some right of way properties to help with such funding. He said nothing about using money from Federal and State TEA or TIP funds for ongoing infrastructure management.

So, in its rush to get the Broadway-Brommer Bike/Ped project through the Coastal Commission, the City appears to be telling the Coastal Commission one thing, while saying something else in public presentations and in its administrative record.

An endowment to fund the Adaptive Management Program may require in excess of one million dollars, given current interest rates, to provide dedicated funding in perpetuity. This is required whether B-B is built or not, although admittedly with B-B there will be less habitat to manage. A rule of thumb is that grant monies for development projects are used for the project infrastructure, not used for ongoing maintenance. In any case, the full cost of B-B from Frederick Street all the way to 7th Avenue is not known because, according to Public Works, there are no engineered plans at this point. So there is no way to substantiate if any Federal or State funds will be left for project mitigation.

This funding conundrum is one more reason to say "whoa" to B-B and to only allow acceptance of the the Master Plan (which contains an excellent, science-based Tarplant Adaptive Management Plan) **contingent on the removal of the Broadway-Brommer project.** Since one of the primary concerns of the Coastal Commission is the protection and restoration of habitat, let the City show that is can generate independent funding for resource management and actually do that management before it gets the green light to build any project in an ESHA of the Coastal Zone at Arana Gulch greenbelt.

Sincerely,
Jean Brocklebank
Friends of Arana Gulch

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Exhibit I

The Second Bridge

The City of Santa Cruz insists that there is only one bridge (over Hagemann Creek) in its Broadway-Brommer Bike/Ped Connection project, contained in its Arana Gulch Master Plan.

The DEIR for the Master Plan contradicts this one bridge project description.

The "raised ramp" and "steel bridge span" over Arana Creek is found on page 3-17 of the Arana Gulch Master Plan Draft EIR (paragraph 4). Since the plan (not yet engineered, according to Public Works staff) requires an elevation climb from 10' above sea level (just behind the Dry Storage Yard on Port District property) to 43' above sea level at the wooden Port District sign on Brommer Street Extension, there has to be some way to cross Arana Creek to get to Brommer Street Extension.

The description of the eastern portion of what is now called the Creek View Trail, on Port District property, is found in the Feb. 2006 AG MP draft EIR on page 3-17. On 3-6, 3-7, and 3-8 are architectural renderings that show the "trail footprints" varying from 8' 8" to 11' 7" to 15' widths and also show the ramping with retaining walls.

Since the route must meet ADA requirements and the elevation rise is the height of more than a three story building just to get over Arana Creek and up to lower Brommer Street Extension, how could it not be a bridge?

It is true that Arana Creek flows through culverts and under the harbor parking lot but at the point the "trail" will cross the creek it will definitely be a steel span bridge as described in the EIR. It would also be on riparian hanitat.

Additionally, the "trail" portion and raised ramp to Arana Creek on Port District property is entirely within the 100' riparian zone setback that the harbor was required to re-vegetate and leave unoccupied (by the Coastal Commission) when it built its now current Dry Storage Yard. The steel span bridge is required to allow for flooding of the floodplain (spillover from the creek).

A field trip will make this clear.

Jean Brocklebank

Jean Brocklebank
1190 7th Ave. #5
Santa Cruz, CA 95062
[831] 462-4919
jeanbean@baymoon.com

23 Feb. 2010

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Exhibit I

January 17, 2010

Dear Mr. Lester ~

Way back in August 2005, Friends of Arana Gulch (FOAG) submitted comments to the S.C. Dept. of Parks & Recreation, as they were preparing their Draft EIR on the Arana Gulch Master Plan.

In our comments, we spoke of the CA Coastal Commission's emphatic and repeated recommendation that 1) the City find other bikeway routes as alternatives to developing one on the Environmentally Sensitive Habitat Area of the coastal prairie of Arana Gulch greenbelt, and 2) the proper planning process for the Arana Gulch greenbelt, as directed by the City's own Local Coastal Program (LCP) was that a "preferred planning approach would be to prepare a specific management plan" for the greenbelt "prior to consideration of a Broadway-Brommer Bicycle Pedestrian Project." (see letters from the Coastal Commission to the City dated 25 Nov. 1998, 11 Jan. 2000, and 13 May 2003).

We said then:

"The purpose of a Master Planning process is to analyze the resources of the area under study and develop goals and objectives for its use. The proposed Arana Gulch Draft Master plan has substituted a **project** for a **process**. Instead of the Master Planning process, the City has produced a project (the Broadway-Brommer Bicycle/Pedestrian Path Connection) around which the entire Master Plan has been developed. Project, not process."

Your prescient words, Mr. Lester, warned of the troubles that would ensue if the City created a specific project before doing a Master Plan. Just as you warned, the Arana Gulch Master Plan is simply a vector for the Broadway-Brommer transportation project. The entire 2006 EIR is about the B-B transportation project. But the City is applying for a development permit for its AG Master Plan, camouflaging a specific development project under an aura of access for disabled and elderly to the coastal zone. You know the history of the B-B project; you helped to write that administrative history!

The CA Coastal Commission District Office had it right all along, for the last 11 years, on the record.

I urge you to consider the application for development in the ESHA as a two part application: one, a very commendable resource management, protection and restoration Master Plan and two, a specific development bikeways transportation project. Considered separately, as they should have been all along, at your historical urging, means that the resource management actions can be separated from the Broadway-Brommer Bike/Ped project, granted and implemented at last. Whereas, the B-B project should be resubmitted to stand on its own, to be proven with supportable evidence to be a "resource-dependent" development on critical habitat of an endangered species within an ESHA. Furthermore consideration of the B-B project separately will allow it to be compared with alternatives outside of the ESHA, which have never been analyzed in any EIR (not in 1999, not in 2006).

Thank you for listening,
Jean Brocklebank

Restoration Alternative, submitted to the City in August 2005:
http://members.cruzio.com/~arana/comment.html/

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February 14, 2010
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz
CA, 95060

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FEB 16 2010
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RE: Arana Gulch Master Plan

Dear California Coastal Commissioners,

The Santa Cruz Tarplant AKA Santa Cruz Sunflower, *Holocarpha macradenia*, is a unique biological entity, which should be preserved not only for its own merits and place in the tangled web of life, but also for the enjoyment of future generations. The Arana Gulch population shows a genetic variant unknown in any of the other 11 known populations, so in making decisions that could negatively impact this one-of-a-kind brick in the wall of life, we are talking about the possibility of its extinction.

The entire Arana Gulch greenbelt was designated as Critical Habitat for the Tarplant by the USFWS in 2002. Critical Habitat plays a legally mandated role in the Endangered Species Act by providing areas for expansion, which could lead to future recovery of a species. It also protects essential features such as hydrology and the habitat for species essential to pollination or seed dispersal.

This project by the City violates the State's own Coastal Act (as this whole site is in the Coastal Zone) and under that law the entire 67 acres have been designated as Environmentally Sensitive Habitat Area (ESHA). ESHA only allows resource dependent development. Thus, building/development on ESHA must be resource dependent, not for transportation purposes as proposed by this paving project. The City has renamed this paved bikeway an "interpretive trail" in an attempt to get around violating ESHA. But as California Native Plant Society botanical experts have pointed out, interpretive trails should be just that and not destroy the natural resources they are opening up to human view. This project as it stands is not resource dependent. In further attempts to get around the ESHA problem the City has said the "interpretative trail" is essential to enabling the disabled to have access to the greenbelt arguing that they have a right to allow such access and recreation. I support any true interpretive trails that do not destroy Critical Habitat or violate ESHA, including some paved access from the north in the most degraded section to allow for the disabled to have an interpretive access.

If the California Coastal Commissioners agree to the City's faulty reasoning it will set a bad precedent for any and all future development within ESHA areas, many of which contain federally listed plants and other rare species. The Arana Gulch Tarplant should be

managed in compliance with its ESHA designation. The Arana Gulch Master Plan by the City should be approved without the Broadway-Brommer paved connection so that management can begin ASAP to restore the Tarplant.

The EIR for the project stated that the bikeway would cause "significant and unavoidable impact" to the Tarplant, which violates ESHA protection. The impacts will not be mitigatable to a less than significant level. The Tarplant is dependent on a specific hydrologic regime, and the EIR failed to adequately address potential adverse impacts from hydrologic changes from the paved bikeway. Further, the EIR inadequately addresses the effects of fragmenting the four historic Tarplant subpopulations. Fragmentation could prevent successful restoration. The City argues that only a small amount of habitat will be destroyed; but these 8-12 feet wide paved roads will potentially radically change the coastal prairie's hydrology and fragment the subpopulations. Additionally, introducing large numbers of pedestrians and bicyclists will not only require the City to implement very expensive controls for the Tarplant through the use of some combination of fences, patrols, and monitoring those impacts, but will also greatly limit one of the best and least expensive kinds of ecological disturbance for this species - cattle grazing. There is no reason that fenced-in grazing cattle and walking pedestrians on interpretive trails could not enjoy Arana together; but the bicycles and paved bikeways in the present plan pose huge problems to successful, affordable long-term management.

Please support one of California's most effective coastal habitat protective laws! If this paving development is to be allowed, it will violate the Coastal Act's ESHA protection of Arana Gulch's 67 acres. Allowing such a legal violation will set up a bad legal precedent that will enable future developments to take place throughout other coastal areas with listed species and rare habitat and ESHA protection.

Sincerely,

Ellen Holmes
6850 Freedom Blvd
Aptos, CA 95003

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February 15, 2010
California Coastal Commission
725 Front St.
Suite 300
Santa Cruz, CA 95060

Re: Arana Gulch Master Plan

To Our Esteemed Coastal Commisioners,

I have reviewed several of the various written materials and the issues relevant to the proposed Arana Gulch bicycle path project. As both an avid cyclist sensitive to the need for such a route and a member of the board of the local California Native Plant Society, I have looked at both sides of this lawsuit with an eye toward the best overall solution. The Arana Gulch Master Plan, the FEIR, etc. clearly do not represent such a best solution and so I am joining the chorus of those concerned citizens you have heard from, and countless ones you have not, to ask you to uphold the letter and spirit of the law. You have already received plenty of supportive documentation from both sides, you're aware that alternatives are available, and now you are in a position to give the sort of wise guidance which the CCC is charged with and has demonstrated in the past.

So I am simply urging you to do the right thing and follow through with your prior recommendation for the City of Santa Cruz to consider an acceptable compromise, which they have failed to do. What was come up with would make a mockery of the good regulations, such as the Coastal Act and CEQA, set up to protect Environmentally Sensitive Habitat Areas. There is no doubt about significant impact to a protected plant population, and the way this has been handled would be an unacceptable precedent if approved. I trust that you will recognize this, and I plan to be at the upcoming hearing to congratulate you on making the obviously correct decision.

Thanking you in advance,

Joel D. Rider
Santa Cruz Chapter, California Native Plant Society

Exhibit I

February 10, 2010

Mr. Dan Carl
District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

RECEIVED
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Re: The Arana Gulch Master Plan

To District Director Carl:

As a consulting botanist in the Santa Cruz Mountains and a long-term member of the California Native Plant Society, I am alarmed at the "significant and unavoidable impacts" – noted in the EIR – posed by the proposed Broadway-Brommer bikepath to the survival of the only remaining federally and state-listed Santa Cruz tarplant (*Holocarpha macradenia*) population on public land.

These significant and unavoidable impacts include loss of federally designated Critical Habitat for a listed species, substantial and deleterious changes in the hydrology of the area, fragmentation of the four historic subpopulations and their attendant seedbanks, inadequate buffers around the seasonally inundated areas, and an increase in trampling and the importation of weed propagules due the huge increase in bicycle and foot traffic through the area.

In addition, the installation of a pathway limits the choice of management techniques available to restore the now-dwindling population to its former numbers. After years of neglect, it is ironic that the City has tied its implementation of the desperately needed management plan for the tarplant to the installation of this bike path, while neglecting to specify that there is any long-term funding available to carry out these efforts.

Since this area has been designated as an Environmentally Sensitive Habitat Area (ESHA), it is difficult to see how the installation of the bike-path (now termed an "interpretive trail") would qualify as a resource-dependent use – especially since there currently exist other, better alternatives that would not result in the destruction tarplant habitat. Indeed, it seems that the Coastal Commission, in approving this usage, would be weakening its own ability to provide protection for these fragile areas, resulting in the loss of even more species.

Clearly, this population is in need of all the help it can get. Unlike the bike path, which could be placed in several other locations, the tarplant is wedded to its ostensibly state-protected habitat. I hope it will once again thrive in this spot, as it has for millennia.

Thank you very much,

Dylan Neubauer

Dylan Neubauer
Santa Cruz, CA

Neubauer
2026 Back Ranch Rd
Santa Cruz CA 95060

Exhibit I

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Kit Birskovich Piano Studio
528 Windham Street, Santa Cruz, CA 95062
kitb@baymoon.com 831.426-5172

February 10, 2010

California Coastal Commission, Central Coast
725 Front Street, Suite 300
Santa Cruz CA 95060

RE: ARANA GULCH MASTER PLAN

Dear Commissioners,

I would like to add to the public record some facts concerning the effect paved roads produce on the natural ecology of a given place. As the proposed paved "bike trails" through Arana Gulch are in every sense roads, the following quotes from Stephen DeStefano's recently published *Coyote at the Kitchen Door* are relevant and important to the Coastal Commission's decision on permitting such a project in this small environmentally sensitive habitat area. (Mr. DeStefano is a research professor, Department of Natural Resources Conservation, at the University of Massachusetts, Amherst, and leader, U.S. Geological Survey's Massachusetts Cooperative Fish and Wildlife Research Unit. His new book has received excellent and important reviews.) I begin the following excerpts from pages 98-106 of his book. (Text in bold print are mine.)

(Quoting Dr. Richard Forman, professor of landscape ecology at Harvard University:)

> **"The road system ties the land together for us yet slices nature into pieces. Natural processes degrade and disrupt roads and vehicles, requiring continuous maintenance and repair of the rigid network. Conversely, the road system degrades and disrupts natural patterns and processes, requiring management and mitigation for nature. Both effects – nature degrading roads and roads degrading nature – are costly to society."**

The road system, which we consider so central to our personal freedom, social mobility, and economic success, **lies at the heart of our problems with sprawl and loss of open space**...

In the United States, roads and roadsides cover about 1 percent of the land, an area the size of Indiana... **an outright removal of wildlife habitat from the landscape or an**

alteration of that habitat. This concept has been dubbed the road-effect zone, a term indicating that the impact roads have on terrestrial and aquatic habitats and on wildlife populations reaches beyond the edge of the pavement. **The influence of the road extends more than three hundred feet on either side, for most ecological factors, such as the effects the road zone can have on amphibian populations and the assistance they give to the invasion and dispersal of exotic plants. The area of influence extends to more than half a mile in other cases; for example, many grassland birds avoid areas for half a mile on either side of a road...**

The first-felt effect of roads on nature is mortality directly from road construction. As researchers Stephen Trombulak and Christopher Frissell state simply and succinctly in an article in *Conservation Biology*: "Road construction kills any sessile or slow-moving organism in the path of the road."

... Once the road is constructed, it continues to affect conditions in the physical environment on and around it especially when it comes to water. Roads disrupt and alter flow and runoff patterns. The hard-packed, impermeable surfaces of roadways do not allow water to be absorbed into the ground. Consequently, soil moisture content is different around roads than away from roads, runoff is increased, and sedimentation deposition changes. That hard surface also contributes to the heat island effect. Most roads, especially those covered with black asphalt, quickly build up heat and retain it much longer than do surfaces covered with vegetation.

The most obvious connection between wildlife and roads is mortality from collisions... -- roadkill...

Roads are especially hard on smaller animals like amphibians and reptiles. **The species that are reliant on wetlands for reproduction but that also spend part of their life traveling overland are particularly vulnerable to vehicles as the creatures make their way across land in an attempt to move from wetland to wetland...**

...Although some species may be attracted to the mowed roadside vegetation, **many are repelled by the presence of roads and traffic and change their home ranges and movements in response...**

The most pervasive and perhaps most troubling relation between roads and wildlife, however, is habitat fragmentation. ...Roads cut up the landscape in many different ways, by opening up the forest canopy, segmenting forests, deserts, and grasslands into small separate patches, and **separating the patches from one another with some barrier that is impenetrable (for some species) and hazardous (for others).**

Please consider these facts as they apply to the proposed Arana Gulch bike roadway project, and consider the negative impact such construction would have on the ecology of our small coastal prairie, wetlands, and wildlife – plants and animals – who struggle for survival there, as well as those of us

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February 10, 2010

Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

RE: Arana Gulch Master Plan

Dear Coastal Commission Staff and Commissioners:

I am writing this letter as a biology teacher and a former USFS naturalist to oppose the paved bikeway slated to bisect Arana Gulch.

After following the issue for several months now, I do not believe that enough evidence to the contrary exists to offset the potential adverse effects of such a project on Arana's population of the Santa Cruz Tarplant, *Holocarpha macradenia.*

In cases such as this any doubt at all concerning negative biological impacts should make all of us stop to consider what we are about to do. We need to ask ourselves if we are convinced beyond the shadow of a doubt that this project will not edge the tarplant closer to extinction.

Surely the USFWS did not designate this area as Critical Habitat on a whim.

Thank-you,

Margaret Edwards

Margaret Edwards
pegedwards@sierranatureprints.com

831-335-4800

Ms Peg Edwards
1600 Mount Hermon Rd
Scotts Valley CA 95066

Exhibit I

January 22, 2010

Dear CCC:

We oppose a paved bike path in the Arana Gulch Greenbelt in Santa Cruz. This would significantly change the nature of this greenbelt. Please only approve the Arana Gulch Master Plan contingent on the removal of the Broadway-Brommer Bicycle Path Connection project.

Thanks,

John and Ellen Moir
307 Marnell Avenue
Santa Cruz, CA 95062
John@jmoir.com

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JAN 25 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

January 16, 2010

RE: Arana Gulch Master Plan

Opening words of UN Secretary-General Ban Ki-moon's message for the International Year of Biodiversity, 2010

"Over the past half-century, human activities have caused an unprecedented decline in biological diversity. Species are going extinct a thousand times faster than the natural rate..."

Please help us protect biodiversity in the City of Santa Cruz Arana Gulch greenbelt lands.

2010 has been declared the International Year of Biodiversity. Habitat destruction is one of the primary factors in what some experts say is a rate of species extinction 1000 times its natural rate. As individuals we sometimes feel helpless to stop the world-wide unraveling of the web of life upon which we all depend. But locally, where we have control we can act to protect biodiversity. The science says, and the Environmental Impart Report says that the bicycle path between Broadway and Brommer streets proposed in the City of Santa Cruz Arana Gulch Master Plan will create significant and unmitigateable damage to the habitat of the Santa Cruz tarplant. Science tells us that one of the very worst things we can do is to fragment the habitat of an endangered species like the Santa Cruz tarplant. Even though most of Arana Gulch was designated as Critical Habitat for the tarplant by the USFWS in 2002, fragmentation is exactly what paving this route would do.

The Canyon Trail together with the Creek View Trail was conceived as an east-west bicycle connection. Since bicycle use has no coastal dependence the City has sought to widen the scope by relabeling Canyon and Creek View as multi-use trails. But the majority of the public still views this for what it is, a paved bicycle corridor. Most of its funding is based on that concept. Some pedestrians, and maybe even a wheelchair user or skateboarder may seek to go there, but should any group be given special privilege to damage the habitat of an endangered species? Are we going to continue to accelerate the loss of species or are we going to act locally to protect biodiversity?

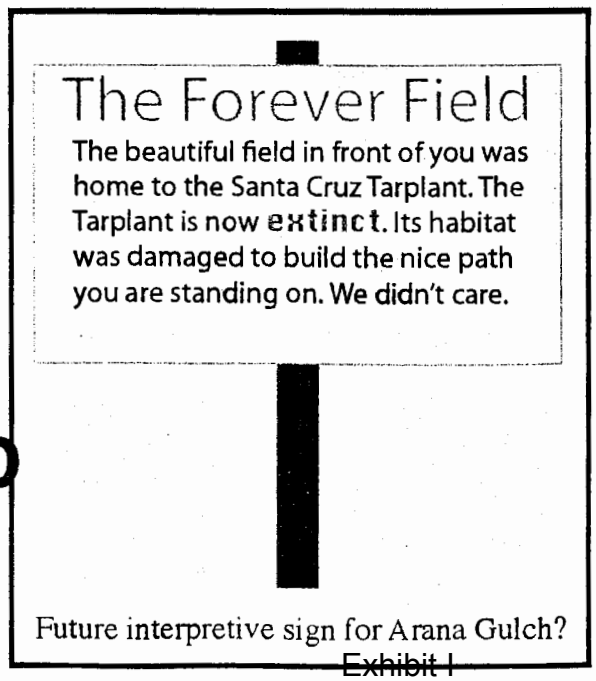
Other options are available to provide access for all without damage to the tarplant, and within 1/4 mile there is an even better option for an east-west bicycle corridor. In this International Year of Biodiversity I ask you to approve the Arana Gulch Master Plan with the elimination of the Canyon and Creek View Trails.

Thank you.

Richard Stover

Richard Stover, PhD
1603 King St.
Santa Cruz, CA 95060

RECEIVED
JAN 25 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA



Future interpretive sign for Arana Gulch?

January 18, 2010

RECEIVED
JAN 20 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

Re: Arana Gulch Master Plan

Deborah Christie
136 South Park Way
Santa Cruz, CA 95062

Dear Commissioners,

Having been a resident of Santa Cruz County since 1979, I have seen a great deal of green space being paved over in the name of progress. The scenario emerges again; this time with Arana Gulch Greenbelt.

What I don't understand is why the infrastructure already in place in Frederick Street Park is not modified and updated to accommodate bicyclists commuting from the city through to Live Oak and beyond. There are stairs and a concrete pathway along the perimeter of the park that lead to the road through the yacht harbor and up to Brommer Street and 7th Avenue. Granted the stairway is not bicycle friendly at this point, but a minor modification with switchbacks and wheelchair accessibility will suffice at creating a more efficient and much less expensive East-West corridor.

Another question I pose is that of the Rail Trail as an East-West pathway for pedestrians and bicyclists. The railroad tracks are a mere ¼ mile from the proposed Arana Gulch Trail and it is a much better use of our state and federal funds to create a corridor from the boardwalk through Eaton Street Bridge and onto 7th Avenue. Again, the infrastructure for a trail ***already*** exists; the disruption of pristine meadow habitat is not necessary because focus for the improvement of Santa Cruz County best resides with the acquisition and development of the existing 32 mile rail corridor. Piece by piece, little by little, infrastructure can be designed and developed along the railroad tracks; with community involvement, such as was done about two years ago when a neighborhood coalition secretly created a bike/pedestrian friendly path from Seabright Brewery to the beginning of Eaton Street Bridge. As an avid bicyclist I used it more than 20 times to ride my bike from Arana Gulch/Agnes Street to Wilder Ranch. Because the railroad had not given permission for this trail, the new path was destroyed. If we purchase this corridor, then the same forces that created the illegal path can come together to again create a viable path for East-West transit.

In closing, the matter seems very clear to me and numerous city and county residents who I have spoken with. To interrupt the environmental balance that exists in Arana Gulch; the foxes, coyotes, birds of prey, skunks, raccoons, as well as the peace and tranquility that this rare stretch of greenbelt offers, does not make economic nor ecological sense.

Sincerely,

Deborah Christie

Deborah Christ

Exhibit I

January 15, 2010

Neil Conner
136 S Park Way
Santa Cruz, CA 95062

RECEIVED
JAN 20 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

Re: Arana Gulch Master Plan

Dear Commissioners,

I urge you to protect the beautiful and environmentally sensitive habitat of Arana Gulch and vote NO the on Broadway-Bromer Bicycle Path.

The city may have dressed this project as an "Interpretive Trail", but it is, and always has been, a transportation project. And as a transportation project, I believe it is poorly conceived, will offer little benefit to the bicycle community, and be very destructive to an environmentally sensitive habitat area. If the bike lanes on Soquel Avenue - and the bike lanes to be built with the Murray Street Retrofit Project - don't make the Broadway-Bromer Bicycle Path obsolete already, surely the proposed Rail Trail project will. And when that happens, all destruction and the loss of the natural beauty of Arana Gulch will have been for nothing. Please don't let this happen! The "Interpretive Trail" the city wants to build is fine, but the two bridges required for the East-West connector should be eliminated from the Arana Gulch Master Plan altogether.

Aside from the fact that the Broadway-Bromer Bicycle Path is complete boondoggle as a transportation remedy, the added pedestrian use from the Seabright neighborhood will have a significant and detrimental impact on the environmentally sensitive habitat of the Santa Cruz tarplant. It would require industrial-strength fencing to keep the added influx of hikers and their dogs out of the tarplant habitat, and the effectiveness of even that measure is questionable; fenced in areas can be vandalized by anyone determined enough to recover the leg room for their dogs the city hopes to restrict. To think otherwise is hubris; fences the city constructed to just close the existing trails through the tarplant habitat were not simply ignored, they were violently ripped apart. And the city wants to construct a direct opening into Arana Gulch from a much larger neighborhood than already has access? That's ludicrous! The tarplant wouldn't stand a chance with even a good steward, let alone one with as poor a record of stewardship as the City of Santa Cruz. And surely, the impacts of that level of overuse won't be limited to just the tarplant...

Please vote NO the on Broadway-Bromer Bicycle Path!

Sincerely,

Neil Conner

Exhibit I

Kit Birskovich Piano Studio
528 Windham Street, Santa Cruz, CA 95062
kitb@baymoon.com 831.426-5172

January 18, 2010

RECEIVED
JAN 20 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

California Coastal Commission, Central Coast
725 Front Street, Suite 300
Santa Cruz CA 95060

RE: ARANA GULCH MASTER PLAN

Dear Commissioners,

Please receive the enclosed petitions signed by 39 California voters/citizens. They request that you deny a development permit to the City of Santa Cruz for the construction of bicycle transportation projects in Arana Gulch. Further, they strongly support science-based resource management in this greenbelt land.

Please include this as part of the public record regarding Arana Gulch.

Thank you,

Sincerely,

Kit Birskovich

Kit Birskovich

TO: The California Coastal Commission
RE: Application by the City of Santa Cruz for a development permit for Arana Gulch

We, the undersigned, petition the California Coastal Commission to deny a development permit to the City of Santa Cruz for the construction of bicycle transportation projects on the Arana Gulch Greenbelt (the Broadway-Brommer Bicycle-Pedestrian Connection). We strongly support science based resource management for the endangered Santa Cruz tarplant and all associated floral and faunal species in the Arana Gulch Greenbelt.

Name (signature and printed) Ken Weisner	Address
1. Kenneth R Weisner	528 Windham St, S.C. 95062
2. [illegible] (TERRA OWEN)	1113A SEABRIGHT AVE, S.C. 95062
3. Thomas Miller	426 Pennsylvania Ave. Apt. C, S.C. 95062
4. Kim Hill (Kim Hill)	121 Mentel Ave, Santa Cruz CA 95062
5. Kriya Callac	136 Mentel Ave SCCA 95062
6. Diane Ripley	225A Hall St. S.C. 95062
7. Christine McAllister	246 Marnell Ave SC 95062
8. Timothy Fedwith	046 Marnell Ave SC. 95062
9. Cecilia Pinheiro	1739 BYER COURT SANTA CRUZ, CA 95062
10. Darlene Wilcox	1739 Byer Ct. S.C. 95062
11. [illegible] Wilkinson	9299 Glen Arbor Dr.
12. [illegible]	9299 Glen ARBOR DR.
13. [illegible]	~~1239 ASHLAND, CHICAGO, IL~~
14. [illegible]	77 Hollins Drive, Santa Cruz CA 95060
15. [illegible]	359 Baker ST SC CA 95062
16. [illegible] Lisa Tenenbaum	411 Cayuga St SC 95062
17. Therese Johannesson (Therese Johannesson)	3075 Salisbury Dr. 95065

Petition completed this date: 1-11-2010
(Submitted by Kit Birskovich
528 Windham St, Santa Cruz 95062)

Exhibit I

TO: The California Coastal Commission
RE: Application by the City of Santa Cruz for a development permit for Arana Gulch

We, the undersigned, petition the California Coastal Commission to deny a development permit to the City of Santa Cruz for the construction of bicycle transportation projects on the Arana Gulch Greenbelt (the Broadway-Brommer Bicycle-Pedestrian Connection). We strongly support science based resource management for the endangered Santa Cruz tarplant and all associated floral and faunal species in the Arana Gulch Greenbelt.

	Name (signature and printed)	Address
1	James Bennett, M.D.	359 Baker Street Santa Cruz, CA 95062
2	TODD PINSKY	950 N. Branciforte Ave Santa Cruz CA 9506
3	Margaret Erickson Margaret Erickson	206 Berkshire Ave, Santa Cruz, CA 950
4	Alison Russell	548 Sumner St, Santa Cruz 95062
5	Walter L. Wadlow	548 Sumner St. Santa Cruz, CA 95062
6	Moira Fleming	155 Hagemann Ave S.C. Ca 95062
7	Rebecca Daniel	284 Gulch Rd., Felton, CA 95018
8	Selena Hudson	148 Mentel Ave. S.C. 95062
9	Sigfrid Garman	351 Moosehead Dr. Aptos CA 95003
10	Heather Houston	427 Locust St. Santa Cruz, CA 95060
11	Andrea Brooks	163 Serra Ct. Santa Cruz 9506
12	Ann Krieg Levine	314 Harrison Ave SC 95062
13	MATT JACKSON	609 FAIRMOUNT AVE 95062
14	Abelino	155 Molly My SC 95065
15	E P Ferrell	612 Button St SC 95060
16	Pauline E. Ferrell	612 Button St SC 95060
17	Flora Smith	640 Coast Rd, Santa Cruz, CA 95060

Petition completed this date: 1-18-2010

Exhibit I

TO: The California Coastal Commission
RE: Application by the City of Santa Cruz for a development permit for Arana Gulch

We, the undersigned, petition the California Coastal Commission to deny a development permit to the City of Santa Cruz for the construction of bicycle transportation projects on the Arana Gulch Greenbelt (the Broadway-Brommer Bicycle-Pedestrian Connection). We strongly support science based resource management for the endangered Santa Cruz tarplant and all associated floral and faunal species in the Arana Gulch Greenbelt.

	Name (signature and printed)	Address
1	Donna Lee	327 Union St Santa Cruz CA 95060
2	Edisione B. deAlmeida	404 Palm ST SC, CA 95060
3	LEZIA SALAMONE	1065 HIGH ST SC, CA 95060
4	ERICA Berg VanBerg	812 Western drive SCCA 95060
5	Deborah Noël Deborah Noël	2900 N. RODEO GULCH RD. Soquel CA 9507
6	Jahnavi Noël Jahnavi Noël	2900 N. RoDeO Gulch R.D. Soquel c 9507

Petition completed this date: 1-18-2010

Exhibit I

TO: The California Coastal Commission
RE: Application by the City of Santa Cruz for a development permit for Arana Gulch

We, the undersigned, petition the California Coastal Commission to deny a development permit to the City of Santa Cruz for the construction of bicycle transportation projects on the Arana Gulch Greenbelt (the Broadway-Brommer Bicycle-Pedestrian Connection). We strongly support science based resource management for the endangered Santa Cruz tarplant and all associated floral and faunal species in the Arana Gulch Greenbelt.

Name Address

Mudita Voigt 110 S. Park Way
Santa Cruz, CA 95062

I strongly oppose because it doesn't respect the natural life and beauty of Arana Gulch. An asphalt path is insensitive, ugly, destructive, toxic with many bad consequences. There are other great possibilities for an east-west bicycle connection. How can anyone who has experienced Arana Gulch's magical serene beauty feel okay about destroying it. It would be gone and lost forever to the many species that have lived here and the many people who treasure this sanctuary for their daily recreation.

Send signed petitions to:
California Coastal Commission, District Office, 725 Front Street, Suite 300, Santa Cruz, CA 95060

Petition completed this date: 11/10/10

Mudita Voigt
110 S Park Way
Santa Cruz, CA 95062

GREENPEACE

RECEIVED
JAN 25 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

TO: The California Coastal Commission
RE: Application by the City of Santa Cruz for a development permit for Arana Gulch

We, the undersigned, petition the California Coastal Commission to deny a development permit to the City of Santa Cruz for the construction of bicycle transportation projects on the Arana Gulch Greenbelt (the Broadway-Brommer Bicycle-Pedestrian Connection). We strongly support science based resource management for the endangered Santa Cruz tarplant and all associated floral and faunal species in the Arana Gulch Greenbelt.

Name	Address
Steve Wiley Steve Wiley	102 Young Love Ave, Santa Cruz
JAMES CHEAP	140 VERNON ST #13 SANTA CRUZ, CA 95060
Grey Hayes	253 Molino Creek Drive Rd Davenport, CA 95017
Jonathan Holtz	1912 Escalona Dr. SC 95060
Rob Goldschmidt	3309 Maplethorpe Ln. Soquel 95073
Marie Chapman	115 Mesa Ln S. Cruz Cal 95060
Lynn Overtree	610 San Miguel Cyn Rd, Royal Oaks, CA 95076
Stephen McCabe	205 Morningside Dr. Ben Lomond, CA 95005
Charles Koester	445 El Solyo Heights Dr CA 95062
Fred McPherson	Box 544, Boulder Creek, CA
MA Waters	1861 alba Rd, Ben Lomond CA 95005
LINDA SPAHR	122 La Cañada Way Santa Cruz CA 95
Charles Baughman	1000 Stewart St., Boulder Creek, CA 95006
Cheryl MARTIN	4160 JADE St #16 CAPITOLA, CA 95010
MARY H. O'DONNELL	4160 Jade St #112, Capitola CA 95010
Aurora Rufolo	4160 Jade St. Cap 95010
Dean PRICE	750 Olive Springs Rd. Soquel 95073
TRENT EGLIN	4160 JADE ST #111 CAPITOLA, CA 95010
JOHN THOMAS	4160 JADE ST. 62 CAPITOLA Ca 95010

Send signed petitions to:
California Coastal Commission, District Office, 725 Front Street, Suite 300, Santa Cruz, CA 95060

Petition completed this date: 1/13/2010

Mr. Vincent Cheap
Spc 112
4160 Jade St
Capitola, CA 95010-3927

Exhibit I

TO: The California Coastal Commission
RE: Application by the City of Santa Cruz for a development permit for Arana Gulch

We, the undersigned, petition the California Coastal Commission to deny a development permit to the City of Santa Cruz for the construction of bicycle transportation projects on the Arana Gulch Greenbelt (the Broadway-Brommer Bicycle-Pedestrian Connection). We strongly support science based resource management for the endangered Santa Cruz tarplant and all associated floral and faunal species in the Arana Gulch Greenbelt.

Name	Address
Linda J Thomas	Linda J Thomas. 4160 Jade St. Capitola Ca #2
Kim Hogan	Kim Hogan 4160 Jade St #103, Capitola
Gayle McCoy	Gayle McCoy 4160 Jade ST #102 Capitola
Nancy Walsh	Nancy walsh 4160 Jade ST #52 CAPITOL
Wanda Kucina	WANDA Kucina 4160 Jade St #107 Capitola
Patricia MacGregor	4160 Jade St #86 PATRICIA MACGRE
Sharon Friedman	Sharon Friedman 4160 Jade St #6 Capitol
Clelia P Monahan	Clelia P. Monahan 4160 Jade St #17 Capitola, C
Cheryl Voss	4160 JADE ST #27 CAPITOL
Jerry Voss	4160 JADE ST #27 CAPITOL
LINDA DOMENICI	4160 JADE St #24 CAPITOLA CA 95010
GARY GILBERT	4160 JADE ST. #97 CAPITOLA, CA 95010
Darnella C. Blanton	4160 JADE ST #53 CAPITOLA, CA
Wendy Justice	4160 Jade St # 9 Capitola 95010
Jarrod Herman	4160 Jade St # 9 Capitola 9501
Art Friedman	4160 Jade #68 Capitola 95010
Deborah Belanger	4160 Jade st # 41 Capitola 95010

Send signed petitions to:
California Coastal Commission, District Office, 725 Front Street, Suite 300, Santa Cruz, CA 95060

Petition completed this date: 1/16/2010

Exhibit I

TO: The California Coastal Commission
RE: Application by the City of Santa Cruz for a development permit for Arana Gulch

We, the undersigned, petition the California Coastal Commission to deny a development permit to the City of Santa Cruz for the construction of bicycle transportation projects on the Arana Gulch Greenbelt (the Broadway-Brommer Bicycle-Pedestrian Connection). We strongly support science based resource management for the endangered Santa Cruz tarplant and all associated floral and faunal species in the Arana Gulch Greenbelt.

Name Address

Andrew O'Brien 110 S. Park Way, S.C., CA 95062

OPPOSED

I am opposed to the bicycle project. the city has never openly concidered alternative routes. Now we have sequel I could develope Morrey. I am a bicyclist but would prefer to see Arana Gulch undivided and ~~un~~ uncompromised, for tar Plant but for many other environmental and asthetic reasons. Handicap access is a good idea but is available already thru Agness st. this could be improved by a better path surface — granite fines or other natural surface. the idea of Asphalt is particularly ugly and toxic.

It is a small miracle that this land has gone thru time with a minimum of development. There is still time for us to appreciate this treasure and resist bridges, Asphalt and or concrete.

thanks for listening Andrew

Send signed petitions to:
California Coastal Commission, District Office, 725 Front Street, Suite 300, Santa Cruz, CA 95060

Petition completed this date: 1/18/10

Andrew O'Brien
110 S Park Way
Santa Cruz CA 95062-2202

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JAN 20 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

RECEIVED
JAN 19 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

January 12, 2010

Dan Carl , Director
California Coastal Commission

Dear Mr. Carl:

I am writing to ask that your Commission decide against approving the proposed bike road which the City of Santa Cruz plans to pave through Arana Gulch. The permanent damage this "path" (in fact road) will cause to the land and endangered plant species such as the Santa Cruz tarplant is too great to be disregarded for the sake of another bike route. The City is motivated to build the bike path more because of the generous Federal grants (3 to 4 million dollars) rather than the path's true value as a needed improvement to bicycle traffic. There are very viable alternative routes which the City Council won't recognize as such because the cost of construction would be less thereby less Federal grant money.

The Arana Gulch land is an oasis of stillness and nature:it is virtually surrounded on all sides by buildings and roads and the upper Yacht Harbor. The dairy family who previously owned the property made the stipulation that the City would "Allow the land to remain in its natural state in perpetuity." It is a gift of open space and wildlife Mr. Carl, not a bicycle route.

As you know the Coastal Commission denied the City's application for a automobile route through the same land about 1994- we were very relieved for this as the CCC had previously approved the expansion of the Upper Harbor and this road would have been just too much impact for the Arana vicinity. The proposed "bike path is indeed a road with all the impacting elements.

I ask that the Commission find that the important value this open space gives to the coastal region would be permanently compromised by this urban intrusion. I thank you sir, for your attention to this matter.

Sincerely,

Birgit M. Wilke

Birgit M. Wilke

409 Prospect Heights
Santa Cruz, CA 95065
Ph# 831 429 9974

Exhibit I

RECEIVED
JAN 15 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

January 14, 2009

Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

Coastal Commission Staff and Commissioners:

I am writing in opposition to the application by the City of Santa Cruz for development permits for the construction of the Arana Gulch Master Plan, which includes the Broadway-Brommer Bicycle-Pedestrian Path Connection project.

The United Nations has declared 2010 as the International Year of Biodiversity. The Secretariat of the Convention on Biological Diversity stated:

"Biodiversity, the variety of life on Earth, is essential to sustaining the living networks and systems that provide us all with health, wealth, food, fuel and the vital services our lives depend on. Human activity is causing the diversity of life on Earth to be lost at a greatly accelerated rate. These losses are irreversible, impoverish us all and damage the life support systems we rely on every day. [And] we can prevent them."[i]

The Arana Gulch Master Plan, as submitted to the California Coastal Commission, will result in degradation of the biodiversity of Arana Gulch and will increase the risk of extirpation of a federally threatened and state endangered species.

Specific Project Included in the Master Plan

The Arana Gulch Master Plan incorporates the Broadway-Brommer Bicycle-Pedestrian Path Connection project as an integral component of the plan, to the extent that the Alternatives listed in the Arana Gulch Master Plan Draft EIR apply only to this specific project and not to the Master Plan as a whole.[ii]

The Broadway-Brommer Bicycle-Pedestrian Path Connection project proposes to build two asphalt paved 8 foot wide bikeways (with two feet of shoulders) across Arana Gulch, one north to south and a second from west to east, including a 300 foot bridge across Hagemann Gulch on the west and a raised ramp and steel bridge span across Arana Creek on the east. In addition, the proposed bikeway will be 11 to 15 feet wide where it passes through the riparian zone setback on Port District property and crosses Arana Creek.[iii]

Habitat for the Santa Cruz tarplant has already been degraded by over a decade of declining management of Arana Gulch by the City of Santa Cruz. For this reason, the Santa Cruz tarplant was federally listed as threatened on March 20, 2000 (65 FR 14898), and critical habitat for the Santa Cruz

tarplant in Arana Gulch was designated on October 16, 2002 (67 FR 63968).

This project will further degrade the remaining tarplant habitat by reducing critical habitat and by dividing its historic populations with asphalt paved bikeways that will destroy the tarplant seedbed underneath and change existing patterns of water drainage on the project site. In Comment on the 2000 Broadway-Brommer Bicycle-Pedestrian Path Connection Draft EIR, the Coastal Commission noted: "It appears that the placement of a path at the proposed alignments would inhibit the movement of this species and would serve to separate the identified tarplant areas ... from one another. In addition, while individual specimens may not be covered by the proposed path, potential habitat for this species may be covered by the proposed path. We are concerned that such habitat segmentation and displacement may negatively affect the long term viability of suitable habitat for the tarplant in Arana Gulch."[iv]

The Arana Gulch Master Plan Draft EIR noted in BIO-4, page 4.2-42, that "Construction of trails through these areas would result in permanent loss of tarplant habitat within the width of the trail: additional habitat for 1 or 2 feet outside the trail footprint could also be disturbed if pedestrians and bicyclists do not stay strictly on the trail width. ... To the extent that these trails cannot be routed to avoid tarplant habitat, this would be an impact that cannot be fully mitigated." Section BIO-4 concludes with the statement "The combination of the above measures would reduce this impact, but the impact would remain *significant and unavoidable* (emphasis added). [v]

The US Fish and Wildlife Service's 2008 *Biological Opinion for the Broadway-Brommer Bicycle-Pedestrian Path* made the following findings:

"The Santa Cruz tarplant population declined from approximately 13,000 individual plants in 1998 to approximately 350 plants in 2006."

"Constructing the proposed bicycle-pedestrian pathway at the Arana Gulch open space would adversely affect approximately 65 acres of designated critical habitat for Santa Cruz tarplant. The project would directly affect approximately 0.4 acre of critical habitat through the construction of the paved pathway. The remainder of the 65 acres of critical habitat at Arana Gulch could be indirectly affected by project activities.

"Activities conducted within the proposed project area that could directly or indirectly adversely affect the Santa Cruz tarplant include ground clearance, cut-and-fill activities, paving, mowing, scraping, and non-native species removal. The potential effects associated with these activities include crushing, cutting, or otherwise injuring and killing of plants and/or seeds (through mechanical or foot traffic), surface disturbance and soil compaction, and erosion and/or changes in the hydrology.

"Probability of population extirpation increases as the number of individuals and the area of habitat decrease."[vi]

The California Coastal Commission has consistently objected to the Broadway-Brommer Bicycle-Pedestrian Path Connection project in the absence of an approved Arana Gulch Master Plan. In it's January 11, 2000 letter commenting on the Proposed Draft Environmental Impact Report/ Environmental Assessment for Broadway-Brommer Bicycle/Pedestrian Path Connection (SCH #98102080)[vii], Charles Lester, District Manager of the Central Coast District Office stated:

"As directed by the City's LCP, the preferred planning approach would be to prepare a specific

management plan for the Arana Gulch greenbelt prior to consideration of a Broadway-Brommer Bicycle Pedestrian Path project."

"...birds and animals otherwise displaced by encroaching urbanization all around utilize this area that is largely devoid of noise, lights, and other urban activities. Arana Gulch is also home to vast plant, wetland and stream resources that are protected by LCP and Coastal Act policies. As such, it is more appropriate that larger management planning take place for Arana Gulch as a whole prior to individual development decisions that may eventually prejudice future decisions."

Development in ESHA

In it's letters of comment on the 2000 Broadway-Brommer Bicycle-Pedestrian Path Connection Draft EIR and the 2006 Arana Gulch Master Plan Draft EIR, the Coastal Commission has repeatedly pointed out that any development within the Arana Gulch environmentally sensitive habitat area (ESHA) must comply with the California Coastal Act.

"Coastal Act Section 30107.5 defines environmentally sensitive habitat as follows:

> *"Environmentally sensitive area" means 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.*

Where development is proposed in or adjacent to ESHA in the Commission's CDP jurisdiction, Coastal Act Section 30240 applies. Section 30240 states:

> *(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.*

It is abundantly clear from the administrative record dating from the 2000 EIR that the City of Santa Cruz and the Santa Cruz County Regional Transportation Commission consider the Broadway-Brommer Bicycle-Pedestrian Path Connection to be a regional transportation project consisting of an East-West bicycle connection from Santa Cruz to Live Oak. Letters of comment to the California Coastal Commission from City and County agencies and the public in support of the City's application consistently refer to the Broadway-Brommer Bicycle-Pedestrian Path Connection as a transportation project intended to complete a bicycle trail link between Broadway and Brommer Streets. The emphasis of the project has always been intended to get bicyclists and pedestrians through Arana Gulch not to the resources within Arana Gulch.

Therefore, the Broadway-Brommer Bicycle-Pedestrian Path Connection does not meet the California Coastal Act definition of a resource-dependent project and the project should not be built within the Arana Gulch ESHA.

Santa Cruz Tarplant Adaptive Management program

The Arana Gulch Master Plan includes plans for the management of Arana Gulch for the Santa Cruz tarplant and other sensitive species, the Santa Cruz Tarplant Adaptive Management Program. While the Arana Gulch Master Plan Draft EIR ties funding for this project to the Broadway-Brommer Bicycle-Pedestrian Path Connection project, the Arana Gulch Draft Master Plan states: "Local funding will likely be the source for implementation of minor trail improvements and on-going resource management. ... the City Council may consider utilizing the sale of City-owned property, such as the Broadway extension alignment outside the Master Plan boundaries, to help fund implementation of the Santa Cruz Tarplant Adaptive Management Program and provide the local match for state and federal funds."[viii]

Conclusions

It is clear that the Broadway-Brommer Bicycle-Pedestrian Path Connection project will cause significant and unavoidable damage to the Santa Cruz tarplant and will result in habitat reduction for this endangered species. This transportation project cannot be built in the Arana Gulch ESHA in compliance with the California Coastal Act.

It is clear that the City of Santa Cruz can use the Santa Cruz Tarplant Adaptive Management Program to manage Arana Gulch for endangered and sensitive species without the Broadway-Brommer Bicycle-Pedestrian Path Connection project.

Recommendations

Although I am opposed to the Broadway-Brommer Bicycle-Pedestrian Path Connection project contained within the Arana Gulch Draft Master Plan, it is vitally important that the City of Santa Cruz implement the Santa Cruz Tarplant Adaptive Management Program as soon as possible.

I therefore strongly recommend that the California Coastal Commission only approve the Arana Gulch Master Plan contingent on the removal of the Broadway-Brommer Bicycle-Pedestrian Path Connection project. The City of Santa Cruz should be encouraged to submit the bicycle transportation project to the Coastal Commission as a separate regional transportation project.

Michael A. Lewis, Ph.D.
1190 7th Avenue #5
Santa Cruz, California 95062
malewis@calcentral.com

i UN opens Biodiversity Year with plea to save world's ecosystems, http://www.un.org/apps/news/story.asp?NewsID=33393&Cr=envirionment

ii Arana Gulch Master Plan Draft EIR, City of Santa Cruz, February, 2006, page 5-1.

iii Arana Gulch Master Plan Draft, City of Santa Cruz, February, 2006, page 38.

iv January 11, 2000 letter commenting on the Proposed Draft Environmental Impact Report/ Environmental Assessment for Broadway-Brommer Bicycle/Pedestrian Path Connection (SCH #98102080), Charles Lester, District Manager of the Central Coast District Office, Arana Gulch Master Plan Final EIR, May 2006, page 17.

v Arana Gulch Master Plan Draft EIR, City of Santa Cruz, February, 2006, pages 4.2-42 to 4.2-44.

vi Biological Opinion for the Broadway-Brommer Bicycle-Pedestrian Path, Santa Cruz County, California (1-8-07-F-46), United States Department of the Interior, Fish and Wildlife Service, Ventura Fish and Wildlife Office, September 15, 2008, http://members.cruzio.com/~arana/docs/F&WS BioOp.pdf

vii January 11, 2000 letter commenting on the Proposed Draft Environmental Impact Report/ Environmental Assessment for Broadway-Brommer Bicycle/Pedestrian Path Connection (SCH #98102080), Charles Lester, District Manager of the Central Coast District Office, Arana Gulch Master Plan Final EIR, May 2006, page 17.

viii Arana Gulch Master Plan Draft EIR, City of Santa Cruz, February, 2006, page 48.

January 15, 2010

Dear Coastal Commission,

I am writing this letter to express my concern and distress over the plans to build a paved bicycle path through an Environmentally Sensitive Habit Area, Critical Habitat for the Santa Cruz Sunflower.

As a resident of Santa Cruz County for the last five years who is deeply interested in the ecology and environment of the area in which I live I feel I understand how destructive it is to the prospects of this California endangered species to pave and fragment some of its little remaining viable habitat.

There are other alternatives that address the laudable goals of environmentally friendly transportation alternatives and access for those with disabilities. Please instruct the City of Santa Cruz to seriously consider them. Many times an acceptable, even superior, solution is found when the unacceptability of the first choice is enforced.

Please do not let this come to pass. We must at some time say we have taken enough and will adapt our habits so we do not leave future generations an increasingly impoverished natural world.

Thank you,

Charles Baughman

Charles Baughman
1000 Stewart Street
Boulder Creek, CA 95006

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January 12, 2010

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Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA, 95060

RE: Arana Gulch Master Plan

Dear Coastal Commission Staff and Commissioners,

Please include the following comments in your staff report for the Arana Gulch Master Plan.

I am opposed to the implementation of the Arana Gulch Master Plan. The entire Arana Gulch greenbelt was designated as Critical Habitat for the Santa Cruz tarplant *(Holocarpha macradenia)* by the US Fish and Wildlife Service in 2002. Critical Habitat plays a legally mandated role in the Endangered Species Act by providing areas for expansion which could lead to future recovery of a species, in this case, the Santa Cruz tarplant.

The Environmental Impact Report (EIR) for the project stated that the bikeway will cause "significant and unavoidable impact" to the tarplant's habitat which will violate an Environmentally Sensitive Habitat Area (ESHA) as defined in the California Coastal Act (Policy 30240). This destruction of ESHA is even more tragic given the likely possibility that the county of Santa Cruz will soon purchase the railroad right of way which could be the site of a county-wide bikeway just one-quarter mile from the proposed bikeway through tarplant habitat.

The impacts will not be mitigable to a less than significant level. The EIR failed to adequately address potential adverse impacts including hydrologic changes and destruction of habitat and seedbank from the paved bikeway. Further, the EIR inadequately addresses the effects of fragmenting historic tarplant subpopulations.

Arana Gulch was acquired by the City of Santa Cruz in 1994. Some work was initially done to assist the tarplant population, however due to lack of a significant and long term management plan for recovery, tarplant numbers have dropped precipitously. It is doubtful that the city will be able to meet its future obligation to manage tarplant habitat when no funding is in place currently.

Finally, it is time to take a look at our priorities as a species. Our big brains have afforded us many abilities, and some qualities most species don't exhibit. Compassion and reasoning are two which come to mind. Due to our growing human population, we have succeeded in impacting most of our natural areas, displacing and destroying species we may never know. It is time to consider reason and be compassionate in determining what will live or not. Further, we need to stop the denial. Overpopulation is the ultimate cause of environmental destruction playing out here and throughout the world—it is time we start dealing with it.

Thank you for your time and consideration.

Linda Brodman
1231 Andrew Lane
Santa Cruz, CA 95062
831 462-4041

Exhibit I

Greening associates

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CENTRAL COAST AREA

January 12, 2009

Mr. Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

RE: ARANA GULCH BIKE PATH AND SANTA CRUZ TARPLANT

Dear Mr. Carl,

I am a licensed landscape contractor and ecological consultant specializing in native plants, with over thirty years' experience in the Monterey Bay area.

There are at least two alternatives that can connect the two sides of Santa Cruz for bicyclists and pedestrians across Arana Gulch without harming the Santa Cruz Tarplant (*Holocarpha macradenia*). One is to construct a raised boardwalk in order to preserve the existing hydrology of the site which is a crucial component of the habitat. The other is to route the path around the perimeter of the population instead of cutting through it.

Of these two, the perimeter route is preferable - preserving the population footprint in a single unit facilitates the management activities needed to promote survival of the Tarplant population. Land management is always more complicated (and expensive) when management sites are fragmented.

These two alternatives have apparently been rejected out of hand. And they seem to have fallen out of the details of the current review. Why can this not be a win-win situation? The Tarplant habitat CAN remain intact AND the bike path can cross the gap between the Eastside and Westside of Santa Cruz.

It is ironic that before long there will be one or two other cross-town bicycle routes closer to the coast than the Soquel Drive alignment. The County of Santa Cruz may purchase the railroad right-of-way and create a bikeway just a quarter mile from the proposed Arana Gulch bikeway through the Tarplant habitat. And the Murray Street Bridge is scheduled to be reconstructed in late 2011 with the addition of bike lanes. Must a rare plant that is listed by both the state and federal governments succumb to a project that will be redundant?

I respectfully request that you and your staff take a look at all the possibilities and evaluate whether one of the win-win possibilities can simultaneously benefit bicyclists, pedestrians, and our special natural resources.

Thank you for considering this request.

Sincerely,

Suzanne Schettler
Principal

P.O. Box 277 • 9491 Love Creek Road • Ben Lomond, CA 95005 • Phone/Fax (831) 336-1745
greening@cruzio.com • California Landscape Contractor's License #552336

Exhibit I

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Kit Birskovich Piano Studio
528 Windham Street, Santa Cruz, CA 95062
(831) 426-5172 kirb@baymoon.com

January 6, 2010

California Coastal Commission, Central Coast
725 Front St., Ste. 300
Santa Cruz, CA 95060

RE: Arana Gulch Master Plan

Dear Commissioners,

Enclosed please find an opinion editorial I wrote which was printed in the Santa Cruz Sentinel. The original version was nearly 1,000 words. I was challenged by the editor to reduce it to 550 in order for it to be acceptable. I hope you can read between the lines in order to know how much our rich, sweet and tiny greenbelt means to us – us all. Saving a modest bit of coastal prairie is perhaps not a small thing but profoundly important.

Best regards,
Kit Birskovich

Kit Birskovich

Exhibit I

Arana Gulch plan would trample sensitive habitat

KIT BIRSKOVICH

The Arana Gulch Master Plan's "bikeways project" is a short-sighted project which would result in habitat destruction. It violates the spirit of the Endangered Species Act, the California Environmental Quality Act, the California Coastal Act, and the intent of local citizens who voted for greenbelts as open space.

The decision to allow paved bikeways across Arana Gulch, an environmentally sensitive habitat area, is an example of exactly how local government can contribute to ecological degradation. Arana Gulch is not a large place, yet it hosts more varieties of wildlife than any other city greenbelt. The open meadow is home to a flowering plant found nowhere else in the world, the genetically unique Santa Cruz Tarplant, Holocarpha macradenia.

On one side of its elongated range is Arana Creek, a coastal tributary with riparian habitat, nesting site of "sensitive species" great blue heron. Red bats with "special species" status, have been sighted there. Its waters are habitat for coho salmon and steelhead trout, other "threatened" species. Nearby seasonal and emergent wetlands host a multitude of amphibians. On the other side of the meadow, Hagemann Creek is the nesting site of the "threatened" San Francisco dusky-footed woodrat (not actually a rat).

The plan to bisect this land with two asphalted, 8-foot wide (plus 2-foot shoulders) bikeways would mean heavy earth movers grading the meadow, and construction of two bridges both longer than a football field over the creeks. Imagine the construction site, fleeing wildlife, bulldozers, steel girders lifted off trucks, soil impaction. Much smaller compacted paths, non-asphalt, could offer significant, safe access — including for the disabled — without the current plan's level of encroachment and hazard.

In addition, a bike road means speeding bikes. This is bound to cause conflict with other users: parents with strollers, small children, folks in wheelchairs, and dog walkers.

Other routes in place or planned make this Broadway-Brommer bike road redundant: Just to the north, bike lanes have already been added on Soquel Avenue; just south, there is the Broadway/Brommer connection through Frederick Street Park/upper SC harbor; and there are plans for expanded bike lanes on Murray Street bridge and the planned rail trail.

Where is the sense in spending millions on a non-essential, ecologically destructive road in a city that cannot afford upkeep of roads it already has, and with no funding to properly manage maintenance, patrol, and the greenbelt's natural resources? At issue also are negative impacts of lighting, crime, litter, and vagrancy caused by increased access.

Defense of this greenbelt takes foresight and recognition of its rarity and beauty. Since when do Santa Cruzans stand silently while their own heartland, their own open space is trampled?

Ultimately Arana Gulch, with its meadows of tall grasses, seasonal wetland, creeks, oaks, wildflowers, and abundant wildlife, as with all our greenbelts, does not belong to us: we are caretakers for our children and grandchildren. Let us do the noble thing and the more difficult thing: Save for those to come what coastal prairie land still exists in our urbanized city.

The California Coastal Commission has the power to halt the project. Let them know this transportation project does not belong in our greenbelt. Speak up, citizens.

California Coastal Commission, Central Coast, 725 Front Street, Suite 300, Santa Cruz, CA 95060-4508. (831) 427-4863

Kit Birskovich

Kit Birskovich is a piano teacher and ceramicist. He lives in Santa Cruz.

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OCT 19 2009

CALIFORNIA
COASTAL COMMISSION
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Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

October 12, 2009

Dear Mr. Carl,

As a resident of the city of Santa Cruz, I ask you to strongly consider two things:

1) ONLY approve the Arana Gulch Master Plan *contingent upon* the removal of the Broadway-Brommer Bicycle Path Connection project (found on pg. 30 of the draft and portion of Sec. 3.4), and
2) Please instruct the City to consider other alternatives for an east-west bike connection.

This bike "path" is an environmentally flawed, expensive and non-aesthetic plan for bicycle commuting. For over 15 years we have been telling the city to not do this bike path *in this way*. I have been to countless meetings and spent my personal funds to sue the City. This plan pits bicyclists against pedestrian residents- usually both environmentally concerned people. This is a shame that the City cannot create a positive dialog and become more creative in their approach to this solvable issue.

- ***Yes, bicycle commuting should be encouraged, but not a 8'-11' foot wide asphalt path with two bridges, and possible night lighting.***

- **ASPAHALT IS NOT AN ENVIRONMENTALLY SOUND PAVING MATERIAL.** It contributes to surface temperature warming and is hot to walk on for people and pets, it creates erosion, and being impervious creates run off problems. **An eleven foot path is not a path, it is a road.** It is rare that two bicycles pass in opposing directions in the Gulch. Any bicyclist can pass easily within 6 feet. The Gulch is not difficult to ride on now. I do it everyday. An asphalt path will mean bicyclists will ride faster, creating more possible **SAFETY ISSUES** with pedestrians. As an example, try a leisurely stroll on foot or try to get a good workout on a bike on the West Cliff- there are near misses all the time.

- The bridges and paving will **DISTURB WILDLIFE AND NATIVE FLORA,** including the endangered tar plant. TWO bridges will be an eyesore and **DIMINISH THE NATURAL BEAUTY** of his open space treasure. It is overkill in the worst way and sends an inappropriate message to residents about City spending during tough budget times.

- **LIGHTS DISTURB WILDLIFE** and make the Gulch **LESS SAFE** for night travel. Every bicycle commuter has a night lite. As far as my personal safety, I do not want to be a "sitting duck" walking on a lighted path surrounding a dark field. Has anyone thought about this?

I ask for your help in urging the City to make a more appropriate response to the need for bicycle commuting, I only hope that after 15 years, we can get a plan that include the environment and pedestrians as well. We are a creative people and I know this is possible. Help the City see this bike "path" is not the right approach.

With Thanks,

LeAnne Ravinale

Exhibit I

no return address

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OCT 19 2009

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

10/13/09

Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA. 95060

Dear Dan,

I'm writing you to urge you to vote against the proposed Broadway-Brommer Bike project which will cut through the heart of Arana Gulch. The threatened and endangered Santa Cruz tarplant will definitely be impacted by such bridges. Not to mention the peace and tranquility, which is one of the reasons for having a greenbelt.

As a bicycle rider, I am happy to ride down Soquel Ave. as an East/West route. And if Murray Ave. does not do the trick, there is always a shortcut through Frederick Street Park (one block away from the proposed bridge). This last route could be improved by a much cheaper ramp (especially compared to the two bridge proposal) down to the yacht harbor and then you bike up to 7th Ave. This seems like the obvious solution to a mid-city connection that doesn't compromise the greenbelt. Especially since the proposed two bridge system would still go down to the harbor and require a climb back up to 7th. How does this make it any easier for a bike rider? And at such a financial and environmental cost!

So. I'm urging the CCC to only approve the Arana Gulch Master Plan contingent on the removal of the Broadway-Bromer Bicycle Path Connection project.

Thank You,

Bruce Larsen

Bruce Larsen

BRUCE and ROBIN LARSEN
125 S. Park Way
Santa Cruz, CA 95062

Exhibit I

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OCT 19 2009
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

10/17/09

To Whom It May Concern at the California Coastal Commission,

The proposed Broadway-Brommer Bike project (now called an "interpretive trail") will cause "significant and unavoidable impact" to habitat of the endangered and threatened Santa Cruz tarplant (Holocarpha macradenia).

The B-B Bike project ("interpretive trail") will violate an Environmentally Sensitive Habitat Area (ESHA) as defined in the CA Coastal Act (Policy 30240). The City of Santa Cruz has failed to demonstrate that this proposed project is "resource-dependent," as specified by the Act.

The tarplant population in Arana Gulch has declined precipitously due to lack of management. In the Draft Master Plan document, the City ties management of tarplant habitat to the B-B Bike project, but the City has no funding mechanism to ensure long-term management of the Santa Cruz tarplant.

Please **only** approve the Arana Gulch Master Plan **contingent on** the removal of the Broadway-Brommer Bicycle Path Connection project (as found in six Public Use objectives on page 30 of the Draft Master Plan, as well as portions of Sec. 3.4).

Please instruct the City to consider alternatives outside of Arana Gulch for any proposed east-west bike connection. Otherwise this beautiful piece of land will be ruined forever!!

Thank you for your consideration,

Ann Contos
243 Marnell Ave
Santa Cruz, Ca. 95062

Exhibit I

October 15, 2009

To Dan Carl and the California Coastal Commission:

This letter is in opposition to the construction of a bicycle bridge and path through the Arana Gulch Greenbelt as it would significantly impact the threatened Santa Cruz Tarweed (*Holocarpha macradenia*). I have been a regular bicycle commuter in Santa Cruz County for over 20 years and currently live near Arana Gulch and can attest that there are several viable alternative bicycle routes to the proposed Broadway-Brommer route that do not impact a threatened species in a rare and sensitive coastal prairie habitat.

There is a major road (Soquel Avenue) with a designated bicycle lane that runs to the north of the gulch. Several major improvements to this route have been implemented over the last few decades including most recently a dedicated bike path at the intersection of Soquel Avenue and Capitola Road at the north east boundary of the greenbelt.

A rider can also travel through the Santa Cruz Harbor, which provides a route between Soquel Avenue and Murray Street. Some riders also carry our bikes up a set of stairs that lead to Frederick Street Park and Broadway Avenue that connects to downtown. The harbor routes do involve steep hills or stairs but are used as routes by some though not all cyclists.

A third route around Arana Gulch is the road to the south of the gulch (Murray Street), which runs parallel to a set of railroad tracks that span the County. This rail corridor has been identified for purchase by the County for development into a "rail trail" system to provide a flat, car free, cross-County bicycle route. My understanding is that the rail trail funding has been secured and this project may begin soon. I strongly support this project that also serves as a preferred alternative to the Broadway-Brommer route.

I feel the preservation of the threatened Santa Cruz Tarweed outweighs the possible benefits of the Broadway-Brommer connection through Arana Gulch and ask that the gulch's coastal prairie habitat be protected.

Sincerely,

Terrence Willett
1305 Dougmar Drive
Santa Cruz, CA 95062

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21 Dec 09

Mr. Dan Carl
District Director
California Coastal Commission

Dear Mr. Carl:

May I call your attention to the matter of the proposed Broadway-Brommer Bike project which is going to be submitted to the CCC for approval or denial. In regard to the benefits vs the potential damages incurred by this project, I strongly urge the Commission to disapprove the Bike path.

The advantages of such path have been considerably exaggerated by promoters as well as the City of Santa Cruz. It is a huge intrusion into lands which were sold to the City under the promise that the 62+ acre parcel"will remain in its natural state for perpetuity." One look at the artist's rendition of the acreage with Bike road is pretty good evidence the "Promise of Natural State" would be decidedly broken.

Also Sir, there is the basis for the City's urgency to construct the path and that is grant money from the Federal Office which issues grants for recreational structures by cities and counties. Just as it did after the 1989 earthquake when the City highly overstated damages in order to receive FEMA funds, the City is overstating the need for this bike road in order to obtain Federal funds. The Bike road would be an intrusive and permanent fixture built on false testimony about its need.

I ask you Mr. Carl,to visit the Arana Gulch land and stand where the Brommer-Broadway Bike road would be cut through. Let the silence and stillness come to you. You'll know instinctively this bike road is inappropriate and just plain bad taste.

I don't know what the CCC's standards are for approval of projects but the utter magnitude of the Bike Road with its lengthy bridges over gulches and the fact alternative routes have been summarily ignored really seems like it doesn't come up to those standards. I hope you agree and thank you for your attention.

Sincerely,

Theodore F. Meyer III
191 Mountain View Rd.
Santa Cruz, CA 95065
Ph# 831 426 5960

Exhibit I

Jennifer Greene
118 Hagemann Avenue
Santa Cruz, CA 95062

December 28, 2009

California Coastal Commission
725 Front Street
Suite 300
Santa Cruz, CA 95060

RECEIVED
JAN 0 4 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

Re: Opposition to Arana Gulch bicycle trail

Dear Commissioners:

Thank you in advance for your careful consideration of the proposed bikeways project with a raised viaduct from Brommer Street to Broadway, *covering the mouth of the estuary*, carving 2 *eight foot wide paved roads* all the way across the high fields above the gulch itself and linking to another bridge system across the gulch before cutting through the parking lot of the Santa Cruz Bible Church.

It is my understanding that the mission of the Coast Commission, includes protecting the integrity of our coastal areas. The Pacific connects to the Arana Creek through an estuary at the harbor 'foot' off Brommer Avenue.

I would hope it is the legislative if not the common sense case, that projects must consider the least intrusive alternative, or a sort of 'First Do No Harm' approach. It must be said that the Arana Gulch greenbelt is a ***virgin acreage.*** Once it is tinkered with by the hand of man, there is no turning back to where it is now. Two 8 foot wide paths will surely cede to a road within the next 50 to 100 years. Buildings will appear along its length. It is our job as stewards of the Earth to vigorously defend the right of land and especially land near water, to remain untouched; inviolate to development.

If this project is passed, an entire biome will be threatened. Will the fox still play in the fields? Will the large waterfowl soar gracefully across the meadow before landing in the eucalyptus above the estuary? The estuary is an unbelievably serene place where one can go and feel safe walking and being with nature. A raised bikepath over this beautiful riparian area would invite more traffic, litter, disturbance to nature, and very likely increased camping and crime. On this last point, there is a laughable inadequacy of law enforcement or park personnel to keep this bikeway maintained and patrolled.

I have heard it said in meetings promoting this project, that more people will bike to work if they don't have to go *up and down hills* (like, for example, the driveway to the harbor from the intersection with Brommer and 7th Avenues. People have touted the health benefits of riding a bicycle and no-one believes this more than I. But are we so wrapped in cotton wool as a community, that we can't conceive of or encourage getting on a bike and enjoying the feeling of

Exhibit I

soaring down the hill into the harbor *as so many now do*, or, on the other side, going up to Frederick Street Park, the Greenbelt, or onto Murray across the tracks?

I have heard the proponents of Pedal Power complain that a bike with a trailer containing a child requires 2 trips up the stairs at Frederick Street Park. But a bike with a trailer is a 4 wheeled vehicle! The steps at Frederick Street aren't designed for 4 wheeled vehicles!

But what about the steps at Frederick Street Park? Santa Cruz City Council member Dan Porter *repeatedly* stated that a serpentine path from the Harbor to Frederick Street Park would be the simplest possible way to achieve better contact between 7th and Brommer and the Broadway approach to downtown. He had plans drawn and the reception was lukewarm at best. The cost, the impact, and the maintenance were so far smaller there is no comparison to the Arana Gulch proposal.

Such a project would involve soils engineering and hillside retention in order to succeed, obviously, but the *visual blight would be eliminated with this approach. The* hillside from the Harbor to the Frederick Street Park is already developed!

The City leaders did ask the Harbormaster if this project was feasible, to which he replied "no." The City did not pursue the matter further! The City is now considering 2 bridges spanning very ecologically sensitive areas and which the City has *no money to maintain or patrol*. The delicate soils on the meadows will be badly eroded by the presence of 2 paved roads. The natural beauty of the area will be permanently scarred.

I implore you to use your executive might to stop this ill advised project. The Greenbelt would be irrevocably altered! Please take a walk out there before voting on this project. Stand at the mouth of the estuary down and behind the boat storage lot and soak up the absolutely unspoiled nature. This area is vulnerable to harm and desperately needs the Coastal Commission to champion the cause of its preservation as an undeveloped and undisturbed natural area.

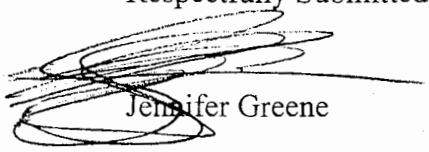
Finally I want to address the issue of the wheelchair access on such a path. My friend Bill Messiter took care of his 92 year old father for the last year of his life. Rick was wheelchair bound but we took him out for lots of walks. One of our favorites was the Arana Gulch greenbelt. By accessing the trail from Mentel Avenue, the way is flat, smooth, and dirt. There is a good 1/4 to ½ mile of trails that are not asphalt smooth, but are definitely able to accommodate wheelchairs. Here again, a tiny amount of maintenance to the part of the trail that may suffer some rutting during the wet season would go a long way to achieving the aim of the access yet preserving the area from development.

Please, please, please, consider being the sole thoughtful voice in this debate! The bicycle riders are a strong and vocal bunch. But in this instance they are not thinking like environmentalists and someone must before it is too late. There is tarplant as the lawsuits have stated, but more than this is the absolute purity of this natural area that would be so altered if this project were approved. Additionally, the impact of the construction on the Greenbelt would be

felt for many years hence.

Thank you in advance for your careful consideration of this vitally important issue.

Respectfully Submitted,



Jennifer Greene

Exhibit I

Maya Sapper
129 Rathburn Way
Santa Cruz CA 95062-1035

Oct 10/09

Dear Mr Carl:

I urge you to instruct the City to consider alternatives to the bike trail project in Arana Gulch because:

- It will violate an Environmentally Sensitive Habitat Area in the Ca Coastal Act (Policy 30240)
- The City is not managing the tarplant habitat well for lack of funding, and the tarplant is declining.
- Please urge that the CCC only approve the Arana Gulch Master Plan contingent on the removal of the Broadway - Brommer Bicycle Path Connection project (as found in six Public Use objectives on page 30 of the Draft Master Plan, as well as portions of Sec 3, 4.

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Sincerely -

Maya Sapper
129 Rathburn Way
Santa Cruz - Ca 95062

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10/10/09

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OCT 14 2009
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

Dear Dan Carl,

I am an avid bicyclist and environmentalist here in Santa Cruz – I bicycle for my main mode of transportation and for pleasure. I am also a member of the local bicycle group People Power.

The AG Master Plan must not be approved as is. We need to respect and protect what little natural habitat that is left to us. A Master Plan is definitely necessary for Arana Gulch in order to protect such an important and significant resource – but also constructing a paved bike "freeway" and 2 bridges across it is NOT what I deem "protection". I am urging you to do all that is in your power to STOP the proposed paving of the Arana Gulch greenbelt.

I just came through the old growth redwood area (Avenue of the Giants) in northern CA. A major bypass has been constructed around a good stretch of the old 2 lane highway – but there is still a small stretch where the 4 lane freeway thins back down in order to protect many old growth trees that would have had to have been removed otherwise. Despite the "need" of travelers to get to their destinations quickly – the greater need of our old trees came first.

This is exactly what the mission of the Calif. Coastal Commission is and I expect that mission to be followed in this case as well.

The need for this particular east/west bike path is not necessary enough to justify such an extreme environmental degradation of part of our greenbelt. Since this plan was proposed, bike paths have been added to Soquel Avenue making an eastern bike route very safe and easy. The Murray Street Bridge now has the go-ahead to be replaced/widened as well as adding bike paths along Murray St/East Cliff. This western bike route will soon be the route of choice for most bicyclists getting across town.

Arana Gulch meets the definition of a Sensitive Habitat Area (CCC Policy #30240). We must put the protection of our endangered Tar Plant before the now diminished "need" of bicyclists.

The CCC is the only hope for this sensitive area's preservation and I urge the approval of the Arana Gulch Master Plan contingent on the removal of the Broadway-Brommer Bicycle Path project.

Regards,

Susan Martinez
1517 Delaware Avenue
Santa Cruz, CA 95060

ps: If you want to see first hand what environmental degradation the building of a small bicycle bridge can cause, go see the Highway 1/ Gateway Plaza ped/bike bridge. I was in favor of the building of this bridge because there was no significant habitat in this area; and there never will be any for sure now. The massive earth movers and other equipment needed to construct this project was disturbing. Nothing living was or could have been spared. An 11' paved path takes more than 3 times that width of construction destruction to be built. Ingress and egress from the AG site by the earth movers, paving equipment, employees trucks, etc. would be more of the same.

Exhibit I

October 30, 2009

Dan Carl, District Director
California Coastal Commission
725 Front Street
Santa Cruz, CA 95060

Re.: City of Santa Cruz Master Plan for the Arana Gulch Greenbelt

Dear Mr. Carl:

I am writing to urge the Coastal Commission to reject the Master Plan for the Arana Gulch Geenbelt as currently submitted by the City of Santa Cruz, and to **approve it only contingent on removing the proposed Broadway-Brommer Bicycle Path Connection Project from the plan.**

The proposed Broadway-Brommer bike project (now called an "interpretive trail") will cause significant and unavoidable impact to habitat of the endangered and threatened Santa Cruz tarplant. It will violate an Environmentally Sensitive Habitat Area , as defined in the California Coastal Act (Policy 30240). The City of Santa Cruz has failed to demonstrate that the Brommer-Broadway Bike Project would comply with pertinent provisions of the California Coastal Act.

We have been following the issue of the Broadway-Brommer Bike Project for about ten years now. During that time, we have enjoyed the Arana Gulch Greenbelt in the manner that the citizens of Santa Cruz have always intended, by hiking/walking, wildlife and bird watching, and just enjoying nature. In following the population of the Santa Cruz tarplant, we have observed that it has declined precipituosly over the years. The City did not engage in any observable management of the tarplant until two or three years ago. At that time, we noticed some signs posted and some mowing. Around the same time, the City changed the title of the Broadway-Brommer Bike Project to an "interpretive trail", in a move that appears cynical to us.

In the City's proposed Master Plan document, the management of tarplant habitat is unnecessarily tied to the Brommer-Broadway Bike project. The City does **not** offer any funding mechanism to ensure the long term management of the Santa Cruz tarplant. An adequate and identifiable funding source is essential if the tarplant is to be protected in compliance with the California Coastal Act.

We would like to briefly address the issue of longstanding public opposition to the Brommer-Broadway Bike Project. While this is not directly relevant to the application of the California Coastal Act, we feel that the Coastal Commission should have this information to make its decision in an accurate context. We have attended at least six public hearings on this issue and assure you that this project, with its paved bike roads and intrusive bridges, is being forced on city residents against their expressed will.

Public opinion at these hearings has been overwhelmingly against this level of development in the Arana Gulch Greenbelt.

We do recognize that finding an additional east-west bicycle connection accross Santa Cruz is a laudible goal. But disrupting an Environmentally Sensitive Habitat Area to advance an optional bike project is wrong. The route is convenient, but the project violates the California Coastal Act and is not lawful.

We request that the Coastal Commission reject the City's proposed Master Plan and instruct it to continue to explre other transportation alternatives outside of the Arana Gulch Greenbelt and its Environmentally Sensitive Habitat Area. We have participated in many public hearings on the subject and realize that there is not an easy answer to this issue. But we beleive an alternative can, and must, be found.

Thank you for your attention to this matter. Good luck in making a difficult decision!

Very Truly Yours,

Sharon Saldavia - Phil Saldavia

Sharon Saldavia
Phil Sladavia

Sharon Saldavia
125 Mentel Ave
Santa Cruz CA 95062-2216

Exhibit I

Sandra C. Ferguson
800 Brommer St. #11, Santa Cruz, CA 95062
(831) 462-0286 sanderling2@earthlink.net

RECEIVED
DEC 21 2009
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

December 15, 2009

California Coastal Commission
Central Coast
725 Front St, Suite 300
Santa Cruz, CA 95060-4508

Re: Arana Gulch and Spending Less Money

Dear Coastal Commission Members;

Arana Gulch is a lovely area and I walk it most days. I've also been a biker.

I suggest that, to save money and meet the needs of all, a bike throughway be fenced off at the edge of Frederick St. Park to protect bikers, children and dogs from each other and some lighting added. A rideable ramp into the Harbor could be built inexpensively, which would then give access to Brommer St. and Seventh Ave. where there are bike lanes. This would be right next to Arana Gulch.

For handicapped people, a paved area into part of Arana Gulch could be provided, coming off the main entrance at Mentel Ave.

Doing these few things would not be nearly as costly as suspension bridges and paved paths through the park with extensive lighting.

In these lean times this would be a good way to find out, inexpensively, if a plan like this would accommodate bikers, wheelchairs, and canes and walkers effectively. Necessary additions and adjustments could be done when this is known and when the economy is in better condition.

Sincerely,

Sandra Ferguson

copy: Santa Cruz County Sentinel

Exhibit I

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DEC 21 2009

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

105 Hagemann Avenue
Santa Cruz, CA 95062
December 18, 2009

Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

Dear Coastal Commissioners,

I am writing about the City of Santa Cruz's proposed Master Plan for Arana Gulch. This project contains a bikepath across Arana Gulch Greenbelt that will damage critical habitat. Please do not approve this project. Please approve the Arana Gulch Master Plan only if the bikepath project is removed. Here are some problems:

1. **The bikepath project (now called an "interpretive trail") will violate an Environmentally Sensitive Habitat Area (ESHA) as defined in the CA Coastal Act (Policy 30240).** The City of Santa Cruz has failed to demonstrate that this proposed project is "resource-dependent," as specified by the Act.

2. **The City admits that the project will harm the tarplant** The proposed bike project will cause "significant and unavoidable impact" to habitat of the endangered and threatened Santa Cruz tarplant (*Holocarpha macradenia*). The tarplant is a State endangered and Federal threatened species, and the City acknowledges that this bikepath will harm critical habitat. This species is found in only a few areas in Santa Cruz County, and in recent years, those areas have been developed as well. Looking at the County and State as a whole, Arana Gulch Greenbelt is one of the final locations for the Tarplant. After years of inadequate management on the City's part, the Tarplant population has already dwindled to very small numbers. This project will destroy remaining habitat, and increase the risk of extinction.

3. **This bikepath is not needed:** The City began this project back in the 1990s, with the goal of providing an East-West cycling corridor where none existing. At that time the Coastal Commission staff suggested that the City choose alternatives that did not bisect the Arana Gulch Greenbelt, and listed many specific alternatives. They included:
   a) adding bikelanes to Soquel Avenue (north of Arana Gulch)
   b) widen Murray Street (south of Arana Gulch) to include bikelanes
   c) purchase the "rail trail" right-of-way (also south of Arana Gulch) and include bikelanes

The City has already completed alternative "a." Alternatives "b" and "c" are currently funded and in the process of being developed. In the span of less than 10 years, the City will go from zero East-West cycling corridors to three. We do not need a fourth East-West cycling corridor if it will harm the environment and degrade critical habitat. If a fourth is needed, please consider Frederick St. Park or other alternatives that have less environmental impact.

Exhibit I

4. **The issue of handicapped access can be addressed in other ways** The City did not consider any other alternatives to providing handicapped access to Arana Gulch Greenbelt. Access can be made available by creating paved ADA-compliant paths from the North and South entrances, away from the tarplant habitat.

5. **This project is a wolf in sheep's clothing:**

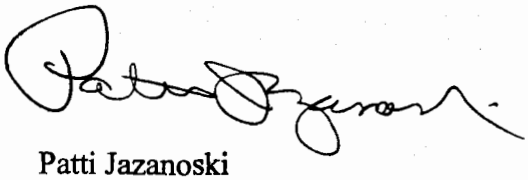
   a) This bikepath project was originally proposed by the City's transportation department as the Broadway-Brommer bikepath and was intended to connected two streets—Broadway and Brommer in the shortest distance possible—a straight line. Unfortunately, building such a path requires a long bridge over Hagemann Gulch—a seasonal creek and riparian corridor—and that bridge will land smack in the middle of tarplant habitat. This is the crux of the problem. Because the requirements of that project were so narrow the City refused to consider any alternative outside of Arana Gulch Greenbelt. The City framed the question in a way that forced it to harm the tarplant habitat.
   b) The ADA-access requirement is a bit disingenuous. It was added late to this project, only after other bike projects began, such as bikelanes on Soquel Avenue. The City claims that this bikepath will be used by so many cyclists, it will take 100s if not 1000s of cars off the road (These claims that are sometimes hard to believe and are unsubstantiated by data). Yet, they also claim this same path can be safely used by people in wheelchairs, even while large numbers of cyclists to use it simultaneously to commute to work.
   c) Cycling can be good for the environment. However, building bikepaths over the critical habitat of Federally-list endangered species is not good for the environment. You can't save the environment by paving over it.

Cycling access is important but so is undeveloped open space. **Please approve the Arana Gulch Master Plan only if the Bikepath project is removed.**

- The tarplant is a Federally-listed endangered species.
- This project violates ESHA.
- The City admits the project will harm tarplant critical habitat.

We don't need to build this bikepath across Arana Gulch Greenbelt. Please help protect our last remaining open space on the East Side of Santa Cruz.

Sincerely,



Patti Jazanoski
pattijaz@cruzio.com

17 December 2009

RECEIVED
DEC 21 2009
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

Dear CCC Staff ~

The City of Santa Cruz is preparing to submit an application for acceptance of its Master Plan (MP) for the Arana Gulch (AG) greenbelt.

In addition to general visions, goals and management directions, the MP also contains a specific development project (the Broadway-Brommer [B-B] bike/pedestrian path) that will cause "significant and unavoidable impact" to habitat of the endangered and threatened Santa Cruz tarplant (*Holocarpha macradenia*). The B-B project is the only specific project of the Master Plan that will adversely affect the "critical habitat" of an endangered species and which creates significant disruption of an Environmentally Sensitive Habitat Area .(ESHA) of the Coastal Zone.

Regarding the impact to *Holocarpha macradenia*, consider these comments from the USFWS Sept. 2008 Biological Opinion:

a. "Constructing the proposed bicycle-pedestrian pathway at the Arana Gulch open space would adversely affect approximately 65 acres of designated critical habitat for Santa Cruz tarplant."

b. "The potential effects associated with these activities include crushing, cutting, or otherwise injuring and killing of plants and/or seeds (through mechanical or foot traffic), surface disturbance and soil compaction, and erosion and/or changes in the hydrology."

c. "Probability of population extirpation increases as the number of individuals and the area of habitat decrease."

Consider also that the B-B portion of the Master Plan still involves diminishing "critical habitat" of a State endangered and Federal threatened species. Thus, this issue of pavement over critical habitat is more than a local coastal zone depredation. The Federal Endangered Species Act of 1973 (the conservation of ecosystems upon which species depend) and especially Sec. 4 (amended in 1978) that established critical habitat (protect and recovery goals) and Sec. 7 (to insure that critical habitat is not modified) must be taken seriously by the California Coastal Commission. Promises of mitigation, with no dedicated funding for such mitigation is hardly the basis of approval for the B-B component of the Arana Gulch Master Plan.

Finally, consider that the inadequacies of the Environmental Impact Report, as well as the confusion of the exact nature of the "project" (a Master Plan or an east-west bicycle transportation project) has led to an ongoing lawsuit by the California Native Plant Society and Friends of Arana Gulch.

Friends of Arana Gulch, comprised of residents throughout the City and County of Santa Cruz, has the following recommendations for action with regard to the upcoming application from the City, County and Port District:

1. The City should be instructed to apply first for its LCP amendments and then for acceptance of its Master Plan because the Master Plan is in conflict with the unamended LCP. At the very least, LCP amendments should be submitted at the same time as the Master Plan.

2. Approval of the Arana Gulch Master Plan should be contingent on the removal of the Broadway-Brommer Bicycle Path Connection project (as found in six Public Use objectives on page 30 of the Draft Master Plan, as well as portions of Sec. 3.4), because the Broadway-Brommer bike/pedestrian project is not "resource-dependent," as required for development projects in an Environmentally Sensitive Habitat Area of the Coastal Zone (ESHA).

3. The City should be instructed to consider alternatives to east-west bicycle/pedestrian route(s) outside of Arana Gulch in any future application for that specific project within the Coastal Zone. Coastal Commission staff is on record for many years asking that alternatives to the B-B transportation project outside of Arana Gulch greenbelt be considered. To date, there has been no environmental impact report with analysis of alternatives outside of Arana Gulch

Our recommendations are based, in part, on the history of both the Arana Gulch greenbelt and the Broadway-Brommer Bicycle/Pedestrian project:

1. Although the record shows that Coastal Commission's District staff has stated over the years that the best practice would be to create a Master Plan first and then look at specific projects, the City of Santa Cruz (the City) ignored that advice.

2. Since 1995 the B-B transportation project has been the focus of plans for Arana Gulch. Consistently controversial, one City Council asked for a Frederick Street addendum to the B-B EIR. It was never produced. And one City Council canceled the project altogether.

3. In 2002 the USFWS designation of Arana Gulch's coastal terrace prairie as "critical habitat" for the endangered and threatened *Holocarpha macradenia* added a new dimension to planning for the B-B project and management of the greenbelt.

4. To meet legitimate concerns from B-B transportation project opponents, the City, grasping at straws, has changed what it called the B-B transportation project. Its first new name was a "multi-use trail." Then it became an "interpretative trail" to make it sound "resource-dependent," as required for ESHA development by the Coastal Act. And finally the City currently refers to it as the only handicapped access to any of the City's greenbelts.

Master Plan or Transportation Project?

As can be seen by the letters of support generated by Master Plan proponents, the project is still an east-west bicycle transportation connection. One member of the Elderly and Disabled Commission spoke in public of seeing the project as a sidewalk across the greenbelt, not simply as one of access, hardly a "resource dependent" project. The SCCRTC's Bicycle Committee letter (28 October 2009) touts how the "multi-use trail" would "fill a gap in the regional east-west bicycle...network thereby increasing the ease and safety of bicycle...trips for transportation purposes..." The east-west Broadway-Brommer Bike/Pedestrian Connection Path is not a resource-dependent project. It is a transportation project dressed up to look like "access to the coastal zone."

Mitigation?

The proposed Broadway-Brommer Bike project (now called an "interpretive trail") will cause "significant and unavoidable impact" to habitat of the endangered and threatened Santa Cruz tarplant (*Holocarpha macradenia*).

The tarplant population in Arana Gulch has declined precipitously due to lack of management. In the Draft Master Plan document, the City ties management of tarplant habitat to the B-B Bike project, but the City has **no dedicated funding mechanism** to ensure long-term management of the Santa Cruz tarplant.

Funding

The "current cost estimate" for building the Broadway-Brommer bikeway project (from Chris Schneiter of Public Works to the City Council on November 24, 2009) is $3.6 million. However, per Mr. Schneiter on December 4, 2009, this estimate is based only on the "preliminary design" as described in the 2006 Arana Gulch Draft Master Plan and its EIR. Looking at those documents shows only generalized dotted lines [one even shows the dotted B-B path going through the Dry Storage Yard (p. 41)]. The cost estimate is not based on any engineered plans for the physical infrastructure itself, because there are presently no engineered plans.

There is no funding mechanism identified for the Adaptive Management Plan, the restoration of the eroded gully at Agnes Street, nor for the stabilization and restoration of eroded creek banks in the tidal reach.

Sedimentation

In response to suggestions that the Master Plan provides the only way to properly manage the natural resource systems of the greenbelt, located within the Coastal Zone, we present the following comments (as sent to Save Our Shores by email and presented to the Port District Commissioner's meeting of December 15, 2009) for your consideration:

Previous support for the Arana Gulch Draft Master Plan has been based on the need to decrease sediment load in Arana Creek from two sources in the Arana Gulch greenbelt area -- the eroded gully in the northern portion of the greenbelt, near the intersection of Agnes Street and the alleyway and accelerated head cutting and banks erosion along the tidal reach of Arana Creek north of the tubes. Concern has been also expressed about sedimentation from eroding ad-hoc trails across the Arana Gulch grasslands.

But the Arana Gulch Draft Master Plan contains no detailed plans to deal with bank instability and collapse in the tidal reach of Arana Creek. On page 36, it states, "...detailed hydrologic analysis and actual repair is beyond the scope of this Draft Master Plan." This bank cutting is a function of the unnatural flow of Arana Creek, being squeezed into the culverts of the upper harbor. It can no longer spread or meander naturally. Instead its energy is pushed straight toward the tubes. The same thing happens at high tide. The intertidal water comes rushing through the tubes and its energy cuts more bank sediment. As long as those tubes squeeze water and its energy unnaturally, there is going to be bank cutting. The AG Master Plan cannot solve this problem.

While the "Preliminary Phasing Plan for Implementation of the Arana Gulch Draft Master Plan," on page 47, identifies plans to "conduct analysis of eroded tidal reach of Arana Gulch Creek and identify possible solutions" and to "implement stabilization of tidal reach", this Resource Management is found in Phase II. If this is so very critical, why is it not in Phase I? Furthermore, why hasn't it been done under the City's 1997 Interim Management Plan which called for resource protection?

The eroded gully off Agnes Street likewise receives short attention, on page 36: "Restore the eroded gully in the northern portion of Arana Gulch. Design and implement a restoration project that reduces sedimentation and blends with the natural setting." However, there is no dedicated funding for this important project. Although this is found under Phase I, the plan says "pursue funding to conduct gully repair." The City's 1997 Interim Management Plan provided guidance, "outlining the actions necessary to manage and maintain the natural resources within Arana Gulch" greenbelt. Why the delay? The Master Plan was only for "land use decisions" (p.2 of the AG Draft MP), i.e., build a soccer field, build housing, build the B-B bikeway project. add new trails. etc. Resource protection did not, and does not, need the Master Plan, although its goals for resource protection are necessary, smart and laudable.

Concerns about run off and sedimentation from the paved and unpaved trails in the Arana Gulch grasslands are met in the Draft Master Plan with the statement, on page 45, "Provide drainage improvements along trails to include drainage dips and water bars." Sedimentation from paved trails in the Arana Gulch grasslands area is not a concern, since they do not drain to the creek. However, the Marsh View Trail, along the eastern border of the Arana Gulch grasslands does drain directly into the creek, and this trail would not be paved and therefore could continue to add sediment to Arana Creek after completion of the project.

Lastly, there is a great deal of sediment from the developed portion of the AG watershed at its cusp on 7th Avenue. All water from the right-hand downhill lane of Brommer St. Extension as well as the gravelly area between it and the Twin Fountains fence, flows downhill into the gully next to the road and directly into Arana Creek. Take a look at this drainage on a rainy day. Vehicle movement on the gravelly surface constantly breaks it down into fines, which also flow to Arana Creek. The AG Master Plan does not address this sediment source and the B-B bikeway project will not solve it. We are trying to get the County Redevelopment Agency to add roadway and drainage improvements on Brommer St. Extension to its 5 Year Plan. It would be great if the City RDA collaborated on that project. This would solve a sediment problem.

Tying watershed management of these critical waterways to the Broadway-Brommer Bike/Ped transportation project as well as the Master Plan makes little sense. The only dedicated funding the City has so far is possibly enough to build the B-B project: the bridge over Hagemann Creek, the paved bikeway through the grasslands area, the raised ramp on 8' to 15' width of the 100' riparian setback behind the Dry Storage Yard for about 300 lineal feet, the second bridge over Arana Creek and the rest of the project up to 7th Avenue. And even that funding is not wholly secure. There is no dedicated funding for watershed management and solutions to critical sedimentation pollution. There is no dedicated funding for mitigation for impact to the "critical habitat" of an endangered species (Holocarpha macredenia).

In summary, the Arana Gulch Draft Master Plan provides no clear mechanism for reducing sedimentation into the Harbor from Arana Creek, and no plan or funding mechanism for stabilizing existing sources of erosion and sedimentation. Erosion and sedimentation projects can and should be funded and implemented with or without the Broadway-Brommer Bicycle Pedestrian Pathway Connection component of the AG Master Plan.

Recommendation

We suggest that the Arana Gulch Master Plan could be accepted with the absolute removal of the specific Broadway-Brommer bikeway project, because the hugely expensive B-B bike connection jeopardizes critical environmental projects by drawing funding and administrative support to a project that does not benefit either Arana Creek, its wetlands or the ocean. The B-B transportation plan is not "resource dependent" and never has been. Without removal of the B-B transportation project from the Master Plan, we absolutely oppose acceptance of the AG Master Plan by the California Coastal Commission.

Sincerely,
Jean Brocklebank
Michael Lewis
On Behalf of **Friends of Arana Gulch**
1190 7th Avenue #5
Santa Cruz, CA 95062

jeanbean@baymoon.com
[831] 462-4919

Mari C. Albanese
17070 Lon Road, Los Gatos, California 95033-8510

Dec 8, 2009

to: the California Coastal Commission -
I would like to voice my
opinion with Kit Berkshevich
in the Sentinel (dated 11-22-09).
Leave the Arana Gilch to
it's natural state, we don't
need more paved paths through
our wildlands!

Thank you,
Mari Albanese

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Exhibit I

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DEC 0 8 2009

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12-6-09

Mr. Raymond R. LeClair
104 S. Park Way
Santa Cruz, CA 95062-2202

TO: Calif Coastal Commission,
Central Coast
725 Front St.
Suite 300
Santa Cruz, Ca. 95060-4508

I'm complaining about the Arana Gulch Master Plan's "bikeway Project." I believe it is short sighted and contrary to what we voted for and hope you will see there are definitely alternatives. I read the article by, Kit Berkshevich, in the Sunday, NOV. 22, 09 Opinion Page of the Santa Cruz Sentinel. He did a very good job of covering the issues - rather than repeat them I'd love for you to read his article - Thanks for considering alternatives (like Rail-Trail)

Sincerely,
Ray LeClair

Exhibit I

Mr. Carl.

I am writing you today to urge you to consider the implications of paved bike and interpretive paths through Arana Gulch in Santa Cruz. There are several flaws with the plan that I'd like to share with you at this time. The proposed Broadway to Brommer bike path project will cause irreparable impacts to the area. The Santa Cruz port district already has a hard time keeping up with dredging operations to keep the harbor open. Putting an impervious surface over dirt will only further degrade the watershed in the form of run off. The project will also violate the environmentally sensitive habitat area as defined in the California Coastal Act (policy 30240). There have been other bike paths through open spaces in California. It is a fact that paved rights of way increase traffic through an area. The city of Santa Cruz has no long term funding to ensure long term management of the endangered tar plant, and equally importantly public safety. The most important thing to mention is that there are alternatives that don't threaten open space. Fredrick St. park has a direct connection to Broadway, and with grading that would be less costly, and have far less impact a bike route through what is already an urban park could provide direct access to the upper harbor and ultimately to Brommer St. There is precious little open space in the urban area that remains a purely open area. I urge you to consider the alternative route, and not allow the City of Santa Cruz to proceed with this shortsighted project.

Thank You,

Will Wingert
429 La Fonda Ave.
Santa Cruz, Ca. 95065-1438
831-246-1755

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DEC 08 2009
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CENTRAL COAST AREA

Joy Carey LeClair
Licensed Marriage and Family Therapist
104 S Park Way
Santa Cruz, CA 95062
831-325-9835

To the California Coastal Commission:

I am writing to you concerning Arana Gulch Master Plan that would bisect the meadow with aspalt & bridges, much less night lighting.

Please consider the natural habitat and our children's ability to walk on earth. To transect this area via bike, I use the Frederick Street Park, so close and no environmental destruction needed!

Supporting the Frederick Street Park maintenance & the rail trail seem much more worthwhile to me.

Thank you for your hard work!

Joy

Exhibit I

391 Westport Lane
Santa Cruz, CA 95060
11/25/9

RECEIVED
NOV 30 2009

California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060-4508

Dear Commission Representative:

I am writing in regard to the proposed bikeway through the Arana Gulch open space. I strongly urge you to reject this project.

The project constitutes a risky and unnecessary intrusion into a unique natural space. Not only would it jeopardize the existence of the endangered Santa Cruz Tarplant , it would add further stress an already over-burdened riparian corridor. Assurances that the impact of the project can be ameliorated or eliminated fly in the face of experience and common sense.

The need given for the project seems to be well-met by new bike lanes and other access routes that already exist along either side of the open space. The sole rationale for the project seems to be that the money is there. That is not a good reason to do something foolish.

Once open space is lost, it never returns. I hope you will be wise enough to keep the city from doing irreparable harm to a rare and beautiful vestige of our natural heritage.

Regards,

Tim Eagan

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COASTAL COMMISSION
CENTRAL COAST AREA

Doug Ross
312 Poplar Ave
Santa Cruz, CA 95062

Dan Carl, District Director
California Coastal Commission
725 Front St, Suite 300
Santa Cruz CA 95060

Dear Mr Carl

Regarding the City of Santa Cruz Plan for paved bike paths through Arana Gulch:

I have been riding a bike for most of my errands for the last 10 years. I have never felt the need to ride through Arana Gulch. I think the current routes via Capitola Rd (north of AG) and Murray St (south of AG) are sufficient.

I enjoy going for walks in Arana Gulch about once a week. I feel the quality of the wilderness at AG will be seriously degraded by this city project.

Currently Arana Gulch is a safe place to visit. If the paved paths are created, I feel it will be a draw to unsavory elements to loiter.

Thank you for your prompt attention to this matter,

Doug Ross

Exhibit I

November 22nd, 2009

Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

Dear Mr. Carl

The purpose of this letter is to let you know how very opposed I am to the proposed paved bike path at Arana Gulch. While I am pro bicycles, it is obvious that this plan is detrimental to the many habitats in Arana. I frequently cycle through Arana Gulch and don't understand why paving is even necessary. In addition to the significant impact this would cause Arana Gulch, it would also spoil the natural beauty of it.

Why have there not been alternatives explored to solve the east-west bike connection issue? Why spoil one of the few beautiful open space areas left in Santa Cruz? This is a unique and special area that needs protection, not development.

I don't write many letters like this, but this issue is very upsetting.
Thank you for listening,

Ginger Mosney

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CENTRAL COAST AREA

Ms. Virginia Mosney
312 Poplar Ave.
Santa Cruz, CA 95062

Exhibit I

11/20/09

To Whom It May Concern:

I am a bike commuter who is against the bike trail through Arana Gulch for the following reasons:

There are so few open spaces left in our city. Arana Gulch has been shared by walkers, bikers, families, dog walkers, and animals for many years. There is no way that putting in a large road will not have a negative affect the on the existing wildlife and plants.

Riding through Arana Gulch, just the way it is now, is a respite from asphalt roads. Commuting by bike requires a huge commitment, which includes time, weather, and even dress. To propose that any significant number of people would chose to commute by bike if this one route were opened is short sighted. You are basically ruining one of our last open spaces for people who might bike commute to and from the Broadway area to the Eastside, where all the road options are still not bike friendly.

A much better option in the rail trail. This will serve many more areas of town and will not ruin a finite natural resource. The rail trail will increase bicycle safety by allowing us to commute a significant distance off of our busy roads.

If the goal is an east west connection, another option would be a ramp by the stairs at Fredrick Street Park. Either way, the goal of a bike path is met without compromising one of Santa Cruz's last open spaces.

Please weigh your potions carefully. Twenty years from now, you don't want to be remembered as the short sighted council who sold out our beautiful open space.

Thank you for your consideration,

RADDIT COPIERS, INC.

AG 1st Ave?
207 Forest Ave?
SC CA
95062

Can't read return address!
L. Chapman

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NOV 30 2009
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CENTRAL COAST AREA

Exhibit I

RAYMOND LeCLAIR
M.S., M.F.C.C.
104 So. Park Way
Santa Cruz, CA 95062

TO: DAN CARL
DIST. DIR.

I'm not in favor of the bridges across Branner - Broadway and over Hagemann Creek - I would like the CCC to approve The Arana Gulch master Plan contingent to remove The B-B bike Path — to basically consider alternatives outside Arana Gulch for bikepaths.

Thanks,
Ray LeClair

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OCT 26 2009
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Lee Taiz
328 Oxford Way
Santa Cruz, CA 95060

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OCT 14 2009
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

Dan Carl, District Director
California Coastal Commission
725 Front Street
Suite 300
Santa Cruz, CA 95060

Dear Director Carl,

Much effort has been devoted to preserving Arana gulch in Santa Cruz as open space. Very little natural open space remains within our city, an we need it. Arana Gulch needs to be managed to take care of its naturally occurring animals, birds and plants, but it does not need a bike path. A bike path would hurt it very much. Advocates for the bike path have decided to call the proposed bike path an "Interpretive Trail," but whatever it is called, it is still a threat to this small area. Arana Gulch is host to many species, and significantly, to the endangered Santa Cruz tarplant.

We need safe bicycle routes, but it is not necessary to construct one through Arana Gulch. Better alternatives exit.

The Master Plan for Arana Gulch should be approved only if the Broadway-Brommer Bicycle Path Connection project is taken out.

Sincerely yours,

Lee Taiz

Lee Taiz

Exhibit I

10/11/09

Dear Dan Carl,

I urge you to recommend to the California Coastal Commission that the Arana Gulch Master Plan for the City of Santa Cruz be approved only if the Broadway-Brommer Bicycle Path project is deleted from the proposed plan because of the following reasons:

1. The Tar Plant population in the area has suffered a major decline already and in the Draft Master Plan the City ties management of the Tar Plant habitat to the Bicycle Path project but has no long term funding included.

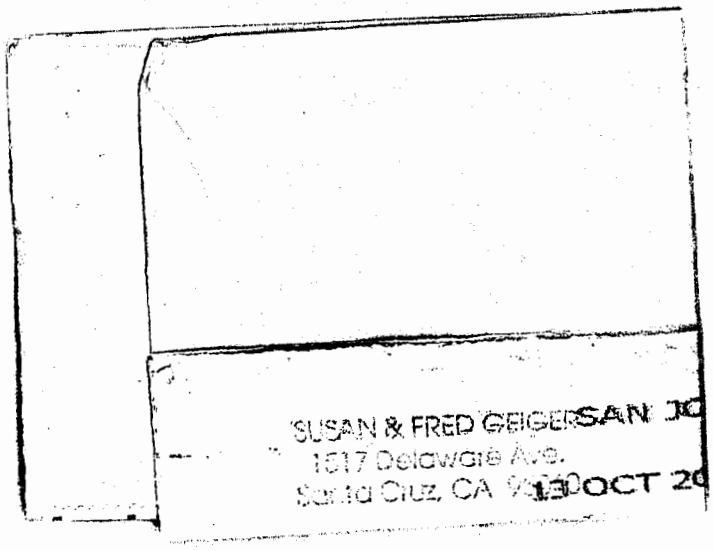
2. The proposed BB Bike Path will cause significant unavoidable impact to the habitat of the endangered Tar Plant.

3. The bike path will violate an environmentally sensitive habitat area and the City of Santa Cruz has not demonstrated that this project is resource dependent as required by the Act.

As a frequent bicyclist and member of the leading bicycle advocacy group in the community (People Power) I certainly support enabling additional bicycle travel. However since this plan was first proposed there are 2 nearby parallel alternatives now in place (Soquel Avenue and Murray Street) that were not in existence when the need for the BB Path was identified. Therefore the BB Path is redundant as well as being environmentally damaging. I urge the Commission to not allow this project to be built.

Thank you,

Fred Geiger
831-423-6059



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OCT 14 2009
CALIFORNIA
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Kit Birskovich Piano Studio
528 Windham Street, Santa Cruz, CA 95062
kitb@baymoon.com

October 6, 2009

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California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

RE: Arana Gulch Master Plan, City of Santa Cruz

Dear Commissioners,

I am writing to you with grave concern about the City of Santa Cruz's Arana Gulch Master Plan. The meat of this "Master Plan" is in fact a paved-road short-cut for bicycles through the heart of our greenbelt land, home to the Santa Cruz Tarplant (*Holocarpha macradenia*), an endangered and threatened species. In addition, it requires a steel span bridge longer than a football field over Hagemann Gulch, nesting place of the dusky-footed woodrat (not actually a rat), a species of special concern; and a bridge over Arana Creek (steelhead trout and coho salmon historically present and federally endangered), where the Western Red Bat (another special status species) has been documented within 100 feet of the proposed span.

This home of oaks, grassland, seasonal wetlands and riparian habitat is threatened with paved bisection of a switch-back (because of its slightly steep grade)11-foot wide road for bicycles. One can already envision the threat of bikes screaming downhill to the mothers with strollers, kids exploring the meadows, retired dog-walkers. Ironically, bike lanes have recently been added to a main street just a few blocks north of our greenbelt, and plans are in the making to expand the Murray Street bridge over the Santa Cruz Harbor a few blocks to the south to include a bike lane. Besides being obviously redundant, If constructed this road will cause "significant and unavoidable impact" to Santa Cruz tarplant habitat.

An early fan of the tarplant myself, I have watched its numbers fall drastically while the City of Santa Cruz blatantly did next to nothing to improve its status. I personally documented with photographs/mappings

several areas of tarplant individuals last year which were excluded from the paltry mowing areas this year. According to the Master Plan, there is not even any specific funding in place to continue management of this species named after our city!

This same city is hoping to violate its own riparian setbacks code in construction of the proposed girder bridges/spans.

The Broadway/Brommer bike path [road] project, a.k.a. "interpretive trail," violates the Coastal Act's designation of this beloved greenbelt as an Environmentally Sensitive Habitat Area.

Therefore, please deny the Arana Gulch Master Plan your approval. Please protect this special and unique place against any significant disruption of habitat values, in accordance with Section 30001 (a) and (b) of the California Coastal Act:

Section 30001 Legislative findings and declarations; ecological balance
The Legislature hereby finds and declares:
(a) That the California coastal zone is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem.
(b) That the permanent protection of the state's natural and scenic resources is a paramount concern to present and future residents of the state and nation.

Save our modest but important greenbelt, its wildlife, its quiet splendor and its Santa Cruz Tarplant from the City of Santa Cruz's ill-advised trampling.

Sincerely,

Kit Birskovich

Kit Birskovich

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Surfrider Foundation

Santa Cruz Chapter

Conservation Activism Research Education

August 21, 2009

Dan Carl, District Manager
California Coastal Commission
725 Front Street
Santa Cruz, CA 95060

RE: Arana Gulch Master Plan

Dear Mr. Carl:

I am writing to you on behalf of the Santa Cruz Chapter of the Surfrider Foundation and Surfrider Foundation membership regarding the Arana Gulch Master Plan (AGMP).

The Surfrider Foundation is a grassroots non-profit environmental organization dedicated to the protection and enjoyment of our oceans, waves, and beaches by all people. It is well documented that the health of our watersheds and wetlands areas directly affects the health of our ocean and bay. Therefore, we support the efforts to improve coastal water quality, which the chapter feels is inherent in the AGMP. However, the chapter also feels that any development that damages or destroys any environmentally sensitive habitat area or endangered species, as protected by the Coastal Act and Endangered Species Act, should be avoided.

Thank you for the opportunity to comment on this important issue.

Sincerely,

Richard Ferdinand

Richard Ferdinand, Chair
Santa Cruz Chapter of the Surfrider Foundation

2222 East Cliff Drive, Suite 234
Santa Cruz California 95062

831-476-7667
www.surfridersantacruz.org
surfridersantacruz@yahoo.com

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Dan Carl, District Director
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

January 22, 2010

RE: Arana Gulch Master Plan

I urge approval of the Arana Gulch Master Plan contingent on removal of the Broadway-Brommer bicycle path connection. The Broadway-Brommer bicycle connection is cleverly disguised in the Arana Gulch Master Plan as the Canyon Trail and the Creek View Trail.

Arana Gulch is home to the Arana Gulch tarplant population, a State-listed endangered plant that is distinct genetically from other Santa Cruz County populations, making it more rare than other populations in the County. The entire Arana Gulch Greenbelt was designated as critical habitat for the tarplant in 2002.

The California Coastal Act prohibits the development of ESHA. The bicycle project would introduce pavement into ESHA. It would disrupt the hydrology and fragment the four historic tarplant populations. Other interpretive trails will provide ADA access for visitors.

We are in great need of additional bicycle connections in the City of Santa Cruz, but causing "significant and unavoidable impact" to threatened and endangered species is not the way to achieve these connections. The pending purchase of the railroad right-of-way by the County of Santa Cruz will provide a county-wide bicycle connection only a few hundred feet away from the paved bikeway bisecting the Greenbelt.

The advantage of the nearby east-west bicycle connection on the railroad right-of-way is that it would run the length of the entire County of Santa Cruz as well as connect to the levee paths along the San Lorenzo River and along Beach Street/West Cliff Drive. The proposed Broadway-Brommer path would be very short at a terrible biological price.

Building in ESHA also raises the question of additional damage from heavy equipment during the construction phase.

Please, approve the Arana Gulch Master Plan contingent on removal of the paved Broadway-Brommer bicycle connection.

Debbie Bulger

Debbie Bulger
1603 King Street
Santa Cruz, CA 95060

Exhibit I

Feb 9,2010
11810 Alba Rd.
Ben Lomond, Ca 95005

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Dan Carl, District Director California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

RE: Arana Gulch Master Plan

Dear Coastal Commission Staff and Commissioners,

I am writing on behalf of the threatened federally and state listed Santa Cruz tarplant. This species is a beautiful sunflower on the brink of extinction. The currently proposed Broadway-Brommer Bike project will hasten that extinction. There are only about 12 areas in the whole world where this plant exists. It used to be plentiful, in the tens of thousands. This is very sensitive habitat. If this project goes through this will wipe out this area and doom genetic diversity that it holds.

The science behind this has already been provided to you so I will not waste your time repeating it. It is a complicated issue.

The people who are making the decisions to put the bike path project through will not be in office to experience the affect of their decisions. There are other possibilities for the bike path that do not threaten to wipe out a whole species.

In addition, this will violate an Environmentally Sensitive Habitat Area (ESHA) which is defined in the CA Coastal Act (Policy 30240). The City of Santa Cruz has not shown that the project is "resource-dependent," as specified by the Act.

I urge you to insist on the removal of the Broadway-Brommer Bicycle Path Connection from the Arana Gulch Plan.

The Coastal Commission is the last hope to protect our environment and the endangered plants and animals. They have no voice to protest as we destroy any chance they have to exist. To that end, I also ask that you encourage the city to find another east-west bike connection that doesn't destroy this habitat.

We're all in this together.

Thank you for your service to us all,

Peggy Waters

Exhibit I

2009.12.28

Dear Coastal Commission,

I am writing to express my opposition to the plans of the City of Santa Cruz with respect to Arana Gulch. More specifically, I object to the plan to construct two bridges and a paved bikeway thru the habitat of an endangered species. I am both a bike advocate (formerly a founding member of the group "People Power" who have supported the bikeway), and a former member of the City of Santa Cruz Transportation Commission. I urge you to deny approval of any plans that include this project.

The reasons to deny approval are simple. First, the project will harm the environment, by diminishing and fragmenting the habitat of an endangered species (the Santa Cruz Tarplant).

Second, the project is not an appropriate use of the coastal zone since it is not "resource-dependent".

This bikeway is not needed. When it was originally proposed, there was no good east-west route for bicyclists traversing this region. But now, things are vastly different. Continuous bike lanes have been installed on Soquel Ave to the north of the site. Safety improvements have been made on the Murray-Eaton route to the south. And plans for the rail-trail which would abut the site, are moving forward.

As for the argument that the project will provide "access" to seniors and the disabled: I'm afraid it is little more than a cynical political ploy to turn a marginal bike project into a sacred cow. As currently designed, the 8' paved portion of the bike path is too narrow to allow safe sharing by bikes, pedestrians, and wheelchairs. It doesn't comply with Caltrans chapter 1000 recommendations for a mixed-use trail. Bikes zooming down the long downhill will create a hazard for other users, and vice-versa.

If this project were truly intended to provide disabled access, that end could be achieved at lower cost and with greater safety, by designing it as such from the start. Instead of starting with a bikeway and trying to rebrand it as an accessibility project. The coastal act will become meaningless if any weak project can get a pass by tacking on "disabled access".

For the benefit of the project supporters who dismiss opponents as NIMBY's, I will point out that I am a 20-year resident of the westside, nowhere near Arana Gulch. The vacuousness of the NIMBY accusation is also clearly shown by the fact that the project is opposed by the California Native Plant Society, a statewide org with impeccable scientific credibility.

I frequently ride thru the eastside, and I know this bikeway is unnecessary. I ride my bike because I want to save the earth, not pave it.

Sincerely,

Don Fong
227 Alta Ave
Santa Cruz, CA 95060

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TO: The California Coastal Commission
RE: Application by the City of Santa Cruz for a development permit for Arana Gulch

We, the undersigned, petition the California Coastal Commission to deny a development permit to the City of Santa Cruz for the construction of bicycle transportation projects on the Arana Gulch Greenbelt (the Broadway-Brommer Bicycle-Pedestrian Connection). We strongly support science based resource management for the endangered Santa Cruz tarplant and all associated floral and faunal species in the Arana Gulch Greenbelt.

Name	Address
Beata Willison	1606 King St. SC 95060
Timothy L. Terry	1606 King St SC 95060
Paul Elerick	1960 Jennifer Dr Aptos 95003
Carl J. Kossack	P.O. Box 268, Davenport CA 95017
Heather Dooley	1142 Pulora Ct. Sunnyvale CA 94087
M T Dooley	1142 Pulora Ct Sunnyvale CA 94087
Richard A. Simpson	3326 Kipling St, Palo Alto CA 94306
Randall S Mary	843 Grove Acre, Pacific Grove CA 93950
Karen K Davis	152 Oakfield Ave Redwood City, CA 94061
Carol Greenstreet	843 Grove Acre Ave, Pacific Grove CA 93950
John Langbein	152 Oakfield Ave RWC. CA 94061
Shlomo Waser	1610 Hummingbird Lane, Sunnyvale CA 94087
Virginia Draper	1121 Walk Circle Santa Cruz 95060
Charles Koester	445 El Solyo Heights Dr Felton 95018
Jeff Alford	1725 Escalona Dr., Santa Cruz, CA 95060
Nick Gravem	617 Columbia St. Santa Cruz CA 95060
Don Nielsen	606 Bethany Curve Santa Cruz 95060
Keith H. Wood	606 Calle del Sol, Aptos, 95003

Send signed petitions to:
California Coastal Commission, District Office, 725 Front Street, Suite 300, Santa Cruz, CA 95060

Petition completed this date: 2-21-10

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La Ventana 2010
Vol 49, #1,

FROM THE EDITOR

What would you do?

Here's a choice for you. What if you could reduce motor vehicle traffic and resultant greenhouse gas emissions, but in the process seriously harm an endangered species? Would you do it? Could you still call yourself an environmentalist if you did?

You may have guessed that I am talking about the proposed paved bikeway through Arana Gulch. You may also be aware that, in this case, we don't have to choose between saving an endangered plant and having a better bicycle connection. **There are other options.**

One option that would have added a mere 1½ minutes to a bike trip was through Frederick Street Park. This option would

- The Center for Biological Diversity opposes this destruction of habitat which is home to the endangered Santa Cruz Tarplant.
- The Sierra Club opposes this destruction of habitat which is home to the endangered Santa Cruz Tarplant.
- There are nearby non-destructive alternatives.
- The City is linking management of this fragile habitat to approval of the destructive bikeway. In fact the City must manage this critical habitat whether or not the bikeway is built.

Some have suggested the proposed bikeway would destroy only 2% of the habitat in Arana Gulch. Doesn't sound like much.

It is easy for someone in Santa Cruz to fight to save a rainforest in Brazil or Thailand. Do we have the courage to fight to save an endangered species in our own back yard?

Exhibit I

completely avoid sensitive habitat. Would you spend an extra 90 seconds to save an endangered species?

Another option, widening the bike lanes on the Murray Street Bridge, is scheduled to be constructed next year.

The best option would be to put the bikeway on the railroad right of way. The County of Santa Cruz is in the process of buying the railroad right of way with the intention of building a bicycle-pedestrian trail the entire length of the county. The future rail trail is only one quarter mile south of the proposed route.

What are the facts?

- The proposed bikeway would go right through the middle of rare coastal prairie habitat and habitat for the endangered Santa Cruz Tarplant.
- The EIR for the bicycle project stated that the proposed bikeway would cause "significant and unavoidable impact" to the endangered Santa Cruz Tarplant.
- Building on ESHA (Environmentally Sensitive Habitat Area) must be resource dependent, not for transportation purposes. (That's why the City calls it an "interpretive trail.")
- The City has stated that the path will provide access for disabled persons. No one is saying that there should not be accessible paths on Arana Gulch. To the contrary, such access can be accommodated onsite without destroying an endangered species. It is the bike path's alignment that is the problem, not access for people with disabilities.
- The California Native Plant Society opposes this destruction of habitat which is home to the endangered Santa Cruz Tarplant.

Well, if Arana Gulch were a person and that 2% were the heart, it would be fatal. Bisecting habitat is about the worst thing one can do and could indeed prove fatal to the tarplant. In the past the Department of Fish & Game and expert biologists have all said that bisecting the habitat with the path would be destructive.

While the revised bicycle project is improved from what was first proposed by eliminating lighting at night and eliminating access to motorized vehicles, the fact remains that it will damage ESHA for a non-coastal-dependent use (transportation). With better alternatives available, it is senseless harm of an endangered species.

It is easy for someone in Santa Cruz to fight to save a rainforest in Brazil or Thailand. Do we have the courage to fight to save an endangered species in our own back yard?

Write the Coastal Commission and ask that they approve the Arana Gulch Master Plan **without** the paved Broadway-Brommer bike trail. Explain that the bikeway can be located on the already degraded railroad right of way instead of on ESHA (Environmentally Sensitive Habitat Area).

Address your letters to Dan Carl, District Director, California Coastal Commission, 725 Front Street, Suite 300, Santa Cruz, CA 95060. You do not have to be a Santa Cruz resident to write. Do it today. The Coastal Commission meeting will most likely be in Santa Cruz, March 10-12.

Come to the meeting if you are able and speak up for the Santa Cruz Tarplant. Call the Coastal Commission 427-4863 in early March to see the exact date, time, and location for the Arana Gulch hearing.

—Debbie Bulger

Printed on recycled paper

Exhibit I

California Native Plant Society
2707 K Street, Ste. 1 • Sacramento, CA 95816-5113 • (916)447-2677 • Fax (916)447-2727

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FEB 22 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

California Coastal Commission
725 Front St. Suite 3000
Santa Cruz, CA 95010

Dear Commissioners,

I am writing to strongly urge that you deny approval of the Arana Gulch Master Plan due to its significant and unfavorable impacts to the Endangered Santa Cruz Tarplant, *Holocarpha macradena*.. The plan violates the Coastal Act ignoring that the area is designated as an Environmentally Sensitive Habitat Area.

There are good alternatives to paving a bike path right through the middle of a federally listed endangered species. The bike path could simply go around or the available money could be spent wisely on other needed bike connections around the city.

The argument recently offered that handicapped need to use this to access the harbor is important and it is true that we need to make all manner of areas universally accessible, but handicapped access was never the focus for the bike path until recently. I wonder if this is anywhere near as important as handicapped access in hundreds of other areas of the city. Handicapped access is a hugely important issue but Arana harbors one of the last remaining Santa Cruz Tar Plant populations in the world and we should do everything possible to protect it!

I am attaching a letter from David M. Pereksta of the US Fish and Wild Life Service regarding protection of endangered species in Santa Cruz. *Holocarpha macradena* is mentioned in his letter:

California Native Plant Society
2707 K Street, Ste. 1 • Sacramento, CA 95816-5113 • (916)447-2677 • Fax (916)447-2727

We are concerned that the DEIR does not take into consideration the several federally listed species that are also reliant upon the City's water supply sources and management actions to ensure their continued existence. The federally threatened California red-legged frog (*Rana aurora draytonii*) and its designated critical habitat (71 FR 19243), the threatened Santa Cruz tarplant (*Holocarpha macradenia*) and its designated critical habitat (67 FR 63967), the endangered tidewater goby (*Eucyclogobius newberryi*) and its designated critical habitat (73 FR 5920), and the endangered Ohlone tiger beetle (*Cicindela ohlone*) all occur within either the City's current or proposed SOI or the Service believes has the potential to be affected by the project as a result of water withdrawals.

Thank you for your time considering this and many other serious issues over the years. Rare plant communities cannot defend themselves against development but the Coastal Commission can defend them, and must!

Sincerely,

Brett Hall

Brett Hall
President Santa Cruz Chapter CNPS
President State CNPS Board

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

IN REPLY REFER TO:
81440-2010-TA-0150

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FEB 22 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

January 19, 2010

Ken Thomas
Principal Planner
City of Santa Cruz
809 Center Street, Room 107
Santa Cruz, California 95060

Subject: Comment Letter for the Notice of Availability of a Draft Environmental Impact Report for the City of Santa Cruz Sphere of Influence Amendment and Provision of Extraterritorial Water and Sewer Service, Santa Cruz County, California

Dear Mr. Thomas:

We have reviewed the Draft Environmental Impact Report (DEIR) (City of Santa Cruz 2009) for the City of Santa Cruz Sphere of Influence Amendment and Provision of Extraterritorial Water and Sewer Service (project) for the 374-acre portion of the University of California Santa Cruz (UCSC) known as the "North Campus," in Santa Cruz County, California. The City of Santa Cruz (City) submitted an application to the Santa Cruz Local Agency Formation Commission (LAFCO) to amend the City's Sphere of Influence (SOI) to include UCSC's North Campus. UCSC concurrently submitted an application to LAFCO for extraterritorial water and sewer service to be provided by the City. The applications to LAFCO were made by the City and UCSC in accordance with provisions of the "Comprehensive Settlement Agreement" (Agreement) regarding UCSC's 2005 Long Range Development Plan (LRDP). The objective of the project is to implement the City's obligations set forth in the Agreement with regards to provision of water and sewer services to UCSC's North Campus. Pursuant to the Agreement, the City agreed to continue to provide water service to the campus to assist UCSC with achieving its on-campus housing commitment. Furthermore, the City agreed to submit an application to LAFCO to amend its SOI to include most of the North Campus concurrent with UCSC submitting its own application request to LAFCO for provision of extraterritorial water and sewer service to the project area for development of up to 3,175,000 gross square feet of building space in this area as set forth in the 2005 LRDP.

The U.S. Fish and Wildlife Service's (Service) responsibilities include administering the Endangered Species Act of 1973, as amended (Act), including sections 7, 9, and 10. Section 9 of the Act prohibits the taking of any federally listed endangered or threatened species. Section 3(18) of the Act defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap,

TAKE PRIDE IN AMERICA

Exhibit to Letter from California Native Plant Society

Exhibit I

capture, or collect, or to attempt to engage in any such conduct. Service regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harassment is defined by the Service as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species. Exemptions to the prohibitions against take may be obtained through coordination with the Service in two ways: through interagency consultations for projects with Federal involvement pursuant to section 7 of the Act or through the issuance of an incidental take permit under section 10(a)(1)(B) of the Act.

As it is not our primary responsibility to comment on documents prepared pursuant to the California Environmental Quality Act (CEQA), our comments on the DEIR do not constitute a full review of project impacts. We are providing our comments based upon a review of sections addressing biological resources, project activities that have the potential to affect federally listed species, and our concerns for listed species within our jurisdiction related to our mandates under the Act.

We are concerned that the DEIR does not take into consideration the several federally listed species that are also reliant upon the City's water supply sources and management actions to ensure their continued existence. The federally threatened California red-legged frog (*Rana aurora draytonii*) and its designated critical habitat (71 FR 19243), the threatened Santa Cruz tarplant (*Holocarpha macradenia*) and its designated critical habitat (67 FR 63967), the endangered tidewater goby (*Eucyclogobius newberryi*) and its designated critical habitat (73 FR 5920), and the endangered Ohlone tiger beetle (*Cicindela ohlone*) all occur within either the City's current or proposed SOI or the Service believes has the potential to be affected by the project as a result of water withdrawals.

The Service is concerned that the DEIR discusses the project's potential impacts to water resources throughout the City's current and proposed SOI, yet fails to have any meaningful discussion and analysis of the project's potential impacts to the federally listed species that are also reliant upon these water resources for their survival. These concerns are based on conclusions reached in the DEIR; one of which that states "cumulative development and growth in the City's water service area would result in a significant cumulative water impact, as it results in additional demand in a system that does not currently have adequate water supplies to meet existing or future demands during drought conditions or adequate long-term supplies during normal years potentially at some time after the year 2025" (City of Santa Cruz 2009).

The City has four primary water sources which include: North Coast Stream Diversions (25 percent), San Lorenzo River Diversions (47 percent), Loch Lomond Reservoir (24 percent), and the Live Oak Well system (4 percent) (Erler and Kalinowski, Inc. 2009).

North Coast Sources and the California Red-Legged Frog

The North Coast sources consist of surface diversions from three coastal streams and a natural spring located approximately 6 to 8 miles northwest of downtown Santa Cruz. These sources are Liddell Spring, Laguna Creek, Reggiardo Creek and Majors Creek; all of which are located within California red-legged frog designated critical habitat unit SCZ-1 (71 FR 19243). Diversion from these sources is limited primarily by flows (City of Santa Cruz Water Department 2006 in City of Santa Cruz 2009).

The California red-legged frog critical habitat final rule recognizes that "threats that may require special management in this unit (SCZ-1) include water diversions, which could dewater portions of aquatic habitat, and thereby lead to desiccation of egg masses or temporal loss of aquatic habitat." Considering that the City currently extracts 25 percent of its water from the North Coast sources it remains their responsibility to ensure that their actions are not taking California red-legged frogs that also rely upon these water sources for their continued survival. The Service recommends that the City complete an effects analysis of each of the (above mentioned) affected streams and springs to determine what effects their actions currently have on California red-legged frogs and their habitat in these areas. Furthermore, as the City is now proposing to increase their SOI, the Service recommends that the City also analyze the project's potential impacts to California red-legged frogs and their habitat in regards to the North Coast sources.

North Campus and the California Red-Legged Frog

California red-legged frogs occur south of the project area on the UCSC campus and are also known to occur 0.4 mile northwest of the project area; locations that are both well within the known dispersal distance of the subspecies. The DEIR estimates that 4.7 acres of wetland habitat currently exists within the project area. This information leads the Service to believe that the project area likely constitutes upland and dispersal habitat for California red-legged frogs, and may also contain appropriate breeding habitat for the subspecies. The DEIR only recognizes and attempts to address impacts to the subspecies within the Moore Creek watershed while anticipating that "the proposed 2005 LRDP would not result in take of threatened or endangered species or their habitat in other areas of the campus." We are unclear how this conclusion was reached when protocol surveys for the species have not been conducted within the North Campus area. We request that the City or UCSC conduct protocol level surveys for California red-legged frogs within the North Campus area in order to properly plan for future growth at UCSC by taking into consideration the needs of listed species that also utilize these resources.

Live Oak Well System

The City's Water Supply Assessment (WSA) concludes that water supplies are sufficient to meet the City's existing and project water demands in a normal year through the year 2030 based on a 0.4 percent annual increase in customer classes (City of Santa Cruz 2009). We note that from 1921 to 2008, the City experienced 28 years (32 percent) of either dry or critically dry years (City of Santa Cruz Water Department 2009). Additionally, during wet or normal years

historical ground water production at the Live Oak Well System provides the City with 91 million gallons per year (mgy) and 119 mgy respectively. However, during dry or critically dry years that production increases to 188 mgy and 260 mgy respectively (Erler and Kalinowski 2009).

Although ground water constitutes only four percent of the City's normal year water supply, it is a critical component for meeting peak season and dry year demands. The City currently produces water through the Live Oak Well System which extracts ground water from one of the water bearing units of the Purisima Formation. Ground water level data collected over the past 15 years indicate that water levels across the Purisima Formation have been lowered by a combination of changes in recharge and the gradual increase in overall ground water production from the aquifer (City of Santa Cruz 2009).

Wetlands are sensitive to the effects of ground water pumping as a result of progressive lowering of the water table and by increased seasonal changes in the altitude of the water table. The persistence of wetness for many wetlands is dependent on a relatively stable influx of ground water throughout changing seasonal and annual climatic cycles. Characterizing ground water discharge to wetlands and its relation to environmental factors, such as moisture content and chemistry in the root zone of wetland plants, is a critical but difficult to characterize aspect of wetlands hydrology (USGS 1999).

As stated previously, the Service is concerned that the DEIR does not take into consideration potential impacts resulting from the project on federally listed species and their habitat throughout the City's SOI, and at water source locations. This concern is highlighted by LRDP Impact HYD-8, contained in Volume II of the DEIR (UCSC 2006) which states that "The City has also evaluated the cumulative impact on the aquifer from withdrawal of ground water and determined that the cumulative impact on ground water storage and saltwater intrusion would be significant."

The primary responsibility of the Service is the conservation of public fish and wildlife resources and their habitats. In order for the Service to determine if the proposed project would impact these species or their habitat we offer the additional following information and recommendations that the Service believes should be thoroughly addressed in the final EIR.

Ohlone Tiger Beetle

The Ohlone tiger beetle is endemic to Santa Cruz County, where it is known only from coastal terraces supporting patches of native grassland habitat. Since the final listing rule in 2001 (63 FR 50340), the known distribution of the Ohlone tiger beetle has decreased from 5 geographic areas with 16 occurrences to 3 geographic areas with 7 occurrences. Three historical occurrences are on property owned by the City, two of which have been determined as potentially extirpated, while six historical occurrences are on property owned by UCSC, three of which have not been detected in 5 or more years. Threats to the Ohlone tiger beetle, including habitat fragmentation and destruction due to urban development, habitat degradation due to

invasion of nonnative plants, potential threats due to collection, pesticides, and recreational use of habitat, and vulnerability to random local extirpations continue to imperil the continued existence of this species. The DEIR recognizes that development under the LRDP could result in a substantial adverse impact on the species as a result from increased bicycle use on trails and obstruction of potential movement corridors. Measures contained in the LRDP are intended to reduce these potential impacts to a less than significant level; however, this can only be determined with appropriate coordination with the Service. We recommend that the City and UCSC take these factors into consideration to ensure direct and indirect impacts to the species and its habitat is avoided.

Santa Cruz Tarplant

The Santa Cruz tarplant and its designated critical habitat occur within the City's SOI. A special management consideration identified in the critical habitat final rule (67 FR 63967) states that the hydrologic regime of the area surrounding Santa Cruz tarplant habitat should be maintained to provide for the seasonally moist soils that the species favors. Increasing or decreasing surface and subsurface water flow to these areas though habitat alteration that either artificially adds or reduces water could decrease the suitability of these areas to support the species.

The Service recognizes the City's previous conservation and management efforts regarding the Santa Cruz tarplant; such as management efforts at the Arana Gulch Open Space Preserve. However, habitat that has been set aside in preserves, conservation easements, and open spaces also suffers secondary impacts such as changes in hydrology. In particular, smaller preserve areas with Santa Cruz tarplant suffer because they are cut off from many ecosystem functions dependent upon soil and hydrologic characteristics that would be present in larger, more contiguous sites. More often, these smaller areas are left as open spaces, but without the benefit of the grassland management needed to sustain them (67 FR 63967). As such, the Service recommends that the City discuss and analyze the project's potential impacts on the Santa Cruz tarplant and its critical habitat.

Tidewater Goby

Historically, concern about ground water in coastal regions has focused on seawater intrusion into coastal aquifers. More recently, ground water has been recognized as a key contributor of nutrients and contaminants to coastal waters. Likewise, plant and wildlife communities adapted to particular environmental conditions in coastal areas can be affected by changes in the flow and quality of ground water discharges to the marine environment (USGS 1999). Tidewater gobies occur in lagoons, estuaries, backwater marshes, and in freshwater streams to brackish habitats. Tidewater goby critical habitat has been designated at 44 units, 3 of which may be affected by the project. These units include: 1) SC-1 (Laguna Creek), a North Coast Diversion source located approximately 7.5 miles west of the City; 2) SC-2 (Baldwin Creek), which is located approximately 6 miles west of the City; and 3) SC-3 (Corcoran Lagoon), which is located adjacent to the east of the City. The species has been also known to occur at several locations within this range including at the San Lorenzo River and Woods Lagoon, both of which are

within the City's SOI. Threats relevant to the project and identified within the critical habitat final rule include: 1) coastal development projects that result in the loss or alteration of coastal wetland habitat; 2) water diversions and alterations of water flows upstream of coastal lagoons that negatively impact the species breeding and foraging activities; and, 3) ground water overdrafting that results in reduction of flows and negatively impacts the species breeding and foraging activities. These threats combined with drought conditions, which is the most significant natural factor adversely affecting the species, have degraded coastal and riparian ecosystems and have created extremely stressful conditions for most aquatic species including the tidewater goby (73 FR 5920). The Service recommends that the City consider these factors and conduct an effects analysis at known tidewater goby occurrence locations that are currently impacted, or will be impacted, by the City's continued water diversions.

Other Considerations

The WSA (Erler and Kalinowski 2009) indicates that in response to the City's existing dry year supply shortfalls the City has been implementing water conservation programs and has initiated studies for the development of a desalination project. The City anticipates being able to reduce the water supply deficit in a worst case scenario, as in the 1976 to 1977 drought event, from over 50 percent at peak times to a maximum of 15 percent. Plans for achieving this 15 percent curtailment are outlined in the City's updated Water Shortage Contingency Plan (WCSP) (City of Santa Cruz Water Department 2009). However, the WSCP identifies several issues regarding implementation of the plan which include: 1) A major capital improvement affecting the City's water supply is the renovation of the Live Oak well system which includes upgrades to wells, treatment plant, and the distribution system to restore production capacity back to its full 2 million gallons per day (mgd) level that was in operation during the 1987 to 1992 drought. This assumes the entire ground water basin is not compromised by continued regional over-pumping of the Purisima aquifer; 2) The City is pursuing an Endangered Species Act section 10 permit (habitat conservation plan). Long-term requirements for in-stream flow releases affecting the City's surface water diversions have yet to be determined. It is expected that the City will lose more water as a result of regulatory actions at the state or Federal level for the protection of listed species; and, 3) The City is also involved in two water rights matters pending before the State Water Resources Control Board that could affect future operations of the Felton Diversion and Loch Lomond Reservoir.

The Service is concerned that despite the acknowledgment that long-term requirements for in-stream flow releases have yet to be determined (in regards to a section 10 permit), the City has proposed to move forward with expanding their water service area. We request that the final EIR include substantive discussion regarding the potential effects of the project in regards to projected in-stream flow release limitations, which should be determined coordination with the Service and the National Marine Fisheries Service.

Summary

The Service is concerned that approval of the project would not only result in impacts to federally listed species occurring within UCSC's North Campus area, but to federally listed species occurring throughout the City's SOI, which are also dependent on the City's water management actions for their survival. This is derived from the fact that ground water and surface water supplies are inexorably linked, and as a result, plant and animal species that are dependent on these water supplies will also continue to be affected by the City's water management decisions. The Service recognizes the City's difficulty in understanding how their water management actions may affect federally listed species occurring in this area; however, irrespective of these difficulties it remains the City's responsibility to ensure their actions do not result in effects to these species.

Thank you for the opportunity to comment on the Notice of Availability of a Draft Environmental Impact Report for the City of Santa Cruz Sphere of Influence Amendment and Provision of Extraterritorial Water and Sewer Service. If you have any questions, please contact Chad Mitcham of our staff at (805) 644-1766, extension 335.

Sincerely,

David M. Pereksta
Assistant Field Supervisor

REFERENCES

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RECEIVED
FEB 17 2010
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

February 17, 2010

Mr. Dan Carl
Ms. Susan Craig
California Coastal Commission
725 Front Street
Santa Cruz, CA 95060

Re: Master Plan for Arana Gulch

Dear Mr. Carl and Ms. Craig:

This office represents the California Native Plant Society (CNPS). Overall, CNPS supports the City of Santa Cruz's Master Plan for Arana Gulch, including access for persons with disabilities, with one exception: the east-west bike path that connects unincorporated Santa Cruz County and the City of Santa Cruz. CNPS has grave concerns regarding the impact of the bike path on the Santa Cruz tarplant, which is listed as "endangered" by the State of California, and "threatened" under the federal Endangered Species Act. It is also undisputed that habitat area where the bike path will be built is an Environmentally Sensitive Habitat Area (ESHA) protected under Public Resources Code § 30240.

Dr. Grey Hayes stated that the bike path was "destructive." (*See* Exhibit A attached hereto). Hayes is cited as an authority on the tarplant several times in the Master Plan. (*See* Exhibit B attached hereto). CNPS also believes there are other alternative alignments for the bike path that would avoid the tarplant and its habitat. Commission Staff has expressed the same concerns in the past. We urge the Commission to consider alignments that can provide for an east-west bike path while avoiding the impacts to the tarplant.

The population of tarplant has been highly variable and fluctuates on Arana Gulch, ranging from a population of 797 plants to 65,000 plants in a given year between 1998 and 2005. (*See* Exhibits B, C, D, E and F attached hereto). The California Department of Fish & Game previously noted that the California Endangered Species Act "require[s] that the impacts to the species from any project for which the Department issues a permit be 'minimized and fully mitigated.' ... . We believe that splitting the population in two by a bike path is not appropriate, may limit the recoverability of the population, and may not be mitigable." (*See* Exhibit G attached hereto). Despite the City's arguments to the contrary, the seedbank for the tarplant could still be viable since the seeds remain viable for a long time. (*See* Exhibit E and F attached hereto)

Despite the City's Attempts to Justify the Bike Path Through Arana Gulch, the Proposal Violates the Coastal Act's Prohibition Against Development in ESHA

Clearly, the Project will result in development over or in ESHA in violation of the Coastal Act (specifically Public Resources Code § 30240). The EIR prepared by the City for the Master Plan admits that there will be significant and unavoidable impacts to tarplant habitat as a result of the bike path. The City takes the position, however, that there is a distinction between the terms "significant disruption of habitat values" in section 30240, and the meaning of "significant effect" under CEQA. The City's distinction takes section 30240 out of context.

First, the City's interpretation considers CEQA to be more protective than the protections provided for in section 30240, which is simply wrong. Second, a "significant environment effect" on tarplant habitat is a *de facto* "significant disruption of habitat values." The standard of significance under CEQA for determining whether there is a significant effect on the environment, as outlined in the City's EIR, is whether any activity would "[h]ave a substantial adverse effect, either directly or through habitat modifications, on any ... special-status species." Section 30240(a) prohibits "**any** significant disruption of habitat values." Moreover, the EIR concludes that "[a]ny routing of trail segments through historic Santa Cruz tarplant habitat would represent a direct loss of habitat for the [tarplant]." It is indisputable that a "direct loss" of habitat is a "significant disruption of habitat values." Third, section 30240, subd. (a), provides that "only uses dependent on those resources shall be allowed within [ESHA]." While the City asserts that a bike connection between Broadway and Brommer is a "resource dependent use," it is not. The primary purpose of the connection is not to enjoy or study the resource, but simply to connect two urban parts of the City/County for transportation purposes. The bike path included in the Master Plan is clearly a resurrection of the Broadway-Brommer bike connection. This Broadway-Brommer bike connection has been the subject of heated debate for years because it is proposed through ESHA. The bike path violates section 30240 because the Project results in non-resource dependent development in ESHA, and the development results in "significant disruption of habitat values." Assuming, for the sake of argument, that the Arana Gulch east-west bike path could be considered a resource dependent use, that resource dependent use must not cause "any significant disruption of habitat values." Section 30240(a) clearly provides that the use be resource dependent *and* that there not be any significant disruption of habitat values. ("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." Public Resources Code § 30240(a). Even the Santa Cruz City Attorney opined that in order to comply with the Coastal Act, the Master Plan bike connection trail must be both resource dependent and not result in significant disruption of ESHA, citing *Bolsa Chica Land Trust v.*

Superior Court (1999) 71 Cal.App.4th 493[1]. (See Exhibit H).

Finally, Section 30240, subd. (b), states that "[d]evelopment 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... ." [Emphasis added]. Under the City's tortured reading of Section 30240, areas adjacent to ESHA are afforded more broad protections than the actual ESHA because subdivision (b) governing adjacent areas does not even permit "significant degradation" to occur. "Degradation", like "effect", is an extremely broad term. The fact remains, however, that Section 30240 is designed specifically to protect habitat and it is clear that "significant disruption of habitat values" is one result of "significant environmental effect."

The City has attempted to justify the bike path through citation, in the Master Plan EIR, to three unrelated projects previously approved by the Commission. But, the record of these three projects is very different than the "spin" put forth by the City in its EIR. These projects are also very different from the Arana Gulch Master Plan. The first project cited by the City, the Monterey Dune Public Access & Restoration Project, was the restoration of a property that was a former Phillips Petroleum tank farm. The site included an existing road through dune habitat that obviously predated the Coastal Act. The Project included *limited* public access. The recreation trail uses the preexisting road; where the trail was added to the dune habitat, it moved the current road alignment away from snowy plover habitat to less important habitat. Moreover, a large amount of existing pavement was removed and the road width reduced. The parking area was consolidated and moved to an area adjacent to existing parking for a hotel so that the existing parking and access road could be removed. Eight acres of existing degraded dune habitat was restored. The result of that project was a reduction in pavement, and an increase in habitat. (The Coastal Commission staff report for this project is attached hereto as Exhibit I.) The Arana Gulch east-west bike path introduces new pavement, does not reduce it, and paves directly over tarplant habitat reducing the overall amount of habitat.

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[1]*See also Kirkorowicz v. California Coastal Comm.* (2000) 83 Cal. App. 4th 980, 995, confirming *Bolsa Chica's* holding that the restrictions on development in section 30240 did not vary depending on whether the ESHA was in a threatened or deteriorating condition. "Rather, under the statutory scheme, ESHA's, whether they are pristine and growing or fouled and threatened, receive uniform treatment and protection." *(Bolsa Chica Land Trust v. Superior Court, supra*, 71 Cal. App. 4th at p. 508.)

The City also cites the Commission's approval of the Morro Bay Harborwalk/Dune Restoration Project. (The staff report for this project is attached hereto as Exhibit J). This project is also easily distinguishable from the Arana Gulch east-west bike path. This project also involved the construction of a bike path within an existing road prism. The bike trail in Morro Bay was to be constructed "outside the sensitive resource area." So obviously, this project has no relevance to Arana Gulch. Aside from the bike path, the Morro Bay project consisted of a roadway realignment that encroaches on the dune habitat. However, the staff report for the Project notes, "[t]ypically, roadways are not considered resource dependent uses. In this case, however, the proposed roadway realignment is necessary for effective management of access and successful protection and restoration of dune habitats." The project was a means to control access rather than to introduce a new use to the site through ESHA. The existing access to the site was considered to be untenable because the "access management measures" are considered "essential to the long term protection and restoration of the nature dune habitat." That was because without the project, the dune habitat would continue to be trampled by visitors. In the case of Arana Gulch, no one disputes that a pedestrian interpretive trail that protects the tarplant may be resource dependent, but a bike path that is intended to serve as part of the City's transportation network and has nothing to do with managing existing use can hardly be considered a resource dependent use.

The third project cited in the Master Plan EIR, is the Sand City Bike Path (application No. 3-97-062). This project involved the construction of the path adjacent to an existing road (Sand Dunes Drive). (The staff report for this project is attached hereto as Exhibit K.) Arana Gulch presently has no roads through it and the Project proposes a bike path directly through the middle of ESHA. Also, the project was approved in 1997, prior to the decision in *Bolsa Chica Land Trust v. Superior Court*, (1999) 71 Cal.App.4th 493, the leading case on the subject of ESHA. In that case, the Coastal Commission approved development in ESHA because in exchange for development, ESHA would be restored. The Court of Appeal found that the very practice of trading away environmentally sensitive habitat in exchange for mitigations elsewhere was inappropriate even when an environmentally sensitive habitat area was considered degraded.

> "[C]ontrary to the [Coastal] Commission's reasoning, [Public Resources Code] section 30240 does not permit its restrictions to be ignored based on the threatened or deteriorating condition of a particular [environmentally sensitive habitat area] ESHA... There is simply no reference in section 30240 which can be interpreted as diminishing the level of protection an ESHA receives based on viability. Rather under the statutory scheme, ESHA's, whether they are pristine and growing or fouled and threatened, receive uniform treatment and protection....

> As the [Petitioners] point out, if, ... application of section 30240's otherwise strict limitations also depends on the relative viability of an ESHA, developers will be encouraged to find threats and hazards to all ESHAs located in economically inconvenient locations. The pursuit of such hazards would in turn only promote the isolation and transfer of ESHA habitat values to more economically convenient locations...." *Bolsa Chica Land Trust v. Superior Court*, *supra*, 71 Cal.App.4th 493.

The *Bolsa Chica* decision essentially did away with the practice of allowing development of ESHA in exchange for restoration. The Sand City Bike Path as described by the Master Plan EIR, and the Coastal Commission staff report, is contrary to *Bolsa Chica*. Therefore, the Sand City Bike Path is of no relevance to the Arana Gulch matter since it is based on pre-*Bolsa Chica* analysis.

Thank you for your consideration of these comments.

Very truly yours,
WITTWER & PARKIN, LLP

William P. Parkin

Encl.

(2)

Grey Hayes
On behalf of the
California Native Plant Society
Santa Cruz County Chapter
849 Almar Ave. C-418
Santa Cruz, CA 95060

1/10/00

City of Santa Cruz
Department of Public Works
809 Center Street
Rm. 201
Santa Cruz, CA 95060
Attn: Ted Lopez

Dear Mr. Lopez,

Enclosed you will find concerns of the California Native Plant Society about the proposed bike roads through Arana Gulch. On behalf of the over 300 members of the Santa Cruz County Chapter of CNPS, I ask you to reconsider this project as it is as destructive as it is unnecessary.

The California Native Plant Society's mission is to provide for the protection of California's flora through education and conservation work. We pride ourselves in providing the best available scientific information to these ends. Local chapter members have been intimately involved with ongoing maintenance and monitoring of Santa Cruz tarplant at the proposed project site. We will continue to be involved with conservation work regarding the Santa Cruz tarplant, and look forward to doing this work at Arana in the future. We thank you for considering our concerns.

Very Sincerely Yours,

Grey Hayes

Grey Hayes
CNPS Past President

Cc: Deb Hillyard, CDFG
Connie Rutherford, USFWS

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EXHIBIT A

3 SANTA CRUZ TARPLANT POPULATION AT ARANA GULCH

Census data for Santa Cruz Tarplant at Arana Gulch were first obtained by Randy Morgan in 1977 (CNDDB # SPNXFJ3). Previous to this, the plant was thought to be extinct (Munz 1959, Palmer 1982). In the early 1980s, Palmer visited many occurrences of the species in Northern California during his dissertation research. Details of how the Palmer's census was originally conducted at Arana Gulch are absent from his dissertation. Anecdotally, Bill Davilla who actively participated on many field trips recalls that Santa Cruz tarplant population density at Arana Gulch was moderate to low and the plants were small and unbranched. The coastal prairie community was dominated by non-native grasses and heavily impacted by cattle traffic and foraging. At that time, the dairy was still in operation and 35-40 head were routinely kept on the property.

At that time, collections of Santa Cruz tarplant were taken mostly from the southern portion of the property, which is now designated subpopulation A. No comprehensive census or survey took place on those trips, and there was no awareness at that time of separate subpopulations. After the cattle were removed, Santa Cruz tarplant plants became apparent in areas of the site where they had not been observed on cursory surveys, but in subsequent years non-native forbs to develop dense cover, especially in the northern half of the property (Davilla, pers. comm.).

In 1989, R. Doug Stone at EA Engineering Science and Technology Inc. (EAESTI) first designated and roughly mapped the subpopulation structure of Santa Cruz tarplant at Arana Gulch (Stone memo 7/11/89). He recognized four subpopulation areas, A, B, C, and D that occupied what appeared to be distinct areas in the southern end of the property (Figure 1). Stone did not find any plants in area C in either 1988 or 1989, but confirmed that Randy Morgan had observed around 10,000 plants in that area in 1986 (Stone memo 7/11/89).

These four recognized subpopulations (A, B, C and D) became the basis of all subsequent census efforts, although it was not until 2004 that they were accurately documented and logged with GPS data. The subpopulations became the focus of management activities and observations at Arana Gulch, in particular the largest and southernmost subpopulation A (Bainbridge 2003), although in 1998 plants were found in areas between the mapped subpopulations (CNDDB 2000) and Bainbridge's experiments include areas within subpopulation D and other areas at Arana Gulch.

Demographic data for Santa Cruz tarplant were collected by Dr. Susan Bainbridge (UC Jepson Herbarium) at Arana Gulch during 2000-2002 as part of her experiments on management techniques. Although much of these data are not yet available, it is clear that information on germination, survivorship, plant growth, and reproduction were obtained in response to small-scale, replicated mowing, soil scraping, and burning treatments. Demographic data were also obtained by Dr. Grey Hayes for artificial populations used in his dissertation research (Hayes 2002). Hayes, working on questions of coastal prairie ecology and management with Dr. Karen Holl at UC Santa Cruz, conducted his field experiments on three introduced populations to the north and south of Arana Gulch.

Population Census at Arana Gulch

The total number of aboveground plants at Arana Gulch has ranged from zero to an estimated 115,000 during the 18 census years of 1977 to 2004 (City of Santa Cruz memo, December 2004). The authors of this document assume that all of the plants found and tallied were reproductive, but this was not always indicated by the field worker. The largest reproductive population sizes, 10,000, were observed in 1986, 1988, 1997, 1998, and 2002. The smallest sizes, 100 or less, were observed in 1977, 1993, and 1995, the latter year producing no aboveground individuals. A summary of census data at Arana Gulch is included in Table 1. Census data for 2004 and 2005 are depicted in Figures 2 and 3.

Exhibit 12 83
EXHIBIT

Exhibit 1284

Table 1 Census Estimates and Management Actions for Subpopulations at Arana Gulch **1989-2005**

Y = present, but no counts available U indicates mowing type (scythe-type or chopped mulch) unknown M indicates chopped mulch type mowing conducted

subpop/year	total # of plants[a]	management: July (previous) to June
SUBPOPULATION A		
1989	Y[b]	no management
1993	2	no management
1994	0	no management
1995	0	mowed[M], mowed[M]/raked
1996	7,420	mowed[U]/raked, scraped
1997	12,941	fall fire (arson) 10/96
1998	65,000	fall fire (prescribed) 10/97
1999	1,228	mowed[M], fall fire (prescribed) 10/98
2000	1,053	no management
2001	619	experiment (see Table 6)
2002	10,230	no management
2003	2,536	no management
2004	797	no management
2005	1,552	no management
SUBPOPULATION B		
1989	Y[b]	no management
1993	0	no management
1994	0	no management
1995	0	mowed[M], mowed[M] /some raked
1996	0	mowed[U]
1997	0	mowed[U], scraped small plots 10/96
1998	5[c]	mowed[U]
1999	0	mowed[U], fall fire (prescribed) 10/98
2000	0	mowed[U] (*)
2001	n/a	mowed[U]
2002	0	mowed[U]
2003	0	mowed[U]
2004	0	mowed[U]
2005	0	mowed[U]
SUBPOPULATION C		
1989	0	no management
1993	0	no management
1994	0	no management
1995	0	mowed[M], mowed[M] /some raked
1996	0	mowed[U]
1997	0	mowed[U]
1998	20[c]	mowed[U]
1999	0	mowed[U]
2000	0	mowed[U]
2001	na	mowed[U]
2002	0	mowed[U]
2003	0	mowed[U]
2004	0	mowed[U]
2005	0	no management
SUBPOPULATION D		
1989	Y[b]	no management
1993	131	no management
1994	0	no management
1995	0	mowed[M], mowed[M] /some raked
1996	0	mowed[U]/raked/scraped
1997	21	mowed[U]/raked /scraped (small plots)
1998	60	no management
1999	1	fall fire (prescribed) 10/98
2000	1	no management
2001	na	experiment (no data available)
2002	156	no management
2003	57	no management
2004	2	no management
2005	0	no management

[a] When more than one population estimate is provided, the larger is used for this table

[b] Plants recorded as present in this subpopulation but no census data are provided

[c] Plants found at the periphery of this subpopulation location included

(*) Harris (memo 10/16/99) indicates that spring 2000 mows would be bailed (scythe-type and "raked") but there is no confirmation that this type of mow was performed

Exhibit I
1285

Seed Bank Dynamics

Seed bank studies found only ray seeds [achenes] in the soil (Palmer 1982, Bainbridge 2003), indicating that nearly all disk seeds germinate or are eaten in the year following production (it is possible but unlikely that these achenes could have also dispersed. Seed bank densities can be highly variable due to the spatial aggregation of dispersal in the landscape and also possibly due to different environmental conditions, including those due to different management practices.

Ray seeds comprise the persistent seed bank in the soil because the more easily germinable disk achene may mostly germinate each year, or, disk achenes may be more likely to be eaten due to their more delicate seed coats. The lack of a thick pericarp for disk seeds means that not only are they more likely to germinate with the first rains, but if they don't germinate, they are extremely likely to get eaten and therefore die. Predation experiments conducted on Santa Cruz tarplant disk achenes found predation rates of well over 90% in a 1-month interval (Hayes 2002). Seed predation, infection, and death all contribute to the loss of seeds from plant seed banks. Persistent seed banks can be quite low, even for annual plants that depend on seed banks as the only mechanism to maintain their populations over reproductive cycles.

Seeds of Santa Cruz tarplant can germinate after 6 to 9 years of room temperature storage (attachment to Morey memo 4/25/95), so may be able to persist even longer in the soil if they avoid predation, although older seeds, in general, have been found to produce less robust plants than younger ones (Priestley 1986).

4 MANAGING POPULATIONS OF SANTA CRUZ TARPLANT

The Arana Gulch population of Santa Cruz tarplant has been subjected to a wide range of management actions in the past. A few years after grazing cattle were removed in 1988; the number of aboveground individuals began to rapidly decline, leading to the conclusion Santa Cruz tarplant cannot persist without management.

In January of 1995, after the City acquired the Arana Gulch property, a Santa Cruz tarplant recovery workshop was convened by the California Department of Fish and Game. The workshop was attended by local botanists, Santa Cruz City staff, and concerned citizens. As a result of this workshop, several management actions were prescribed and implemented, including soil scraping and mowing. Similar workshops were held in subsequent years, through 2003. These workshops served to collate and disseminate information on much of the conservation and restoration research conducted on Santa Cruz tarplant at Arana Gulch and other population locations

It is now understood that long-term effective tarplant management would need to replace natural disturbance by native grazers, herbivores, and intense, regular fires that had long been absent from this fragment of coastal prairie. In the absence of these disturbances, grasses would out compete forbs such as Santa Cruz tarplant, especially non-native annual grasses that form thick stands with dense canopies and root systems. The grass stands provide low quality habitat (e.g. limited light and water) and build a thatch layer on the soil surface that probably retards Santa Cruz tarplant germination (Hayes and Holl, in review).

While effective management increases Santa Cruz tarplant population viability and decreases non-native grass cover, it may also control noxious weeds. It is important to recognize that effective management may have the unwanted effect of abetting the establishment of noxious weeds and additional weed control measures may be needed to prevent a biological invasion. Actions and research efforts focused around non-native grass control have attempted to determine what management actions might benefit Santa Cruz tarplant subpopulations and their ability to persist by simulating disturbance of the non-native grass canopy. Typically, these studies have measured demographic or individual plant characteristics in the summer

following some kind of site manipulation (e.g. soil scraping) or accidental disturbance (e.g. uncontrolled fire).

Soil Scraping

During November and December of 1995, two types of scraping were used to remove the canopy, thatch and upper organic layers of the soil at Arana Gulch. A bulldozer was used to scrape the soil surface of Santa Cruz tarplant subpopulation A after no plants had been found during the previous summer. This mechanical form of soil scraping was considered a drastic action, required to simulate catastrophic disturbance over a fairly large area of habitat. Hand scraping using garden hoes was also performed to remove the same canopy and soil surface layers. In the following summer of 1996 over 7,000 plants flowered and reproduced in the scraped areas and mechanical scraping appeared to be slightly more effective (although rigorous evaluation was not performed). Subsequent management actions and experiments examined soil scraping as a technique for releasing tarplant seeds from the seed bank. Experimental scraping at Arana Gulch resulted in high recruitment of tarplant compared with mowing, burning, or no management (Bainbridge 2003).

The precise mechanism for the increased tarplant population in scraped areas is unclear. Other native forbs also benefit from scraping (Bainbridge 2003) and the mechanisms may be similar among species. Bainbridge (memo 7/20/05) found that survivorship was similar among grazing, mowing, burning, and no management treatments and found that fall thatch cover significantly affected tarplant recruitment (Bainbridge 2003). The effects of scraping may be some combination of soil compaction, removal of thatch, removal of competitor seed, soil nutrient depletion via biomass removal, or removal of indirectly harmful agents (e.g. herbivores). Hayes (2002) found that large amounts of thatch were associated with higher levels of herbivory on tarplants. Thatch removal might then deter herbivores from finding and eating tarplant (Maze unpublished ms, 2005).

Soil scraping could also have adverse effects, including removal of tarplant seed, removal of seeds of other native forbs and grasses, increased predator access to seeds, soil nutrient depletion and excessive soil compaction. Recent modeling has demonstrated that forcing seeds to germinate ("flushing") can reduce the buffering effect of a large seed bank and diminish persistence across unfavorable years (Satterthwaite et al. unpublished ms, 2005). Given its drastic impacts on the soil surface and its ability to stimulate release of tarplant from the seed bank, scraping should be regarded as a catastrophic form of disturbance to be used infrequently through time and sparingly across Santa Cruz tarplant habitat.

Fire

During the fall of 1996, a portion of subpopulation A within the previously scraped area was burned in an accidental fire. By summer of 1997, the subpopulation had greatly increased to about 12,000 reproductive plants and expanded its distribution inside and outside the fire's boundary. The relative contributions of scraping and burning could not be ascertained. A prescribed burn conducted in the fall of 1997 was followed by the summer 1998 appearance of over 65,000 reproductive plants in subpopulation A. But the prescribed burn of October 1998 in subpopulation D produced only 1 plant in 1999 where 17 had occurred in the prior year (Table 1). Experimental fires in 2001 at Arana Gulch did not result in increased germination or survivorship of SCT (Bainbridge 2003), and laboratory experiments show that fire may stimulate germination of ray fruits but that resulting plant vigor is lower (Bainbridge memo 7/20/05).

Fire can be beneficial by removing thatch that inhibits native forb germination (Carlsen et al. 2000), and by destroying seeds of competing non-native grasses (Meyer and Schiffman 1999). Santa Cruz tarplant germination may respond positively to the fire itself, not just the associated thatch removal. Creating open areas through fire may also facilitate seed dis-

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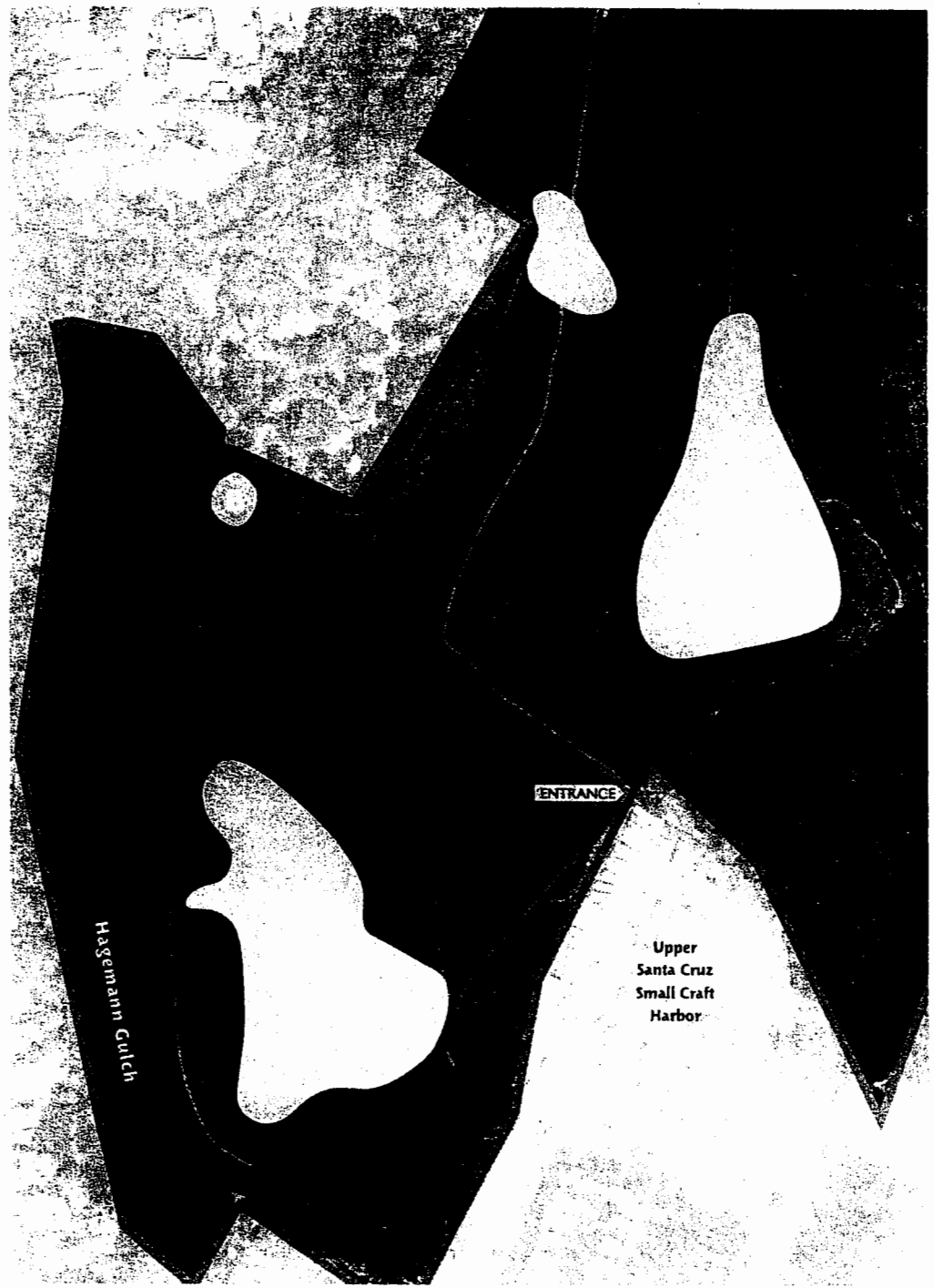

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SCALE IN FEET

Approximate location of Santa Cruz Tarplant subpopulation areas identified in 1989.

Arana Gulch
MASTER PLAN

TARPLANT SUBPOPULATION AREAS

Figure 1

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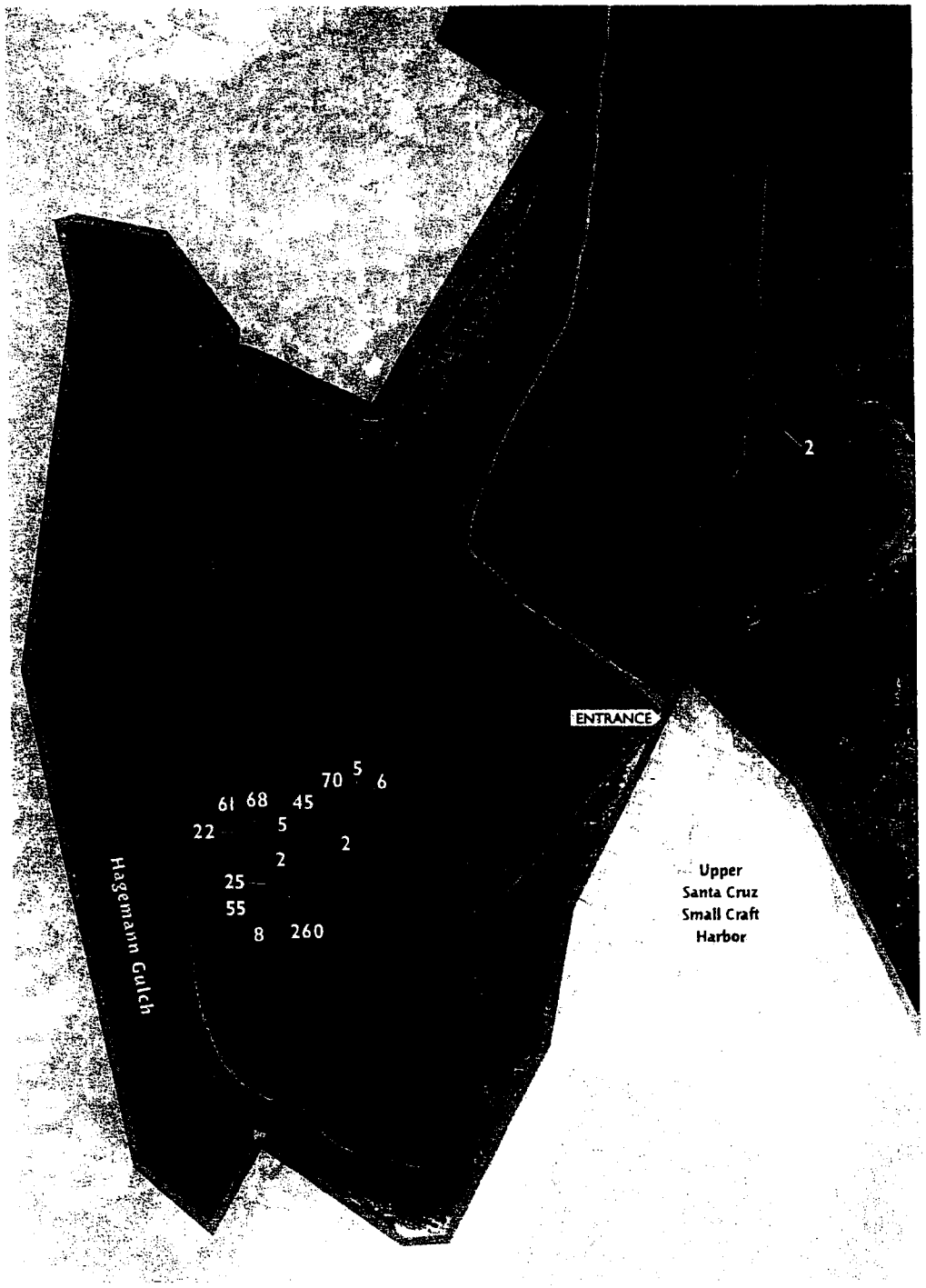
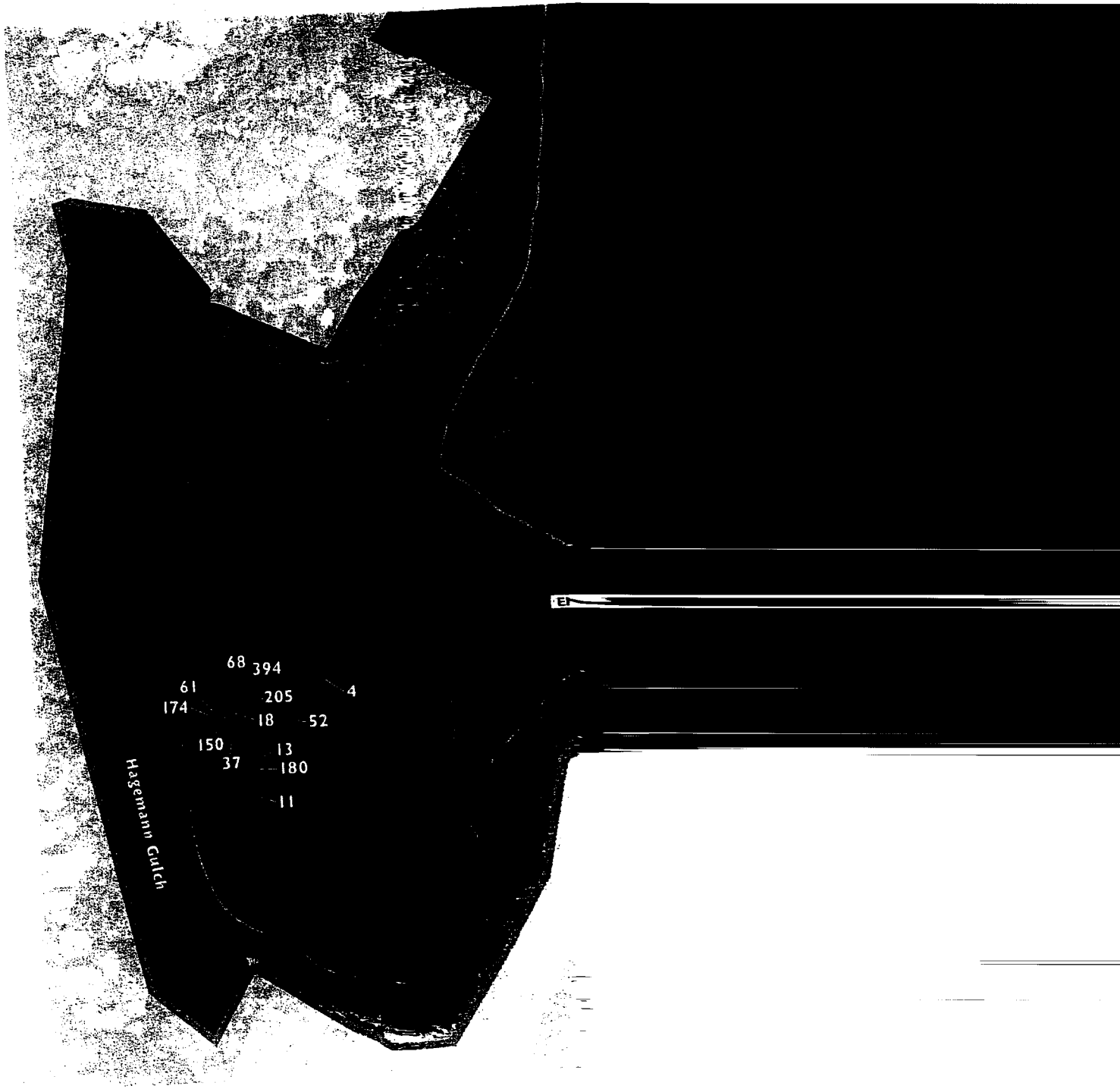


Positions of patches and individual Santa Cruz Tarplants in subpopulations A and D from the 2004 Census at Arana Gulch. Subpopulations B and C had no above-ground individuals. Colors indicate patches (see Appendix A data tables), the pointers indicate the number of individuals at a particular GPS location (WGS 84) within a patch. Unlabled points represent single SCT plants.

Arana Gulch
MASTER PLAN

SANTA CRUZ TARPLANT
2004 Census

Figure 2



Positions of patches and individual Santa Cruz Tarplants in subpopulations A from the 2005 Census at Arana Gulch. Subpopulations B, C and D had no above-ground individuals. Colors indicate patches (see Appendix A data tables), the pointers indicate the number of individuals at a particular GPS location (WGS 84) within a patch. Unlabled points represent single SCT plants.

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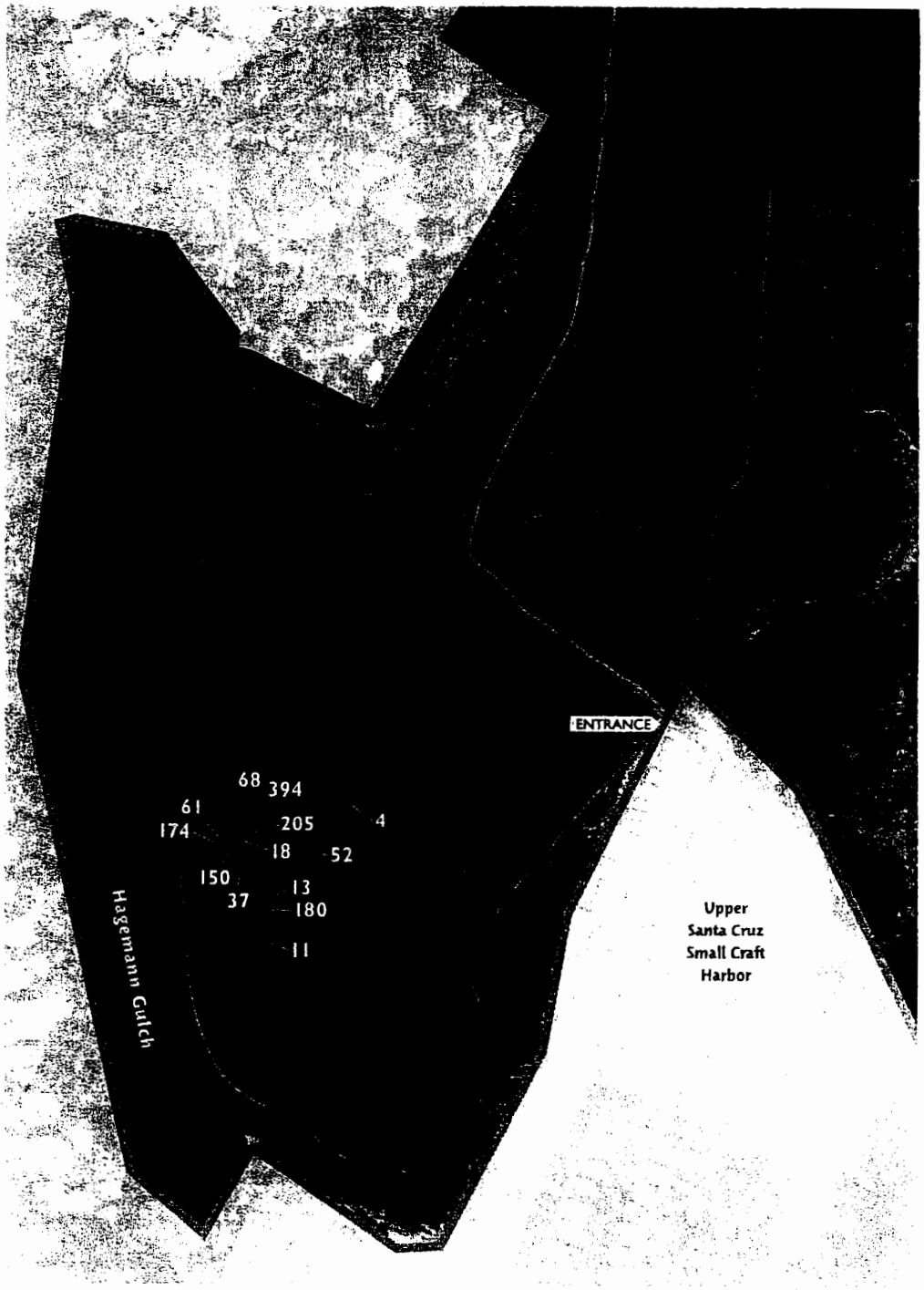


Positions of patches and individual Santa Cruz Tarplants in subpopulations A from the 2005 Census at Arana Gulch. Subpopulations B, C and D had no above-ground individuals. Colors indicate patches (see Appendix A data tables), the pointers indicate the number of individuals at a particular GPS location (WGS 84) within a patch. Unlabled points represent single SCT plants.

2005 PATCH			
• 1	• 2	• 3	• 4

Arana Gulch
MASTER PLAN

SANTA CRUZ TARPLANT
2005 Census

Figure 3

persal into these open areas (Carlsen and Espeland in review). However, fire can also have adverse effects on the target species by killing seeds with high temperatures (Odion 2000, Brooks 2002), and increasing seed predation (Espeland et al. 2004). Timing of fire may be important.

Overall, a controlled burn at should be regarded as a catastrophic form of disturbance to be used infrequently to drastically alter soil surface conditions. On a large scale, controlled burns have many logistic hurtles to be resolved, including safety requirements (e.g. trained burn control crew, fire control vehicle access), regulatory constraints (e.g. air quality, "burn day" system), and potential public relations problems (e.g. neighbor objections, user disappointment). On a small scale, however, they can be an important experimental treatment that returns an important disturbance factor to the habitat. Small-scale techniques (Pavlik et al. 1993, 2000) should be used for research purposes at Arana Gulch.

Grazing

The Santa Cruz tarplant population at Arana Gulch was able to maintain a large size, greater than 10,000 plants, under a high intensity, year-round grazing regime produced by domestic dairy cattle. This regime came to an abrupt end in 1988.

Grazing probably improves habitat quality for Santa Cruz tarplant by removing annual grass cover and phytomass, thus preventing aboveground competition during the growing season and reducing thatch accumulations that inhibit tarplant germination. Grazing also brings trampling, which opens, roughens and compacts surface layers of soil.

Grazers might also have been responsible for most of the pre-1988 dispersal of Santa Cruz tarplant seeds at Arana Gulch, as the sticky ray seeds could have adhered to the legs of passing animals. If long-distance dispersal was facilitated by these large, mobile grazers, then there must have been more genetic exchange between subpopulations in the past. The importance of this exchange to maintaining large, vigorous subpopulations and seed banks is currently unknown.

Grazing should be considered as an appropriate form of long-term, frequent disturbance that can benefit Santa Cruz tarplant and its coastal prairie habitat at Arana Gulch. However, there are significant logistical constraints associated with using cattle for this purpose, including requirements for substantial barbed wire or electric fencing, transport to and from the site, contractual specifications for intensity, duration and timing, and public relations. Other domesticated grazers, such as goats and sheep, may provide a similar service with fewer problems. Grazing should be regarded as an important experimental treatment that returns a critical disturbance factor to the habitat.

Mowing With Phytomass Removal

Many management experiments involving Santa Cruz tarplant have utilized mowing to simulate grazing disturbance with varying degrees of success. Mowing may be the most practical method for uniformly removing large amounts of grass biomass and accumulated thatch over large areas of an isolated fragment of coastal prairie. However, timing of mowing may be important, so as not to injure already-bolted tarplant or prematurely kill senescing plants.

Between 1995 and 2003, mowing has been performed every year at Arana Gulch in subpopulations B and C, with no reproductive tarplant individuals ever emerging from the seed bank (which may or may not have been present prior to treatment). This mowing was conducted as part of the City's fuel break mowing and did not include phytomass removal. Other mowed plots at Arana Gulch exhibited no germination compared to burned and scraped plots.

The effects of mowing with phytomass removal on the coastal prairie habitat of Santa Cruz tarplant can be similar to those of fire and intense grazing because all reduce thatch accumulation and aboveground competition from the grass canopy. However, mowing may be different than grazing in that it is less effective at creating open patches and less selective than

001290
Exhibit I

would-be grazers. Research in Midwestern prairies has shown that mowing and raking can have similar effects as burning (Tix and Charvat 2005). However, the timing of mowing must take into account different parameters than determining the timing of fire: in order to be effective in the following year: if mowing occurs after non-native grass seeds becomes ripe and disperse, then it may facilitate grass dispersal and increase competition with tarplant during the following year.

Timing is critical to the effects of mowing on tarplants, as is whether the cut grass is removed. Many commercial mowers do not remove thatch or the mowed grass material (phytomass), but merely break it into a mulch of smaller pieces that adheres to the soil surface like a blanket. This type of mowing was performed at Arana Gulch in 1995 (Quintanar 1995) and may have been responsible for the lack of a visible demographic response by the tarplant.

Mowing is less effective than fire, grazing, and scraping at creating bare ground, and it may be bare ground that is ultimately necessary for a positive demographic response. Other California native forbs have had a positive response to the creation of bare ground patches within grassland habitats (Meyer and Schiffman 1999, Espeland and Carlsen 2002). Bare ground can be important if germination and/or survivorship are sensitive to light availability, and bare soils are more compacted than those that have roots in them, possibly increasing seed-soil contact and aiding water imbibition of seeds.

Another benefit of mowing, however, could be the reduction in grass canopy height, which allows the seeds of late-flowering forbs to disperse a greater distance (Coulson et al. 2001). Mowing with phytomass removal should be investigated as an appropriate form of long-term, frequent disturbance that can benefit Santa Cruz tarplant and its coastal prairie habitat at Arana Gulch.

No Management

After the removal of cattle grazing from Arana Gulch in 1988, the number of reproductive Santa Cruz tarplant individuals dropped to less than 1,000 in 1989 (Morey 1995). With no disturbance from grazing, and no surrogate management regime, the number of aboveground, reproductive plants precipitously declined to 133 by 1993 and to zero plants in 1994 and 1995, after a period of only seven years. The population had evidently persisted in the seed bank because more plants were produced after treatment with soil scraping in 1995 and fire in 1996. Presumably the treatments were able to counteract unfavorable habitat conditions that developed between 1989 and 1994. These observations underscore the importance of the seed bank to population persistence of annual forbs like Santa Cruz tarplant.

Varied Responses to Management Regimes

As the multi-year management experiments by Hayes (2002) and Bainbridge (2003) show, management efforts may produce different results at different sites and years. Other studies have found that a management action that is beneficial in one year may be detrimental the next (Schultz and Crone 1998, Lesica and Martin 2003, Espeland et al. 2004, Carlsen and Espeland in review). It may not be possible to predict if an action will be beneficial in the upcoming year, but with a consistent schedule of actions and appropriate data feedbacks (i.e. monitoring programs), evaluation and adjustment will be possible.

Perhaps only certain subpopulations or even portions of subpopulations would receive the same management every year, allowing for variable responses across the Coastal Prairie/Tarplant Management Area within Arana Gulch. Although detrimental responses to consistent management may occur, it is probably more important to increase the probability of a favorable coincidence between the seed bank, the conditions of the growing season and the management regime. This coincidence would result in maximum seed production and replenishment of the seed bank, which in turn will allow persistence.

Exhibit 1291

A more sophisticated aspect of developing a management regime is being able to respond to "good years" and "bad years" as they develop during the growing season. A season with early rainfall and warm temperatures can produce a dense, competitive sward of grasses that ultimately will inhibit subpopulations of Santa Cruz tarplant. Careful clipping and early removal of this canopy could maximize tarplant survivorship in what would otherwise be a "bad year". Other, "surgical" actions might be used to maximize seed output in "good years" by removing grass cover in spring. The mechanisms by which such actions survivorship or fecundity (by soil compaction, light infiltration, fire-cued germination, aboveground competition) need to be more clearly elucidated with a focused program of research as discussed in the next section.

5 SANTA CRUZ TARPLANT MANAGEMENT PROGRAM 2006-2026

Given the present understanding of Santa Cruz tarplant, this management program is based upon the following emergent biological principles:

1) the distribution, abundance and persistence of Santa Cruz tarplant subpopulations at Arana Gulch are largely controlled by factors affecting the size and dynamics of the seed bank,
2) seed bank characteristics are primarily determined by habitat quality within and between the subpopulations,
3) habitat quality mostly depends on minimizing the detrimental effects of high cover by non-native grasses, and
4) non-native annual grass cover can be reduced by restoring the proper disturbance regime to the coastal prairie of Arana Gulch.

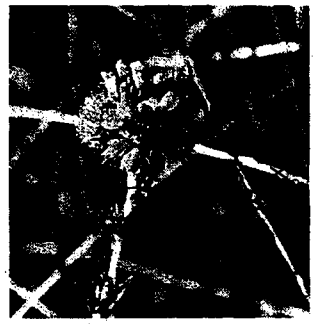
This program is also based upon the following management principles:

1) stakeholders (with respect to Santa Cruz tarplant and coastal prairie) must commit adequate time and resources to a cooperative, decision-making process known as adaptive management,
2) the initial phases of the adaptive management program will emphasize consistency and precision, rather than optimization, of actions,
3) all management actions and research must be evaluated and reported within the annual cycle of Santa Cruz tarplant activity to allow timely adjustments, and
4) enlarging and expanding the seed bank of Santa Cruz tarplant by restoring disturbance to its habitat will require a long-term, science-driven commitment by all stakeholders.

Implementation of the Adaptive Management Framework

Given these biological and management principles listed above, there are five directives that should be implemented over the next 20 years (2006-2026). These include:

1) Implement an adaptive management framework which allows stakeholders to scientifically conduct and evaluate actions by establishing an Adaptive Management Working Group,
2) conduct a two-tracked program for improving overall habitat quality during the first seven years with
   a) semi-annual mowing with phytomass removal (or possibly prescription grazing) to reduce annual grass reproduction and cover over large portions of the Coastal Prairie/Tarplant Management Area, combined with
   b) ongoing experimental manipulations in reserved portions of the Management Area to improve existing, and to develop new, management actions
3) develop a schedule of "surgical" and "catastrophic" management actions,
4) build monitoring into the evaluation of every management action and research effort, and
5) develop public educational opportunities associated with



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the coastal prairie of Arana Gulch and efforts to conserve and restore its rare resources.

Cooperative and committed management of Santa Cruz tarplant and coastal prairie habitat at Arana Gulch will depend on motivated stakeholders who participate in the decision-making process and work to implement basic actions. Those decisions and actions must be informed and evaluated by sound scientific, economic, and public policy information. Scientific information is generated by monitoring programs as well as directed (i.e. management-oriented) research. The best way to combine science with a stakeholder-controlled decision-making process is through an adaptive management framework.

Adaptive management is iterative: it evaluates decisions or actions through carefully designed monitoring and proposes subsequent modifications (Mulder et al. 2000). The modifications are in turn tested with an appropriate, perhaps redesigned, monitoring protocol. Adaptive management is logical, can deal with uncertainty and data gaps, and is similar to the scientific process of hypothesis testing. It recognizes that each stakeholder brings a unique perspective, but all are ultimately focused on enhancing Santa Cruz tarplant subpopulations and habitat quality by cooperating in an open, non-adversarial process.

The process of adaptive management is often represented as a cycle of strategy, design, implementation, monitoring, and evaluation. The first and most important task for implementation of the process is to develop a strategy that includes goals and objectives for Santa Cruz tarplant and its coastal prairie habitat, an inventory of known tools or actions for advancing the objectives (e.g. mowing, grazing), and the development of Key Management Questions that structure all subsequent monitoring and research activities. It is absolutely essential that stakeholders serving on the Adaptive Management Working Group cooperatively develop these elements of the strategy.

Goals and objectives are needed to provide a vision for the long-term conservation of Santa Cruz tarplant, its habitat and for Arana Gulch as a whole. That vision, whether it includes prairie restoration, subpopulation enhancement, or public access for education, must be defined through consensus in order to have the broadest possible stakeholder support. Without that support, opposition or apathy can prevent implementation to a halt. The vision cannot be forced upon stakeholders by regulatory agencies; it can only be guided and facilitated.

One of the first tasks of the Adaptive Management Working Group should be the development and adoption of broad, visionary goals and objectives that speak to the desired future state of Santa Cruz tar plant subpopulations and coastal prairie habitat at Arana Gulch. Once the goals and objectives are adopted, other elements in the strategy can be developed. Especially important will be the key management questions that focus science on specific management issues and data gaps and realize the vision set out in the goals and objectives.

Adaptive Management Working Group

Successful implementation of an adaptive management framework requires that committed stakeholders convene as an Adaptive Management Working Group. Stakeholders in this group should be interested in the outcomes of decision-making and in the technical process of managing the resources of Arana Gulch. This group may include personnel from public agencies (e.g. City of Santa Cruz, California Department of Fish and Game, U.S. Fish and Wildlife Service), private interests (e.g. California Native Plant Society) and scientific organizations (e.g. University of California).

Members of the Working Group would define and prioritize goals and objectives, develop key management questions, implement management actions, design and implement necessary monitoring programs, and utilize monitoring data to evaluate progress. A subset of the Adaptive Management Working Group, to be known as the Technical Advisory Group (TAG), would convene to address tactical scientific problems associ-

Exhibit I
1293

ated with data analysis and experimental design. The Working Group and Technical Advisory Group would utilize and expand this management program in concert with the efforts of state and federal agencies charged with conserving the species as a whole (including implementation of the federal recovery plan, when finalized).

The Adaptive Management Working Group would work cooperatively to enlarge and expand the seed bank of Santa Cruz tarplant at Arana Gulch by improving habitat conditions within the Coastal Prairie/Tarplant Management Program. The work would require a combination of management actions, research and monitoring while seeking public and private sector support for meeting the goals and objectives (vision) of the program.

Between the Adaptive Management Working Group, the public and representatives of the associated government agencies, there should be a structured flow of information. Policy and political issues can be brought to the Working Group for discussion. If a technical solution is appropriate, the Technical Advisory Group would be charged with its development using a science-based approach. Research and monitoring data can then be objectively reviewed and applied to the problem at hand. The results of the Technical Advisory Group deliberations are then taken back to the Adaptive Management Working Group for review. This flow is designed to bring issues to the table, provide objective feedback from monitoring and research, develop science-based solutions, and ensure that management actions, funding efforts, and regulatory requirements have follow-up and timely implementation. Although conflict among stakeholders is inevitable, structured information flow will help to resolve those conflicts over the long run and thus affect institutional synergy.

Conduct a Two-Tracked Habitat Management and Research Program

Evidence supports the conclusion that the average life of Santa Cruz tarplant seeds in the seed bank is between five and 10 years (Bainbridge pers. comm., Hayes pers. comm.). Appropriate disturbance must occur within that period to allow seeds to produce robust reproductive plants, thereby enlarging the seed bank. In the absence of that disturbance, annual grass and thatch cover inhibit germination and deter the establishment of large, reproductive individuals. Seeds that remain ungerminated in the seed bank die of old age, disease, or predation.

It is therefore critical that during the first seven years of this management program (at a minimum), a two-tracked program for enlarging the seed bank should be conducted by improving overall habitat quality in the coastal prairie of the Coastal Prairie/Tarplant Management Area. The emphasis would be on reducing cover and thatch by non-native annual grasses within the Management Area using a) semi-annual mowing regime (spring and fall, above 10 cm, with phytomass removal), combined with b) ongoing experimental manipulations (e.g. founding new subpopulations, plot-based testing of mowing, grazing and controlled burns) in reserved portions of the Management Area to improve existing, and develop new, management actions.

Invasion of coastal prairie by non-native grasses, combined with the elimination of disturbance by grazing and fire, have greatly modified the structure, composition and function of these grasslands. With respect to Santa Cruz tarplant, these changes have reduced the seed bank (and subpopulation sizes) by decreasing seed germination, plant survivorship and reproductive output. Annual grasses develop dense swards with high canopy cover, presumably leading to direct competition with young tarplant individuals. In the absence of disturbance (i.e. grazing and fire), the cover persists as an impenetrable overstory canopy or as a layer of dead thatch on the soil surface.

Exhibit 1 01294

Reducing the canopy and removing the thatch have demonstrated beneficial effects on Santa Cruz tarplant demography (Hayes 2003, Hayes and Holl in review) and on grasslands in general (Meyer and Schiffman 1999). Therefore, improving the seed bank and habitat of Santa Cruz tarplant mostly depend on minimizing the detrimental effects of high cover by non-native grasses. These effects can by minimized by restoring the proper disturbance regime to the coastal prairie of Arana Gulch.

But exactly what is that disturbance regime? Recent research has shown that mowing the grass canopy and removing the clippings at least twice a year can improve germination, survivorship, flower output and seed output of Santa Cruz tarplant at some sites and in some years (Hayes and Holl in review). A small but heavy-duty lawn tractor, fitted with a mower and collector could readily navigate between the subpopulation areas, and would also be capable of treating the larger, unoccupied tracts of prairie within the Coastal Prairie/Tarplant Management Area.

The goal would be to reduce the standing cover of the grasses at least twice a year: once to cut off developing inflorescences in early spring, and once to reduce the final amount of grassland phytomass in late fall. The spring mowing could reduce grass reproduction (a greater detriment to the annual, non-native grasses than to native perennial grasses) and canopy cover without harming low-growing tarplant rosettes. The fall mowing would reduce thatch deposition, thus improving soil surface conditions for tarplant germination. It is important to note that fall mowing conducted before complete senescence would have a negative effect on the tarplant population.

The mowing disturbance regime would only mimic the phytomass removal effects of grazing by native and domesticated ungulates over large portions of the Coastal Prairie/Tarplant Management Area and would not incorporate soil disturbance or selectivity that grazers supply. However, this "Management Track" would be relatively easy and inexpensive to implement, with minimal regulatory uncertainty that complicates other possible habitat treatments (e.g. large-scale controlled burns). Semi-annual mowing could, therefore, be applied consistently every year for at least seven years to portions of Arana Gulch that are already occupied by Santa Cruz tarplant (the current subpopulation areas) or that could be occupied by tarplant in the future if habitat quality and seed bank distribution were not limiting.

However, the effects of the consistent, large-scale semi-annual mowing on Santa Cruz tarplant and its habitat are not predictable at present. The fall mowing, for example, might affect the dispersal of tarplant seeds, or even remove them from the site. Modifications to the regime, such as avoiding subpopulation areas in fall, may need to be tested (perhaps in control plots), as well as other possible treatments for reducing grass cover and thatch (e.g. small-scale prescription grazing, herbicide or burn treatments).

So, in addition to the first management track of the program, a second research track should be implemented to address key management questions regarding grass cover management. To support this "Research Track", portions of the subpopulations may be reserved as controls or as areas to receive a different treatment. Experimental subpopulations of Santa Cruz tarplant may be introduced to mowed areas beyond the existing subpopulations to test the efficacy of grass cover treatments, and to determine if introduction could be used as a way of enlarging the distribution of tarplant within the Coastal Prairie/Tarplant Management Area.

Develop a Schedule of Supplemental Surgical and Catastrophic Management Actions

Actions of the Management Track should take place on a seven-year cycle, owing to the postulated longevity of Santa Cruz tarplant seeds in the seed bank. In addition to regular mowing, relatively minor actions that affect small areas within the known subpopulation areas could be designed as sensitive responses to environmental conditions that develop within the current growing season. These "surgical" actions would counteract the detrimental affects of annual grasses on Santa Cruz

Exhibit 11295

tarplant germination and establishment (Hayes and Holl, in review). For example, a typical surgical action might be hand clipping of the developing grass canopy during wet, warm fall and winter months (November to May) while carefully avoiding young Santa Cruz tarplant plants. The objective would be to keep the prairie canopy open to benefit Santa Cruz tarplant with additional light and soil water resources. A quasi-experimental framework would allow costs and benefits of such adjustments to be evaluated using cause-and-effect monitoring.

In year seven of the cycle, a major management action would take place. This "catastrophic" action would affect large areas within and around the subpopulation areas, or anywhere within the Coastal Prairie/Tarplant Management Area. It would take place without regard to (or prior knowledge of) conditions that will develop during the upcoming growing season and before tarplant germination. For example, a catastrophic action might be used to remove thatch and the upper few centimeters of soil organic material by mechanical scraping or an intense, controlled burn. Its timing would always be in late summer and early fall (August to October) before the first rains of the growing season.

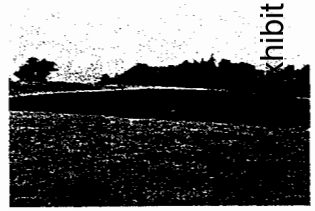
A quasi-experimental framework would allow costs and benefits of such actions to be evaluated using cause-and-effect monitoring. If, however, the Santa Cruz tarplant population in year six happened to be very large (e.g. greater than 5,000 reproductive plants), then the catastrophic action should be delayed one or possibly two years before implementation. This is because the benefits of such an action might not compensate for the immediate losses (e.g. mortality of year six seeds). In general, the cyclical schedule should be regarded as flexible so that annual variations in climate can be taken advantage of (e.g. in "good" years) or compensated for (e.g. "bad" years). Guidelines for dealing with such variations are presented in Zedler and Black (1989).

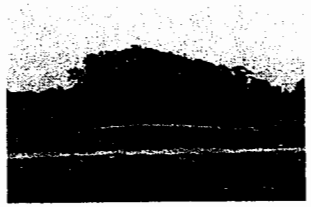
The advantages of having a cyclical schedule of surgical and catastrophic management actions are; 1) surgical actions are immediate responses to each growing season that maximize Santa Cruz tarplant survivorship and reproductive output (seed bank replenishment), 2) catastrophic actions have a frequency that is matched to seed longevity in the seed bank, 3) catastrophic actions improve soil surface conditions to maximize tarplant germination without draining the seed bank, 4) efforts, costs and other logistical elements can be anticipated and developed well ahead of implementation and 5) simplification of the adaptive management process, including clarification of objectives and imposition of regularity on monitoring and evaluation.

Build Monitoring into Evaluation of Every Management Action and Research Effort

Monitoring informs adaptive management. It is designed and implemented with the expressed purpose of determining if the objectives of the adaptive management strategy are being met. Although the specific objectives of this management program have yet to be defined by the Adaptive Management Working Group, some basic elements of monitoring are universal; consistency (repeatable methods applied each year), constancy (applied every year), and appropriateness (for the focal resource). Such design elements are essential for evaluating actions and research efforts, as well as revealing the status of the focal resource, in this case, Santa Cruz tarplant. There are two general types of monitoring that should be used in this adaptive management program, which include "status and trend" monitoring and "cause and effect monitoring," which are described in more detail in the full report.

The AMWG should continue Santa Cruz tarplant subpopulation monitoring at Arana Gulch and integrate the data into the adaptive management framework. This would best be done by a qualified botanist or ecologist, approved by the Working Group and paid for time and expenses, to ensure high quality data collected at the right time of year. A standardized monitoring protocol (see suggestions, Appendix A) should be designed and adopted by the Working Group that would ensure the following:





1) similar effort and intensity of search from year-to-year,
2) inclusion of the entire area in the search (not just the known subpopulation areas,
3) use of GPS technology to map the locations of individual plants and subpopulations,
4) collection of relevant measures of habitat quality (e.g. cover by non-native grasses in subpopulation areas and invasive fronts of noxious weeds), and
5) an accounting of recent management actions or research.

Typically, status and trend monitoring places an emphasis on aboveground plants that survive to flower, but for annuals such as Santa Cruz tarplant, a supplemental program that examines trends in the seed banks of subpopulations is strongly recommended. A standardized data summary sheet and written report form should also be adopted to facilitate timely, year-to-year comparisons.

The seven year cycle proposed for Santa Cruz tarplant must be viewed as a series of management experiments that will test whether subpopulations (and their seed banks) are being enlarged and expanded by restoring disturbance to its coastal prairie habitat. The experiments would include:

1) the semi-annual mowing regime,
2) surgical actions, such as grass clipping, taken during the growing season, and
3) catastrophic actions, such as mechanical scraping of the soil surface, taken every seventh year. In addition, research efforts on the use of grazing animals, fire and other management tools would, by their scientific nature, include this kind of monitoring.

There is already a long history of Santa Cruz tarplant research with cause and effect monitoring at Arana Gulch (e.g. Bainbridge 2003) and elsewhere (Hayes 2003, Hayes and Holl in review) upon which to build. It is the task of the Adaptive Management Working Group to prioritize research needs (according to goals, objectives, and key management questions) for its own decision-making process and to help generate and allocate the necessary funds to support the research. Research funded through the Adaptive Management Working Group should require a final written report, with data files, to be delivered before contract payments have been completed.

Public Educational Opportunities

Broad public support for the management and restoration of Santa Cruz tarplant and its coastal prairie habitat at Arana Gulch are necessary and desirable. Gaining that support requires a demonstration that endangered species protection, habitat restoration, recreational access, and local governance can cooperatively work to protect the public trust. Part of the demonstration will come through concrete implementation of this management program by the Adaptive Management Program. Another part will come through a public access and education program that makes the resources, issues and solutions real; that allows citizens to see Santa Cruz tarplant flowers in a relatively intact natural landscape. Implementation of this program, along with an education and access program, could powerfully demonstrate that public agencies and resource advocates can find a way to make local governance work for the benefit of all.

Exhibit 1297

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Exhibit 1299

APPENDIX 1

Suggestions for the Yearly Census of Santa Cruz Tarplant at Arana Gulch

1) The census should take place during the same period each and every year. Typically, this would be during the earliest reproductive peak, late June to early August, depending on rainfall, temperature and other factors that affect plant phenology.
2) The entire Coastal Prairie/Tarplant Management Area should be searched, including areas beyond occupied patches, treatment areas, and subpopulation centers (A,B,C, D). Detection of the location of quiescent seedbanks is a high priority. Portions of the entire property that burn should be searched during the following summer. The entire Arana Gulch property should be searched during the summer following a burn over the entire property.
3) A standard pattern of search should be adopted by the Technical Advisory Group of the Adaptive Management Working Group. The pattern would allow visual inspection for a thorough search as specified in #2 above. The pattern will be given to the botanist as part of an instruction sheet prior to census.
4) A standard field datasheet should be adopted by the Technical Advisory Group. The datasheet should record plant locations (GPS points), plant size, number of branches, number of floral heads, patch size, and other relevant data.
5) The census should be conducted by a qualified botanist familiar with the species and its habitat. Additional search personnel, trained to recognize the species, will probably be required to insure thorough search in the allotted time.
6) A total crew of four (including the botanist) should be allotted 8 hours in a year when the population totals less than 2,000 plants. In a year with more than 2,000 plants, more time could be required or a sampling protocol devised so that only a representative portion of the population is measured for plant size, etc. The Tehnical Advisory Group can provide the sampling protocol and/or modify these parameters depending on its data requirements.
7) The botanist should summarize the raw data on a standard summary datasheet and presented as a map with precise plant locations shown. These, along with the field datasheets, should be submitted to the Technical Advisory Group before September 30 of that census year.
8) The botanist and the crew should be paid to conduct the census and to submit the products as specified in #7.

EXHIBIT 1
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Exhibit I

APPENDIX 2

Suggestions for Implementation of the Santa Cruz Tarplant Adaptive Management Program

Formal and complete implementation of this Adaptive Management Program depends on coordination by the City of Santa Cruz, commitment of the participants, and acquisition of long-term funding. Until those components are in place, selected elements of this management program should be implemented to ensure persistence of Santa Cruz Tarplant at Arana Gulch. Such interim implementation focuses on taking actions in consultation with a "proto-Technical Advisory Group." Formal implementation involves establishing the entire adaptive management framework presented in this Program.

Interim Implementation

1) The City of Santa Cruz should establish the proto-Technical Advisory Group by inviting one regulatory scientist (from U.S. Fish and Wildlife Service, the California Department of Fish and Game, or the California Coastal Commission) and at least one academic or consulting scientist to serve. This group of two or three members must have expertise in conservation of rare plants and/or restoration of coastal grasslands.
2) The proto-Technical Advisory Group will work with representatives of the City of Santa Cruz to enact appropriate management actions that benefit Santa Cruz tarplant as reviewed in this program. Those actions could be mowing with phytomass removal, grazing, or other habitat manipulations that decrease the deleterious effects of annual grasses. Other actions that are more catastrophic in scale and intensity, such as soil scraping and controlled burning should only be conducted in consultation with a larger array of experts.
3) All actions taken must be properly documented and monitored as reviewed in the Adaptive Management Program with a written summary of results submitted to the City of Santa Cruz before the end of the current management year (December 31).
4) The yearly census of reproductive plants should be conducted every year using conventions and data formatting presented in Appendix A of this program. The results of the census submitted to the City of Santa Cruz before the end of the current management year (December 31).
5) Ongoing research on Santa Cruz Tarplant and Arana Gulch should be facilitated by the proto-Technical Advisory Group and the City of Santa Cruz during this interim period.

Formal Implementation

1) Establishment of the Adaptive Management Working Group should be conducted by the City of Santa Cruz with advice from the U.S. Fish and Wildlife Service, the California Department of Fish and Game, and the California Coastal Commission.
2) The three principal federal and state agencies charged with plant conservation and coastal zone management (U.S. Fish and Wildlife Service, the California Department of Fish and Game, and the California Coastal Commission) should each have a single representative on the Adaptive Management Working Group. In addition, at least two scientists with conservation and restoration experience in coastal grasslands and/or rare plant conservation should be invited to serve. The City of Santa Cruz, as the landowner and as the party responsible for implementation and funding of this program, could have up to two representatives on the Adaptive Management Working Group. These seven representatives constitute the core Working Group. Other parties with a direct interest in plant conservation and/or ecosystem restoration could be added with the approval of the core Working Group, but the total number should not exceed ten representatives for logistic purposes.
3) Funding for implementation of this program should rest in part with the City of Santa Cruz and in part with the agencies

represented on the Adaptive Management Working Group. Details on the origin, timing, and amount of that funding should be determined as soon as possible. Funding should be available to conduct the management program and convene the Working Group. Part of that funding should be used to provide support staffing for the chair of the Working Group as well as to pay expenses of the Working Group incurred for travel to meetings, if feasible.

4) The initial meeting of the Adaptive Management Working Group should include the accomplishment of the following tasks:

   a. Election of a chair to develop agenda, convenes the AMWG, and assigns tasks to others on the group (including appointment to the Technical Advisory Group. The chair should serve for three years.

   b. Election of a recorder to take and distribute minutes. The recorder should serve for two years.

   c. Development of basic operating "rules", especially the issue of quorum, and schedule of meetings and management events.

   d. Discussion of funding sources and acquisition.

   e. Discussion of the adaptive management process with respect to Santa Cruz tarplant and Arana Gulch, as outlined in this program (copies supplied to Working Group well in advance of the meeting). Construction of goals and objectives and key management questions will be postponed for the agenda other meetings to follow.

   f. Discussion of the two-tracked habitat management and research program and how to implement each track for the upcoming year and for the longer time framework of the program. Make a list of ongoing research projects at Arana Gulch.

   g. Achieve consensus on the "Management Track" actions for the upcoming year, including who will conduct them, when, and with what funding. Care should be taken so that these actions do not interfere with ongoing research projects. Determine the monitoring and reporting requirements for these actions and the timing of delivery of the final reports. Determine the permit requirements for these actions. The Technical Advisory Group may be asked to finalize protocols/requirements outside of the meeting and make them available to the party responsible for conducting the actions. Development of a schedule of surgical and catastrophic actions will be postponed for the agenda of other meetings to follow.

   h. Determine how a census of Santa Cruz tarplant at Arana Gulch will be conducted during the upcoming year (Appendix B), including who will conduct it, when and with what funding. Determine the reporting requirements for the census, and the timing of delivery of the final report. Determine the permit requirements for this census. The Technical Advisory Group may be asked to finalize protocols/requirements outside of the meeting and make them available to the party responsible for the census.

   i. Development of public educational opportunities will be postponed for the agenda of other meetings in the future.

   j. Schedule the next Adaptive Management Working Group meeting later in the same year. Assign subcommittees of 2 representatives each to prepare draft versions of the following: 1) goals and objectives, 2) key management questions, and the 3) schedule of surgical and catastrophic actions for discussion at the next meeting.

5) The Adaptive Management Working Group Chairperson should set the next meetings agenda and ensure that it and the minutes of the first meeting are distributed by the recorder. The Chairperson begins working with the City of Santa Cruz and other agencies to ensure funding will be available for the management actions, census, and Adaptive Management Working Group meetings.

Exhibit G 03

LETTER A2
California Coastal Commission

Response A2-1: Policies of the Local Coastal Program (LCP) are denoted with an asterisk (*) in Table 4.1-1 that can be found on pages 4.1-10 through 4.1-14 of the Draft EIR. Section 30240 of the California Coastal Act states the following:

"(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."

Section 30240 is addressed on page 4.1-6 of the Draft EIR and is also addressed below under the Response A2-2.

The Biology section of the EIR (Section 4.2) addresses all of the resources related to the Environmentally Sensitive Habitat Areas (ESHAs) and recommends appropriate mitigation measures to avoid conflicts with the adopted Coastal Act and LCP policies. The only impact found unable to be mitigated to a less-than-significant level was the impact on historic Santa Cruz tarplant habitat. The reason that potential impacts were determined to be significant and unavoidable, despite the applicable recommended mitigation measures, was that within the footprint of the paved multi-use trails there would be a loss of historic Santa Cruz tarplant habitat. It should be noted that there is uncertainty about the viability of the seedbank within the multi-use trail alignments. The determination that the impact within the trail footprint is significant and unavoidable was a conservative approach to the seedbank location uncertainty. The only impacts to the historic tarplant habitat would be associated with trail construction, within the maximum 11-foot, 7-inch width of trail construction areas (maximum 8-foot-wide paved trail surface).

Although, for purely CEQA purposes, the City has determined that the impact to tarplant habitat is significant and avoidable, this legally conservative conclusion is not the same as stating that the project will result in any "significant disruption of habitat values" within the meaning of Section 30240. Indeed, as mitigated, the project should avoid any such significant habitat disruption. In reaching this last conclusion, the City takes note of the fact that the Coastal Act actively encourages the kind of public access and public use of coastal resources facilitated by the project. (See Pub. Resources Code, § 30001.5, subd. (c).) In other words, a CEQA "significant effect" is not necessarily the same as "significant disruption of habitat."

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Exhibit I

EXHIBIT

The DEIR explains that mapping for Areas A, B, C and D was done without the accuracy and advantages of more precise mapping allowed by the use of Global Positioning Systems (GPS) or Geographical Information Systems (GIS) and that, therefore, locations of historic populations and surveys prior to 2004 are approximate only. Nevertheless, the DEIR took the conservative view that any potential impacts on historic tarplant habitat would be significant and for this reason concluded that the impact could not be fully mitigated since the historic seedbank areas may exist where trail construction would occur.

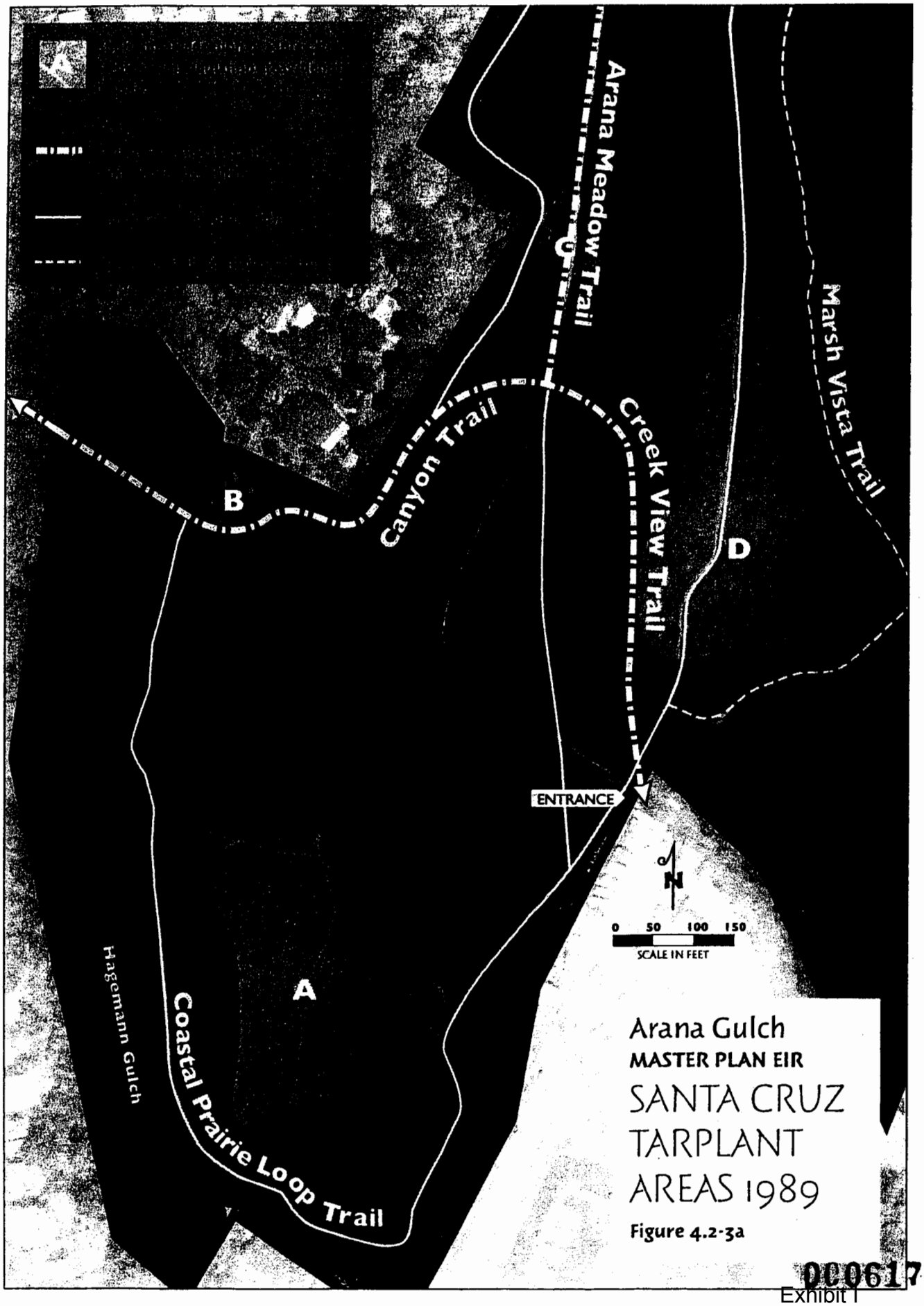
The multi-use trails avoid recently-mapped tarplant populations in Areas A and D. As shown in the attached Figure 4.2-3a, the multi-use trail alignment fully avoids the largest recent and historic tarplant Subpopulation Area A, which is located within the southern portion of the meadow. The 2004 survey identified 797 plants and the 2005 survey identified 1,552 plants. Previous surveys undertaken from 1996 through 2003 found populations ranging from 619 plants to approximately 65,000 plants in 1998. The proposed paved multi-use trail is located no closer than 400 feet from the 2004 and 2005 mapped tarplant within Subpopulation Area A (see amended Figures 4.2-4 and 4.2-5 attached). The trail alignment was proposed and designed to the furthest north to ensure subpopulation Area A is fully protected in its entirety and not degraded.

The multi-use trails also avoid recent tarplant populations within Subpopulation Area D. No tarplant was identified in Area D in 2005. Two plants were mapped in 2004. Previously surveys undertaken between 1993 and 2003 showed tarplant populations ranging from 1 to 156 plants. The alignment of the multi-use trail also aims to maintain the integrity of Subpopulation Area D. The trail alignment is located the furthest west as possible to protect the integrity of Subpopulation Area D to the maximum extent.

As noted on paged 4.2-42 of the DEIR, "The tarplant been observed in Areas B and C only once in the last 17 years. In 1998, five plants were reported observed in Area B and 20 plants in Area C. Although no plants have been observed since 1998, and prior to that no plants were observed since 1989, as a conservative approach it assumed that a seed bank may still be present throughout historic areas of tarplant occurrence.

The paved multi-use trail would avoid Area B that is about 3,600 square feet in area and would pass through Area C that is about 12,000 square feet in area (see amended Figure 4.2-3a attached). However, these mapped areas are very generalized since the mapping was done without the accuracy of GIS or GPS as explained earlier.

Policy Environmental Quality 4.5.2 of the City's Local Coastal Program addresses the Santa Cruz tarplant as related to buffers and management plans, and is addressed on page 4.1-13 of the Draft EIR. The project was found consistent with this policy due to the proposed Santa Cruz Tarplant Adaptive Management Program which is addressed in detail on pages 4.2-30 and 4.2-43.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Marsh Vista Trail
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Creek View Trail
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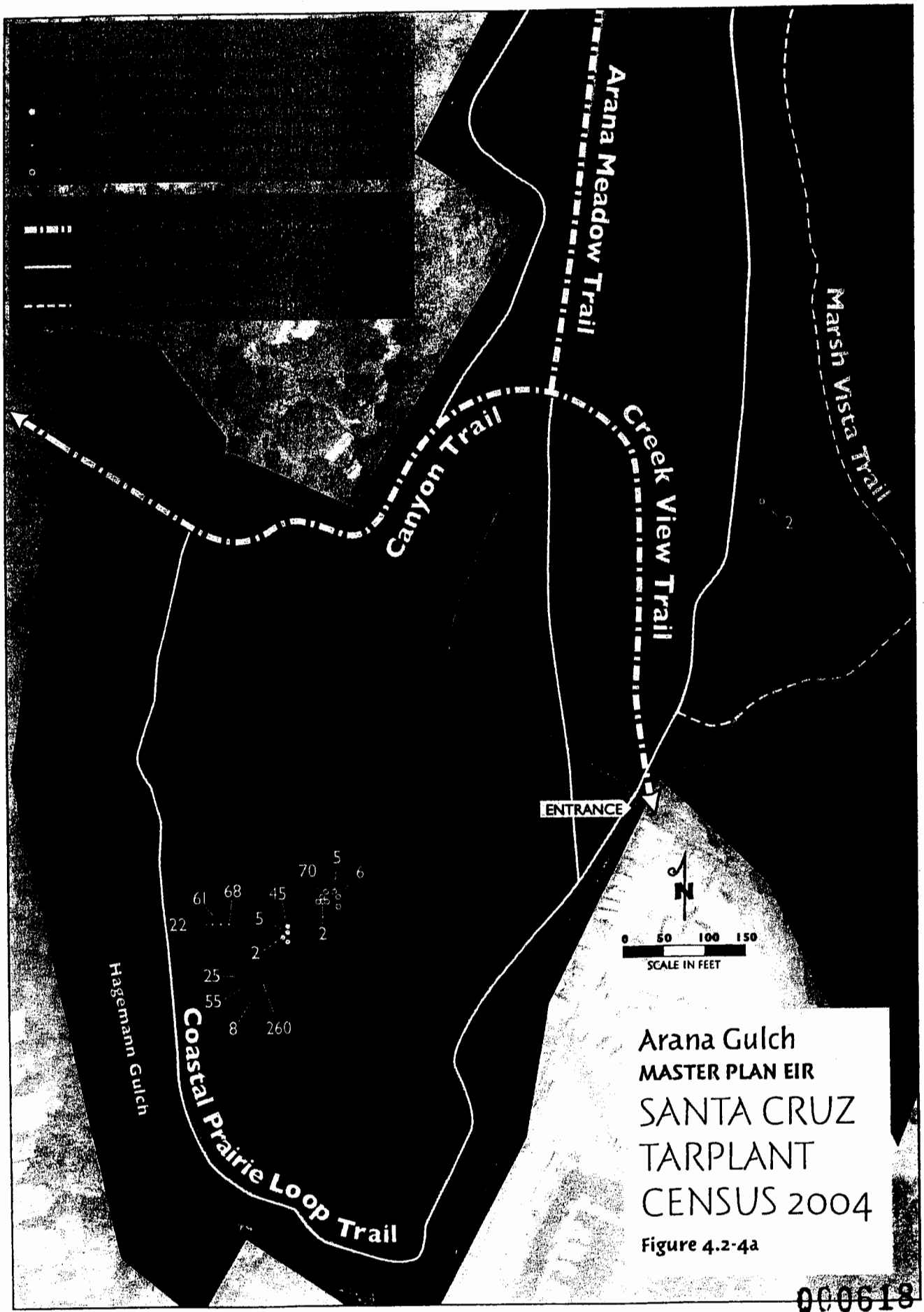
Arana Gulch
MASTER PLAN EIR
SANTA CRUZ TARPLANT AREAS 1989
Figure 4.2-3a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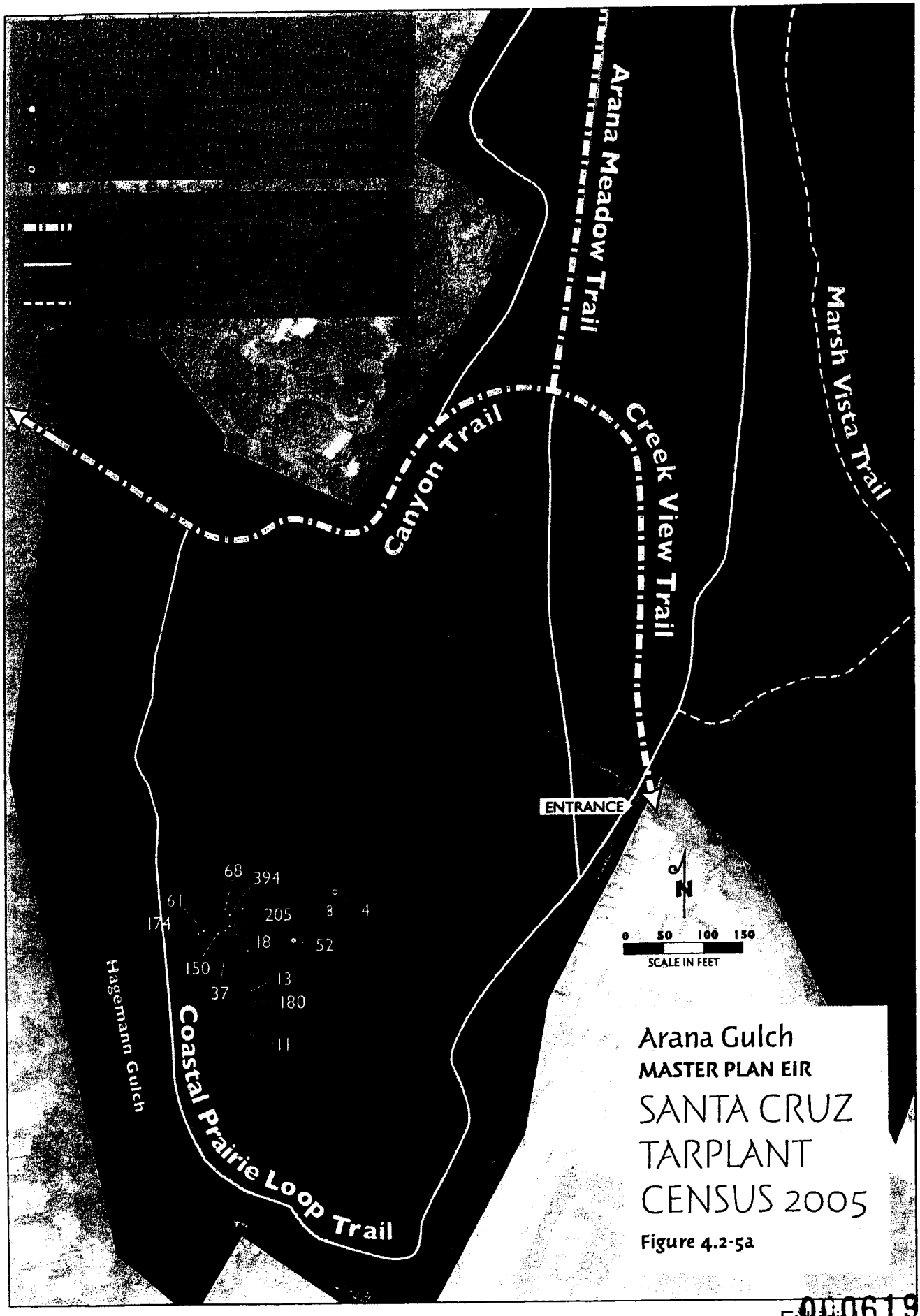
SANTA CRUZ TARPLANT CENSUS 2004
Figure 4.2-4a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Canyon Trail
Creek View Trail
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Hagemann Gulch
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Arana Gulch
MASTER PLAN EIR
SANTA CRUZ TARPLANT CENSUS 2005
Figure 4.2-5a

The uses proposed within Arana Gulch (as addressed in the Master Plan) are considered resource-dependent uses. The multi-use and pedestrian trails would be interpretive trails allowing pedestrian, bicycle, and wheelchair access to areas of the site where resources could be observed by visitors to Arana Gulch. Paved trails, allowing bicycle and pedestrian use, have been approved by the Coastal Commission in other jurisdictions within California (e.g., Monterey, Sand City, and Morro Bay) that included sensitive habitats (e.g., Smith's Blue Butterfly and Western snowy plover). The Santa Cruz tarplant mitigation measures would protect this resource to the maximum extent possible, especially with the adoption and implementation of the proposed Adaptive Management Program. However, as stated on page 4.2-44, the impact to the historic tarplant population within the multi-use trail footprint cannot be fully mitigated for the reasons stated above.

Response A2-2: As stated on that page of the DEIR, "Development within an ESHA must be resource-dependent as stated in Section 30240 of the Coastal Act. Any exceptions to compliance with Local Coastal Program policies are to be within the context of a resource management plan that is approved by the Coastal Commission. The Arana Gulch Master Plan serves as a resource management plan for the 67.7-acre property. Three Management Areas are proposed within the Master Plan to specifically focus resource management. ESHAs within Arana Gulch include the Santa Cruz tarplant habitat, riparian habitat, and wetlands."

The last paragraph on page 4.1-6 of the DEIR is changed as follows:

> "~~Any exceptions to compliance with Local Coastal Program policies are to be within the context of a resource management plan that is approved by the Coastal Commission.~~ The Arana Gulch Master Plan serves as a resource management plan that is intended to protect the resources within the ESHA to the maximum extent possible. For this reason, the Arana Gulch Master Plan includes a Santa Cruz Tarplant Adaptive Management Program (see Appendix A)."

For all greenbelt properties in the City of Santa Cruz, park master plans are prepared and include resource management policies and programs for any sensitive resources that are identified.

Response A2-3: Comment noted. As stated in Mitigation Measure BIO-2(a), a jurisdictional wetland delineation may be necessary. The following text change is to be included on page 4.2-40 to clarify the issue of California Coastal Commission criteria:

> "....with verification by the U.S. Army Corps of Engineers (Corps). Any jurisdictional wetland delineation shall also use the California Coastal Commission criteria (i.e., one positive indicator) since the project site is within the jurisdiction of the California Coastal Commission. Because the Commission criteria and the Corps criteria differ, it is possible that

INFORMATION REPORT

DATE: April 18, 2000

TO: Parks and Recreation Commission

FROM: Kirk Lenington, Resource Ecologist

SUBJECT: Santa Cruz Tarplant Management at Arana Gulch

On April 3, 2000, the Parks and Recreation Commission requested additional information on the natural history of Santa Cruz tarplant (*Holocarpha macradenia*) and the occurrence of Santa Cruz tarplant at Arana Gulch. Additionally, questions were raised about the current status of the management program for Santa Cruz tarplant and Memorandum of Understanding (MOU) entered into between the City of Santa Cruz and the California Department of Fish and Game. This information report presents current information regarding the status of Santa Cruz tarplant and the recovery and management program at Arana Gulch.

BACKGROUND:

Santa Cruz tarplant is an aromatic annual herb in the aster (Asteraceae) family. It is currently known in California from coastal grasslands and prairies in Contra Costa, Santa Cruz, and Monterey counties. Habitat for Santa Cruz tarplant historically consisted of grasslands and prairies found on coastal terraces below 330 ft in elevation. At the time of European contact, coastal prairies covered an estimated 865,000 acres in California. Currently, approximately 1,977 acres of high-quality coastal prairie remain, of which less than 5 percent (100 acres) is Santa Cruz tarplant habitat. In Santa Cruz county, Santa Cruz tarplant is known from 11 populations, only one of which is located on City of Santa Cruz property; Arana Gulch. At the 63 acre Arana Gulch property, 17 acres has been designated as the Santa Cruz tarplant management area, within which four historic populations of Santa Cruz tarplant (occupying 5 acres) are located. The location of the management area and the four Santa Cruz tarplant populations is shown on the attached figures. Figure 1 presents the location of the tarplant management area within the Arana Gulch property and Figure 2 presents the location of the four Santa Cruz tarplant populations within the management area.

Effective April 19, 2000, Santa Cruz tarplant was listed by the U.S. Fish and Wildlife Service as threatened according to the Endangered Species Act of 1973, as amended. Santa Cruz tarplant is also listed as endangered by the California Department of Fish and Game according to the California Endangered Species Act. Santa Cruz tarplant is threatened by extinction primarily through habitat alteration and destruction. Secondary impacts such as competition from nonnative species, alteration of hydrology, and trampling from casual use also threaten the continued persistence of the remaining populations.

Exhibit I

Arana Gulch is among the largest of the remaining populations of Santa Cruz tarplant. The population has exhibited large fluctuations since the management program was initiated in 1995 (see

Table 1 of attachment). Because Santa Cruz tarplant produces large seedbanks, historic populations may not display individuals for any given year, but still may have viable populations in other years. This appears to be the case at Arana Gulch, where an estimated population of 100,000 individuals was observed in the late 1980's. Cattle grazing was terminated in 1988 and over the following years, the population size decreased dramatically due to competition with nonnative grasses. In 1993 only 133 individuals appeared and in 1994 no individuals were observed.

The City purchased the property in 1994 and initiated a management program in 1995. This program has been successful, however large fluctuations in numbers are still observed, with a high of 20,000 individuals in 1997 and a low of 314 individuals last year, 1999.

DISCUSSION:

The current recovery and management program is detailed in the Memorandum of Understanding (MOU) between the City of Santa Cruz and the California Department of Fish and Game. This MOU was recently updated because the previous MOU expired on January 30, 1999. This current MOU was signed by the Department of Fish and Game on September 21, 1999 and will expire on January 30, 2003. The MOU permits the City to implement a recovery and management program for the Santa Cruz tarplant population at Arana Gulch. These management activities may include scraping, mowing, grazing, or burning. Parks and Recreation Department staff are currently working with Deborah Hillyard, DFG Botanist, and Sue Bainbridge of the Jepson Herbarium at the University of California, Berkeley, to implement this year's management program. Because of the recent federal listing of the species, staff is also consulting with the U.S. Fish and Wildlife Service to determine if a separate MOU is required or if the current MOU is adequate.

To assist in implementing the recovery and management program, the California Department of Fish and Game has recently allocated $10,000 to the City of Santa Cruz to assist in implementing the recovery and management program over the next two years. When signed, this funding will extend to June 30, 2002. The Department of Fish and Game previously contracted directly with a contractor to mow the Arana Gulch tarplant management area. This funding is to reimburse the City for the costs associated with tarplant management activities.

Although now under protection and active management, the Arana Gulch Santa Cruz tarplant population is still threatened by several factors. These include competition with nonnative grasses, and random events such as drought and trampling by park users and their pets. Trampling by park users and their pets off of established trails results in increased disturbance of the soil which facilitates the establishment of nonnative plant species that outcompete and shadeout Santa Cruz tarplant.

Attachments:

Figure 1: Tarplant Management Area
Figure 2: Historic Tarplant Colonies

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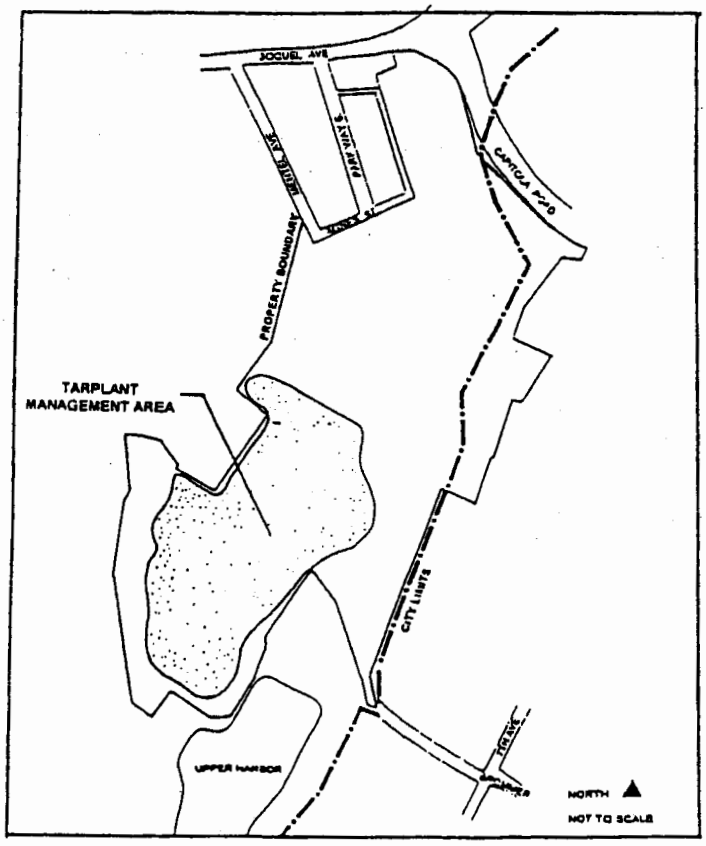
I Introduction

The aim of the *Santa Cruz Tarplant Recovery and Management Program* is to provide guidelines for the recovery and management of the Santa Cruz tarplant (*Holocarpha macradenia*) within a framework of grassland restoration at Arana Gulch, a 63-acre City-owned greenbelt property. The Santa Cruz tarplant is a State-listed endangered species. The tarplant population has been in rapid decline at Arana Gulch since grazing ended in the 1980s, however, it is believed a healthy seed bank continues to exist. The site has been identified as having good potential for recovery of the tarplant. The Tarplant Management Area is shown in Figure 1 below.

The City of Santa Cruz General Plan (Policy 2.2.7) calls for an on-site management program for the Santa Cruz tarplant within the Arana Gulch greenbelt property. Since acquisition of the property in September of 1994, the City of Santa Cruz Parks and Recreation Department has held the primary responsibility for management of the Arana Gulch property.

FIGURE 1
TARPLANT MANAGEMENT AREA



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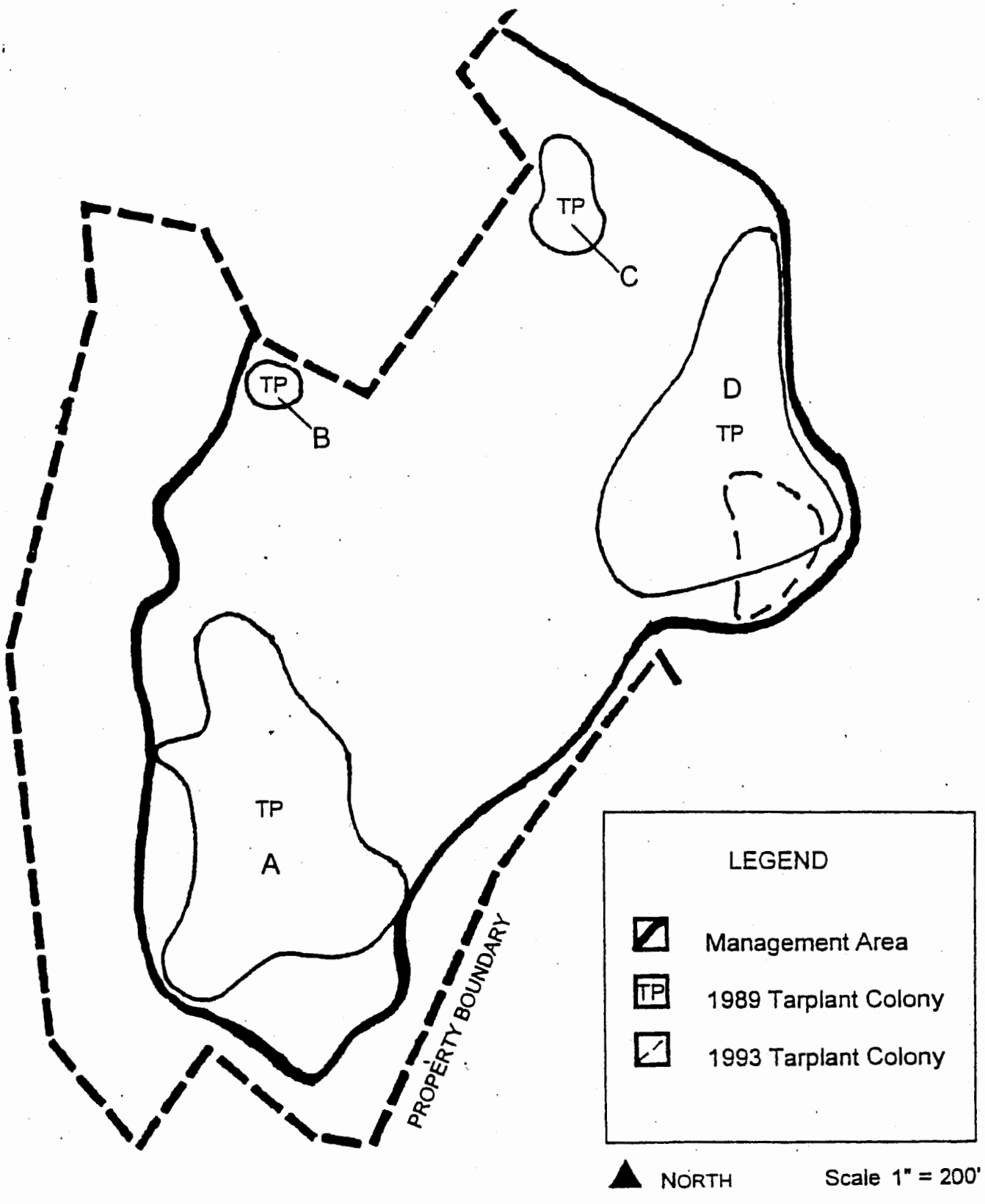


TARPLANT MANAGEMENT AREA
HISTORIC TARPLANT COLONIES
1989 and 1993

FIGURE 2

Exhibit L
002476 31

Arana Gulch Tarplant Survey and Map

The Habitat Restoration Group

ARANA GULCH SANTA CRUZ TARPLANT SURVEY

Prepared for:

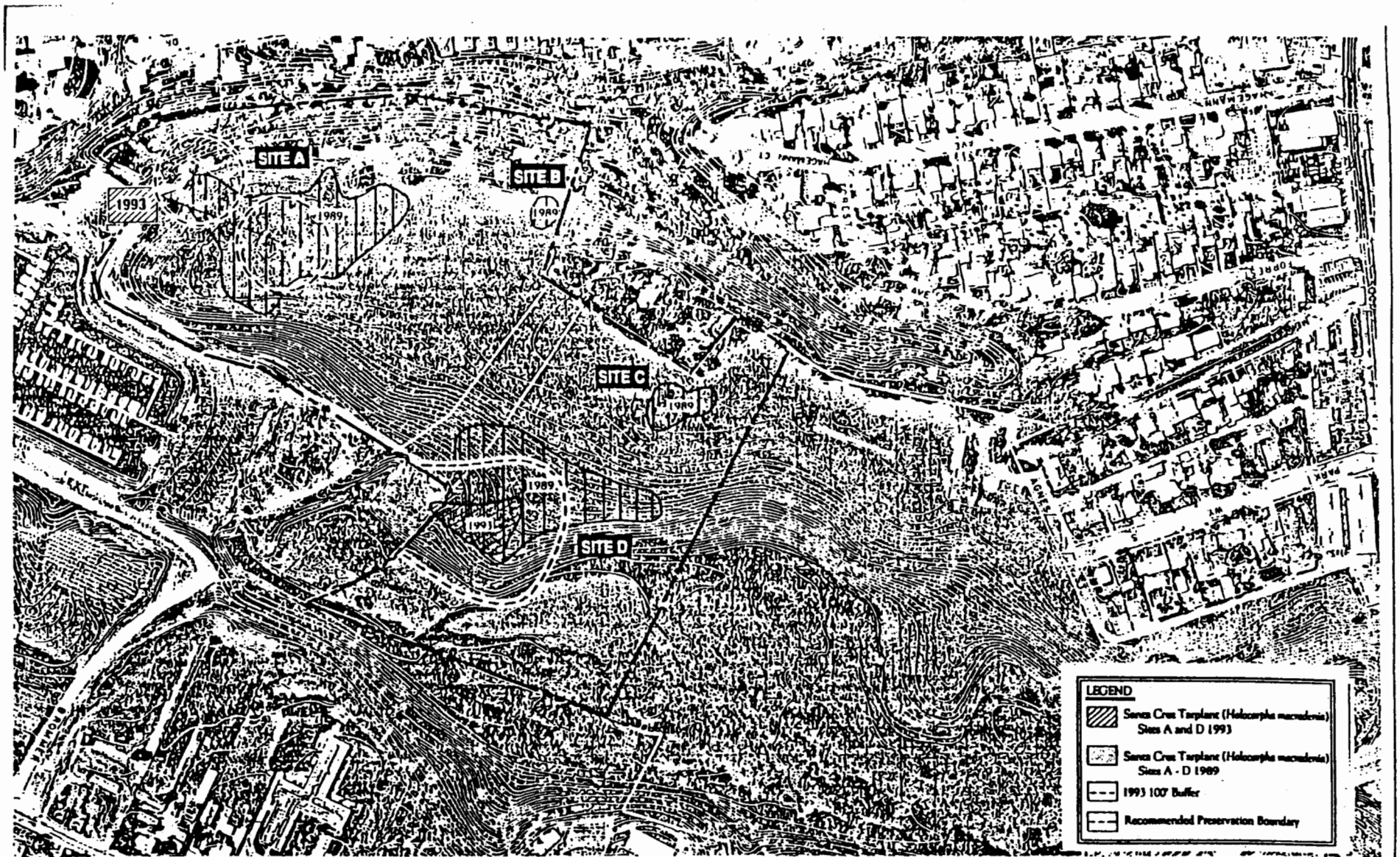
CITY OF SANTA CRUZ

Prepared by:

THE HABITAT RESTORATION GROUP
John Gilchrist, Principal
Mara Noelle, Botanist

dh3099

EXHIBIT F Exhibit I



The Habitat Restoration Group

Arana Gulch
Santa Cruz Tarplant Survey - 1993

Designed	Date		
	8/93	4	
Drawn		3	
		2	
Checked		1	REVISED 9/15/93

Scale: 1" = 100'
Project No.: 728-01
Sheet 1 of 1

Exhibit 102
Final

Arana Gulch Tarplant Survey and Map

The Habitat Restoration Group

ARANA GULCH SANTA CRUZ TARPLANT SURVEY

Prepared for:

CITY OF SANTA CRUZ

Prepared by:

THE HABITAT RESTORATION GROUP
John Gilchrist, Principal
Mara Noelle, Botanist

D:3099

EXHIBIT E

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ARANA GULCH SANTA CRUZ TARPLANT SURVEY

INTRODUCTION

The distribution of Santa Cruz tarplant (*Holocarpha macradenia*) on the Arana Gulch property in Santa Cruz County, California was re-surveyed in July, 1993. This survey was conducted in the areas where four populations Santa Cruz tarplant were documented in a report prepared in 1989 by EA Engineering Science and Technology, Inc. The 1993 survey areas were somewhat larger that the 1989 sites and include suitable habitat areas adjacent to the known populations. These Santa Cruz tarplant sites are depicted as areas A-D in the 1989 report (see Figure 1). The remainder of the Arana Gulch property was not surveyed for new populations of Santa Cruz tarplant.

Santa Cruz tarplant is listed by the California Department of Fish and Game (CDFG) as an endangered plant. In California, a plant is considered endangered when the survival and reproduction of the species is in immediate jeopardy from one or more causes. State listed species are protected under the California Environmental Quality Act (CEQA) and the California Endangered Species Act. The CDFG reviews proposed projects and provides CDFG approval and/or recommends measures to protect the species or mitigate for the loss of the species. The CDFG is currently undertaking the development of a Recovery Plan for Santa Cruz tarplant.

Santa Cruz tarplant is listed by the U.S. Fish and Wildlife Service (USFWS) as a Candidate 1 species for threatened or endangered status. This indicates that the USFWS has sufficient data on file addressing the distribution of the species and the threats to its preservation, but has not yet gone through the formal listing process. Candidate 1 species do not receive formal protection under the Endangered Species Act. The USFWS can choose to provide some level of protection and/or conservation and management recommendations for certain Candidate species, yet protection is not required by law.

METHODS

A survey of Santa Cruz tarplant sites A-D (as documented in 1989) was performed by walking transects which were spaced approximately 15 feet apart. Given the predominance of non-native grassland vegetation, this distance was necessary to provide thorough visual observation. The extent of the Santa Cruz tarplant populations observed during the 1993 survey were recorded on the project map, an aerial photograph provided by the City of Santa Cruz, scale 1″=100′ (see Figure 1). The density of each population was determined by counting individuals; the results are outlined in Table 1, Density Figures for Santa Cruz Tarplant, Arana Gulch. The letter designation for each population in Table 1 and on the 1993 project map corresponds to the letter used for the populations on the 1989 map depicting Santa Cruz tarplant. The California Natural Diversity Data Base (CNDDB) was researched for information regarding the distribution of Santa Cruz tarplant.

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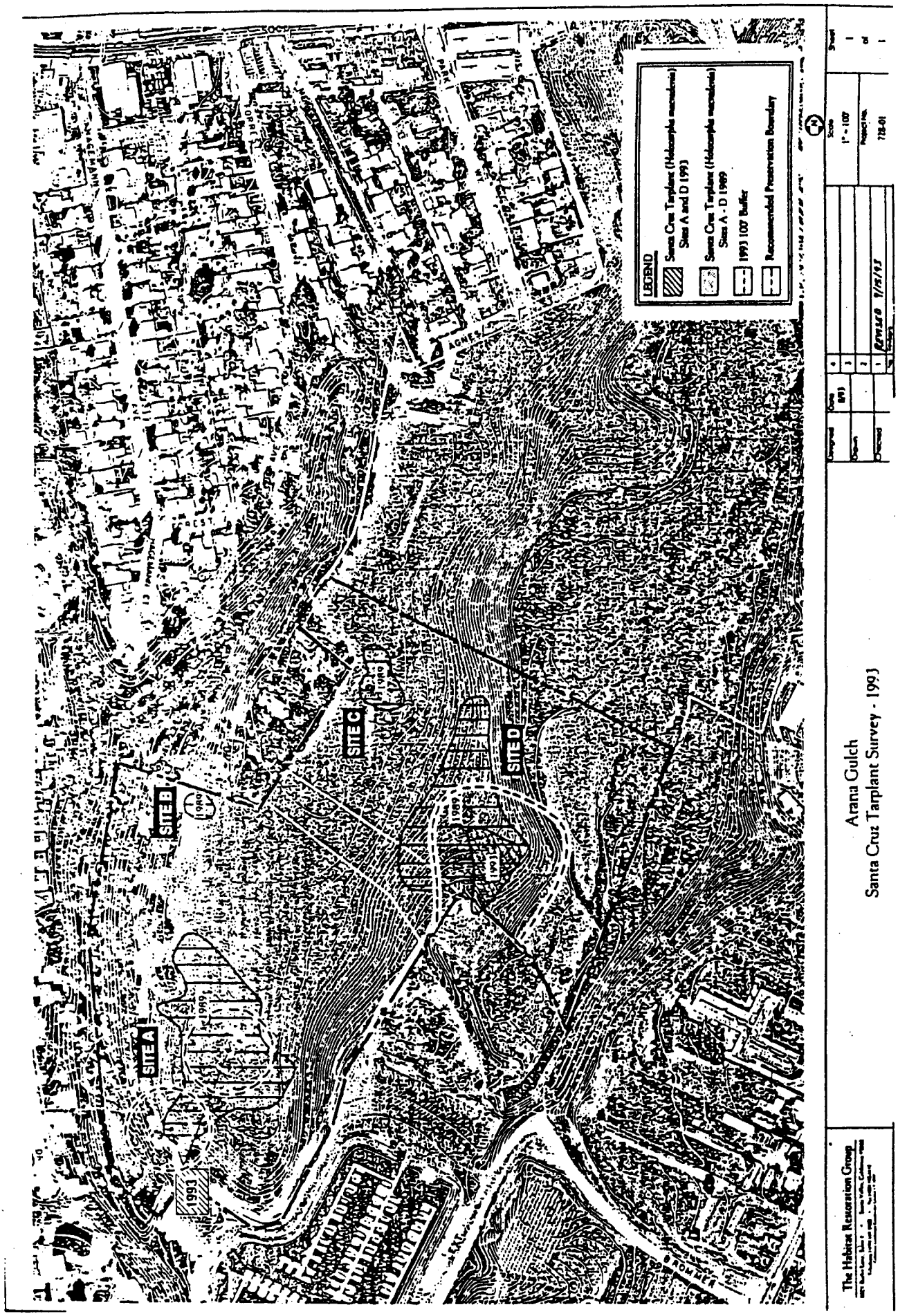
LEGEND
Santa Cruz Tarplant (Holocarpha macrodenia) Sites A and D 1993
Santa Cruz Tarplant (Holocarpha macrodenia) Sites A - D 1989
1993 100' Buffer
Recommended Preservation Boundary
SITE A
SITE B
SITE C
SITE D
1989
1993
Arana Gulch
Santa Cruz Tarplant Survey - 1993
The Habitat Restoration Group
Scale
1" = 100'
Project No.
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RESULTS

The size and density of the populations of Santa Cruz tarplant observed in 1993 are significantly smaller than those recorded in 1989. Much of the project area was dominated with non-native grasses such as wild oat (*Avena barbata*) and perennial rye grass (*Lolium perenne*), as well as an associated non-native herbaceous species, wild radish (*Raphanus sativus*). The 1992-93 rainy season had above-normal rainfall and the density of grasses generally tended to increase in response to this seasonal condition. This increased density of grasses does not favor the reproduction and growth of Santa Cruz tarplant. Many of the populations of Santa Cruz tarplant throughout Santa Cruz County were reported to be smaller in size and density than in previous years when the growth of the grasses was suppressed by drought (Deborah Hillyard, pers. comm., 1993).

The 1993 survey concludes that 133 individuals of Santa Cruz tarplant occur on the Arana Gulch property (see Table 1). Site A has two individuals spaced approximately 250' apart; one plant occurs in the annual grassland and one plant occurs in the perennial bunchgrass grassland.

Site D has 133 individuals occurring in the annual grassland, although the perennial bunchgrass grassland occurs on the slope immediately east of the population. Site D encompasses approximately 0.4 acre.

Site B and Site C did not have individuals of Santa Cruz tarplant in 1993. Portions of these sites had been mowed prior to the field survey so the results of the 1993 survey of these two areas are inconclusive.

The CNDDB and the California Native Plant Society indicate that the Santa Cruz tarplant on the Arana Gulch property had a density greater than 1,000 plants in 1982, and a density greater than 115,000 plants in 1986 and 1988.

Table 1. Density Figures for Santa Cruz Tarplant, Arana Gulch

Population Designations	Density (1993)	Density (1986)*	Density (1988)*
Population A	2	Population estimate by site not available	Population estimate by site not available
Population B	0		
Population C	0		
Population D	131		
Total	**133**	**115,000**	**115,000**

* This estimate was provided by the California Native Plant Society.

The acreage figures for the 1993 tarplant sites A and D, and acreages which include a 100-foot buffer zone surrounding each site are shown in Table 2.

Table 2. Santa Cruz Tarplant and Buffer Zones Acreage - Sites A and D, 1993

Sites:	Site A	Site A with Buffer	Site D	Site D with Buffer
Acres:	0.01	2.0	0.4	2.5

RECOMMENDATIONS

1. It is recommended that the 1989 mapping of Santa Cruz tarplant be utilized for the designation of tarplant habitat. This recommendation is based on the following factors.

   a. The non-native grasses grew extremely well in 1993 in response to above-normal rainfall. As a result of competition with these non-native grasses, the Santa Cruz tarplant populations throughout the County were not as extensive as in previous years.

   b. It is likely that the seed of Santa Cruz tarplant in populations A-D is still viable. If environmental conditions are favorable, the populations of Santa Cruz tarplant could once again germinate and encompass the areas mapped in 1989.

   c. Two of the sites, Sites B and C, had been partially mowed prior to the survey; therefore, the results of 1993 survey are inconclusive for these sites and should not be utilized for planning decisions.

   d. The California Department of Fish and Game will be preparing a Recovery Plan for Santa Cruz tarplant. A seminar discussing the management plan will be conducted in the fall of 1993. The plan is being prepared in response to the overall decline in the density of Santa Cruz tarplant populations due to the incursion of non-native grasses, lack of management, and urbanization. It is likely that the Arana Gulch property will be included in the Recovery Plan (*ibid.*).

Coastal Commission's jurisdiction or review area includes a 100-foot wide buffer around riparian habitats.

11. Special Status Plant Species

There are eight special status plant species with recorded occurrences in the Santa Cruz and Soquel quadrangles, as listed on Table 8. The Santa Cruz tarplant (*Holocarpha macradenia*), a species State-listed as endangered species and proposed for Federal threatened status, has been observed adjacent to the proposed locations for Alignments A1 and D2. The species occurs in four disjunct colonies along the grassy ridge of the Arana Gulch greenbelt lands (CDFG, 1999). One other species, Choris's (or artist's) popcorn flower (*Plagiobothrys chorisianus)* has been documented south of the locations for two alignments; this species is considered locally unique.

Botanical surveys conducted on the site in 1977, 1982 and 1991 by botanist Randall Morgan, and in 1995 and 1997 by the Habitat Restoration Group have not documented other special status plant species within the Broadway/Brommer project area. No other plant species have been recorded with the California Natural Diversity Data Base (CDFG, 1998). No other rare or locally unique species have been documented on the site. The distribution of the Santa Cruz tarplant within the project area is depicted on Figure 11.

a. Santa Cruz Tarplant. The Santa Cruz tarplant is State-listed as endangered and proposed for Federal status as threatened. The species is currently known from 12 native populations and 6 experimental seedings. Six of the native populations occur around the City of Santa Cruz (USFWS, 1998). The "Arana Gulch population" occurs on the 63-acre parcel of land owned by the City of Santa Cruz, upon which the Broadway/Brommer project is proposed. In the late 1980s the tarplant population was comprised of about 100,000 individuals (USFWS, 1998). Grazing by cattle was terminated in 1988, and over the next few years, population size decreased due to competition with non-native grasses. In 1989, an inventory identified four tarplant colonies on the site which covered approximately 5 acres. By 1993, the population was down to 133 individuals and in 1994, no individuals were observed (USFWS, 1998). In 1994 the city acquired the property and in 1997 entered into a Memorandum of Understanding (MOU) with CDFG. This voluntary agreement sets forth actions that can be implemented by the City of Santa Cruz Department of Parks and Recreation to encourage germination of the tarplant, such that a stable population can be obtained (City of Santa Cruz, 1997). Management actions began at one colony in 1995 and included fall mowing, raking, hoeing and mechanical scraping of the habitat. The following tarplant management actions and probable results have occurred at the Arana Gulch site:

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Exhibit I
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Table 8
SPECIAL STATUS PLANT SPECIES THAT ARE KNOWN OR MAY POTENTIALLY OCCUR IN THE PROJECT VICINITY

Species	Status (Fed/State/CNPS)	Known Occurrences or Known Habitat in Project Vicinity	Known or Potential Habitat within Project Site
Santa Cruz Tarplant (*Holocarpha macradenia)*	PT/SE/List 1B	Coastal terrace prairie and grasslands, including non-native grasslands; occurrences known within project area.	Plants observed in one colony adjacent to AlignmentA1; One historic colony located adjacent to Alignment A1/D2 near Hagemann Gulch.
Gairdner's Yampah *(Periderdia gairdneri ssp. gairdneri)*	SSC/none/List 4	Coastal terrace prairie and grasslands, including non-native grasslands	No plants were observed in project area during focused surveys, 1996-present.
Robust Spineflower (*Chorizanthe robusta var. robusta)*	FE/none/List 1B	Coastal terrace prairie and grasslands, often in sandy substrates, including non-native grasslands.	No plants were observed in project area during focused surveys, 1996-present.
San Francisco Popcorn Flower *Plagiobothrys diffusus)*	SSC/SE/List 1B	Coastal terrace prairie and grasslands, often in moist locales including non-native grasslands	No plants were observed in project area during focused surveys, 1996-present.
Santa Cruz Clover *(Trifolium buckwestiorum)*	SSC/none/List 1B	Coastal terrace prairie and grasslands, often in moist locales including non-native grasslands	No plants were observed in project area during focused surveys, 1996-present.
Kellogg's horkelia *(Horkelia cuneata ssp. sericea)*	SSC/none/List 1B	Coastal terrace prairie and adjacent woodlands, including non-native grasslands	No plants were observed in project area during focused surveys, 1996-present.
Maple-leaved Checkerbloom *(Sidalcea malachroides)*	none/none/List 1B	Coastal terrace prairie and grasslands, including non-native grasslands	No plants were observed in project area during focused surveys, 1996-present.
San Francisco Campion *(Silene vericunda ssp. vericunda)*	SSC/SE/List 1B	Coastal terrace prairie and grasslands, including non-native grasslands	No plants were observed in project area during focused surveys, 1996-present.
Choris's Popcorn Flower (*Plagiobothrys chorisianus)*	none/none/List 4	Coastal terrace prairie and grasslands, including non-native grasslands	Plants were observed in Tarplant Area A, south of Alignments A1 and D2 in 1998.

Legend to Status Codes:

Federal: PT = proposed for listing as threatened
FE = listed as endangered
FT = listed as threatened
SSC = species of special concern

State: SE = listed as endangered

CNPS: List 1B = plants endemic and rare through their range and currently vulnerable due to limited or threatened habitat.
List 4 = Watch list of plants with limited distribution that have low vulnerability and threat at this time; plants are often uncommon, significant

Source: Biotic Resources Group, 1999.

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- In fall 1995, Tarplant Area A was mechanically and manually scraped, mowed and raked to stimulate tarplant germination. Most likely in response to these actions, approximately 7,000 or more tarplants were observed in Tarplant Area A during the summer of 1996.
- In fall of 1996, an arson fire occurred on a portion of Area A. Approximately 17,000 individuals were documented in Area A the following summer (1997).
- Hand scraping in small plots was conducted in portions of Area D in the fall of 1996. As a result of these actions, seven tarplants were observed in summer 1997.
- Additional hand scraping in Area D was conducted in spring of 1997. In the fall of 1997, a prescribed burn was conducted in Area A.
- In summer 1998, Area A contained approximately 13,000 tarplants; 17 tarplants were observed in Area D.
- A portion of Area D was burned as part of a City-sponsored prescribed fire program in the fall of 1998. The results of these actions on the tarplant were not evident at the time of the ADEIR/EA (i.e., pre-blooming period for the species), but will be reported in the FEIR.

No active management actions have occurred in the two other tarplant areas (Areas B and C). While no tarplant individuals have been observed at either of these two locations since 1989, viable seed is expected to be present in the soil. Recent studies have suggested that the seed bank may be viable for as much as 10 to 15 years (Baldwin, 1995).

Since the Santa Cruz tarplant is an annual species, the size of the population is dynamic with slight shifts in location according to the environmental conditions of a given year. Coupled with relatively long seed viability, the geographical extent of the population has been considered to consist of the largest area recorded for each colony (i.e., Areas A-D) within the last fifteen years (as depicted on Figure 11). Typically, a 100-foot buffer around the Santa Cruz tarplant is recommended by CDFG. However, since the Arana Gulch site is being actively managed for the recovery of the species, with visible positive results, CDFG's primary concerns are that proposed projects do not inhibit the implementation of the management actions outlined in the MOU or jeopardize the goal of a stable, long-term tarplant population at the site (Hillyard, 1996).

b. Choris's Popcorn Flower. This popcorn flower (CNPS List 4; No State or Federal status) was observed in the project study area in 1998. The species was noted in the southern portion of the grassland amid tarplant Area A. Choris's popcorn flower is a locally unique plant species and is considered a species of

limited distribution by the California Native Plant Society (i.e., List 4). Representatives of the California Native Plant Society, Santa Cruz County Chapter, observed this species in 1998. The species was observed following grassland management activities implemented by the City Parks and Recreation Department (CNPS, 1998).

12. Special Status Wildlife Species

Special status wildlife species are those that are listed as threatened or endangered by state or federal agencies, as well as those species listed as Species of Special Concern by state and federal agencies due to declining numbers and/or habitat. Migratory birds are protected by the federal Migratory Bird Act, and nesting raptors are protected under State Fish and Game Code. The California Department of Fish and Game's California Natural Diversity Data Base (CDFG, 1998) was accessed to retrieve occurrences of special status wildlife, as well as general knowledge of special status species usually associated with the habitats present on the project site. Table 9 summarizes the current status and occurrence of special status wildlife species that are known or may potentially occur in the study area. Two species, the tidewater goby, and steelhead trout are presumed to occur in habitats adjacent to Alignments A1 and D2. California red-legged frog was not found on-site during 1999 protocol-level surveys, but could potentially migrate onto the site. Raptors have been documented in the past as nesting in Hagemann Gulch near the proposed path alignment, although no nesting raptors were observed in 1999.

a. Tidewater Goby. The tidewater goby *(Eucyclogobius newberryi)*, a species federally-designated as endangered by the United States Fish and Wildlife Service (USFWS), has been recorded from within the Santa Cruz Yacht Harbor (an area historically known as Woods Lagoon) (CDFG, 1999). The species was last observed in 1984. Based on an analysis of current habitat conditions, the species is presumed to still occur in the area. Suitable habitat for the goby is considered to be from the mouth of the Yacht Harbor to approximately 1 mile upstream, into the Upper Harbor area (Smith, 1998).

b. California Red-Legged Frog. The California red-legged frog (*Rana aurora draytonii)* is a State species of special concern and Federally listed as threatened. This species is found in quiet pools along streams, in marshes, and ponds. Red-legged frogs are closely tied to aquatic environments, and favor intermittent streams which include some areas with water at least 0.7 meters deep, a largely intact emergent or shoreline vegetation, and a lack of introduced bullfrogs and non-native fishes. They are generally found on streams having a small drainage area and low

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State of California - The Resources Agency
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

RECEIVED
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CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

GRAY DAVIS, *Governor*

Flex your POWER

March 13, 2002

Mr. Ron Marquez
City of Santa Cruz
Department of Public Works
809 Center Street, Room 201
Santa Cruz, CA 95060

Dear Mr. Marquez:

Broadway-Brommer Bicycle/Pedestrian Path Connection
Santa Cruz, Santa Cruz County
SCH Number 988102080

At the request of the City, Department of Fish and Game (Department) personnel have reviewed and prepared comments on the Broadway-Brommer Bicycle/Pedestrian Path Connection project. The project was analyzed in a November 1999 Draft Environmental Impact Report (DEIR). Department jurisdiction for this proposal stems from impacts to the riparian corridors on the western and eastern peripheries of the project location and to the Santa Cruz tarplant *(Holacarpha macradenia)*, a plant listed as Endangered by both the State and Federal Endangered Species Acts. Two site visits were carried out, the first a meeting between Mr. Dave Johnston of the Department and Mr. Kirk Lenington of the City Parks and Recreation Department, and the second by Mr. Johnston and Ms. Deborah Hillyard, also of the Department.

As proposed, the route of the pathway will cross Hagemann Gulch from the west, traverse grassland area and then pass over Arana Gulch to the east. Hagemann Gulch is deeply incised and supports a dense riparian community made up of riparian scrub, riparian forest, and oak woodland. A number of invasive exotics such as eucalyptus and broom are also present in the corridor. Arana Gulch, to the east contains a brackish lagoon, salt marsh, and riparian scrub, in addition to a high proportion of non-native plant species.

Development in these areas will require the issuance of a Streambed Alteration Agreement (SSA) pursuant to Section 1601 of the Fish and Game Code. Issuance of the SAA is subject to review under the California Environmental Quality Act (CEQA). The

EXHIBIT G
Exhibit I

Department, as a responsible agency under CEQA, will consider the local jurisdiction's (lead agency) Environmental Impact Report for the project as part of our review. The review process evaluates whether adequate avoidance, mitigation, monitoring and reporting commitments have been incorporated into the project design. A SAA package can be obtained by contacting the Streambed Alteration Section at (707) 944-5520. In this case, it appears impacts can be substantially lessened by careful routing of the path through these areas, and our review would focus on that issue as well as ensuring that appropriate mitigations for unavoidable impacts will occur.

The grassland area between Hagemann Gulch and Arana Gulch contains an extensive population of Santa Cruz tarplant, as well as areas of seasonal wetlands and coastal terrace prairie. A number of surveys of the tarplant done in this area show that in recent years the population has been seen primarily in four general areas. The population has been mapped by a number of parties, but the map of the tarplant in the EIR appears to be based primarily on mapping done in the 1980s; since that time the tarplant has been observed in locations other than those mapped.

In 1997, in recognition of the value of the site for the continued survival of the Santa Cruz tarplant, the City of Santa Cruz entered into a joint Memorandum of Understanding (MOU) with the Department. The purpose of the MOU is to provide a mechanism for cooperation, coordination and information exchange between the City and the Department in the implementation of a recovery strategy for the Santa Cruz tarplant. The MOU was renewed in 1999, to extend to January 2003. The intent of the recovery program was stated as follows in the MOU:

> *"The aim of the tarplant recovery program is to encourage germination and survivorship of the tarplant while restoring the coastal prairie habitat within which it is found at the City owned Arana Gulch greenbelt property. The long term goal is to encourage a stable tarplant population within a diverse coastal prairie grassland at Arana Gulch."*

The basis for the MOU was development of a Santa Cruz Tarplant Recovery and Management Program (SCTRMP); the SCTRMP established a Tarplant Management Area of about 15 acres, including all four historic tarplant colonies identified in 1989. The Department has contracted with the University of California

to conduct research and monitoring at the Arana Gulch site in cooperation with the City. The City has directed active management in the area, consistent with the MOU, and tarplant have been observed in various locations within the Tarplant Management Area. Population size and locations of individuals has varied from year to year, as is typical of an annual plant.

Implementation of alternative A-1 and D-2 would require a permit from the Department pursuant to §2081 of the California Endangered Species Act (CESA). Provisions of CESA require that the impacts to the species from any project for which the Department issues a permit be "minimized and fully mitigated." We believe that impacts to Santa Cruz tarplant have been underestimated, and that the mitigation proposed will not fully mitigate identified impacts. This population represents one of only two potentially recoverable populations that are in public and/or conservation ownership; in addition, this population has been demonstrated to be genetically unique. We believe that splitting the population in two by a bike path is not appropriate, may limit the recoverablity of the population, and may not be mitigable.

In addition, we believe the entire Tarplant Management Area to be Environmentally Sensitive Habitat Area (ESHA) as defined by the Coastal Act and the Local Coastal Program. Development standards preclude any but resource dependant uses within an ESHA, and then only if the project would not compromise the resources for which the ESHA was designated. We do not believe that alternatives A-1 and D-2 are consistent with ESHA designation.

While we recognize the need for a bicycle route which would connect the Live Oak neighborhood of the County to the City of Santa Cruz, we do not believe that the current project configuration can be done in an environmentally responsible manner. We recommend that the City identify alternatives which would not result in significant, potentially unmitigable, impacts to sensitive resources. We believe the City has demonstrated its leadership by recognizing the value of Arana Gulch through acquisition, and hope they will continue that legacy by encouraging recovery of the endangered tarplant indigenous to the site. The Department looks forward to continued cooperation with the City in conservation of this unique and irreplaceable resource.

Questions regarding this letter and further coordination on these issues should be directed to Ms. Deborah Hillyard, Environmental Scientist, at (805) 835-4318; Mr. Dave Johnston, Environmental Scientist, at (831) 475-9065; or Mr. Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

Sincerely,

Cindy Catalano

for Robert W. Floerke
Regional Manager
Central Coast Region

cc: Dr. Charles Lester
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

CalTrans
District 5
50 Higuera Street
San Luis Obispo, CA 93401

Santa Cruz County Regional
Transportation Commission
1523 Pacific Avenue
Santa Cruz, CA 95060

CITY OF SANTA CRUZ

CITY ATTORNEY'S OFFICE

M E M O R A N D U M

CONFIDENTIAL ____ YES __X__ NO

September 20, 2000

TO: Jim Lang, Director of Parks and Recreation

FROM: John G. Barisone, City Attorney

RE: Environmentally Sensitive Habitat Areas ("ESHA's")

This will respond to your Department's September 19, 2000 request for an explanation of Coastal Act requirements pertaining to the identification and protection of Environmentally Sensitive Habitat Areas ("ESHA's") in the Coastal Zone.

Section 30107.5 (Public Resources Code) of the Coastal Act defines "Environmentally Sensitive Area" as:

> "...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."

Section 30240 of the Coastal Act at subsection (a) provides that "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." Subsection (b), in turn, addresses development adjacent to environmentally sensitive habitat areas and provides that any such development "shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat . . . areas."

In an April, 1999 Court decision entitled Bolsa Chica Land Trust v. Superior Court (1999) 71 Cal.App.4th 493 the Court explained a public agency's legal responsibility to identify and protect ESHA's in the Coastal Zone. In Bolsa Chica the Coastal Commission approved a Local Coastal Program for a 1,588 acre area of undeveloped wetlands and coastal mesas

EXHIBIT

surrounded by urban development on three sides and the Pacific Ocean on the fourth side. The Commission approved an LCP which would have permitted residential development over five acres of a six-and-a half acre non-native eucalyptus grove which was over 100 years old and seriously degraded due to soil salinity. Nonetheless, the Commission noted that the grove provided the only significant locally available roosting and nesting habitat for area raptors. Given this factor, the Commission determined that the degraded eucalyptus grove constituted an ESHA for purposes of the Coastal Act. Having made this determination the Commission then proceeded to approve residential development in the eucalyptus grove finding that, despite the grove's ESHA designation, residential development was permissible in this instance under Section 30240 because the LCP required that alternate superior raptor habitat be developed on the nearby Huntington Mesa. The Coastal Commission reasoned that Section 30240 only requires that "habitat values" be protected and that given the deteriorating condition of the eucalyptus grove, creation of a new superior raptor habitat on Huntington Mesa, imposed as a mitigation measure condition of approval, was the best way to promote the area's "habitat values."

The Court of Appeal disagreed. The Court first of all suggested that, given the eucalyptus grove's significantly degraded condition, the Commission could have probably made a valid determination that the eucalyptus grove did not constitute an ESHA and that it (the Court) would have deferred to the Commission's conclusion in this regard. However, once the Commission made the determination that the eucalyptus grove did indeed constitute an ESHA, a conclusion to which the Court likewise deferred, the Commission was bound by the mandates of Section 30240. The Court found that Section 30240 must be applied literally and that:

> "...a literal reading of the statute protects the area of an ESHA from uses which threaten the habitat values which exist in the ESHA. Importantly, while the obvious goal of Section 30240 is to protect habitat values, the express terms of the statute do not provide that protection by treating those values as intangibles which can be moved from place to place to suit the needs of development. Rather, the terms of the statute protect habitat values by placing strict limits on the uses which may occur in an ESHA and by carefully controlling the manner uses in the area around the ESHA are developed."

Concluding that residential development in the eucalyptus grove would create the significant disruption of habitat values which Section 30240 was enacted to protect against, and that the subject residential use was not a use dependent on the resources within the eucalyptus grove, the Court found that the Commission had abused its discretion by approving an LCP which authorized residential development in the eucalyptus grove. It therefore issued a writ

directing the Commission to correct this defect in the approved LCP.

In light of the foregoing, for projects in the City's Coastal Zone, for which the City has coastal development permitting authority, the City must determine during the application process whether the subject development application proposes development within, or adjacent to, an ESHA, as defined by the Coastal Act. If the application proposes development within or adjacent to an ESHA, the City must then make additional determinations to determine whether or not development can be permitted in light of the Bolsa Chica holding. For development within an ESHA, the City must determine whether that development would either (1) result in significant disruption of habitat value within the ESHA or (2) put the ESHA to a use which is not dependent upon the ESHA's resources. If the answer to either of these questions is yes, under Bolsa Chica, the application would need to be denied or modified. With regard to development adjacent to an ESHA, the City would need to determine whether the proposed development is sited and designed to prevent impacts which would significantly degrade the ESHA and whether the development is compatible with the continuance of the habitat values offered by the ESHA. Under these circumstances, development could be approved only if, as conditioned, the answer to both of these questions is affirmative.

I trust the foregoing is responsive to your inquiry. Please call if you have further questions.

Very truly yours,

John G. Barisone
Santa Cruz City Attorney

cc: Martín Bernal, Assistant City Manager
Eileen P. Fogarty, Director of Planning & Community Development
Chris Schneiter, Acting Public Works Director
Ceil Cirillo, Redevelopment Director
Susan Morris, Park Planner

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COASTAL DEVELOPMENT PERMIT APPLICATION

Application number.....**3-05-071, Morro Bay Harborwalk / Dune Restoration Project**

Applicant.....City of Morro Bay

Project location .....Morro Bay waterfront along Embarcadero Road and Coleman Drive from Beach Street to Morro Rock (APNs 066-461-11 and 066-331-28)

Project description.....Installation of a pedestrian boardwalk and Class I bike trail along waterfront; phased restoration of approximately 20 acres of degraded coastal dunes; and relocation/realignment of Coleman Drive and a portion of Embarcadero Road.

Local approval.....Conditional Use Permit (UP0-014), City of Morro Bay, September 19, 2005.

File documents.....City of Morro Bay Conditional Use Permit (UP0-014); Morro Bay certified Local Coastal Program; CDP Application File 3-05-071.

Staff recommendation ...**Approval with Conditions**

Summary: The City of Morro Bay is a popular central coast visitor-serving destination with over 1 million visitors annually. The City's unique natural environment offers many forms of coastal recreation including birding, fishing, beach combing, surfing, kayaking, and more. Similarly the City's commercial fishing roots and waterfront development provide unique opportunities for shopping, dining, and vacationing among one of central California's true working harbors. The City's certified LCP envisions a series of pedestrian paths, bicycle lanes, and boardwalks providing continuous lateral access connections between popular destinations points from Morro Rock south to Tidelands Park and Morro Bay State Park. This system of paths, bike lanes, and boardwalks will serve as the primary non-motorized routes along the bay and the backbone of the California Coastal Trail through Morro Bay.

In this application, the City seeks authorization to expand and improve upon existing public access and recreation opportunities along the waterfront of Morro Bay, from Morro Rock at the northern end, to Beach Street in the Embarcadero. In addition to maximizing coastal access and recreation opportunities, the project seeks to manage existing use patterns in a manner that will allow for restoration and enhancement of the degraded dune complex that extends from the north end of Morro Bay to Morro Creek. The project will improve the scenic and visual quality of the shoreline while expanding access and recreational opportunities along the waterfront, and protect the habitat values of the dunes.

EXHIBIT I
Exhibit I

The access improvements proposed by the project include:

- An eight foot wide pedestrian boardwalk along the waterfront;
- A twelve foot wide Class I bike path that supports two-way bicycle traffic as well as surrey transports from the Embarcadero;
- Access and recreation amenities along the waterfront trail system, such as public benches, interpretive signing to help direct access, safety railing, bike and surrey racks, lighting, vehicle parking, and habitat oriented landscaping.

In order to accommodate the access improvements and maximize recreational opportunities along the waterfront, the project will realign portions of Coleman Drive and Embarcadero Road. The new roadway alignment will allow the new pedestrian boardwalk and bike path to be constructed within the existing roadway prism along the waterfront, and create a 4.5 acre contiguous recreational use area along the northern shoreline of the bay. Included among the many access and recreation enhancements provided by the project will be improved parking and access to a pocket bay beach that is popular with sunbathers and kayakers. Access to this beach will be maximized, among other ways, by providing a designated parking area and eliminating the need for users to cross Coleman Drive to get to the shoreline. Public safety and access and recreation opportunities will also be enhanced by minimizing conflicts between vehicles, bicyclists, and pedestrians along Coleman Drive.

Despite its clear benefits to coastal access and recreation opportunities, the project raises issues regarding consistency with Coastal Act provisions protecting sensitive habitat areas because the proposed roadway realignment will encroach within a dune formation to the north of the project area. Specifically, the project will result in approximately 0.75 acre of permanent dune loss due to the realignment of the roadways. In addition, a similar amount (0.75 acre) of temporary dune disturbance associated with grading activities will occur in the dunes along Coleman Drive and adjacent to the Morro Rock parking area. Although degraded by exotic plant species and unmanaged access, the approximately 20 acres of dune habitat bounded by Coleman Road, Embarcadero Road, and Morro Creek supports native plant species as well as habitat for the western snowy plover and the Morro Shoulderband Snail, and thereby constitutes an Environmentally Sensitive Habitat Area as defined by the Coastal Act.

Pursuant to Coastal Act policy 30240, environmentally sensitive habitat areas must be protected against any significant disruption of habitat values and only resource dependent uses are allowed within such areas. To avoid a significant disruption of the adjacent dune habitat, staff has worked closely with the applicant to minimize project encroachments within the dunes, and to strengthen the dune protection and restoration components of the project. Towards this end, the applicant has revised the project to reduce the amount of new roadway development within the dunes. Recommended conditions of permit approval seek to further reduce disturbance by limiting the width of the roadway travel lanes to 11 feet, reducing the radii of the curves, and reorienting Coleman Drive into an already disturbed area at the rear of Coleman Park. Special conditions also require a precise assessment of the quantity of permanent and temporary impacts to all sandy dune areas as well as detailed site plan and mitigation proposal for

immediate and future restoration of the entire dune complex south of Morro Creek and west of Embarcadero Road.

In order for dune habitat protection and restoration measures to succeed, current sources of habitat degradation must be addressed. As noted above, unmanaged access is currently having a significant adverse effect on the dune habitat. The project will address the need for a clearly delineated, safe, and attractive coastal access route, in a location that will not encourage or be susceptible to continuing disruption of the dunes, among other ways by placing Coleman Drive between pedestrians and the dunes. In this sense, successful restoration and protection of dune habitats requires putting the road in the proposed location. Hence, the proposed roadway alignment is a component of the restoration plan and is a use that is dependent upon the dune resource. The improved management of existing access patterns, in concert with the dune restoration, will result in an overall enhancement of the native dune habitat, consistent with Coastal Act section 30240. Recommended conditions of the permit intended to ensure that these aspects of the project are fulfilled include: installation of symbolic fencing along Coleman Drive and Embarcadero Road extension, prohibiting parking within the road right-of-ways along the dunes, and installing interpretive signing at appropriate locations to inform the public of the sensitivity of the site.

In sum, **staff recommends the Commission approve the project with conditions** requiring the Applicant to provide final plans that minimize the development footprint and avoid dune disturbance to the maximum extent practicable. Special conditions also require submittal and implementation of a public access and interpretive signing plan to direct access and reduce the amount of unmanaged use of the dunes, among other means, by installing symbolic fencing and providing interpretive information regarding the sensitivity of the site. In addition, recommended special conditions require drainage, lighting, and construction plans to reduce water quality impacts, minimize impacts to marine and terrestrial resources from overhead lighting, and avoid/minimize construction-related impacts. Finally, the applicant will be required to revise and supplement its Habitat Protection, Restoration, and Management Program to ensure the success of the habitat restoration efforts over the long run.

With these conditions, the project is consistent with the Chapter 3 of the Coastal Act.

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I. Staff Recommendation on CDP Application

The staff recommends that the Commission, after public hearing, **approve** a coastal development permit for the proposed development subject to the standard and special conditions below.

Motion. I move that the Commission approve Coastal Development Permit Number 3-05-071 pursuant to the staff recommendation.

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

Resolution to Approve a Coastal Development Permit. The Commission hereby approves the coastal development permit on the ground that the development as conditioned, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the coastal development permit complies with the California Environmental Quality Act because either: (1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the amended development on the environment; or (2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse effects of the amended development on the environment.

II. Conditions of Approval

A.Standard Conditions

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittee to bind all future owners and possessors of the subject property to the terms and conditions.

B. Special Conditions

1. **Final Plans. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT,** the Applicant shall submit for Executive Director review and approval, two full sized sets of revised plans that are in substantial conformance with the preliminary plans prepared by RRM Design Group and submitted for review on January 13, 2006, and that illustrate the following:

   (a) **Roadway Width.** The Embarcadero Road extension and Coleman Drive roadways shall be designed to be no greater than 22' in width. A maximum 2' wide shoulder along the right-of-ways of Coleman Drive and Embarcadero Road extension may be permitted.

   (b) **Roadway Relocation.** The alignment of Coleman Drive shall be completely contained within the northern portion of Coleman Park to avoid coverage of the sandy areas to the north of the park. Similarly, the alignment of the Embarcadero Road extension shall be contained within disturbed areas currently used as informal parking.

   (c) **Bike and Surrey Parking.** The final plans shall indicate the precise location of the bike and surrey parking in the Morro Rock parking lot. Termination of the bike path and bicycle parking facilities shall be contained within the existing parking lot area so that there will be no disturbance to adjacent dune habitats during construction, and adequately set back from the parking lot edge as to eliminate the need for future shoreline armoring to protect these public recreational amenities.

   (d) **Roadway Signing Plan.** The final plans shall include a Roadway Signing Plan that indicates public parking areas, as well as areas where parking shall be prohibited in order to prevent disruption of dune habitat areas (e.g., along the northern shoulder of Coleman Drive and the western shoulder of the Embarcadero Road extension).

   (e) **Installation of Symbolic Fencing**. The final plans shall detail the type, dimensions, and location of the symbolic fencing that will be installed to manage access in the dunes. Such fencing shall be designed to prevent interference with the passage of light, water, and wildlife, and avoid disruption of coastal views (e.g., post and guy wire type fencing). At a minimum, such fencing shall extend along the entire length of the northern shoulder of Coleman Drive, the western shoulder of Embarcadero Road between Coleman Drive and the informal parking area at the southern bank of Morro Creek.

   (f) **Interpretive and Access Signs.** The final plans shall detail the type, design, location, and content of the signs that will be installed to educate the public about the area's native habitats, identify the location of established vertical and lateral coastal access routes, and discourage uses

and activities that degrade and damage these habitats. The signing shall be used in conjunction with the symbolic fencing required above to manage access and installed at the following locations: at the pedestrian and bike trailhead near the Duke Intake structure; at the intersection of Coleman Drive and Embarcadero Road; at various intervals along the pedestrian path; the bike and surrey parking lot at Morro Rock; and at the informal parking lot south of Morro Creek.

(g) **Lighting Plan.** Final Plans shall include a lighting plan that indicates the location, type, and wattage of all light fixtures. All lighting shall be designed and located to prevent illumination of adjacent habitat areas (i.e., Morro Bay and coastal dune complex), and to protect views of the coast and night sky. Accordingly, lighting shall be limited to low-lying bollard style lights along the bicycle and pedestrian trail.

2. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT,** the applicant shall submit to the Executive Director for review and written approval, a final Dune Habitat, Protection, Restoration, and Management Program that is in substantial conformance with the draft Program prepared by RRM Design Group, dated January 2006, and that includes the following:

(a) A precise assessment of the total quantity of sandy dune habitat areas that will be impacted, both temporarily and permanently, by project construction. This shall include the sandy area directly adjacent to and north of Coleman Park, as well as the areas along the Embarcadero Road extension north of the Dune Energy Intake structure.

(b) An expanded restoration and mitigation component that details the precise quantity and location of the first phase of dune planting and restoration activities that will be implemented in conjunction with project construction. At a minimum, the first phase of dune planting and restoration shall include all areas disturbed during project construction, and provide an overall restoration area that is four times larger than the area of impact calculated in accordance with section (a) of this condition. In addition, the restoration and mitigation program shall identify:

- the type and location of seeds that will be collected and propagated for use in the restoration area;
- the application rate (e.g. pounds per acres) for seeding efforts; and
- Designation of a qualified botanist to supervise the restoration effort.

Submittal of the Mitigation Program shall be accompanied by written evidence that the program has been reviewed by the California Department of Parks and Recreation, California Department of Fish and Game, and the US Fish and Wildlife Service, along with any comments received and the City's response to such comments. Implementation of the program shall not commence until all necessary approvals or authorizations from these agencies have been obtained.

3. **Public Access.** Permittee shall ensure the public access components are constructed in conformance with the approved final plans, and will be available for public use in perpetuity. Specifically, the

pedestrian boardwalk, bike trail, and all associated access connections, as well as the parking adjacent to the Duke Energy intake building and the City's commercial fishing T-Piers, shall be open and available for free general public use 24 hours a day, 365 days a year for the life of the development.

4. **Construction and Drainage Plan. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT,** the Applicant shall submit for Executive Director review and approval, a Construction, Drainage, Erosion, and Sediment Control Plan that incorporate the following provisions:

   (a) **Implementation of Best Management Practices During Construction.** The Drainage and Erosion Control Plans shall identify the type and location of the measures that will be implemented during construction to prevent erosion, sedimentation, and the discharge of pollutants into Morro Bay during construction. These measures shall be selected and designed in accordance with the California Storm Water Best Management Practices Handbook. Among these measures, the plans shall limit the extent of land disturbance to the minimum amount necessary to construct the project; designate areas for the staging of construction equipment and materials, including receptacles and temporary stockpiles of graded materials, which shall be covered on a daily basis; provide for the installation of silt fences, temporary detention basins, and/or other controls to intercept, filter, and remove sediments contained in the runoff from construction, staging, and storage/stockpile areas; and provide for the hydro seeding of disturbed areas immediately upon conclusion of construction activities in that area. The plans shall also incorporate good construction housekeeping measures, including the use of dry cleanup measures whenever possible; collecting and filtering cleanup water when dry cleanup methods are not feasible; cleaning and refueling construction equipment at designated off site maintenance areas; any the immediate clean-up of any leaks or spills.

   The plans shall further indicate that **PRIOR TO THE COMMENCEMENT OF GRADING,** the applicant shall delineate the approved construction areas with fencing and markers to prevent land-disturbing activities from taking place outside of these areas.

   (b) **Construction Staging / Access.** The Construction Plan shall include construction and staging zones, and shall be limited to the minimum area required to implement the approved project. Construction and staging shall minimize encroachment onto the existing roadway and dunes by using, for example, existing disturbed areas (e.g., undeveloped areas in Coleman Park) for storing equipment and materials. Consistent with these restrictions, public access shall be disrupted as little as possible during construction. Signed detours shall be posted and construction activities shall be staged to ensure that public access to Morro Rock and the state beach parking lots will be maintained at all times during construction.

   (c) **Post Construction Drainage.** The drainage plan shall identify the specific type, design, and location of all drainage infrastructure and Best Management Practices (BMPs) necessary to ensure that post construction drainage from the project, including runoff from the roadway,

paths, parking areas, and other impervious surfaces, does not result in erosion, sedimentation, or the degradation of coastal water quality. Such plan shall clearly identify a drainage system designed to collect, filter, and treat all runoff prior to its discharge from the site and to remove vehicular contaminants and other typical urban runoff pollutants[1] more efficiently than standard silt and grease traps. Such plan shall at a minimum provide for:

(1) The drainage system shall be designed to filter and treat (i.e., a physical and/or chemical reduction of pollutants achieved through active filtration) the volume of runoff produced from each and every storm event up to and including the 85th percentile 24-hour runoff event prior to its discharge to Morro Bay. The drainage system and its individual components (such as drop inlets and filtration mechanisms) shall be sized according to the specifications identified in the California Storm Water Best Management Practice Municipal Handbook (California Storm Water Management Task Force, March 1993);

(2) The drainage system may include natural biologic filtration components such as vegetated filter strips and grassy swales provided that they are populated with native plant species capable of active filtration and treatment (e.g., rushes). If grades require, check-dams may be used in such biologic filters.

(3) The drainage system shall include at least one engineered filtration unit to which all drainage shall be directed prior to any discharge from the site. The engineered filtration unit shall be designed to remove, at a minimum, vehicular contaminants, and shall be appropriately sized to handle all parking lot drainage. Such unit may include media designed to remove expected contaminants.

(4) All vehicular traffic and parking areas shall be swept and/or vacuumed at regular intervals and at least once prior to October 15th of each year. Any oily spills shall be cleaned with appropriate absorbent materials. All debris, trash and soiled absorbent materials shall be disposed of in a proper manner. If wet cleanup of any of these areas is absolutely necessary, all debris shall first be removed by sweeping and/or vacuuming, all storm drains inlets shall be sealed, and wash water pumped to a holding tank to be disposed of properly and/or into a sanitary sewer system.

The applicant shall be responsible for implementing and maintaining drainage, erosion, and sedimentation control measures and facilities for the life of the project. This shall include performing annual inspections, and conducting all necessary clean-outs, immediately prior to the rainy season (beginning October 15), and as otherwise necessary to maintain the proper functioning of the approved system.

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[1] Typical urban runoff pollutants describes constituents commonly present in runoff associated with precipitation and irrigation. Typical runoff pollutants include, but are not limited to: paints, varnishes, and solvents; hydrocarbons and metals; non-hazardous solid wastes and yard wastes; sediment from construction activities (including silts, clays, slurries, concrete rinsates, etc.); ongoing sedimentation due to changes in land cover/land use; nutrients, pesticides, herbicides, and fertilizers (e.g., from landscape maintenance); hazardous substances and wastes; sewage, fecal coliforms, animal wastes, and pathogens; dissolved and particulate metals; and other sediments and floatables.

The Permittee shall undertake development in accordance with the approved Plans. Any proposed changes to the approved Plans shall be reported to the Executive Director. No changes to the approved Plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is necessary.

III. Recommended Findings and Declarations

The Commission finds and declares as follows:

A.Project Description

1. Project Location

The project site is located along the northern shores of Morro Bay, within the City of Morro Bay on the coast of San Luis Obispo County, California. Public Access and recreation improvements will be constructed along Embarcadero Road and Coleman Drive from Beach Street to Morro Rock, and dune habitat protection and restoration measures will be implemented within the approximately 20 acres of dunes bounded by Coleman Drive, Embarcadero Road, Morro Creek, and the beach. This north end of the bay is very popular with residents and visitors alike for its unique and varied recreational opportunities. Morro Bay hosts over 1 million visitors annually, many of whom eventually make a stop at Morro Rock to gain access to the beach, go surfing, fishing, or just take in the view of the town and its surroundings. The City's certified Land Use Plan describes Morro Rock as the "landmark of the community" and "the most significant visual feature of the area."

North of Morro Rock is the southern most extent of Morro Strand State Beach and the Pacific Ocean. Inland of the active beach is a significant, though degraded, dune structure approximately 20+ acres in size. These dunes extend north to Morro Creek and are bounded by Embarcadero Road extension to the east, and Coleman Drive to the south. The dunes have been degraded by the introduction of non-native plant species and unmanaged access throughout the system. Native dune shrubs are also present, but only in scattered locations and with few individuals. In the 1930's dredged fill material was placed in the area to raise the elevation and create access to Morro Rock. Prior to this activity, Morro Rock was an island with natural tidal channels on both sides. Accordingly, the entire site is within the Commission's retained permitting jurisdiction and subject to the public trust.

Further south along the Embarcadero, the shoreline is more extensively developed with commercial fishing facilities and energy / industrial uses. Residents and visitors can watch fishermen off-loading their catch, take a turn at angling from one of the City's T-piers, or stop in to one of the areas small café's for a bite of fresh seafood. Sweeping views of the bay, sand spit, and commercial fishing facilities dominate. Again, in the 1940's the natural shoreline along the Embarcadero area was altered with the construction of bulkhead and dredging of a shipping channel. As a result, this area too is within the Commission's retained permitting jurisdiction.

2. Project Description

The Applicant proposes to expand and improve upon existing public access and recreation opportunities along the waterfront of Morro Bay, from Morro Rock at the northern end, to Beach Street in the Embarcadero. In addition to maximizing coastal access and recreation opportunities, the project seeks to manage existing use patterns in a manner that will allow for restoration and enhancement of the degraded dune complex that extends from the north end of Morro Bay to Morro Creek. The project includes a system of non-motorized transportation links and roadway improvements along the Embarcadero and Coleman Drive. Starting near Beach Street in the Embarcadero, the Applicant proposes to install a pedestrian path that generally follows the shoreline all the way around the north end of the bay to Morro Rock. The approximately three-quarter mile boardwalk will be 8' feet in width and constructed of 2x6 composite decking material. A 42" safety guardrail will be installed along the Embarcadero portion of the boardwalk to ensure public safety. Other access-oriented amenities will also be installed at various intervals and/or at scenic locations along the path. Those amenities include public benches, ADA accessible ramp connections, waste receptacles, interpretive signing, and more. The Applicant intends for the path to be used by pedestrians only, in order to prevent user conflicts with other forms of non-motorized transportation and enhance the access experience.

A proposed Class I bike path will begin at a point just north of the Duke Energy Plant intake building. From this point of beginning, the non-motorized bike path will also somewhat follow the outline of the bay north to Morro Rock where it will terminate near the state lifeguard entrance to Morro Strand State Beach. The Class I bike path will be 12 feet in width and cover a distance of almost one-half mile. The Applicant proposes AC paving surfacing on top of compacted base rock with striping for two-way traffic. The Applicant proposes to install bike and surrey racks at either end of the path (i.e., in the parking area near the Duke intake structure and at Morro Rock).

To accommodate the pedestrian path and bicycle lanes within the existing narrow roadway prism along the waterfront, and generally maximize access and recreation opportunities in the vicinity, the Applicant proposes to relocate Coleman Drive north, within Coleman Park and the degraded dune area west of the Duke Energy Plant. The Applicant also proposes to extend Embarcadero Road approximately 750 feet north along its current alignment and remove the existing dog-leg connecting Coleman Drive. These improvements will create a 4.5 acre park between Coleman Drive and Morro Bay, provide improved safety for pedestrians and bicyclists, and maximize shoreline access and recreation opportunities. Additional improvements include re-striping and resurfacing the parking areas along the Embarcadero and creation of 30+ parking spaces for beach, boardwalk, and bike trail access. The Applicant also proposes to expand ADA accessibility.

B.Coastal Development Permit Determination

1. Environmentally Sensitive Habitat

a. Relevant Regulatory Policies

Section 30240(a). Environmentally sensitive habitat areas shall be protected against any significant disruptions of habitat values, and only uses dependent on those resources shall be allowed within those areas.

Section 30240(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.

Section 30107(5). "Environmentally sensitive area means 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 development.

In addition, the City's certified LCP contains policies that provide for the protection of environmentally sensitive habitat:

***Policy 11.01** Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values and only uses dependent on such resources shall be allowed within such areas.*

***Policy 11.02** Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be site and designed to prevent impacts which would significantly degrade such areas, and shall maintain the habitat's functional capacity.*

***Policy 11.09** The recreational use of rare or endangered species habitats shall be minimal (i.e., walking, bird watching). Protective measure for such areas should include fencing and posting so as to restrict, but not exclude, use by people.*

***Policy 11.10** Only native vegetation shall be planted in the habitat areas of rare or endangered species. Where feasible, use of drought tolerant plants of a native variety shall be used in coastal zone areas.*

***Policy 11.20** Coastal dune habitats shall be preserved and protected from all but resource-dependent, scientific, educational and passive recreational use. Disturbance or destruction of any dune vegetation shall be prohibited, unless no feasible alternative exists, and then only if revegetation is made a condition of project approval. Such revegetation shall be with native plants propagated from the disturbed sites or from the same species at adjacent sites.*

b. ESHA Analysis

The site of the proposed development is adjacent to a relatively large (approximately 20 acres) contiguous coastal dune structure at the south end of Morro Strand State Beach. The dunes front the Pacific Ocean and generally extend south from Morro Creek to Morro Rock. Coleman Drive separates

the dune structure from Morro Bay. As noted in the mitigated negative declaration approved for the project by the City, the site nearest the proposed development was significantly altered in the 1940's when dredged fill material was brought in to raise the elevation of the area and create a land connection to Morro Rock. Prior to this activity, Morro Rock was an island with natural tidal channels [to Morro Bay] on both sides. European beach grasses were imported to stabilize the fill material and control sand movement.

Although classified as "sand dunes," the topography is relatively flat compared to neighboring dunes (e.g., Pismo Beach and Nipomo dunes) that have a more undulating topography with hummocks and a large sand berm along the beach. The habitat is described as highly disturbed sand dunes, populated with non-native, invasive dune grasses and ice plant, though there are native dune shrubs present at scattered locations within the dunes. These primarily occur as individuals or small groups of plants, but there are isolated areas that support a larger diversity of native dune plant species including beach bur, beach evening primrose, coast silver lupine, mock heather, coastal goldenbush, coyote bush, California aster, and Blochman's groundsel.

Coastal dune scrub in and around Morro Bay is also known to support a variety of wildlife species including Morro shoulderband snail. The project site is within the range of the Morro shoulderband snail - a federally listed endangered species - though it is not located within designated critical habitat for this species. Protocol level surveys for Morro shoulderband snails were conducted in 2001, which included the dune area directly west of the Morro Bay Power Plant and east of Embarcadero Road, near the proposed road extension. Morro shoulderband snail shells were found at several locations within the southern extent of the dune scrub area, but no living snails were found. Additional surveys for the snail were conducted in 2003 for the dune area west of Embarcadero Road, near the relocation site for Coleman Drive and the proposed access improvements. No live snails or snail shells were found at any time during the surveys in or around the project site. The biological report prepared for the project concluded that although Morro shoulderband snails have bee documented near the proposed project site, they are not currently present at the site.

Another special status species known to frequent the coastal dunes in and around Morro Bay is the Western snowy plover. Sandy beach and foredune habitat provide foraging and nesting opportunities for this state listed endangered bird. The Pacific coast population of the Western snowy plover has experienced widespread loss of nesting habitat and reduced reproductive success at many nesting locations. Populations of Western snowy plover are most abundant on the Morro Bay Strand State Beach, north of the project site, and along the Morro Bay sandspit, south of the project site. Critical habitat for this species has been designated within or immediately north of the project site by the USFWS; the last known attempt at nesting in this area occurred as recently as 1997. The area proposed for the Coleman Drive re-alignment is located within the southern extent of Critical Habitat, Unit 2 (Atascadero Beach), though the project site is thought not to have suitable habitat for nesting plovers due to the predominance of beach grass and uncontrolled access through the dunes.

Although degraded, this coastal dune area continues to provide important habitat for rare and important native dune plant and wildlife species, and therefore constitutes environmentally sensitive habitat as

defined by the Coastal Act. Successful conservation and recovery of this habitat will be dependent upon the protection and biological enhancement of existing, yet disturbed and restorable dune area.

Project Impacts

The purpose of the project is to enhance public access and recreational opportunities along the Morro Bay shoreline, and manage use patterns to allow for successful restoration and protection of coastal dune habitat. In order to effectively restore and protect the 20+ acre dune complex, the applicant is proposing to realign the roadway and install a system of non-motorized transportation routes (i.e., pedestrian boardwalk and Class I bicycle trail) that link Morro Rock, the beach at Morro Strand State Park, and the Embarcadero. Currently, vehicular access exists to these areas, though there are few opportunities for safe pedestrian and bicycle access to the beach access and parking area at Morro Rock. As a result, people opt for a safer and shorter route to the beach through the dunes.As previously mentioned, this unmanaged access is a primary source of habitat degradation. Implementation of the project is expected to increase the quantity and quality of native coastal dune habitat by redirecting human activity away from sensitive areas.

There are, however, both temporary and permanent impacts associated with realigning and extending segments of the existing Coleman Drive and Embarcadero Road (approximately 0.7 acres temporary habitat disturbance and roughly 1 acre permanent dune habitat loss). In addition, the project poses indirect impacts to terrestrial resources due to noise, light, and traffic.

As cited above, Coastal Act Section 30240 prohibits any significant disruption of ESHA and limits development within such areas to uses dependent upon the resource. Similarly, certified LCP policy 11.20 prohibits all but resource-dependent, scientific, educational, and passive recreation uses in coastal dune habitats. The dune restoration activities, including replanting with native plant species and non-native plant eradication, represent resource enhancements and therefore are a permitted use. Construction / installation of the pedestrian path, Class I bike trail, and related access improvements will be constructed within the existing roadway prism along the edge of the Morro Bay and outside of the sensitive resource area. The proposed roadway improvements, however, will encroach into the sandy dune areas west of the Duke Energy Plant. Typically, roadways are not considered resource dependent uses. In this case, however, the proposed roadway realignment is necessary for effective management of access and successful protection and restoration of dune habitats.

The proposed Embarcadero Road extension and Coleman Drive realignment is one of four alternatives that were evaluated in the adopted mitigated negative declaration. The other alternatives were determined to be infeasible because of safety and access concerns, potential significant impacts to sensitive biological resources, or expense. These alternatives include: forgoing the Embarcadero Road extension and realigning Coleman Drive north into the dunes with either a perpendicular "T" intersection or continuous transition with the existing Coleman Drive segment; extending Embarcadero Road and realigning Coleman Drive directly west to the intersection with the existing Morro Rock parking area; a combination of no Embarcadero Road extension and realigning Coleman Drive west to the Morro Rock parking area; and the "no project" alternative. The first alternative does not fully take advantage of the recreational opportunities to combine Coleman Park with Coleman Beach or improve

upon public safety at this location and was thus eliminated from consideration. Extending Coleman Drive directly to the existing Morro Rock parking area was determined to be infeasible because it resulted in a much larger and significant amount of additional dune disturbance. The third alternative was eliminated because it failed to address access and safety issues, as well as introduced significant adverse impacts to the dune habitat. The "no project" alternative would maintain the existing unsafe and inadequate access situation , and fail to provide the access management measures that are essential to the long term protection and restoration of the native dune habitat.

Reducing roadway widths, installation of a Class II bike path (6' width) instead of a Class I bike path (12"width), and elimination or reduction in the visual and physical separation between the various travel lane segments could all but eliminate dune impacts, and was initially suggested by Commission staff as a viable alternative. However, it would not accomplish project goals of enhancing and managing public access by creating a safe, dedicated, non-motorized transportation alternative to important and popular recreational destination points. Roadway widths have been reduced to the absolute minimum allowable for the amount of traffic and size of vehicles that frequent the recreational areas in and around Morro Rock without sacrificing public safety. The 12' wide Class I bike trail is necessary to safely accommodate two-way bike and surrey traffic between the Embarcadero and Morro Rock. Eliminating / reducing the separation between pedestrian, bike, and motor vehicle lanes poses additional safety risks to pedestrian and bike users and degrades the access experience. If the access experience is not safe and/or enjoyable for the users, people will continue to shortcut through the dunes to reach the beach and trample the dune habitat.

Accordingly, the proposed project is the only alternative that addresses public safety concerns, maximizes and manages public access, and results in effective protection and restoration of the coastal dunes. The project will address the need for a clearly delineated, safe, and attractive coastal access route, in a location that will not encourage or be susceptible to continuing disruption of the dunes, among other ways by placing Coleman Drive between pedestrians and the dunes. In this sense, successful restoration and protection of dune habitats requires putting the road in the proposed location. Hence, the proposed roadway alignment is a component of the restoration plan and is a use that is dependent upon the dune resource. The improved management of existing access patterns, in concert with the dune restoration, will result in an overall enhancement of the native dune habitat, consistent with Coastal Act section 30240. Conditions of the permit intended to ensure that the habitat protection and restoration objectives of the project are fulfilled require that final project plans include detailed fencing and signing plans that will direct and inform public access and recreation opportunities in a manner the will maximize protection of adjacent habitat areas.

In addition to limiting development in ESHA to resource dependent uses, Coastal Act Section 30240 prohibits the significant disruption of the habitat. In order to comply with this requirement, the project has been revised and conditioned to limit the project's encroachments within dune habitat areas, and to provide both short term and long term habitat protection, restoration, and management measures for the approximately 20 acre dune habitat area adjacent to the project. Specifically, final plans must limit overall roadway width to 22', and maximize opportunities to contain the realigned roadway within previously disturbed areas. In addition, the conditions require that the submitted Dune Habitat

Protection, Restoration, and Management Plan be supplemented to ensure that the first phase of plan implementation includes restoration of all areas disturbed during project construction, and meets the project objective of providing a restoration area that is four times larger than the area of impact.[2] With these conditions, the project is consistent with Section 30240 of the Act.

In summary, one of the main purposes of this proposal is to enhance existing biological resources, both through direct habitat restoration and through public access management and education. Moreover, by realigning the roadway and installing symbolic fencing and interpretive signing, it is expected that the amount of dune intrusion by the public that currently occurs should significantly decrease. The only permanent dune habitat impacts are associated with relocation of the roadways. Realigning the roadways will not only enhance public access, but significantly increase safety for access users adjacent to the roadway. The roadway realignment will also facilitate effective management and protection of the larger dune system. Special Condition #4 identifies appropriate implementation of BMPs during construction to prevent erosion, sedimentation, and the discharge of pollutants into Morro Bay during construction. This condition also establishes parameters for the location of access corridors and staging areas to assure, among other things, that no sensitive habitat areas are used for these purposes. Special Condition #5 has been added requiring submittal of a lighting plan to prevent incidental impacts to surrounding areas (i.e., Morro Bay and coastal dune complex) associated with lighting and glare. These conditions will prevent adverse construction-related and development impacts to adjacent habitat areas as required by Section 30240(b). Therefore, as conditioned, the Commission finds the proposed development consistent with the cited resource protection policies of the Coastal Act.

c. ESHA Conclusion

The project will protect, restore, and enhance the sensitive dune habitat adjacent to the siteby discouraging use of informal paths through the dunes and providing restoration and protection of the dune habitat values. The project includes a phased approach to restoring the approximately 20 acres of dune habitat adjacent to the proposed access improvements, including immediate restoration of disturbed areas at a 4:1 ratiousing native plant species taken from local stock; ongoing maintenance of a buffer zone around new planting to ensure newly planted areas aren't out competed by invasive species; and performance criteria to ensure long-term success of restoration of native plant species. As conditioned, the access management and dune protection and restoration measures to be provided by the project constitute resource dependent uses that will result in the overall enhancement of the affected habitat, and are therefore consistent with the certified LCP and the ESHA policies in Chapter 3 of the Coastal Act.

---

[2] The Applicant identified approximately 0.4 acres of permanent impact on dune habitat associated with the road improvements on the west end of Coleman Drive. This estimate did not include any impacts associated with the Embarcadero Road extension or disturbance of the sandy area at the rear of Coleman Park adjacent to the proposed new alignment of Coleman Drive. Although these areas are mainly degraded, development in and around these sites will still result in temporary and permanent impacts to surrounding dune habitat. Based on staff's estimate of the potential project disturbance, the total amount of permanent impact to dune habitat is on order of 0.75 – 1 acre of coastal dune scrub. Accordingly, the proposed 1.75 acre mitigation falls short of meeting the criteria established in the Dune Habitat Protection, Restoration, and Management Program, which calls for restoration at a 4:1 ratio.

2. Public Access

a. Relevant Regulatory Policies

Coastal Act Sections 30210, 30212, 30213, 30220, and through 30221 specifically protect public access and recreation. In particular:

> ***Section 30210:*** *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*
>
> ***Section 30212(a):*** *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects...*
>
> ***Section 30213:*** *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. ...*
>
> ***Section 30220:*** *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*
>
> ***Section 30221:*** *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

Coastal Act section 30252 requires new development to maintain and enhance public access opportunities by providing non-automobile circulation and parking facilities:

> ***Section 30252:*** *The location and amount of new development should maintain and enhance public access to the coast by...(3) providing non-automobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation...*

In addition, the following certified LCP policies and contextual information, though not the standard of review, can provide pertinent information and guidance:

> ***Policy 1.06.*** *All accessways shall be properly signed and should conform to Coastal Conservancy / Coastal Commission access standards and guidelines.*
>
> ***Policy 1.26.*** *Lateral public access along the waterfront revetment shall be provided in all new development, rehabilitation or addition projects...*

Chapter III F.5b. Opportunities may be available in the future to make several circulation system improvements in Coleman Drive to enhance public access and recreation...Potential improvements include realigning Coleman Drive away from the water's edge in order to provide more beach area, safer pedestrian access, and to enable better integration of Coleman Park and the shoreline.

Chapter III D.10. Uncontrolled and undirected shoreline access has, over the years, resulted in resource damage to the sand dunes paralleling the beach. Dune vegetation has been trampled and lost and the dunes themselves have eroded away. Fragile native plants and wildlife habitat have been lost. There is an urgent need to control and direct access, and restore, as far as possible, the former dune habitat.

b. Access Analysis

The proposed pedestrian boardwalk, dedicated non-motorized bicycle path, roadway realignments, and appurtenant development will occur on City property and is for specific purpose of expanding and enhancing public access and low-cost recreational opportunities along the Morro Bay shoreline. Coastal Act policies demand that maximum public access and low-cost recreation facilities be protected, encouraged, and provided. The creation of dedicated pedestrian and bicycle paths from Beach Street to Morro Rock will further Coastal Act goals in Morro Bay. The 8-foot wide pedestrian boardwalk is adequately sized to handle a large number of pedestrians, while the dedicated Class I bicycle path is designed to accommodate two-way, multi-modal traffic (e.g., bikes, skates, kick-scooters, etc.) with a minimal amount of user conflicts. The development will improve access and increase visitor-serving uses at this location by providing non-motorized transportation alternatives while fulfilling an important link in continuous lateral shoreline access in Morro Bay. Together with the proposed benches, ADA ramps, safety railing, parking, interpretive signing, etc., the project will make the northern end of the bay more accessible, educational, and fun for a wider variety and greater number of users. The proposal was silent regarding availability and hours of use, so staff is recommending Special Condition 3 that requires the Applicant to develop an access signing plan program that identifies the improvements as being "public" and available for public use 24 hours per day, at all times during the year.

The second goal of the project was to create a larger recreational area in the northeastern corner of the bay. The City's certified LCP recommends realigning Coleman Drive to facilitate expansion of the existing recreational use area with better integration of Coleman Park and the shoreline. The existing Coleman Drive alignment does not maximize public access, it essentially creates two isolated access units separated by a moderately traveled roadway. Coleman Beach is a small pocket cove beach popular with kayakers in the northeastern corner of the bay. Coleman Park is located across the road and a bit west from Coleman Beach. It is improved with a skate park, restrooms, and informal public parking. The park begins just beyond the bend in Coleman Drive and as such, access to the shoreline requires a potentially dangerous jog across the road. Accordingly, it is not well used for this purpose. The skate park does attract a fair bit of traffic as does the public restroom, but given its size and proximity to the shoreline, Coleman Park is under-utilized.

The undeveloped area generally east of Coleman Beach provides much of vehicle parking for access to this small sandy beach. Gaining access requires negotiating traffic and scrambling down one of a series of informal trails leading down the embankment to the waters edge. This too can be a dangerous proposition, but it is the shortest route to the beach, and so, it is well used.

The proposed Embarcadero Road extension in combination with the Coleman Drive relocation will create a larger public recreation area while vastly improving public safety. In general, the roadways will be relocated further back from the waters edge freeing up additional lands for access and recreation. Embarcadero Road will be extended along its current orientation approximately 700 feet. The existing dog-leg that connects Embarcaero Road with Coleman Drive will be removed and Coleman Drive relocated approximately 105 feet north to the rear of Coleman Park. This alignment places the roadway and motor vehicles on the outside of the public recreation area as opposed to right through the middle of it. Relocating the roadways will create approximately 4.5 acres of contiguous public lands available for public access and low-cost visitor-serving recreational amenities. The typical user conflicts between pedestrian, bicycles, and motor vehicles will be eliminated, as well as the need to cross the road to access the shoreline. Notwithstanding all of the public benefits associated with improving and expanding the public recreation area, the project did not include an assurance that access to this newly created recreational area would remain free and unrestricted. Accordingly, Special Condition 3 also requires the newly created parking area adjacent to the Duke Energy intake structure and any parking in the expanded Coleman Park, remain free and unrestricted (i.e., no time limits) for the life of the development. As conditioned, the proposed public access improvements including realignment of the roadway is consistent with the certified LCP policies and Coastal Act access and recreation policies.

c. Access Conclusion

The proposed project is consistent with the applicable LCP and Coastal Act policies and standards. The project will further these policies because it will improve public access and low-cost visitor-serving amenities by expanding pedestrian and bicycle access along the shoreline from Beach Street to Morro Rock. The project will enhance access and recreation opportunities by providing two-way, multi-modal and non-motorized transportation routes capable of accommodating a greater number of persons including those with disabilities. It will expand and improve existing recreational amenities by integrating Coleman Park with the shoreline and Coleman Beach, and will eliminate user conflicts and improve public safety. As such, the Commission finds the proposed project, as conditioned, is consistent with the certified LCP and the Access and Recreation policies in Chapter 3 of the Coastal Act.

3. Water Quality

a. Relevant Regulatory Policies

The following Coastal Act policies addressing water quality are most applicable to the subject proposal, and state, in part:

Section 30231. The biological productivity and quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum population of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment...

b. Water Quality Analysis

Development of the proposed project could increase the amount of impervious surfaces in the project area, which would increase the volume of surface water runoff from the project site. Additionally, minor changes in surface flow patterns and volumes of stormwater runoff due to grading and increased impervious surfaces could lead to increase erosion and sedimentation into Morro Bay.

The project involves additional paving for roadway and parking improvements directly adjacent to Morro Bay. The Applicant has indicated that the project will be designed to use natural drainage features and vegetated buffers to filter and infiltrate stormwater runoff prior to conveyance offsite. The sandy composition of the surrounding area lends itself to quickly absorbing runoff. The realigned portions of Coleman Drive and Embarcadero Road will be crowned (i.e., raised at the centerline, sloping downwards to the pavement edge) so that surface flows would disperse to either side and dissipate into the adjacent sandy soils. This project will also result in new impervious surfaces on the proposed bike path and to a lesser degree, the pedestrian boardwalk. The accompanying Class I bike trail will incorporate crowning or sloping to direct storm water to pervious areas able to absorb it, while the boardwalk, since it is comprised of wooden or similar decking, will partly drain through the deck to the earth below. The project has been reviewed by the Commission's Water Quality Unit and it has been determined that no significant changes in surface water patterns or drainage will occur. Moreover, landscaping and revegetation with drought-tolerant native species will reduce, or eliminate, the need for irrigation; only temporary irrigation for plant establishment is proposed.

The project also includes construction of an additional 30+ space parking area north of the Duke Energy Intake structure and directly adjacent to newly expanded Coleman Beach. The Applicant has not yet fully detailed how runoff from the expanded impervious area will be handled. Special Condition 4 is attached that requires submittal of a post-construction drainage plan that requires the Applicant to identify the specific type, design, and location of all drainage infrastructure and best management practices (BMPs) necessary to ensure that post-construction drainage from all roadways, paths, parking areas, and any other impervious areas does not result in erosion, sedimentation, or degradation of coastal water quality.

The Commission therefore finds, as proposed and as conditioned to address water quality issues, that the development will be consistent with Section 30231 of the Coastal Act.

4. Visual Resources

a. Relevant Regulatory Policies

The following policy of the Coastal Act provides for the protection of scenic coastal resources, and

states, in part:

> ***Section 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.*

b. Visual Analysis

The project site is located along the shoreline of Morro Bay. The proposed access improvements will connect the extremely popular visitor-serving destination of the Embarcadero with the recreational opportunities originating near Morro Rock. As noted in the findings above, Morro Bay hosts over 1 million visitors annually many of who go to the beach, walk along Embarcadero, or visit Morrro Rock – the landmark of the community.

The proposed access and roadway improvements are at-grade facilities, so their visual impact will be minimal. The project also includes symbolic fencing and interpretive signing that will extend above grade, though its purpose is to direct access and educate the public, so some visibility is necessary. However, in order to ensure that the fencing and signs minimize visual intrusion and are compatible with the dune setting, the Commission is recommending Special Condition 1 which requires the Applicant to submit final plans illustrating the overall dimensions of the symbolic fencing and the type of materials to be used. Likewise, the applicant is required to provide a signing detail for the required interpretive displays that will inform the public of the site sensitivities. In addition, the habitat restorations and enhancements along with the additional road and trailside landscaping can only improve the visual experience for pedestrians, motorists, and cyclists alike.

The Applicant has also proposed the removal of three existing overhead cobra-style lights and installation of 8 similar type overhead lights along the Embarcadero Road extension and Coleman Drive realignment. The lighting is proposed to be installed along the dune side right-of-way and will introduce additional lighting and glare into the area proposed for dune restoration. Furthermore, the proposed light fixtures will be visible from many vantages along the Embarcadero, Morro Bay, and the new recreational paths. During the evenings, illumination will create a string of lights extending from the Duke Energy Intake structure to Morro Rock and could interfere with state and federally protected bird species known to nest in and around the area. The lighting is not necessary for vehicle travel along the roadway, though some lighting of the recreational paths may be appropriate. Accordingly, Special Condition 5 is attached that limits lighting to low bollard-style or similar type of lighting for the pedestrian and bike paths. The lights must be low-wattage and directed downward to minimize visual impacts and prevent glare from on adjacent sensitive habitat and Morro Bay. The Commission therefore finds the proposal, as conditioned to address visual resource impacts, is fully consistent with Section 30251 of the Coastal Act.

5. California Environmental Quality Act (CEQA)

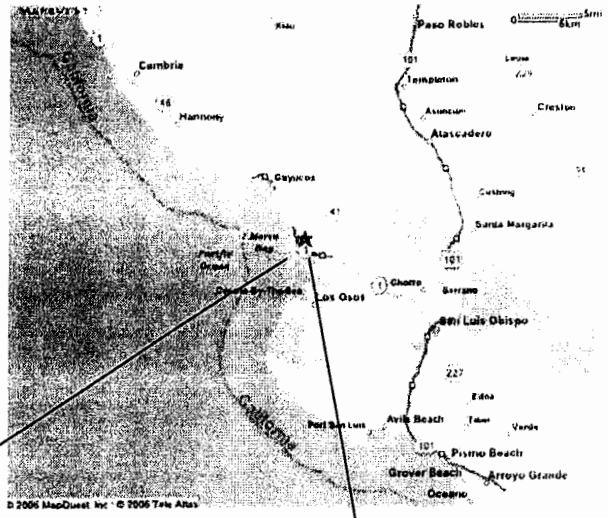
Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

As discussed and conditioned herein, the proposed project, as conditioned to avoid and minimize impacts to coastal dune scrub habitat, and temporary construction-related disturbances, and fully mitigate all remaining impacts, will not cause significant adverse impacts to the environment. Specifically, the project, as conditioned, has been found consistent with the sensitive resource, public access, water quality, and visual resource policies of the Coastal Act.

The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. This staff report has discussed the relevant coastal resource issues with the proposal, and has recommended appropriate mitigations to address adverse impacts to said resources. Accordingly, the project is being approved subject to conditions which implement the mitigating actions required of the Applicant by the Commission (see Special Conditions). As such, the Commission finds that only as modified and conditioned by this permit will the proposed project not have any significant adverse effects on the environment within the meaning of CEQA.

Exhibit A: Location Maps

City of Morro Bay Waterfront
APN 066-461-11



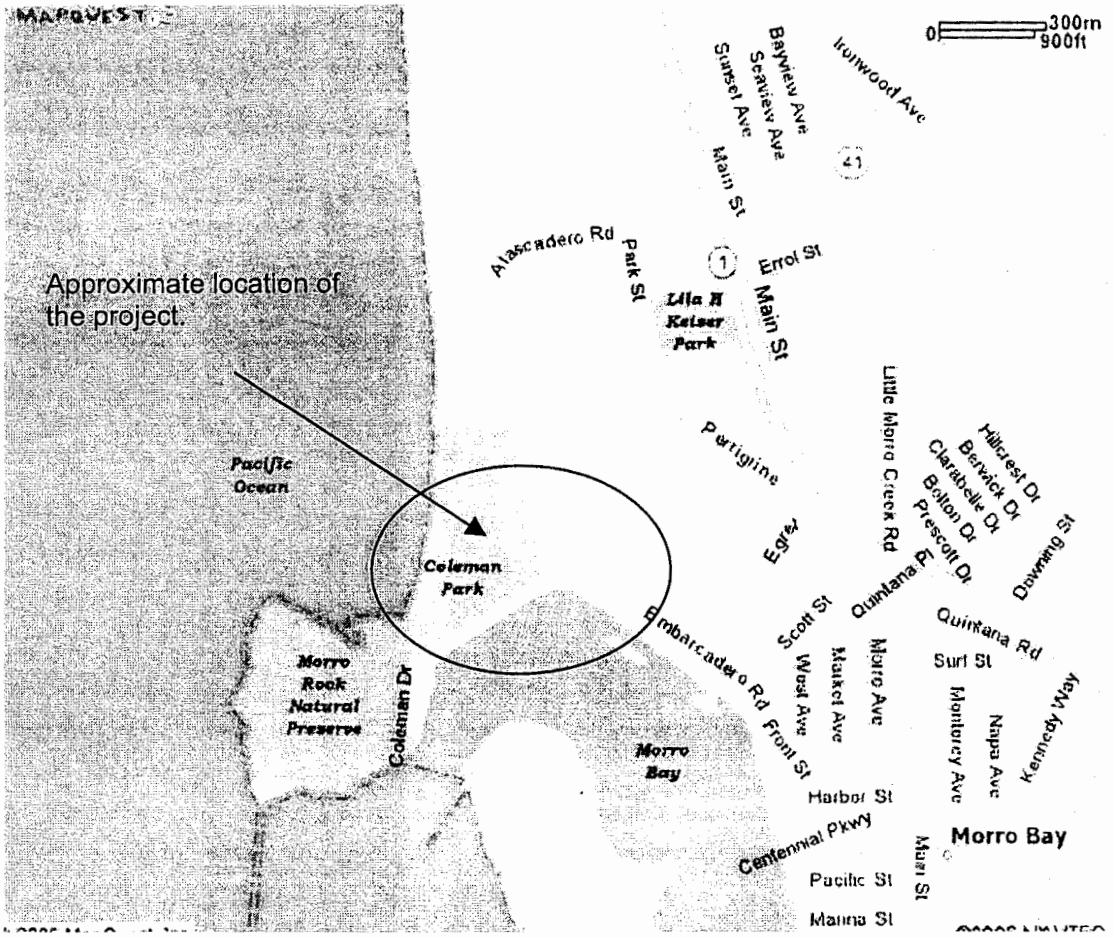


Exhibit A: Location Maps
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Harborwalk Access and Dune Restoration
Exhibit I

California Coastal Commission

Exhibit A

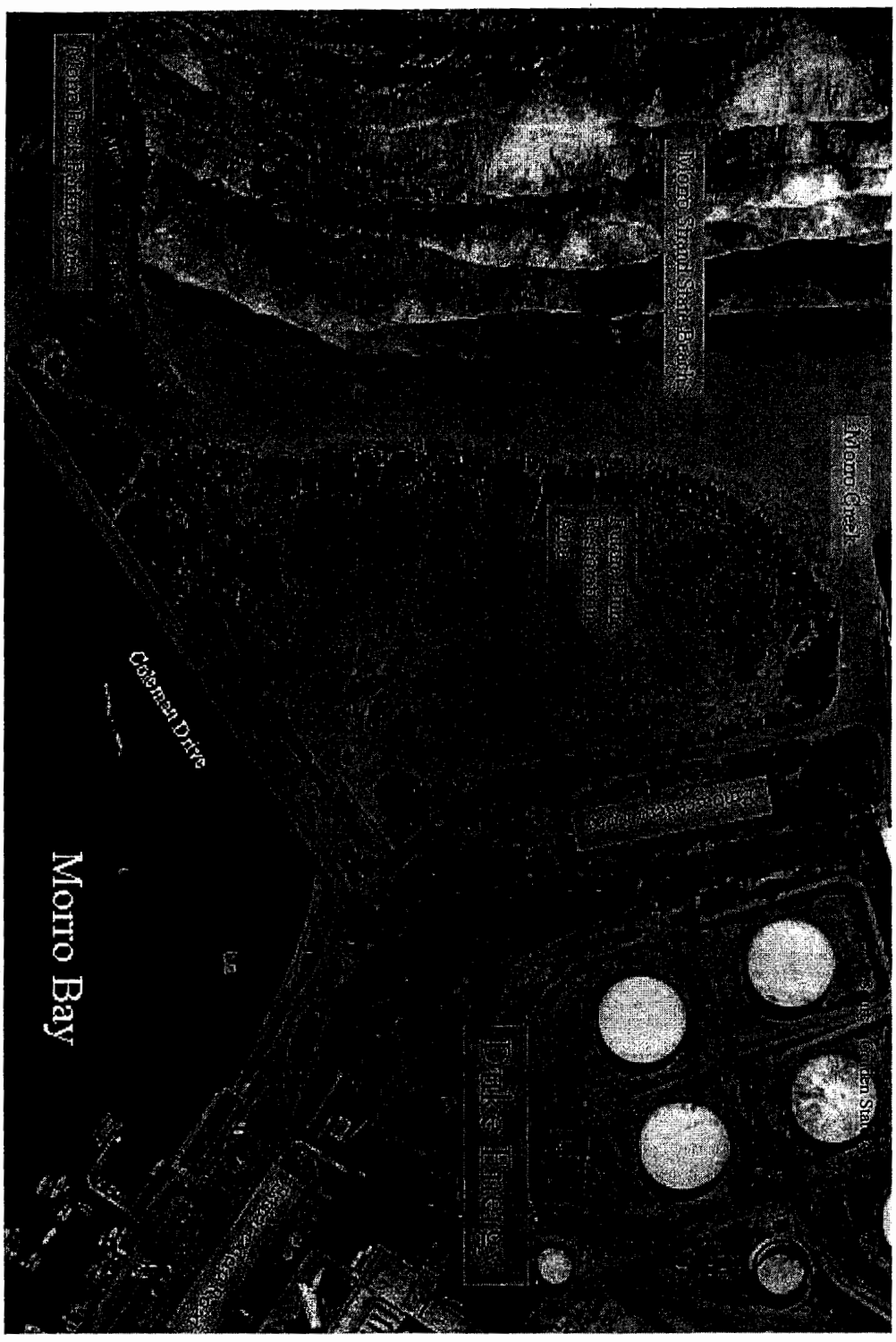

Exhibit A: Location Maps
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Harborwalk Access and Dune Restoration

Exhibit B: Site Plans

Exhibit B: Site Plans
Application No. 3-05-071
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Harborwalk Access and Dune Restoration

California Coastal Commission

Exhibit B: Site Plans

Site Plan shows the west end detail including bike and surrey parking at Morro Rock and new access and roadway improvements west of the Coleman Drive transition.

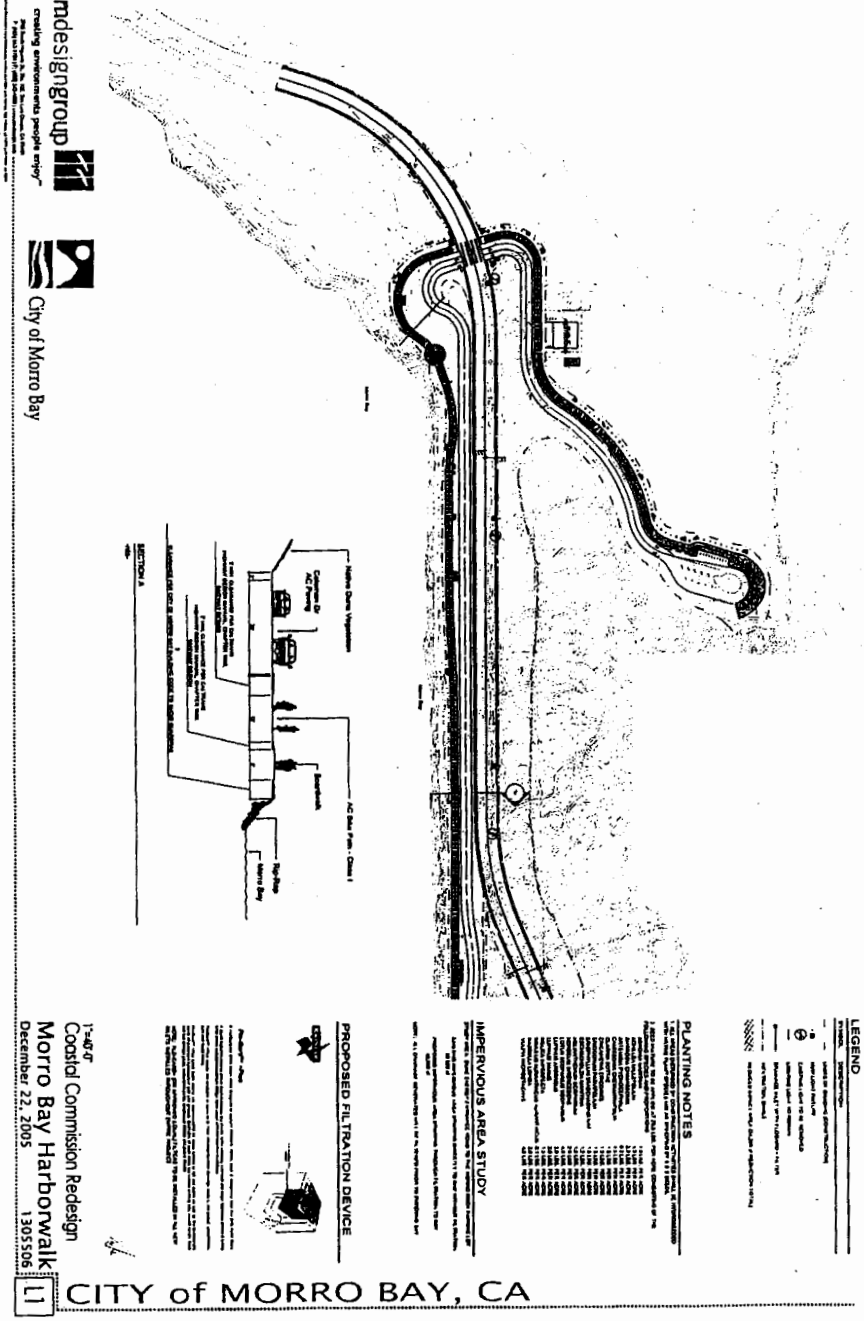

Exhibit B: Site Plans
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Harborwalk Access and Dune Restoration

California Coastal Commission

Exhibit I

Exhibit B: Site Plans

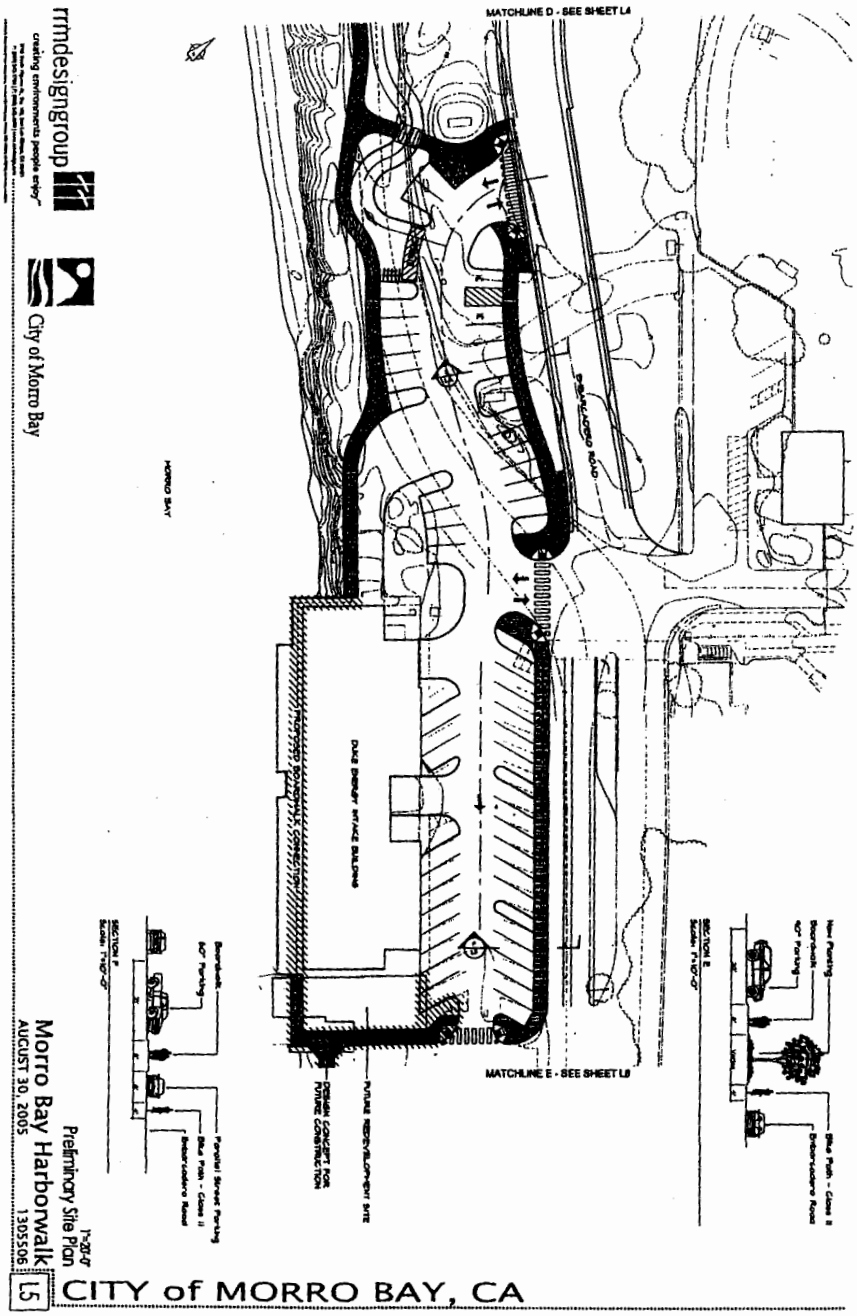
Detail shows Embarcadero Road and Coleman Drive alignment from the new parking area to Coleman Drive transition.

California Coastal Commission

Exhibit I

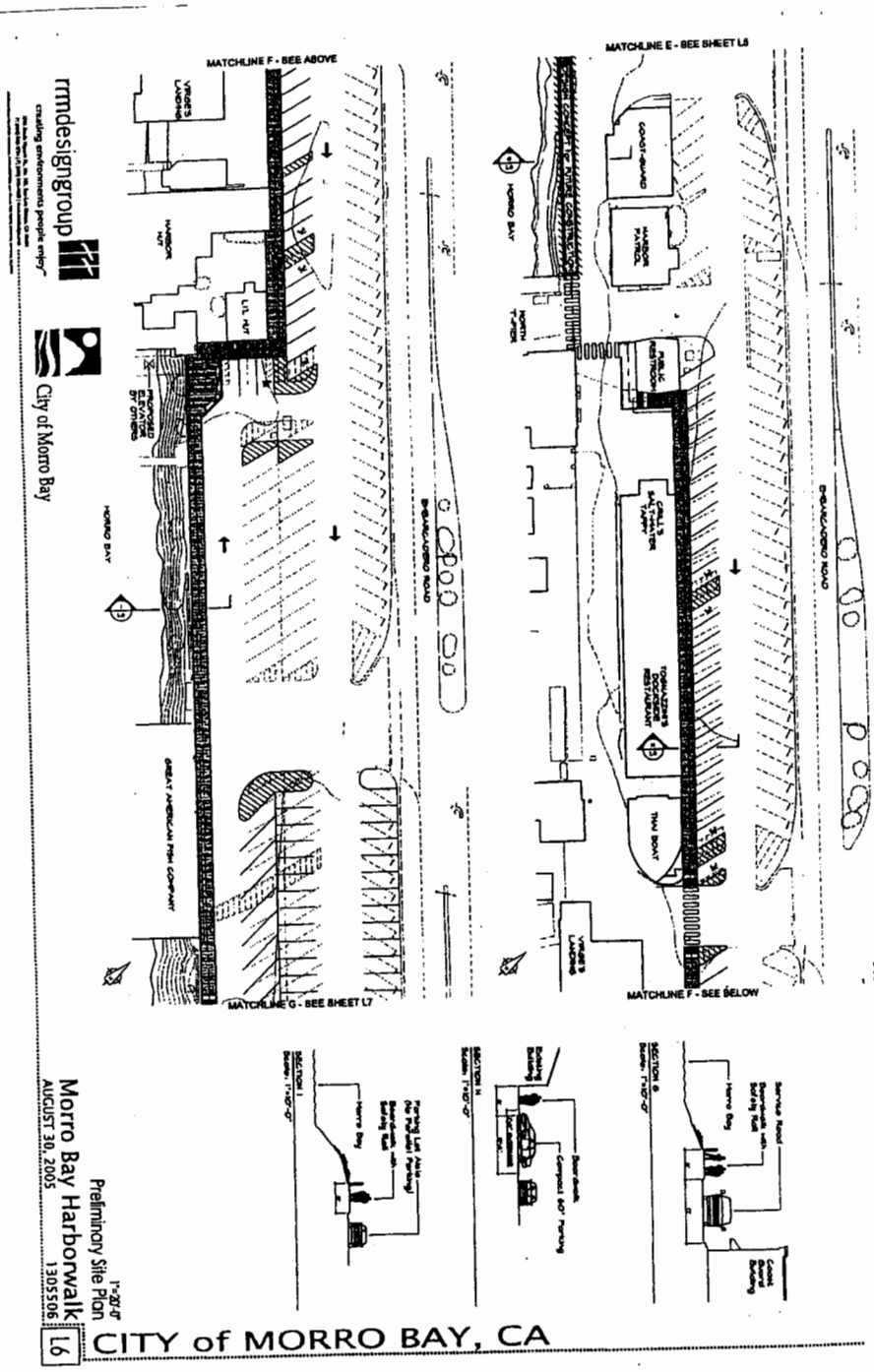
Exhibit B: Site Plans

New roadway and parking area north of the Duke Energy intake structure.



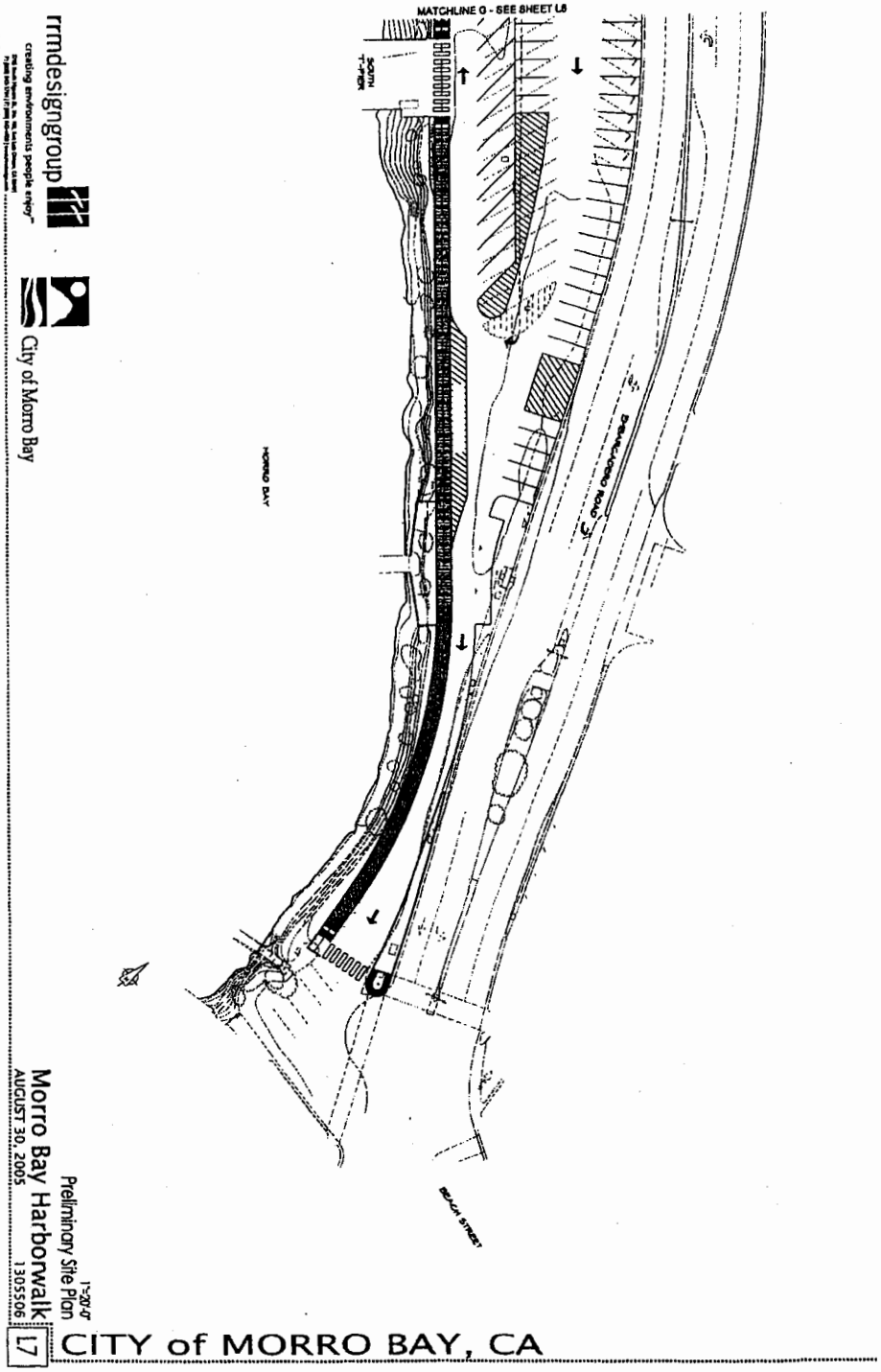
California Coastal Commission

Exhibit B: Site Plans



Pedestrian path along the Embarcadero and commercial fishing T-Piers.

Exhibit B: Site Plans

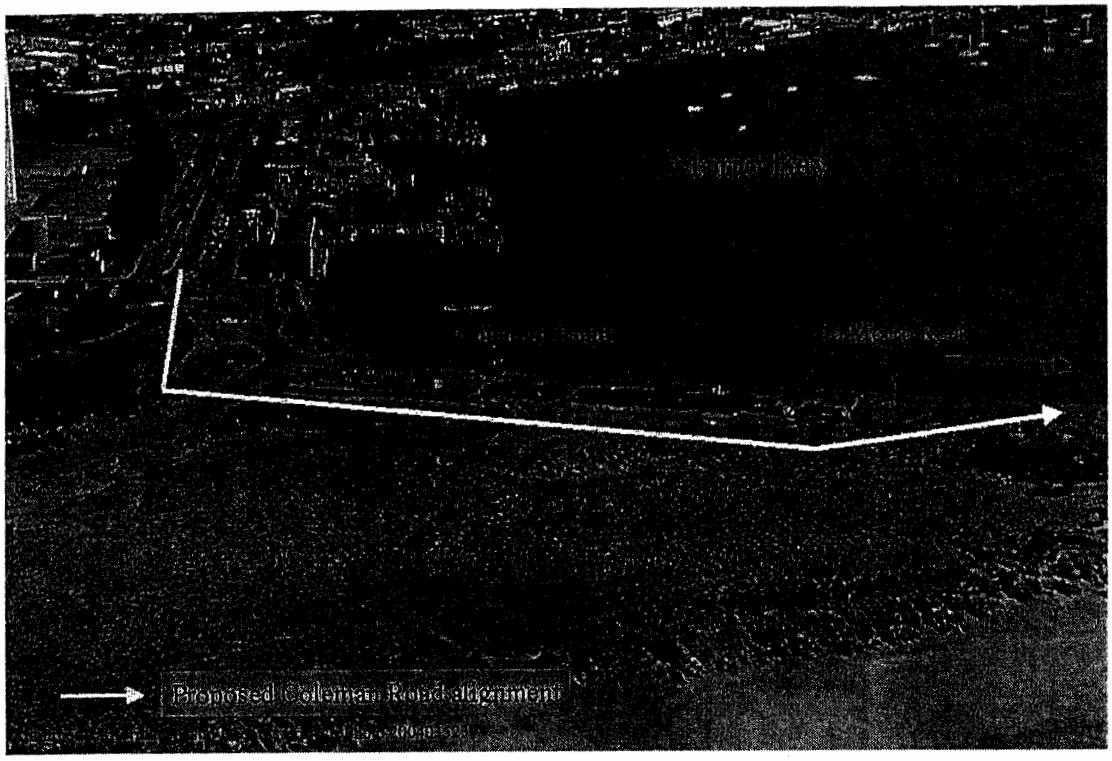


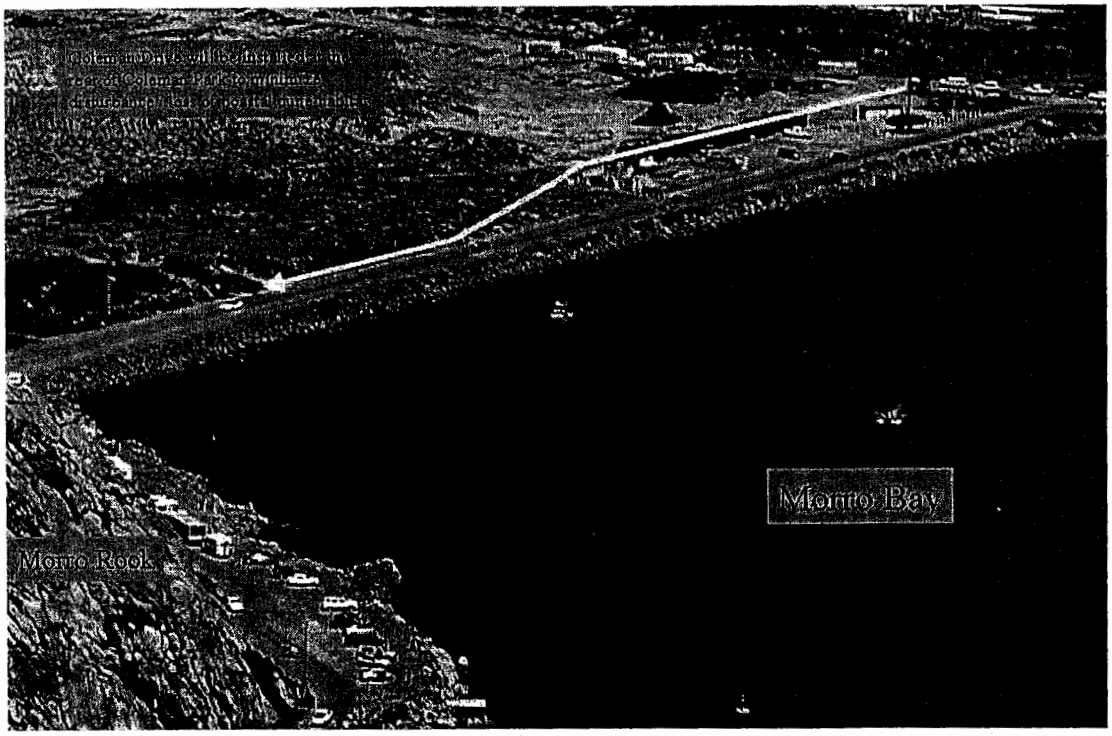
Segment 1 at the foot of Beach Street.
Pedestrian path begins here.

California Coastal Commission

Exhibit I

Exhibit C: Proposed Roadway Realignment





Revised Coleman Road alignment

Exhibit C: Proposed Roadway Realignment
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Harborwalk Access and Dune Restoration

Exhibit D

Project Impact Map

Exhibit D: Project Impact Map
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California Coastal Commission

Exhibit I

Exhibit E

Proposed Dune Restoration

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Exhibit F

Exhibit F: Dune Restoration per Special Condition 2
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Harborwalk Access and Dune Restoration

CALIFORNIA COASTAL COMMISSION
CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
(831) 427-4863

W15a

Filed:	08/25/00
49th day:	10/13/00
49-Day Waiver	09/19/00
180th day:	02/21/01
Staff:	K.Colin
Staff report:	12/26/00
Hearing date:	01/10/00

COASTAL DEVELOPMENT PERMIT

Application number.....3-00-092, Monterey Dune Public Access & Restoration Project

Applicants.....California Department of Parks & Recreation and City of Monterey, (Contacts: William Reichmuth, City of Monterey & Ken Gray, CA. Dept. of Parks & Recreation)

Project location.....Coastal dunes of Monterey State Beach between the intersection of Sand Dunes Drive and Canyon Del Rey and the intersection of Del Monte Boulevard and Ramona Avenue, at APNs 011-432-04, 011-432-14, and 011-432-15.

Project description.....Request for permit to: (1) construct an approximate 4000-foot (14 foot wide) recreation trail; (2) removal of approximately 200 linear feet of asphalt paving from former petroleum tank access road; (3) removal of approximately 200 linear feet at the end of Sand Dunes Drive, as well as decreasing its width from 25 to 14 feet; (4) construction of 29-space parking lot and landscaping; (5) associated drainage improvements; and (6) restoration of approximately 8 acres of existing disturbed dunes.

File documents.....Draft Habitat Conservation Plan (7/12/00); Smith's Blue Butterfly Survey by Richard A, Arnold Ph.D. ((9/23/99); Smith's Blue Butterfly and Seaside Bird's Beak Survey (Davis, Jacoubowsky, Hawkins Associates Inc., 10/12/82); Botanical/Biological Report by Bruce Cowan (1/22/99); Mitigated Negative Declaration Adopted 5/2/00; Monterey State Beach General Plan (August 1987); Conservation and Management of the Endangered Smith's Blue Butterfly, *Euphilotes enoptes smithi*, Richard A. Arnold (Journal of Research on the Lepidoptera 22(2): 135-153, 1983); Ocean Harbor House Condominiums, Encroachment Permit Application and Alternatives Analysis, EMC Planning Group Inc., September 23, 1999; and Ocean Harbor House Apartments, Coastal Erosion Study and Revetment Design by Rogers Johnson and Associates, dated 12/15/83 and 1/31/84.

Agency approvals.....Conceptual approval by City of Monterey (5/2/00); U.S. Fish & Wildlife Service Section 10 Incidental Take Permit (pending).

Staff recommendation..... Approval with Conditions

EXHIBIT J
Exhibit 1

Summary of Staff Recommendation

Staff recommends that the Commission approve, with conditions, the proposed recreation pathway and parking lot construction, and habitat restoration activities at Monterey State Beach. The project would provide a direct link to the existing Monterey Bay Recreation Trail that currently skirts the project sites eastern border. In addition, the proposed project would result in the restoration of approximately eight acres of currently degraded coastal dunes. On balance, the proposed project would further the public access and habitat enhancement goals of the Coastal Act by maximizing public access to and along the coast, creating a public access configuration which better addresses conflicts with sensitive species and habitats, and restoring a substantial area of coastal dunes. In response to these significant proposed public access and habitat restoration improvements, staff recommends that the Commission approve the project, subject to the following findings and conditions.

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1. Staff Recommendation on Permit

The staff recommends that the Commission, after public hearing, approve the proposed permit subject to the standard and special conditions below. Staff recommends a YES vote on the following motion:

Motion. I move that the Commission approve Coastal Development Permit Number 3-00-092 pursuant to the staff recommendation.

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

Resolution to Approve a Coastal Development Permit. The Commission hereby approves the coastal development permit on the ground that the development as subject to conditions, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either: (1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the amended development on the environment; or (2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse effects of the development on the environment.

2. Conditions of Approval

Standard Conditions

1. **Notice of Receipt and Acknowledgment.** The permit amendment is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and

possessors of the subject property to the terms and conditions.

Special Conditions

1. **Project Approval & Final Plans:** This coastal permit approval is for the proposed bike path and parking lot (and associated pavement removal and site restoration). Any other site development, including a restroom, will require a separate coastal development permit or an amendment to this permit. The bike path, including associated drainage facilities, shall be installed according to plans by Creegan + D'Angelo, dated May 2000 and included in the application file (see Exhibit B). Any final plans or revisions shall be submitted for Executive Director review and approval, prior to construction. The parking lot shall be installed as shown on the aforementioned plans. PRIOR TO ISSUANCE OF THE COASTAL PERMIT, the applicant shall submit a final set of construction and maintenance plans for the parking lot, including non-point source pollution controls (see following condition # 2). Any subsequent revisions shall be submitted for Executive Director review and approval, prior to construction. Since the bike path and parking lot are to be installed under separate contracts, this permit can be issued in two separate parts; provided that all of the following conditions, except #2, would apply to both parts of the permit.

2. **Non-point Source Pollution Control:** The aforementioned drainage plans shall clearly identify all permanent measures to be taken to control and direct all site runoff. Such plan shall at a minimum provide for the following:

    1. The drainage system shall be designed to filter and/or treat the volume of runoff produced from each and every storm event up to and including the 85th percentile 24-hour runoff event;

    2. Runoff from areas subject to automobile use shall be filtered by an engineered filtration system, or equivalent Best Management Practices, specifically designed to remove vehicular contaminants (such as petroleum hydrocarbons, heavy metals, and other particulates);

    3. All parking lot areas, driveways, and other vehicular traffic areas on site shall be swept and/or vacuumed at regular intervals and at least once prior to October 15th of each year. Any oily spots shall be cleaned with appropriate absorbent materials. All debris, trash and soiled absorbent materials shall be disposed of in a proper manner. If wet cleanup of any of these areas is absolutely necessary, all debris shall first be removed by sweeping and/or vacuuming, all storm drains inlets shall be sealed, and wash water pumped to a holding tank to be disposed of properly and/or into a sanitary sewer system;

    4. Any drainage system elements shall be permanently operated and maintained. At a minimum:

        (a) All traps/separators and/or filters shall be inspected to determine if they need to be cleaned out or repaired at the following minimum frequencies: (1) prior to October

15th each year; (2) prior to April 15th each year; and (3) during each month that it rains between November 1st and April 1st. Clean-out and repairs (if necessary) shall be done as part of these inspections. At a minimum, all traps/separators and/or filters must be cleaned prior to the onset of the storm season, no later than October 15th of each year;

(b) Debris and other water pollutants removed from filter device(s) during clean-out shall be contained and disposed of in a proper manner.

It is the Permittee's responsibility to maintain the drainage system in a structurally sound manner and its approved state. Any proposed changes to the approved permanent drainage plan shall be reported to the Executive Director. No changes to the approved permanent drainage plan shall occur without a Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

3. **California Department of Parks & Recreation General Plan Amendment**. WITHIN FIVE YEARS OF THE PERMIT ISSUANCE, the California Department of Parks and Recreation shall submit for Executive Director review and approval elements of an amended State Park General Plan for the site: amending the Plan for the current area covered and expanding coverage to the remainder of the park land. The elements submitted shall illustrate how long-term provision and management of public access will be consistent with resource protection of the environmentally sensitive habitat dune environment. Included shall be an updated Interpretation Plan (see condition #7). Evidence shall be submitted or included within the Plan demonstrating how the long-term park management is consistent with the results of the required habitat monitoring (see condition #6). Also, the amended State Parks plan shall address potential shoreline erosion and facility relocation consistent with condition #5 below. The five year deadline may be extended by the Executive Director for good reason. The submittal may be in the form of a condition compliance submittal, a Public Works Plan, or a coastal permit amendment (if aspects of this current permit need revision).

4. **Conformance with U.S. Fish & Wildlife Service (USFWS) Requirements**. PRIOR TO CONSTRUCTION UNDER THIS PERMIT, the permittee shall submit to the Executive Director for review evidence of approval, or that none is required, from the USFWS.

5. **Assumption of Risk/Shoreline Protection. BY ACCEPTANCE OF THE COASTAL DEVELOPMENT PERMIT,** the applicants shall agree and acknowledge the following:

    1. The applicant acknowledges and agrees that the site may be subject to hazards from waves, flooding, liquefaction, erosion, and wildfire.

    2. The applicant acknowledges and agrees to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development.

3. The applicant unconditionally waives any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards.

4. The applicant agrees to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

5. The applicant agrees that any adverse effects to property caused by the permitted project shall be fully the responsibility of the landowner.

6. The applicant shall not construct, now or in the future, any shoreline protective device(s) for the purpose of protecting the public access related development approved pursuant to coastal development permit 3-00-092 including, the recreation trail and parking lot. In the event that these structures are threatened with imminent damage or destruction from waves, erosion, storm conditions, or other natural hazards in the future and by acceptance of this permit, the applicant hereby waives any rights to construct such devices that may exist under Public Resources Code Section 30235 and should consider relocation of the facilities if they become threatened by erosion or other coastal hazards.

6. **Monitoring Program Submittal.** PRIOR TO CONSTRUCTION UNDER THIS PERMIT, the applicants shall submit a habitat restoration monitoring program substantially in conformance with the revegetation monitoring program proposed in the July 17, 2000 draft Habitat Conservation Plan (HCP). However, the proposed HCP monitoring program shall be revised to include the implementation of spatially stratified random transects (as opposed to permanent transects); and explicit performance standards with which to judge the effectiveness of restoration, as well as a clear schedule and procedure for determining whether they are met. For revegetation, any such performance standards should include; identification of minimum goals for each species, by percentage of total plantings and by percentage of total cover when defined criteria are met. All performance standards should state in quantifiable terms the level and extent of the attributes necessary to reach the goals and objectives. Sustainability of the attributes should be part of every performance standard. Each performance standard should identify:

(1) the attribute to be achieved;

(2) the condition or level that defines success; and

(3) the period over which success must be sustained.

The performance standards should be specific enough to provide for the assessment of dune habitat performance over time through the measurement of attributes of dune habitat and functions including, but not limited to, vegetation and wildlife abundance. In conjunction with

these standards, the program should include measures to address those portions of the restoration that are unsuccessful and specify methods to remedy them. Long-term management and restoration efforts that are found necessary shall be incorporated into a revised State Park General Plan (see condition #1).

7. **Interpretation Plan.** PRIOR TO CONSTRUCTION UNDER THIS PERMIT, the applicants shall submit a plan for public use interpretation for Executive Director review and approval. This plan may be submitted as a component of the Habitat Conservation Plan. This plan shall indicate how public use of the project will be allowed and managed consistent with the objectives of the Habitat Conservation Plan. The objectives shall be that site visitors who park in the parking lot and/or bike or hike on the trail do not harm the sensitive dune habitat system. Physical elements may include signing, fencing, information brochures, closure areas, trash receptacles, ant the like. Management elements may include time restrictions on facility use (by season, nighttime restrictions, etc.), description of management personnel, and specifying various responsible entities' roles and coordination efforts. Included shall be a discussion of the signing and management of this link through the State Park in coordination with the existing regional bike path and its alternative route along Roberts Lake. The plan shall include a monitoring component and the results of the monitoring shall be incorporated into an amended State Parks General Plan (see condition #1).

4. Recommended Findings and Declarations

The Commission finds and declares as follows:

A. Project Background

Project Location & Setting

The approximate 33.8 acre project site is located in the City of Monterey, at the western terminus of Sand Dunes drive, west of Highway 1, and between the Del Monte Dunes subdivision and Monterey Hotel. More specifically, the project site constitutes the northern-most portion of Monterey State Beach, while the approximate 16-acre southern portion lies downcoast to the west of the U.S. Naval Postgraduate School. Other state beaches in the region of the project site include Marina State Beach to the north and Asilomar Beach to the west. There are also a number of other public access and recreational amenities located in the project's vicinity. These amenities include: (1) Monterey Bay Recreation Trail to the west and east, (2) Roberts Lake to the south, (3) vertical beach access at the U.S. Navy Post Graduate School, (4) lateral regional public access along the beach, (5) and the City of Monterey Wharf numbers one and two.

Site History

Though the entire project site is now considered to be a portion of Monterey State Beach, this was not always the case. State Parks has owned the approximate northern half of the project site since the early 1960's; however, the approximate southern half did not become incorporated into the park until

1991. The approximate southern half of the site was formerly home to the Phillips Petroleum tank farm. Subsequent to the removal of nine petroleum tanks, the property was transferred to a separate private entity that ultimately resulted in a proposal for residential development of the site. In short, while the City ultimately denied the proposed residential development, the property owner subsequently succeeded in obtaining a ruling of temporary takings of their property. In response to this ruling, the site was purchased through funding efforts of the California Coastal Conservancy, California Department of Parks & Recreation, California Department of Fish & Game, Wildlife Conservancy, and the Monterey Peninsula Regional Park District.

Though purchase of the southern half was funded by various public entities, the California Department of Parks & Recreation (DPR) now owns the majority of the site, with the exception of an approximate four acre back dune area (owned by the Department of Fish & Game) and the Sand Dunes Drive right-of way (owned by the City of Monterey). Overall, though, DPR is responsible for day-to-day management of the entire site through a cooperative agreement with the Department of Fish & Game and the City of Monterey.

Current Site Conditions

The project site consists primarily of existing disturbed and partially restored coastal dunes. The old tank farm road traverses approximately 1800 linear feet through the back dunes (roughly paralleling Highway One), and the western most portion of Sand Dunes Drive parallels the ocean for a distance of approximately 1100 feet and terminates at a cu-de-sac (See Figure 1 below for road locations). While automobiles do not currently use the existing tank farm road, Sand Dunes Drive is accessible to automotive, pedestrian, and bicycle traffic during daylight hours; is most frequently utilized by persons parallel parked along the road to obtain coastal views.

As could be expected, the sites former use for petroleum storage left a lasting mark upon the site. The most notable remnants of this past land use include the access road mentioned above, the nine former tank locations, and a large staging area at the middle of the site. The site was subject to a site remediation effort and, according to the County Department of Health, clean up of the site was accomplished.[1] Notwithstanding these visible scars, the site harbors valuable coastal resources; these include important coastal views from Highway One, environmentally sensitive species and habitat, as well as the potential for additional public access and recreational amenities.

According to State Parks, habitat restoration and monitoring activities have been conducted at the site since 1992; these activities have included revegetation, exotic species control, sensitive species monitoring, and recreational use monitoring. In order to protect dune areas from overuse, Monterey State Beach currently has a closure order in effect which prohibits public access to sections of dune or beach that are designated by signage or fencing. Also, State Parks utilizes the closure order to secure any areas which the Western Snowy Plover (*Charadrius alexandrinus nivosus*) nest. Under the proposed project, State Parks would continue to apply the closure order to the site, and, in fact, public access would be limited to only the paved areas of the recreation trail and parking lot, a vertical accessway to the beach, as well as lateral access along the sandy beach.

[1] October 12, 1999 letter from the Monterey County Department of Health.

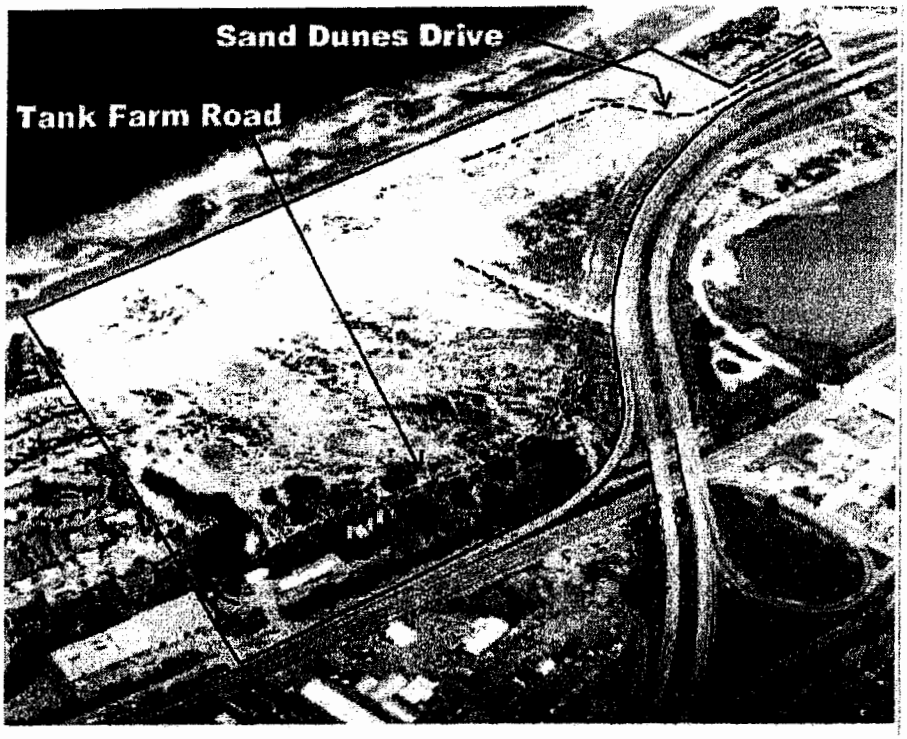

Figure 1. Oblique Aerial View of Project Site Illustrating Project Boundaries and Existing Paved Roads.

Project Description

The California Department of Parks & Recreation and the City of Monterey request approval to: (1) construct an approximate 4000-foot (14 foot wide) recreation trail through coastal dunes between the intersection of Sand Dunes Drive and Canyon Del Rey and the intersection of Del Monte Boulevard and Ramona Avenue; (2) remove approximately 200 linear feet (2000 square feet) of asphalt paving from former petroleum tank farm road; (3) removal of approximately 200 linear feet at the end of Sand Dunes Drive, as well as decreasing its width from 25 to 14 feet; (3) consolidation of coastal access parking into a new 29-space parking lot with associated landscaping; and (4) restoration of approximately 8 acres of existing disturbed dunes. See exhibit B for engineered project plans.

As mentioned, the applicants have proposed to implement a variety of habitat restoration and monitoring activities, outlined in a draft Habitat Conservation Plan[2], as part of the coastal development permit application. (See ESHA findings below for further detail on proposed restoration activities)

Once completed, the applicant's state that the project will improve bicycle travel along the Monterey

[2] *Habitat Conservation Plan for the Federally Threatened Western Snowy Plover, the Federally Endangered Smith's Blue Butterfly and Other Species of Special Concern Associated with the Coastal Access and Habitat Improvement Project within Monterey State Beach, Monterey, California,* July 12, 2000 DRAFT.

Bay Coastal Trail and restore degraded coastal sand dune habitat. More specifically, they state that this would be accomplished by:

- Improved continuity along the existing Monterey Recreation Trail through the provision of a continuous Class I bicycle route from Lover's Lane I Pacific Grove, through the City of Marina;
- Resolution of an existing safety problem for bicycle riders traveling between Roberts Avenue and Sand Dunes Drive;
- Increase in opportunities for bicycle commuting between the Sand City/Seaside areas to Monterey City; and
- Enhancement of habitat for the Western Snowy Plover and Smith's Blue Butterfly, as well as other native coastal dune species.

B. Coastal Act Issues

1. Land Use Priorities

Public access and recreation, as well as habitat enhancement and restoration, are high priority land uses under the Coastal Act.

Coastal Act § 30001.5 states in part:

> *The Legislature further finds and declares that the basic goals of the state for the coastal zone are to:*
>
> *(a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources....*
>
> *(c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.*

Coastal Act Sections 30213 and 30221 prescribed priority for proposed land use in this case and states:

> *§ 30213: Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.*
>
> *§ 30221: Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

The project site currently provides public access and recreational opportunities, at no cost, for members of the public.

Section 30001.5 sets forth the goal of maximizing public access, consistent with sound resource conservation principles. Section 30001.5 also sets forth the goal of enhancing and restoring coastal resources. Section 30221 ascribes the priority of recreational land use at the project site's ocean front location. Hence, public access and recreation, and coastal dune habitat restoration must be considered a high priority land use for the project site. Under the proposed project, such public access and recreational opportunities would remain, though, modified in an attempt to better address existing environmentally sensitive habitat and species conflicts with public access, as well as through the facilitation of improved connectivity of the site to other adjacent public access pathways. Also, the proposed project would result in the restoration of important environmentally sensitive habitat areas.

The proposed project would facilitate improved public access at the site and serve to restore degraded coastal dune habitat, and therefore would further priority land uses under the Coastal Act. Accordingly, the Commission finds that the proposed development presents high priority coastal land uses that are consistent with the land use priorities of Coastal Act Sections 30001.5, 30213, and 30221.

2. Environmentally Sensitive Habitat Areas (ESHAs)

Coastal Act § 30240 affords protection of environmentally sensitive habitat areas and states,

> *§ 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.*

Likewise, Coastal Act sections 30212 and 30214 are relevant to the protection of environmentally sensitive areas and, in this case, are applicable since this project proposes public access through coastal dunes. These sections state,

> *§ 30212: (a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:*
>
> *(1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources.*

§ 30214: (a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.

The City and State Parks are proposing to extend a public bikepath mostly along an existing road and partly through degraded dune habitat that exists at the site. They are also proposing to relocate existing public parking to a location adjacent to an existing hotel parking lot and road, and to remove part of the existing road to the current parking area. With the relocation of the parking lot and the use of an existing road alignment for the bike path, there will be little to no new disturbance of the project site on balance.

More important, the project is proposing to restore approximately eight acres of existing degraded dune habitat. The most significant restoration effort will be focused upon the former tank pads and staging area. More specifically, the following restoration activities will be accomplished under the project:

1. The former tank pad locations (over one acre) will be covered with clean sand, recontoured to a natural dune topography, and planted with native dune species;

2. Over 6,400 cubic yards of non-native fill material will be excavated from the former tank farm staging area (four acres) and topographically restored with native sand material and vegetation to create wind-free microclimates to benefit the Smith's Blue Butterfly;

3. Approximately 10,000 square feet of paving will be removed along the existing length of Sand Dunes Drives at the project site, resulting in a recreation path further away from know Western Snowy Plover nesting areas;

4. Existing patches of non-native invasive species will be eradicated by a combination of herbicide application and physical removal;

5. Over two acres of dunes within the Caltrans right-of-way will be restored with native vegetation;

6. Monterey Spineflower seed will be collected and used to expand existing populations; and

7. Over the long-term, State Park's plans to introduce the Smith's Blue Butterfly and Sand Gilia to the project site so that they may utilize the restored dunes.

All of the above listed dune restoration activities are dependent upon the dune resource, consistent with section 30240.

On balance, the project will enhance dune habitat and ultimately support the long-term restoration of part of the Monterey Dunes System (also known as the Seaside dune system) in this location. Geologists (Cooper et al) describe the dune system as having three main components, each layered upon one another with the oldest layers on the bottom: youngest are the Recent dunes, such as those found around Moss Landing and which are still in the process of building. The most ancient are the pre-Flandrian dunes, mostly located inland from Highway 1 and falling outside the coastal zone.

The highest and most dramatic component of the system is the strand of Flandrian-era dunes, named for an Ice Age event known as the Flandrian Transgression. These high dunes run as a narrow but continuous formation along the shoreline of Monterey Bay, beginning at the Salinas River and reaching approximately 13 miles to Monterey Harbor. The dune system traverses a variety of governmental jurisdictions: Monterey County, the City of Marina, California State Parks, U.S. Army (former Fort Ord), City of Sand City, Monterey Peninsula Regional Park District, City of Seaside, the City of Monterey and the U.S. Naval Postgraduate School. The Coastal Zone boundary through this region primarily follows Highway 1 which, for the most part is the first public road paralleling the sea. The remnant pre-Flandrian dunes inland of Highway 1 in the cities of Monterey, Seaside, and Sand City have suffered severe impacts and are mostly already developed. While the high Flandrian dunes are also impacted, at present several largely undeveloped sections remain along the shoreline.

The significance of the natural resource values of the Monterey Bay dunes – particularly the Flandrian component along the shoreline -- is well recognized, as is the potential to restore and enhance these values in degraded areas (see more detail below). Several major dune restoration programs are underway in the vicinity of the project site. A significant restoration effort has taken place to the north of the proposed project, on a former dumpsite that was acquired and remediated by the Monterey Peninsula Regional Park District. Farther north of the project site, State Parks intends to protect and restore 700 acres of dune habitat on dunes of the former Fort Ord seaward of Highway One. Other notable restoration areas within the dune system include State Park's restoration efforts at Monterey (project site), Seaside, Marina, and Moss Landing State beaches, and the Navy's restoration of 44 acres of beach area at the Naval Post Graduate School in the City of Monterey. In particular, previous restoration efforts at the project site by State Parks have proved successful when compared to the description contained the Park's 1987 General Plan, which states, "there is very little vegetation left on the scalped and drifting sand dunes that remain on the property, and without vegetation there is a lack of land-based fauna." Though portions of the project site remain degraded, habitat conditions have improved substantially since the writing of the Plan.

One of the most critical functions of the dune system is its role as habitat for very unique flora and fauna. These are species which are specially adapted to the conditions and opportunities found in the dunes. Dune plants in particular play a special role by both stabilizing the dunes from the effects of wind erosion, and hosting rare fauna. However, as the natural dune system has been reduced and fragmented, the risk of extinction has increased for several species. Thus, each new impact within the dunes system has and will continue to contribute to the cumulative decline of these species.

Specifically, several native plants known to occur in the dunes are either already listed, or are on the

candidate list for the federal register of endangered and threatened species. These include the Seaside bird's beak (*Cordulanthus rigidus littoralis*), sand gilia (*Gilia tenuiflora arenaria*), Sandmat manzanita (*Arctostaphylus pumila*), Eastwood's ericameria (*Ericameria fasciculata*), coast wallflower (*Erysimum ammophilum*), Menzies wallflower (*Erysimum menziesii*)and Monterey ceanothus (*Ceanothus rigidus*). The Seaside bird's beak is protected under the California Plant Protection Act of 1977. All seven species are recognized as rare by the California Native Plant Society. The sand gilia is both state-listed and federal-listed. Another sand-stabilizing plant species, the Monterey spineflower (*Chorizanthe pungens var. pungens*), is also found in the Monterey Bay dunes (including the project site), and has been listed in the Federal Register as an endangered species (U.S. Fish & Wildlife Service notice of February 14, 1994).

The U.S. Fish & Wildlife Service has also listed the Western snowy plover as a threatened species. These birds forage along the shoreline and nest in the foredunes of the Flandrian system. The plovers are known to nest in various areas of the dunes, including the project site, and have been the focus of significant conservation efforts by the State Dept. of Parks and Recreation (see below for more detail).

Another species of concern existing within the dune system is the Smith's blue butterfly (*Euphilotes enoptes smithi*), a federally protected animal species listed as endangered by the U.S. Fish and Wildlife Service. Coast buckwheat (*Eriogonum parvifolium* and *E. latifolium*), are host plants to the Smith's blue butterfly, and occur in clusters that support localized populations of the butterfly. The black legless lizard (*Anniella pulchra nigra*), another native species of the Monterey Bay dunes, has previously been a candidate for federal listing as endangered, and is considered a Species of Concern by the California Department of Fish & Game because of its limited distribution.

While the distribution of these dune plants and animals may appear sparse to the uninitiated, over time they can collectively be expected to utilize the entire available dune surface. This is because the Flandrian component of the dunes complex is a dynamic system. The dunes present a rather harsh and difficult growing environment, where the wind keeps shifting the shape of the ground, rainfall rapidly percolates out of reach, and, lacking a distinct topsoil horizon, nutrients are quickly exhausted. Thus, a plant like Monterey spineflower may over a year or two use up the available moisture and nutrients at a particular site, and by means of wind-blown seed "move" to a neighboring area. In this simplified model, the original site remains a bare sand surface until life's necessities again accumulate at the original site—thereby allowing recolonization and repeating of the cycle. Therefore, the overall growing area ("habitat") needed over the long run is vastly larger than the area occupied by the plants at any one "snapshot" in time. This also helps explain why the entire dune surface—not just the locations where the plants (and animals) are found in any one particular year—must be considered as ESHA. More detail on this aspect of the dunes ESHA is presented in the discussion of the project site below.

The project site currently contains a mixture of degraded and restored coastal dunes. Although past land practices have altered the habitat qualities of the site, it nonetheless currently supports rare and important native dune habitats. This includes the central portion of the site that provides nesting habitat for the federally threatened Western Snowy Plover. Given the rarity, sensitivity, and historic

decline of the dune habitats native to the Monterey Bay dunes, successful recovery of this habitat is dependent upon the protection and biological enhancement of existing and disturbed yet restorable dune areas alike.

In summary, this project will enhance degraded habitat and eliminate existing paved areas along the shoreline. Although the relocated parking will be located in low-lying dunes, this area consists of degraded habitat that is fragmented from the larger area of dune habitat that will be restored. It currently does not provide significant habitat value for the larger dunes system. Furthermore, a December 22, 2000 letter from Ken Gray of State Parks, confirms that the dune area nearest the Monterey Beach Hotel is wind-swept and of low habitat quality. Nevertheless, the presence of motor vehicles and an impervious surface near the shoreline could result in non-point source pollution. Thus, final drainage plans are necessary as detailed in condition #2.

Finally, as discussed in the next finding, the project will maximize public access by maintaining existing beach parking in this vicinity and by providing a public bikepath and pedestrian access along the coast. In conjunction with the habitat restoration component of the project, this path will also provide for interpretation of the dunes habitat in this location. Thus, the access component of the project provides an additional habitat protection benefit by bringing the public to a restored dune habitat area for appreciation and interpretation of the resource. There is, of course, the potential for park visitors who use the parking lot and/or bike path to disturb the habitat. Therefore, it is necessary for the Department to have an interpretation plan to alert uses to stay out of sensitive areas and the like. An interim plan can be prepared as part of or in conjunction with the required Habitat Conservation Plan. Over time the results of required monitoring may suggest some different long-term strategies for providing public access consistent with protecting the habitat. As noted, State Parks has a General Plan for a portion of the site that will need to be updated to account for the habitat restoration activities. It will also have to be expanded to include the former Phillips Petroleum site. This update can factor in the monitoring that will occur and can be submitted to the Commission for review and approval to. Overall, with the significant resource-dependent habitat restoration component, minimal disturbance of degraded dunes, and provision of public access, interpretation, and opportunity to experience the Monterey Dunes system in an urban environment, the project, as conditioned for an interim interpretation plan and a longer-term overall General Plan revision, is consistent with Coastal Act § 30240.

3. Public Recreation and Access

Coastal Act § 30604(c) requires that every coastal development permit issued for new development between the nearest public road and the sea "shall include a specific finding that the development is in conformity with the public access and recreation policies of [Coastal Act] Chapter 3." The proposed project is located seaward of the first through public road.

Coastal Act Sections 30210 through 30214 and 30220 through 30224 specifically protect public access and recreation. In particular:

§ 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....

§ 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.

§ 30224: Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, [..] providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

Likewise, Coastal Act § 30240 (b) also requires that development not interfere with recreational areas and states,

(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.

As discussed, there are a number of public access amenities in the vicinity and local region. Monterey State Beach consists of two parcels; the first of which includes the project site (northern-portion State Beach), and the second includes the approximate 16-acre southern portion lying downcoast, to the west of the U.S. Naval Postgraduate School. Other state beaches in the region of the project site include Marina State Beach to the north and Asilomar Beach to the west. There are also a number of other public access and recreational amenities located in the project's vicinity. These include: (1) Monterey Bay Recreation Trail to the west and east, (2) Roberts Lake to the south,

(3) vertical beach access at the U.S. Navy Post Graduate School, (4) lateral public beach access, and (5) the City of Monterey Wharf numbers one and two.

In terms of the project site, public access to and along the coast is currently provided for via Sand Dunes Drive. This access is possible at no cost to the public from the hours of sunrise to sunset. Vertical and lateral public beach access is also provided at the State Parks parking lot to the north of the Monterey Beach Hotel. While the project site currently provides public access amenities, and is surrounded by other public amenities, the connectivity between these areas is not ideal.

The proposed project would maximize access to and along the coast by providing better connectivity with adjacent coastal access routes, all in a manner which best protects these sensitive dune habitats. More specifically, the proposed recreation trail would provide a direct linkage to the Monterey Bay Recreation Trail which currently skirts the eastern border of the site. How this link will be signed and managed to account for habitat issues in conjunction with the existing Monterey Bay Recreational Trail can be addressed in the required Interpretation Plan and long-term General Plan revision. Also, the proposed recreation trail would be aligned in a manner that would not significantly disrupt the continuance of adjacent ESHA areas. As discussed, the proposed pathway would utilize the existing Sand Dunes Drive, and in doing so, would remove this ocean front parking. In order to address the issue of parking loss, the applicants propose to replace parking at a ratio of 1:1 within the degraded dunes adjacent to the Monterey Beach Hotel and Sand Dunes Drive. Placement of parking at this location would serve to remove disturbances further away from known Western Snowy Plover nesting sites, and place development more appropriately adjacent to existing developed areas. Similarly, the proposed parking lot would result in more contiguous habitat area overall. In conclusion, the Commission finds that the proposed project, as conditioned, is consistent with Coastal Act Sections 30210 through 30214 and 30220 through 30224.

4. Visual Resources

Section 30251 of the Coastal Act states that the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance, and requires in applicable part that permitted development be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, and to be visually compatible with the character of surrounding areas. This section states in full,

> *§ 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.*

The project site is the first beach access visible to the Highway 1 traveler between Moss Landing to

the north and Carmel State Beach to the south. As such, the project site is located within an important public viewshed, and worthy of protection under Coastal Act § 30251. In terms of public viewing areas surrounding the project site, these include Highway One, Monterey State Beach ocean frontage, and the waters of Monterey Bay. The proposed project presents a low-lying development type that would not obstruct coastal views. Also, the proposed parking lot would not obstruct coastal views from Highway One. Overall, the proposed project will actually enhance the visual character of the site by way of the proposed dune restoration. Therefore, in light of these facts, the Commission finds that the proposed project is consistent with Coastal Act § 30251.

5. Geologically Stable Development

Section 30253 of the Coastal Act requires that new development assure structural integrity and minimize risks to life and property, and states:

> *§ 30253: New development shall: (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The proposed pathway would traverse through coastal dunes from a connection at the existing City of Monterey recreation trail fronting Del Monte Boulevard, and then connect the existing tank farm road to Sand Dunes Drive. In terms of issues raised by the project under Coastal Act § 30253, the portion of the proposed pathway at Sand Dunes Drive is of primary concern as it is currently approximately 50 feet from the high water mark of the Monterey Bay.

Although Sand Dunes Drive (a portion of which would constitute the pathway) has remained in tact to date, evidence of coastal erosion is evident on nearby properties; these properties contain structures that have become in danger of coastal erosion in the recent past. More specifically, the adjacent Ocean Harbor House to the south of the project site has been the subject of previous coastal erosion studies. According to predicted rates of sand dune retreat due to surf action taken in 1983, 1993, and 1998 by Rogers E. Johnson & Associates, the bluff at Ocean Harbor House has retreated at an average of 31 inches or approximately 2.6 feet, per year.[3] In fact, the Commission has allowed the placement of a temporary sand berm to protect the Ocean Harbor House site on at least three occasions in the past. Likewise, the adjacent Monterey Beach Hotel to the north of the project site has been subject of coastal erosion in the past, and this has resulted in the construction of a seawall at the site.

Irrespective of these coastal erosion issues, the applicant's have committed to relocating the path in the future in the event that it becomes in danger of erosion. The Commission finds that the proposed relocation represents a reasonable alternative to shoreline protection, and would result in

[3] *Ocean Harbor House Condominiums, Encroachment Permit Application and Alternatives Analysis,* EMC Planning Group Inc., September 23, 1999.

development that is consistent with Coastal Act § 30253. Nonetheless, in order to assure that shoreline protection is never proposed at this location, this permit requires the applicants to agree to an assumption of risk and commitment towards no future proposals for shoreline protection. Therefore, the Commission finds that, only by imposing special condition two, can the proposed project be found consistent with Coastal Act § 30253.

C. California Environmental Quality Act (CEQA)

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary for Resources as being the functional equivalent of environmental review under CEQA. Accordingly, the Commission finds that as conditioned the proposed project will not have significant adverse effects on the environment within the meaning of CEQA; that there are no feasible alternatives which would significantly reduce any potential adverse effects; and, accordingly, the proposal, as conditioned, is in conformance with CEQA requirements.

STATE OF CALIFORNIA - THE RESOURCES AGENCY

PETE WILSON, Governor

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Hearing Date:	10/10/97

STAFF REPORT
REGULAR CALENDAR

APPLICATION NUMBER: **3-97-062**

APPLICANT: **CITY OF SAND CITY**

PROJECT DESCRIPTION: Construction of a 12 foot wide bike path for 4,845 linear feet, and approximately 5 acres of dune revegetation, with associated grading, retaining walls, installation of fencing and interpretive signs, and modifications to existing portions of Sand Dunes Drive adjacent to the bike path. This is a portion of a larger project designed to connect the Monterey Recreational Trail with the Fort Ord Recreational and Bike Trail over a distance of 1.9 miles, which includes approximately 11 acres of dune revegetation.

PROJECT LOCATION: This permit is for that portion of the project located in the Coastal Commission's original jurisdiction, from the intersection of the Monterey Recreational Trail and Roberts Avenue (within the City of Monterey), along Roberts Avenue, under Highway One at Canyon Del Rey (within the City of Seaside), then generally parallel and seaward of State Highway Route 1 along Sand Dunes Drive between Humbolt Street and Fell Street (within the City of Sand City). The portion of the project north of Fell Street, which continues along the seaward side of the Highway One right-of-way to the intersection of Ord Avenue and Fremont Boulevard, is within Sand City's permit jurisdiction and has been previously approved by the City.

LOCAL APPROVALS: Coastal Development Permit 95-04 for the portion of the bike path within Sand City's permit jurisdiction.

FILE DOCUMENTS: Seaside - Sand City Coastal Alignment Bike Path Final Environmental Impact Report (EMC planning Group, October 17, 1995); Sand City Coastal Development Permit No. 95-04; Sand City Local Coastal Program; Geotechnical Investigation for Seaside Sand City Bike Path (Steven Raas & Associates, June 1993).

EXHIBIT K

Exhibit 1

SUMMARY OF STAFF RECOMMENDATION

Staff recommends conditional approval of the requested permit, which would authorize construction of the portion of the Seaside - Sand City bike path within the Commission's jurisdiction. This is a portion of a larger project to connect the existing Monterey Recreational Trail with the Fort Ord Recreational and Bike Trail.

The recommended conditions of approval require that the bike path be located on the seaward side of Sand Dunes Drive (rather than between Sand Dunes Drive and Highway One as currently proposed) to maximize and enhance coastal access and recreation opportunities. This change shall be incorporated into final project plans, which must comply with the recommendations of the geotechnical investigation completed for this project, and include additional information regarding public safety features (e.g., sign locations and text), the type and location of fencing necessary to protect adjacent sensitive habitat areas, and Department of Fish and Game and Department of Parks and Recreation approval of final landscaping plans. An operations plan to ensure that construction activities minimize impacts to adjacent habitat areas is also required, as is an archaeology report to ensure that any such resources found during construction are appropriately protected and preserved. In addition, the special conditions require evidence of authorization to undertake the grading and dune planting proposed on private property. Finally, the recommended conditions of approval require the permittee to be responsible for the ongoing maintenance and monitoring activities necessary to ensure the long-term success of adjacent dune plantings.

I. STAFF RECOMMENDATION

Staff recommends that the Commission adopt the following resolution:

Approval with Conditions

The Commission hereby **grants** a permit for the proposed development, subject to the conditions below, on the grounds that the development, as conditioned, will be in conformity with the provisions of Chapter 3 of the Coastal Act, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, and, will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

II. STANDARD CONDITIONS (Attached as Exhibit A)

III. SPECIAL CONDITIONS

1. Legal Interest to Undertake Development. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit, for Executive Director review and approval, evidence of legal interest to proceed with development activities outside of the existing Sand Dunes Drive right-of-way. Such evidence can be in the form of recorded easements, encroachment permits, recorded deeds, or other legal documentation acceptable to the Executive Director. The authorization for entry shall be sufficient to allow the City or other governmental agencies to conduct on-going monitoring and maintenance activities required by this permit.

2. Final Project Plans. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit, for Executive Director review and approval, final project plans which: eliminate the proposed waterline extension from this project (unless a separate permit or amendment to the permit is approved by the Commission prior to the submission of final plans); conform to the conditions of approval of the locally issued Coastal Development Permit 95-04; and, include the following:

a. relocation of the bike path to the seaward side of Sand Dunes Drive;

b. best management practices to reduce the potential for contaminated urban runoff to enter Roberts Lake during and after construction;

c. the type and location of all permanent fencing (chain link fencing to be prohibited except between Sand Dunes Drive and Highway One);

d. the type and location of all signs (including traffic signs and environmental interpretive signs); and,

e. for the crossing under Highway One between Roberts Lake and Sand Dunes Drive, the following signs/safety features shall be included in final plans:

1) bicycle crossing warning signs and stop signs on both highway off-ramps;

2) a stop sign for westbound cars on Canyon Del Rey Boulevard at the bicycle crossing; and,

3) a median barrier of at least six feet in width at the Canyon Del Rey Boulevard bicycle crossing to allow southbound bicyclists crossing Humbolt street to stop in the middle of the street should there be eastbound traffic.

3. Geotechnical Review. The submission of final plans shall be accompanied by written evidence that a qualified geotechnical engineer has confirmed that the final plans conform with the recommendations contained in the geotechnical investigation prepared by Steven Raas and Associates (June 1993).

4. Archaeology Report. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit , for Executive Director review and approval, a plan providing for archaeological monitoring, evaluation, and mitigation should any archaeological resources be discovered during construction. If such archaeological resources are discovered all work which could damage or destroy these resources shall be temporarily suspended. A qualified archaeologist shall inspect the project site to determine the nature and significance of the archaeological materials and develop appropriate mitigation measures using standards of the State Historic Preservation Office. Construction within the affected area may not be resumed until these mitigation measures have been approved by the State Historic Preservation Office and the Executive Director and fully implemented by the permittee.

5. Monitoring and Maintenance Plan. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit, for Executive Director review and approval, a plan which establishes specific performance standards, monitoring provisions, and

remedial actions that will be utilized to ensure the success of the proposed landscaping and the protection of coastal dune scrub habitat adjacent to the bike path. The monitoring and maintenance activities included in this plan shall be based on specific criteria such as plant cover, species diversity, and elimination of exotic invasive species, and be conducted over a five year period commencing at project completion, with a minimum monitoring frequency of one inspection every four months. Submission of this plan shall be accompanied by written evidence that the landscaping plan and monitoring and maintenance plan have been reviewed and approved by the California Department of Fish and Game, the California Department of Parks and Recreation, and the U.S. Fish and Wildlife Service, or evidence that such approvals are not required.

AT THE CONCLUSION OF THE FIVE YEAR MAINTENANCE AND MONITORING PERIOD, the permittee shall submit, for Executive Director review and approval, a report which either: documents the successful establishment of the approved landscape plan; or, provides for an extended monitoring and maintenance program, including appropriate corrective actions, which shall be implemented until successful establishment of the approved landscaping plan has been achieved to the satisfaction of the Executive Director.

6. Biological Monitor. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, the permittee shall submit, for Executive Director review and approval, the name(s) and qualifications of a qualified biologist who will be on site to:

a. conduct pre-construction surveys for Monterey Spineflower and Snowy Plover nests;

b. identify locations where temporary fencing will be necessary to protect adjacent habitat areas prior to and during construction, and supervise the installation and maintenance of any such fencing;

c. monitor the construction site on a daily basis and, where warranted, immediately stop any construction activities that would harm Monterey spineflowers or Western Snowy Plovers;

d. capture any black legless lizard, coast horned lizard, Monterey dune scorpion, and burrowing owl found on the site each day prior to construction activities, and relocate these animals to a suitable habitat nearby that is not subject to construction disturbance; and

e. undertake the post-construction monitoring and maintenance activities required by Special Condition 5 (above).

7. Construction Operations. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, the permittee shall submit, for Executive Director review and approval, a plan which delineates the construction zone, staging area(s), and areas where sand may be temporarily stockpiled. These areas shall be demarked on site with temporary construction fencing wherever needed to ensure that construction activities do not intrude upon adjacent sensitive habitat areas. WITHIN 30 DAYS OF PROJECT COMPLETION, all construction materials/stockpiles shall be removed from the site. If there is any excess sand stockpiled on the site, plans for its disposal shall be reviewed and approved by the Executive Director.

IV. FINDINGS AND DECLARATIONS

A. Project Location:

This bike path project will complete the connection between the Monterey Recreation Trail to the south, and the Fort Ord Recreation and Bike Trail to the north, over a distance of approximately two miles (Exhibits B and C). This is the "missing link" in the 21.5 mile regional bikeway that extends from Pacific Grove to Castroville. The majority of the project site can be described as remnant sand dunes, in various stages of disruption and recovery, with significant coastal views available in various locations.

The project will be constructed in three segments, the alignments of which are illustrated in project plans attached as Exhibit D. Segment I originates in the City of Monterey, at the current termination of the existing Monterey Recreation Trail at Roberts Avenue. Segment I will extend the bike path around the west side of Roberts Lake to the intersection with Canyon Del Rey Boulevard in the City of Seaside. At this point, the bike path will cross the northbound Highway 1 off-ramp, continue under Highway 1 on the south side of Canyon Del Rey , then cross Canyon Del Rey into the City of Seaside prior to the southbound Highway 1 on-ramp. The path will then cross the southbound Highway One off-ramp to the intersection of Sand Dunes Drive. (Please see attached Exhibit D for alignment).

As proposed, Segment II originates at the intersection of Sand Dunes Drive and Humbolt Street in the City of Sand City. The path continues north between Sand Dunes Drive and the Highway One right-of-way, until Tioga Avenue, where Sand Dunes Drive ends. To accommodate this alignment, Sand Dunes Drive must be shifted 12 feet to the west.

Segment III parallels the western edge of the Highway One right-of-way, along a wastewater interceptor pipeline maintained by the Monterey Regional Water Pollution Control Agency. This segment extends to Ord Avenue, where it connects to the Fort Ord Recreation and Bike Trail at the intersection of Highway 1 and Fremont Boulevard.

Only Segment I, and the portion of Segment II south of Fell Street, are within the Coastal Commission's permit jurisdiction and subject to this permit. This is due to the lack of a certified Implementation Plan for this section of the Sand City coastline. The remainder of the project (Segment II north of Fell Street and Segment III) are within the coastal permit jurisdiction of Sand City. The City previously approved Coastal Development permit 95-04 for the section of the bike path within its jurisdiction; the conditions of this approval are attached to this report as Exhibit F.

While most of the project is located within existing public rights-of-way, slope stabilization and dune revegetation along portions of Segment II within the Commission's jurisdiction will extend onto lands that are publicly and privately owned. In order to ensure that the City has a legal right to undertake the development activities proposed in these areas, Special Condition One requires the permittee to submit, prior to the issuance of the permit, evidence that such a right has been established. This evidence can be in the form of recorded easements, encroachment permits, recorded deeds, or other legal documentation acceptable to the Executive Director, and must include provisions to conduct the on-going monitoring and maintenance activities. Such a condition is necessary to meet the requirements of Section 30601.5 of the Coastal Act.

B. Project Description:

Development activities included in the project consist of site grading, bike path construction, realignment of Sand Dunes Drive, construction of retaining walls, slope stabilization and erosion control, installation of fencing and signs, and approximately 11 acres of dune revegetation. For most of the project's length, the 12 foot wide bike path (two lanes of six feet in width) will be separated from existing roadways by a planted strip of 4 to 6 feet in width.

Segment I, which is approximately 2,300 feet in length, involves the construction of bicycle lanes for a short distance on Roberts Avenue, where this is not enough right-of-way to accommodate separated bicycle paths. The southbound bike lane changes into a bike path where Roberts Avenue turns north. For northbound bicyclists, Segment I takes advantage of an existing path on the east side of Roberts Avenue that will be improved to better accommodate bicyclists. This path crosses Roberts Avenue and connects with the bicycle path to be constructed on the west side of Roberts Avenue. Segment One also includes improvements to the Highway 1 undercrossing necessary to accommodate the bike path, including the construction of a retaining wall on the north side of the undercrossing, just east of the southbound off ramp, as well as signs directing bicycles and automobiles.

As proposed, Segment II involves moving the existing Sand Dunes Drive 14 feet to the west, in order to accommodate the 12 foot wide bike path between Sand Dunes Drive and the Highway One right-of-way. This would sandwich the bike path between two roads. However, in recent discussions with City staff, the City may be willing to "flip" the project, so that the bike path will be on the seaward side of Sand Dunes Drive as opposed to between Sand Dunes Drive and Highway 1. As detailed in the public access and recreation findings of this staff report, such a change is necessary to maximize coastal access and recreation opportunities, and is therefore required by Special Condition 2 of this permit. As conditioned, Sand Dunes Drive would maintain its existing alignment and the bike path would be located between the road and the dunes.

As previously noted, grading, slope stabilization, and revegetation along this segment of the project extend westward of the Sand Dunes Drive right-of-way. Slope stabilization includes grading and reshaping adjacent sand dunes to a maximum slope of 3:1. The width of these graded areas vary according to existing contours, as shown on the landscape plans attached as Exhibit E. All of these areas will be revegetated with native dune plants according to the attached landscape plans, subject to the requirements of Special Condition 5.

Submitted project plans also show a new waterline and fire hydrant to provide fire protection at the Monterey Regional Water Pollution Control Agency's pump station located at the southwest corner of Bay Street and Sand Dunes Drive. This development is not a part of the bike path project and is being proposed under a separate coastal development permit application that is anticipated to be heard by the Commission at it's November, 1997 meeting. Because this development is subject to future approval, Special Condition 2 requires that it be eliminated from final project plans for the bike path unless it is approved by the Commission prior to the submittal of final plans.

C. Public Access and Recreation:

Coastal Act policies regarding public access and recreation applicable to this project include the following:

> Section 30210. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.
>
> Section 30214 (part). (a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:
>
> (1) Topographic and geologic site characteristics.
>
> (2) The capacity of the site to sustain use and at what level of intensity.
>
> (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.

Consistent with the directive of Section 30210, the bike path project will enhance coastal access and recreation opportunities by providing the "missing link" to an important regional bike way. Installation of this project will greatly improve the ability of the public to travel to and along the coast via bicycle.

However, by locating the bike path between Sand Dunes Drive and Highway 1 right-of-way, the project falls short of "maximizing" coastal access and recreation opportunities. There are numerous reasons why locating the bike path on the seaward side of Sand Dunes Drive is preferable from an access and recreation standpoint. These include:

- the alignment between the two roadways substantially reduces the quality of the coastal recreation experience. Noise, visual obstruction, and odors from automobiles on both sides of the path creates an urban experience, whereas an alignment on the seaward side of the road would maximize opportunities for the public to experience and enjoy the natural beauty of this section of the coast;

- Sand Dunes Drive is an unnecessary barrier to coastal access. An alignment on the west side of Sand Dunes Drive eliminates the need to cross Sand Dunes Drive to reach the shoreline at designated access points; and,

- locating the bike path on the west side of Sand Dunes Drive is more compatible with park development planned for the area. Opportunities to integrate the bike path with coastal access and recreation facilities that may be provided by future park development will be

greatly enhanced by eliminating the need for bicyclists to cross Sand Dunes Drive in order to access the park.

For these reasons, Special Condition 2 requires that the bike path be located on the seaward side of Sand Dunes Drive.

With respect to the requirement that access and recreation opportunities be consistent with public safety needs (Coastal Act Section 30210), the proposed project involves roadway crossings that may result in conflicts between bicyclists and automobiles. In particular, crossings of Highway One off-ramps, as well as the crossing of Canyon Del Rey, have a high potential for such incidents. In order to address these concerns, Special Condition 2 requires the incorporation of specific safety features to minimize such conflicts.

The above Coastal Act sections also require coastal access and recreation facilities to address constraints related to habitat protection, private property rights, topographic and geologic features, and the capacity of the site to sustain the intensity of use. The preservation and enhancement of adjacent sensitive habitat areas will be assured by the extensive native dune plantings, and by the installation of fencing and interpretive signs, as further discussed in part D of this report. Fencing and interpretive signs also ensure that public use of the path will not overwhelm adjacent habitat areas. Regarding private property rights, most of the project area is publicly owned. However, there are some privately owned lots to the west of the bike path. The development of a public bike path within the established public right-of-way, will not interfere with the rights of these property owners. As required by Special Condition 1, the permittee must submit evidence of a legal right to undertake the slope stabilization and dune revegetation elements of the project which extend beyond the existing Sand Dunes right-of way before the permit can be issued. Finally, with respect to geologic and topographic features of the project site, a geotechnical investigation has been completed. This geotechnical report recommends specific measures that should be incorporated in project design and construction to address the geologic and topographic constraints of the site, including: method of site preparation; design of cut and fill slopes; construction of retaining walls; handling of surface drainage; and, pavement design. Special Condition 3 requires compliance with the recommendations of this investigation.

In conclusion, the bike path project will greatly improve public access and recreation opportunities by providing an important connection to a regional bicycle network that is used for coastal access and recreation purposes. Special Conditions attached to this permit maximize public safety and the coastal access and recreation qualities of the proposed project and ensure that habitat protection needs, the rights of private property owners, and the geologic constraints of the site are appropriately considered. Therefore, as conditioned, the project is consistent with Coastal Act access and recreation policies.

D. Environmentally Sensitive Habitat Areas:

Coastal Act Section 30240 provides in part:

> (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only those uses dependent on those resources shall be allowed within those areas.

Section 30107.5 of the Coastal Act defines an environmentally sensitive area as:

> 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 bike path is located along the edge of an existing road (Sand Dunes Drive) within the Monterey Bay dune system. This dune system is one of the most important ecological systems of the Central Coast. Although large portions of it have been significantly degraded over the years, its value as regional environmentally sensitive habitat can not be discounted. According to the Technical Review Draft for the Smith's Blue Butterfly Recovery Plan, U.S. Fish and Wildlife Service:

> more than 50 percent of the Seaside [Monterey Bay] dune system has been destroyed or altered significantly by sand mining, urbanization, military activities, construction, and the introduction of two aggressive exotic plants, European marram grass (Ammophila arenaria) and iceplant (Mesembryanthemum spp.) Even considering this, these dunes are the largest and best preserved of any of the central California dune systems except for the Oso Flaco Dunes near San Luis Obispo. The dune system at San Francisco has been almost totally destroyed (Powell, 1981).

The Monterey Dunes also support a number of native coastal plant and animal species that are dependent upon this habitat. Some of these species are listed, or are being considered for listing, on the federal register of endangered and threatened species. These species include the Smith's Blue Butterfly, the Western Snowy Plover, the Black Legless Lizard, Monterey spineflower, coast wallflower, and the sand gilia.

In addition, degraded areas of these dunes, such as where the bike path project would be located, retain important natural habitat values. As is evident from the success of restoration efforts at places such as Seaside State Beach (adjacent to the subject project), disturbed dunes represent existing and restorable environmentally sensitive habitat. In the context of overall preservation of sensitive dune plants and animals within the Monterey Dunes ecosystem, previously disturbed and currently degraded areas are important components to the area-wide dune restoration effort necessary to ensure the continuance of this unique habitat. Failure to protect the habitat values of open space dune areas that have been previously disturbed or degraded could seriously impede future efforts to restore, through a comprehensive planning approach, the environmentally sensitive dune habitats of the Monterey Bay dune system.

The direct impacts of this project will be limited to areas adjacent to the existing Sand Dunes Drive. The bikeway is set back approximately 500 feet from the beach; the intervening dunes comprise roughly 100 acres. The Environmental Impact Report (EIR) prepared for the project characterized the 3.18 acres of dune habitat that will be covered by the entire bike path (i.e., including the portion already permitted by Sand City), as: 0.20 acre of dune scrub (habitat dominated by native species growing at an average coverage of 25%); 0.38 acre of scrub-iceplant-bare (areas in which dune scrub comprises a relatively small component of plant cover as compared to ice plant or bare areas); 1.39 acres of iceplant (an invasive non-native species); 0.10 acre iceplant-bare; 0.88 acre bare; and 0.23 acre ruderal/non-native grassland (areas

dominated by non-native vegetation other than iceplant) (EIR pages, 91-103). Of these 3.18 acres, roughly 1.6 acres of mostly degraded or disturbed undeveloped dune habitat within the Commission's permit jurisdiction would be covered with an impervious surface by authorization of this permit.

However, the project will also positively impact areas adjacent to the Sand Dunes right-of way through grading and slope stabilization. All of the graded areas that will not be covered by the bike path will be revegetated with native dune scrub plants. In total, the revegetation component of the project includes the planting of 11.05 acres of dune scrub habitat; an increase of 10.15 acres of dune scrub habitat when compared to existing conditions (EIR, p.115).

To guarantee the success of this restoration effort, Special Condition 5 requires a five year monitoring and management plan, to be supervised by a qualified biologist per Special Condition 6. At the conclusion of the 5 year monitoring and maintenance period, the permittee is required to either: document the success of the revegetation effort; or, provide for an additional monitoring and maintenance period, with appropriate corrective actions, until the approved landscaping plan has been successfully established to the satisfaction of the Executive Director.

Special Condition 5 also requires that final landscaping plans, as well as the required monitoring and maintenance plan, be reviewed and approved by the California Department of Fish and Game, California Department of Parks and Recreation, and the U.S. Fish and Wildlife service. This will ensure that project landscaping will be compatible with adjacent habitat restoration efforts and resource needs.

While project grading and slope stabilization will not directly impact any special status plant or animal species, it will take place in close proximity to areas in which Monterey spineflower exists, and within the vicinity of an area previously used by Western Snowy Plovers as a nesting site, both of which are federally listed as threatened. The special conditions attached to this permit eliminate the potential that project construction will affect these habitat areas by requiring them to be fenced, under the supervision of a qualified biologist, prior to the commencement of construction (Special Condition 6). Special Condition 7 requires construction areas to be demarked with temporary construction fencing to prevent construction equipment or employees from trampling on sensitive resources adjacent to the project. To address the possibility that sensitive dune animals such as the black legless lizard, coast horned lizard, Monterey dunes scorpion, and burrowing owls may enter the construction area, the biological monitor required by Special Condition 6 must inspect the site on a daily basis prior to construction activities, and relocate such animals to a suitable habitat nearby. The biological monitor must also monitor the construction site on a daily basis and immediately stop any construction activities that would harm Monterey spineflowers or Western Snowy Plovers per Special Condition 6.c.

Following project completion, increased use of the area by bicyclists has the potential to result in increased trampling of adjacent sensitive habitat areas. To prevent this impact, the project includes the installation of fencing and interpretive signs which educate the public about the sensitivity of the dune habitat and direct them to stay on the path. To ensure that an adequate amount of fencing and signs will be installed to effectively protect adjacent habitat areas, Special Condition 2 requires Executive Director review and approval of final plans which indicate the specific type and location of all fencing and signs. The use of guide wire fencing

and interpretive signs to effectively manage public use of areas adjacent to sensitive dune habitats has proven to be successful at the nearby Seaside State Beach.

Considering the above, the temporary impacts associated with grading and slope stabilization will not result in a significant disruption to environmentally sensitive habitat areas. In fact, as conditioned, the 11 acres of dune revegetation that will be provided by the project will actually enhance the habitat qualities of the area over the long term. Although in public ownership, the City has not taken the initiative to undertake dune restoration along the unused portions of the Sand Dunes Drive right-of-way. Further, the lack of fences or interpretive signs preventing unmanaged public access from Sand Dunes Drive increases the potential for disturbance to sensitive species in the area, such as nesting Snowy Plovers, by human trampling. It is likely that unused portions of the Sand Dunes right-of-way in which the bike path will be located would remain in a disturbed and degraded state and offer little value to the overall habitat quality of the Monterey Bay Dune system should the bike path not be installed.

The bike path project is also a catalyst for addressing the resource management needs of sensitive habitat areas adjacent to Sand Dunes Drive because of its dune revegetation component. In particular, the project will result in a smoother transition from the urban type use associated with Sand Dunes Drive, to the sensitive habitat values of the adjacent dune area, by providing a landscaped buffer of native dune plants. This will not only restore habitat values to the largely degraded area adjacent to Sand Dunes Drive, but will also stabilize the dunes to minimize the amount of sand that is blown onto Sand Dunes Drive. In addition, the fencing and interpretive signs to be provided will minimize impacts of unmanaged access that would persist under the status quo and, as discussed below, will increase public understanding and appreciation of the unique and sensitive resources of the Monterey Bay dune system.

Finally, in addition to being a significant regional public access and recreational enhancement, and a valuable dune revegetation project, the bike path project will serve an important educational and interpretive function vis-à-vis the protection of the Monterey dunes system. Thus, as with other resource dependent interpretive projects, another purpose of this project is to provide educational opportunities within and adjacent to environmentally sensitive habitat areas, in a manner consistent with the continuation and enhancement of the habitat. Indeed, long term preservation of the Monterey dunes environmentally sensitive habitat areas is dependent upon public understanding and appreciation of native dune resources and their needs. This necessitates opportunities for the public to experience, learn about, and passively interact with the natural dune environment. Such opportunities are critical to evoking the sense of stewardship that is essential to the overall protection and enhancement of the coastal environment. Most opportunities to experience and learn about the natural dune environment within the Monterey Bay region are currently limited to boardwalk facilities designed for pedestrians that have arrived at the destination via automobile (e.g., the nearby Seaside State Beach). Expanding this experience to the large number of people who recreate and exercise on the Monterey Recreational Trail and commute by bike will be an important addition to the coastal education experience in the Monterey Bay area.

Overall, the project as conditioned will not result in a significant disturbance to environmentally sensitive habitat areas, and will maximize resource dependent dune revegetation and educational activities consistent with the habitat preservation goals of the Coastal Act. As such, it is consistent with Coastal Act Section 30240.

E. Marine Resources/Water Quality:

Section 30231 of the Coastal Act states in part:

> The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored ...

A portion of Segment I of the bike path is adjacent to Roberts Lake, a freshwater wetland. The increase in impervious surface attributable to the project, as well as the construction activities adjacent to the lake, have the potential to increase the amount of sediment and urban pollutants contained in runoff entering the lake.

In order to protect the biological productivity and water quality of Roberts Lake, Special Condition 2.b. requires final project plans to include best management practices (BMP's) that will prevent sediments and urban contaminants from entering the lake both during and after construction. Examples of BMP's include the use of silt fences to capture sediment during construction, and planting a vegetative strip between the impervious surface and waterbody to filter out pollutants. Selection of the specific BMP's most appropriate for this project will be done by the project engineer, and must meet the approval of the Executive Director prior to the issuance of the permit.

With this condition, the project will not impact the biological productivity and quality of Robert's Lake. Therefore, the project, as conditioned, is consistent with Coastal Act Section 30231.

F. Archaeology:

Section 30244 of the Coastal Act requires:

> Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The Sand City certified Land Use Plan (LUP) identifies the potential for archaeological sensitivity in the southwestern portion of the City, within the immediate vicinity of the bike path project. The LUP recommends that development proposals in this area be required to submit archaeological surveys and recommended mitigation measures should archaeological resources be found.

To achieve project consistency with the guidance provided by the LUP and the requirements of Coastal Act Section 30244, Special Condition 4 requires the City to submit an archaeology report establishing monitoring, evaluation, and mitigation procedures in the instance that archaeological resources are discovered during construction. If such resources are discovered, this condition further requires construction activities that could damage the resource to be suspended, and State Historic Preservation Office and Executive Director approval of appropriate mitigation measures based on the significance of the archaeological materials.

With this condition, the project is consistent with Section 30244 of the Coastal Act.

G. LCP Certification:

Coastal Act Section 30604 states in part:

> (a) Prior to certification of the local coastal program, a coastal development permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with Chapter 3 (commencing with Section 30200) and that the permitted development will not prejudice the ability of the local government to prepare a local coastal program that is in conformity with Chapter 3 ...

This permit authorizes the portion of the Seaside -Sand City bike path that is located in the portion of the Sand City coastal zone for which there is not a certified Local Coastal Program (LCP). Although Sand City has a certified Land Use Plan (LUP) and Implementation Plan (IP), the portion of the City west of Highway One and south of Fell Street is an area of deferred certification due to the fact that the certified IP does not contain the Transfer of Development Credit (TDC) program for this area provided by the certified LUP.

Section 30604 of the Coastal Act prohibits the Commission from approving a permit in an uncertified area that would prejudice the local governments ability to prepare an LCP that conforms with Chapter 3 of the Coastal Act. As detailed in the previous findings, the bike path project, as conditioned, is found to be consistent with Chapter 3. In addition, the project will not jeopardize any planning options for the area that would need to be contained in an LCP; the bike path is not located within the designated development envelope for the area, should the City wish to pursue completion of its LCP by finalizing the TDC program.

However, plans for the area of deferred certification are evolving towards the development of a public park/open space area, as most of this area is owned by the Department of Parks and Recreation and the Monterey Peninsula Regional Park District. The bike path project will be a positive asset to park development, and will not prejudice the development of a park plan that conforms with the Chapter 3 policies of the Coastal Act, consistent with the requirements of Coastal Act Section 30604.

H. California Environmental Quality Act:

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(i) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the project may have on the environment.

In response to the environmental review requirements of CEQA, Sand City certified an Environmental Impact Report (EIR) for this project on October 17, 1995. In certifying this document, the City adopted mitigation measures intended to reduce the project impacts on the environment to a less than significant level. During the course of coastal development permit

review, the Commission identified additional mitigation measures necessary to achieve project conformance with the Chapter 3 policies of the Coastal Act, which are required by the Special Conditions of this permit. These additional measures, in conjunction with the mitigation measures adopted by the City, ensure that the project, as conditioned, will not have a significant impact on the environment within the meaning of CEQA.

CALIFORNIA COASTAL COMMISSION

STANDARD CONDITIONS:

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.

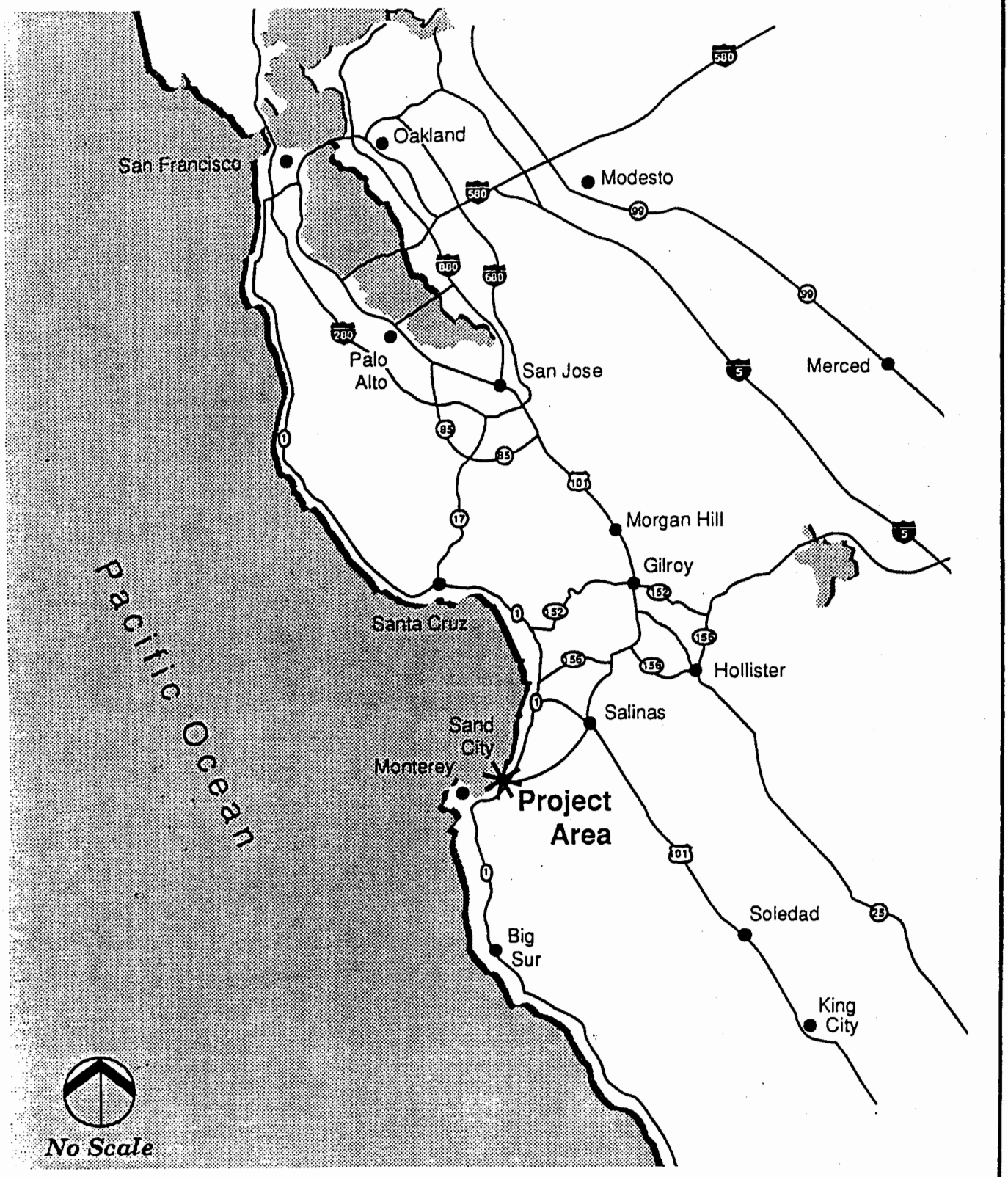
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

5. Inspections. The Commission staff shall be allowed to inspect the site and the project during its development, subject to 24-hour advance notice.

6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

EXHIBIT NO. A
APPLICATION NO. 3-97-062
Standard
Conditions



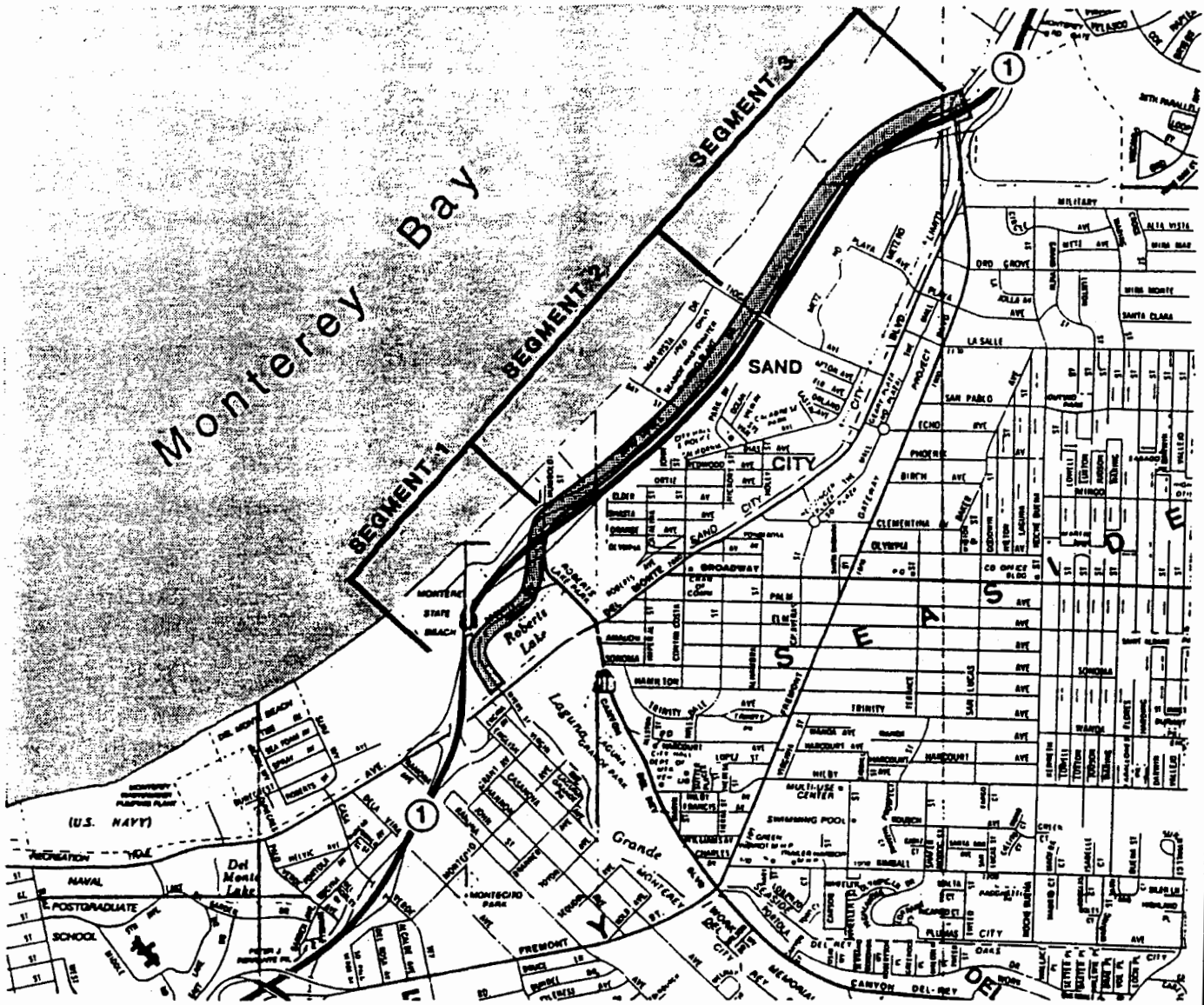
Source: California State Automobile Association and EMC Planning Group Inc.

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Seaside–Sand City Bike Path EIR

Regional Location

EXHIBIT NO. B
APPLICATION NO. 3-97-062
Regional Location



Source: LSA Associates and EMC Planning Group Inc.

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Seaside–Sand City Bike Path EIR

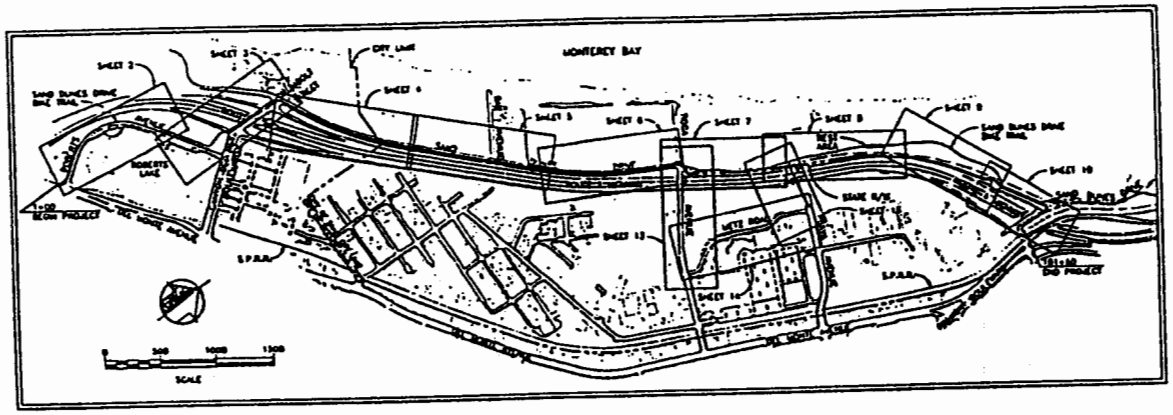
Project Site Location

EXHIBIT NO. C
APPLICATION NO. 3-97-062
Site
Exhibit 1
Location

EXHIBIT NO. D, p.1	APPLICATION NO. 3-97-062	Construction Plans

Exhibit I

PLANS FOR THE
CITY OF SAND CITY
SAND DUNES DRIVE BIKE TRAIL
SAND CITY CALIFORNIA



ABBREVIATIONS

AB(2)	AGGREGATE BASE, CLASS 2
AC	ASPHALT CONCRETE
BVC	BEGIN VERTICAL CURVE
℄	CENTER LINE
EVC	END VERTICAL CURVE
EX	EXISTING
FG	FINISH GRADE
LOL	LAYOUT LINE
OG	ORIGINAL GRADE
PVIC	POINT OF INTERSECTION, VERTICAL CURVE
R/W	RIGHT OF WAY
S	GRADE SLOPE
VC	VERTICAL CURVE

LEGEND

(No) PAVEMENT STRIPE, DETAIL SEE CALTRANS STANDARD PLAN A24A, A20B, AND A20D.

LIST OF DRAWINGS

SHEET NO.	DESCRIPTION
1	VICINITY MAP, COVER SHEET & SHEET INDEX
2 THRU 10	PLAN & PROFILE
11	HUMBOLT STREET UNDERCROSSING
12	TYPICAL SECTIONS
13 THRU 15	PLAN & PROFILE TIOGA-METZ-PLAYA BYPASS
L-1 (Not Included)	DUNE RESTORATION & REVEGETATION SHEET INDEX, PLANT LIST & NOTES
L-2 THRU L-10	DUNE RESTORATION & REVEGETATION PLAN
L-11 & L-12	TYPICAL SECTIONS

PREPARED BY: CREEGAN + D'ANGELO

PROJECT ENGINEER _____ DATE _____

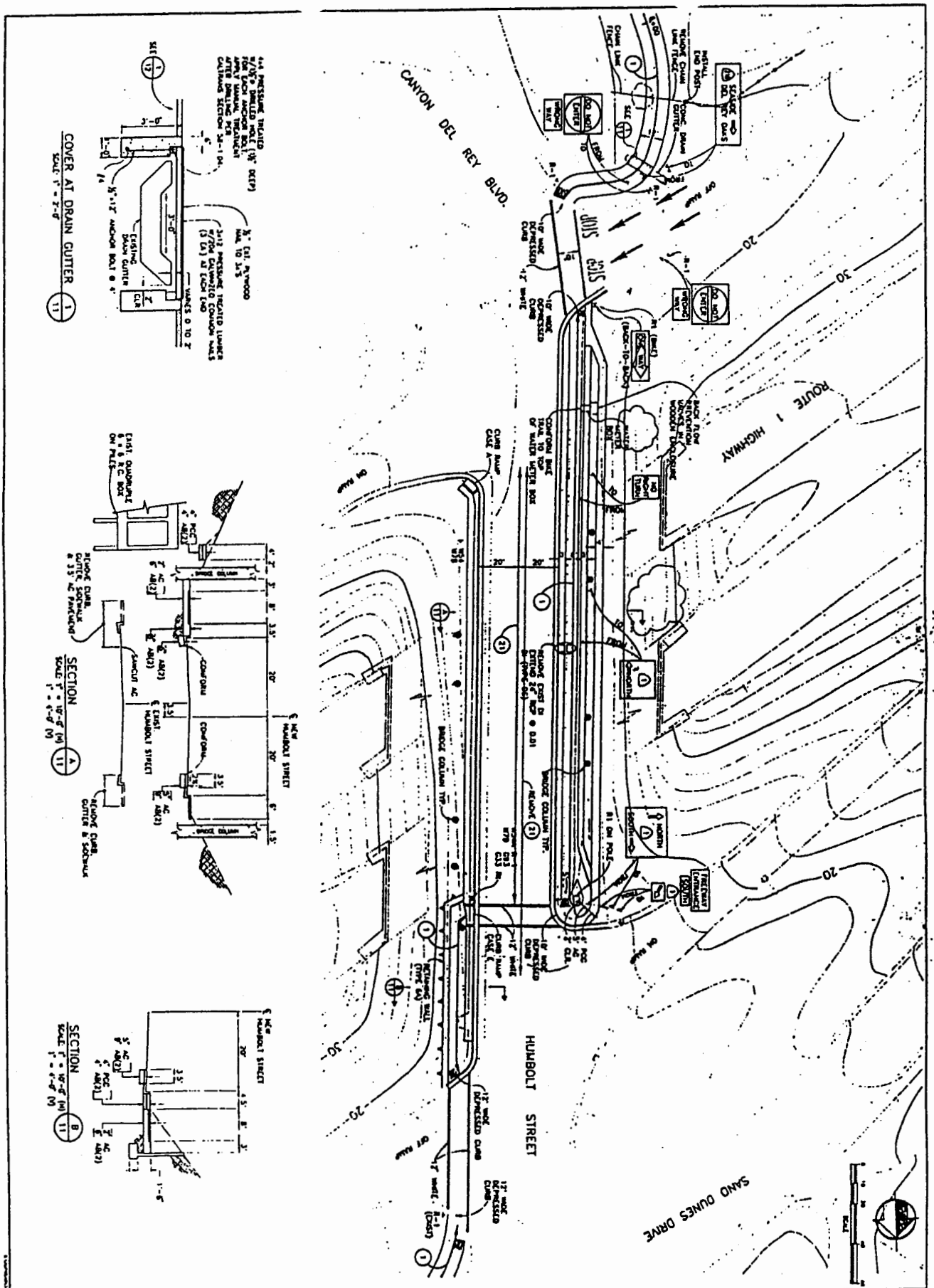
APPROVED FOR CITY OF SAND CITY

CITY ENGINEER _____ DATE _____

CREEGAN+D'ANGELO
Consulting Civil and Structural Engineers

SHEET NUMBER 1 OF 27 SHEETS

DRAWING NO. 1567GB-01



Highway One Undercrossing
Humboldt Street

3-97-062
Exhibit D, p.5

Exhibit I

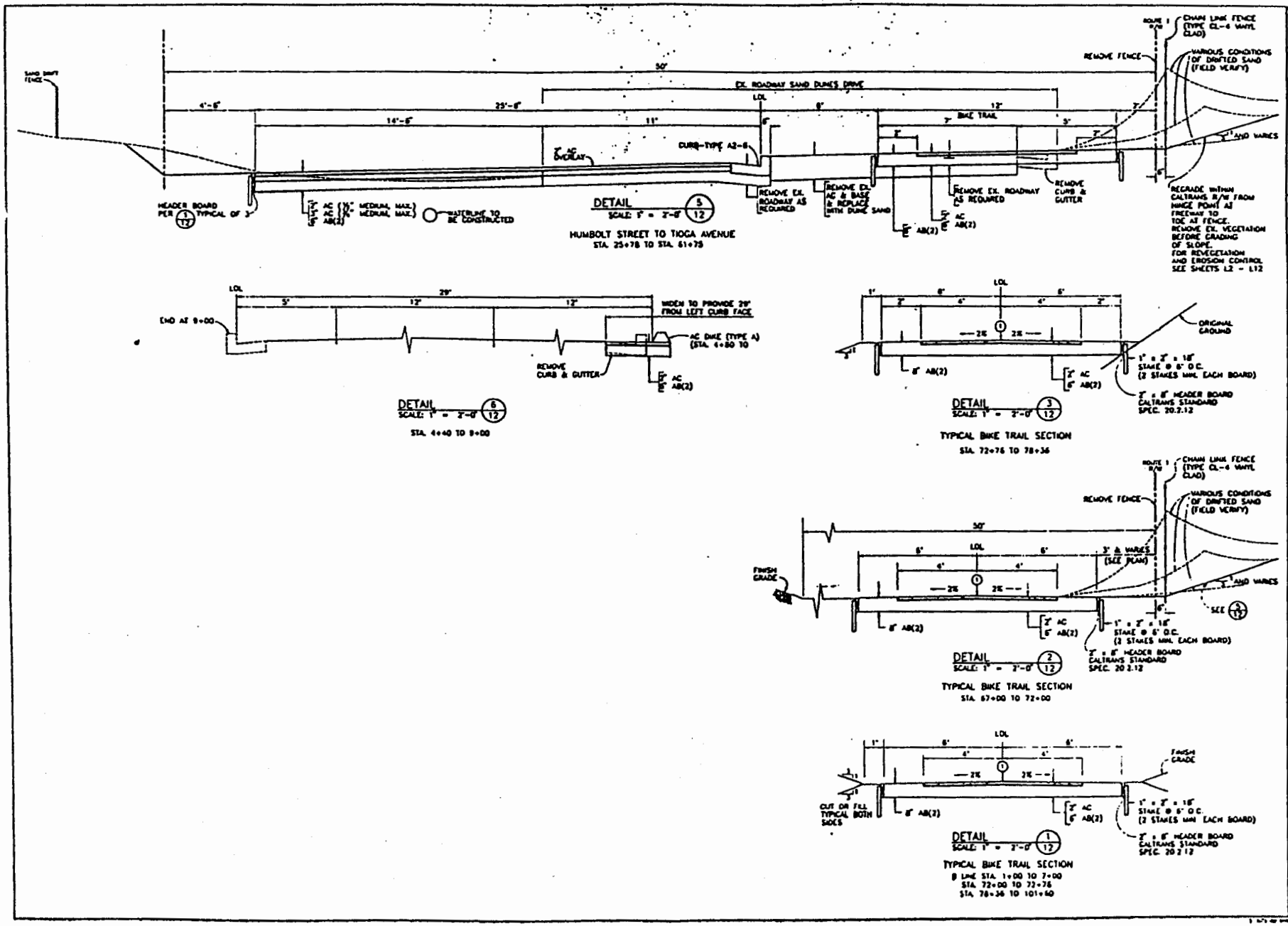
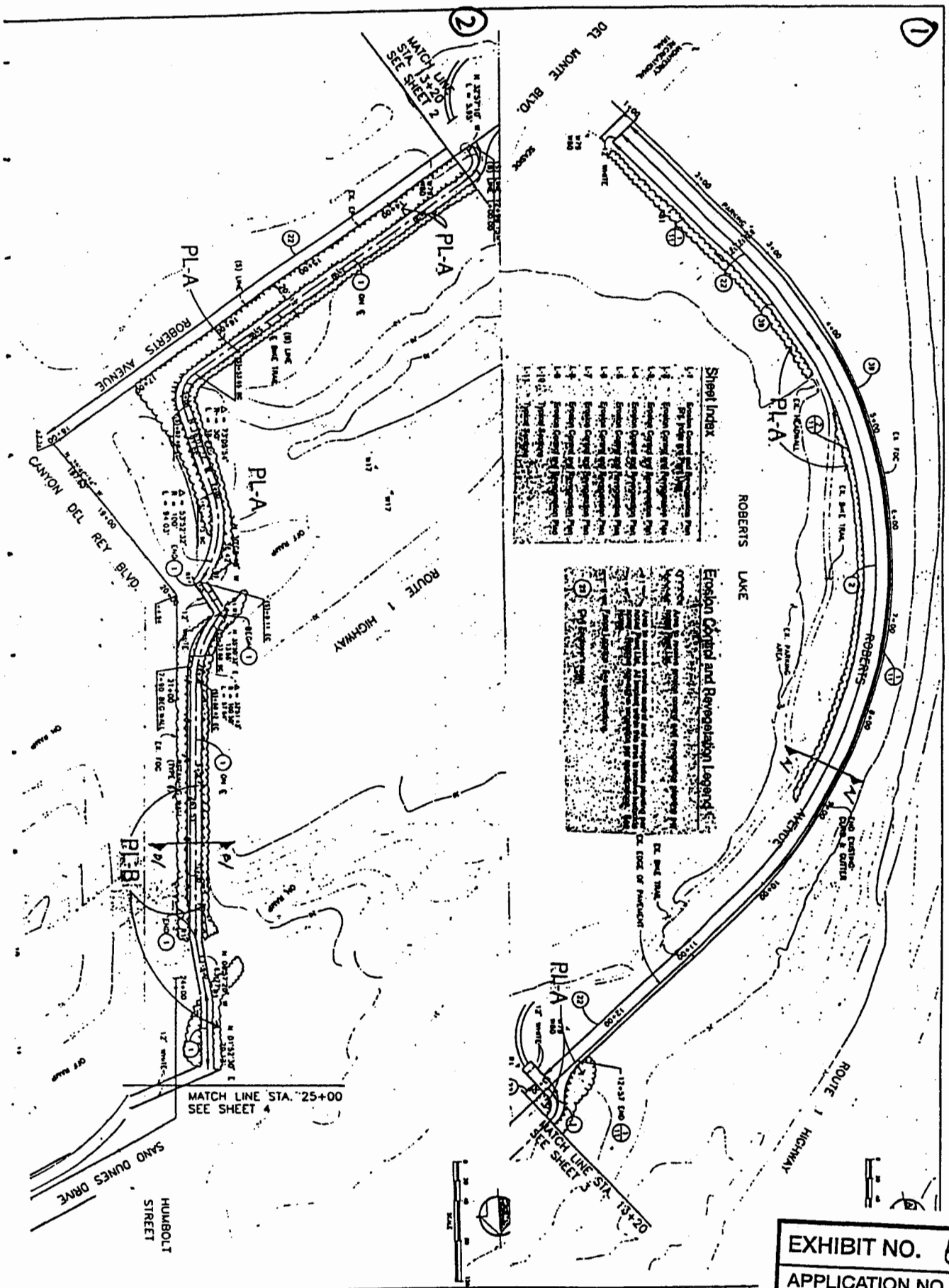


Exhibit I

Exhibit D, P.6

Typical cross-sections



D'ANGELO

Bellinger & Foster
Landscape Architects

Seament I

EXHIBIT NO. E, P.
APPLICATION NO. 3-97-062
Landscape Plans

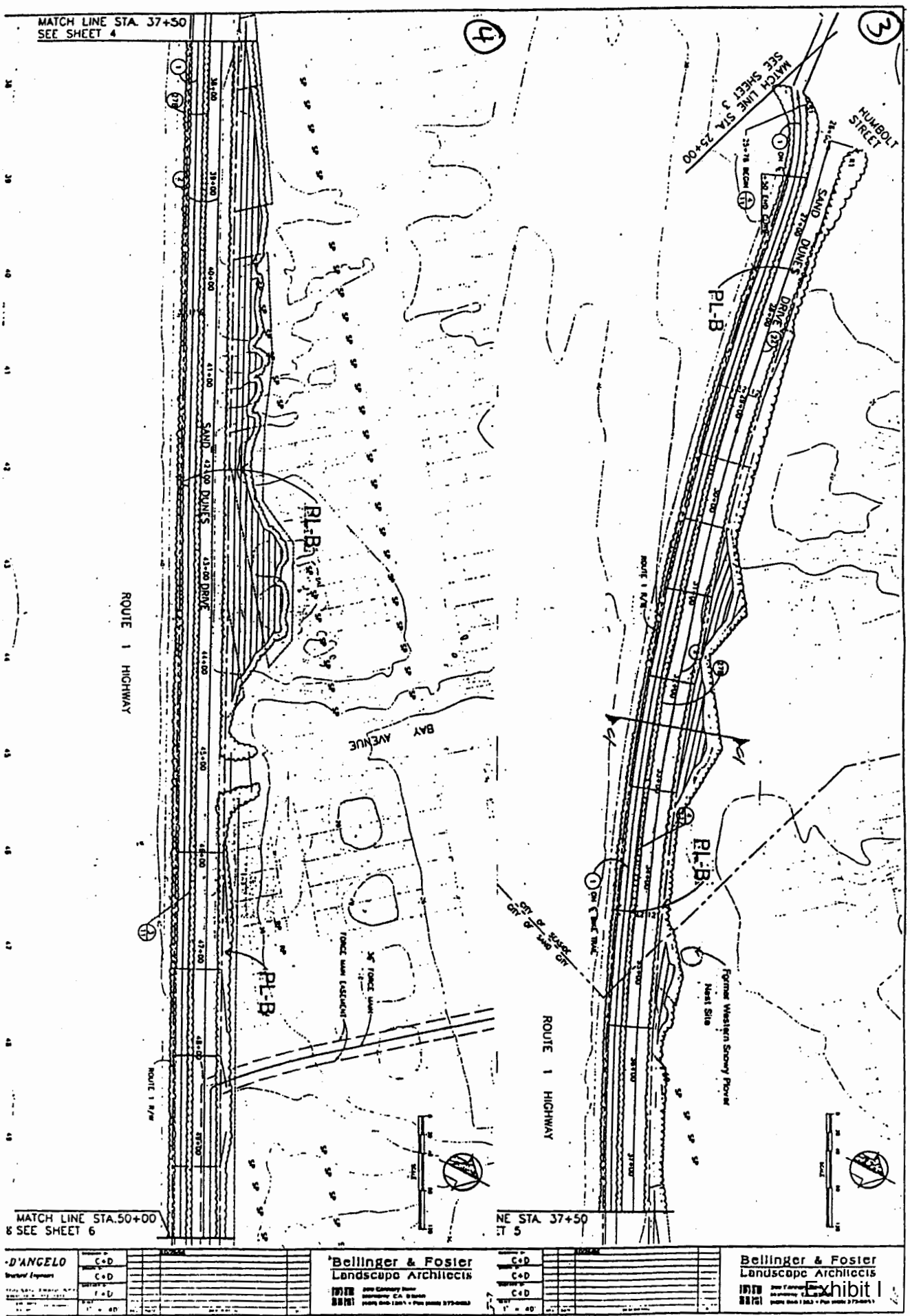
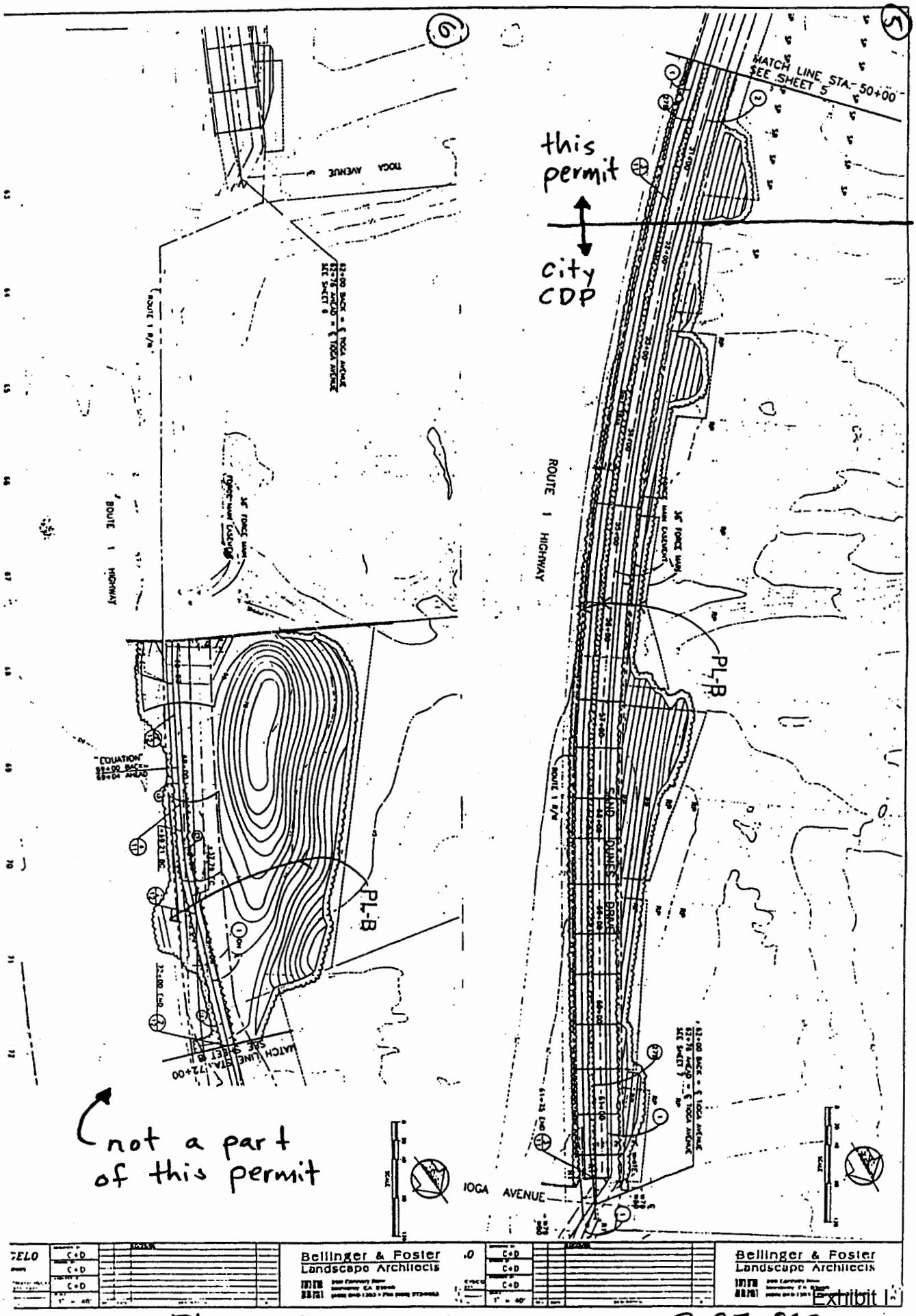


Exhibit I

Landscape Plans, Segment II

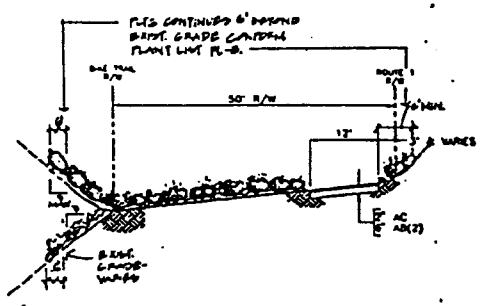
3-97-062
Exhibit E, p.2



Landscape Plans, Segment II (continued)

3-97-062
Exhibit F p.3

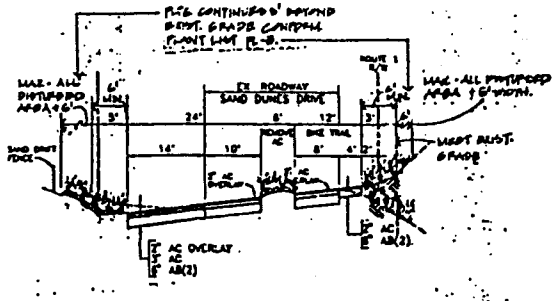
Exhibit I



SECTION A

SCALE: 1"=10' (HORIZ.) 1"=4' (VERT.)

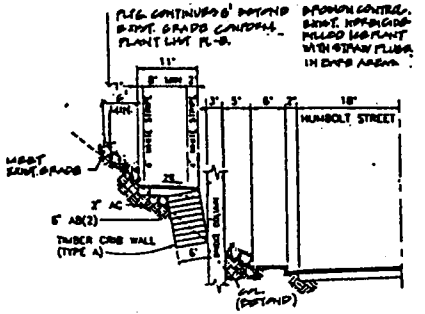
STA. 1-00 TO 5-10
12-00 TO 7-90
10-30 TO 25-00/SAND DUNES DRIVE
79-51 TO 80-50
83-40 TO 94-42



SECTION C

SCALE: 1"=10' (HORIZ.) 1"=4' (VERT.)

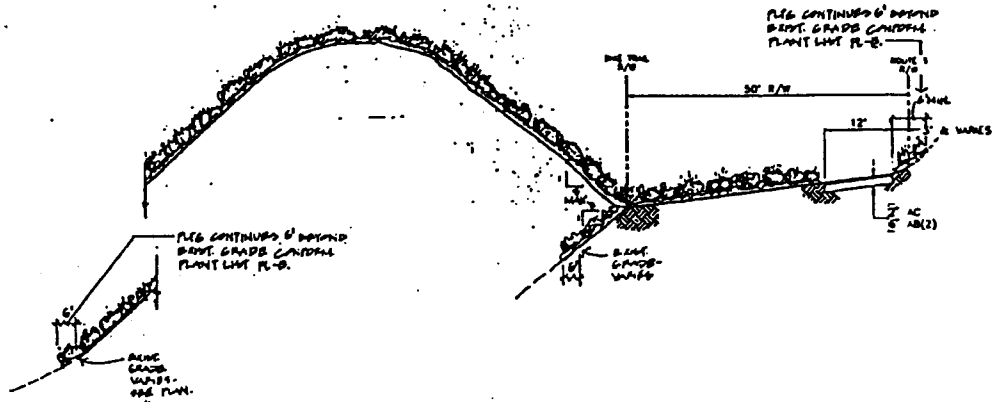
STA. SAND DUNES DRIVE / 25-00 TO 61-83 / TIOGA AVE.



SECTION B

SCALE: 1"=10' (HORIZ.) 1"=4' (VERT.)

STA. 7-90 TO 10-20
83-40 TO 94-42 - SIMILAR
94-42 TO 97-65 - SIM.
97-65 TO 101+12 ± - SIM.



SECTION D

SCALE: 1"=10' (HORIZ.) 1"=4' (VERT.)

STA. 80-50 TO 83-40
97-65 TO 79-51 - SIM.

Bellinger & Foster
Landscape Architects
200 Cannery Road
Monterey, CA 93940
(408) 646-1383
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Planning
Urban Design
Park & Recreation
Environmental Design

Revisions

CREEGAN+D'ANGELO
Consulting Civil and Structural Engineers

SAND DUNES DRIVE BIKE TRAIL
Erosion Control and Revegetation Plan

Date 10-25-96
Scale AS NOTED
Drawn
Checked
Project No. 96.038

Sheet No.
L-11
of 27 sheets

Exhibit
3-97-062
Exhibit E
Landscape Plan Sections

EXHIBIT " C"
SEASIDE-SAND CITY COASTAL ALIGNMENT BIKE PATH PROJECT
CONDITIONS OF APPROVAL

Introduction

This coastal Development Permit (CDP) is for the protion of the Seaside-Sand City Coastal Alignment Regional Bicycle Path located within the City of Sand City, north of Fell Street only. It authorizes construction of a 12-foot wide Bike path (8-foot travel lanes with 2-foot wide paved shoulders on each side). A separate CDP is required to be issued by the California Coastal Commission and a Design Permit is required from the Sand City Design Review Committee (DRC) prior to project initiation.

Environmental Conditions of Approval

1. The proposed project shall incorporate the recommendations of the geotechnical investigation prepared by Steven Raas and Associates, June 1993. The recommendations shall be incorporated into the final construction plans subject to review and approval by the city prior to issuance of a grading permit and shall be incorporated as conditions of the grading permit. The most applicable recommendations are listed here. All recommendations are included in the geotechnical report contained in Appendix C:

   a. Grading plans shall be reviewed by the geotechnical engineer during their preparation and prior to contract bidding.

   b. Surface vegetation and organically contaminated topsoil shall be removed from the graded areas. These soils may be stockpiled for future landscaping. The required depth of stripping will vary with the time of year. It is anticipated that the depth of stripping may be as much as two to four inches in the in the underpass area at the intersection of Highway 1 and Canyon Del Rey Boulevard.

   c. Following the stripping, the area shall be excavated to the design grades. The exposed soils in the paving areas shall be scarified, moisture conditioned and compacted as an engineered fill. The moisture conditioning procedure will depend on the time of year that the work is done.

   d. Should the use of imported fill be necessary for the proposed project, the fill material shall meet the requirements specified in the geotechnical investigation.

   e. All cut and fill slopes along the proposed project alignment shall not exceed a 3:1 (horizontal:vertical) gradient and a 15 foot vertical height unless specifically reviewed by the geotechnical engineer. Where the vertical height exceeds 15 feet, intermediate benches must be provided. These benches shall be at least six feet wide

EXHIBIT NO. F, p.1
Exhibit I
APPLICATION NO.
3-97-062
Local Conditions

and sloped to control surface drainage. A lined ditch shall be used on the bench.

f. The surfaces of all cut and fill slopes shall be prepared and maintained to reduce erosion. This work, at a minimum, shall include track rolling of the slope and effective planting. The protection of the slopes should be installed as soon as practicable so that a sufficient growth will be established prior to inclement weather conditions. It is vital that no slope be left standing through a winter season without erosion control measures having been provided. Dune slope planting stabilization is difficult and very specific plantings as approved in the project landscape plans, must be used. The above-recommended gradients do not preclude periodic maintenance of the slopes as minor sloughing and erosion may occur.

g. An appropriate foundation system to support the retaining walls will consist of reinforced concrete spread footings bedded into firm native soil or engineered fills on the project site. Footings shall be embedded below the adjacent grade not less than two feet. The footings shall contain steel reinforcement as determined by the project engineer.

h. Surface water must not be allowed to pond or be trapped adjacent to the proposed bike path. Final grades shall be provided with a positive gradient away from the proposed bike path in order to provide for rapid removal of the surface water from the proposed bike path to a discharge point approved by the City Engineer.

i. Cut and fill slopes shall be constructed so that surface water will not be allowed to drain over the top of the slope face. This may require berms along the top of fill slopes and surface drainage ditches above cut slopes.

2. Final construction plans shall include construction specifications which identify methods to eliminate the potential for urban pollutants to enter Roberts Lake and its associated drainage basin during construction. The construction specifications shall be subject to review and approval by all participating cities and the Coastal Commission prior to issuance of a grading permit.

3. In order to protect the existing individuals and habitat of the Monterey spineflower, the following measures shall be included in the final construction plans and contractor work specifications subject to the review and approval by the city prior to issuance of a grading permit:

   a. Conduct a survey to definitively locate the boundaries of the spineflower population in the project area.

   b. Include a 10-foot buffer between the construction area and the spineflowers. A silt fence should border the spineflower population to prevent the deposition of any soil onto the spineflowers during grading activities.

c. The spineflower population shall be fenced to prevent construction-related impacts. Fencing shall remain after construction to prevent persons and domestic animals from entering this area.

d. Upon completion of construction, posting of permanent signs to explain the sensitive nature of the spineflower and its habitat and to lessen the inclination of persons to enter this area shall be required.

e. Construction equipment use and storage shall be restricted to the construction zone.

f. Monitoring of the construction site daily for any impacts to the spineflower population shall be required. The Community Development Director shall have authority to stop construction if the spineflower has experienced any direct impacts from construction-related activities.

g. Monitoring of the spineflower population for a five-year period in order to determine whether the population has experienced impacts due to intrusion of persons and domestic animals, shall be required.

4. In order to protect the remaining suitable habitat for the western snowy plover, the following measures shall be included in the final construction plans and contractor work specifications subject to the review and approval by the city prior to issuance of a grading permit:

a. Contractor work specifications shall include a notice restricting construction workers from entering sensitive areas on the project site, such as the remaining suitable habitat for the western snowy plover.

b. A pre-construction survey shall be performed to determine whether any nests are located in the project area, if construction is planned during the western snowy plover nesting season (April to the middle of August). Construction activities shall be avoided in areas containing nests.

c. Remaining suitable nesting habitat for the western snowy plover located on the project site shall be fenced and avoided during construction activities. The location of this habitat and methods to protect this habitat during construction activities shall be indicated on final construction plans and shall be included in the contractor work specifications.

d. Construction equipment use and storage shall be restricted to the construction zone.

e. Upon completion of construction, permanent signs shall be posted to prohibit on-street parking and vehicle use of the dunes, as well as to discourage pedestrian

use by explaining the sensitive nature of the dune environment and to direct vehicles and persons to appropriate coastal access points along the eastern boundary of Sand Dunes Drive. This shall be included in the final construction plans, subject to review and approval by the city, prior to issuance of a grading permit.

5. Individuals of the black legless lizard, coast horned lizard, and Monterey dune scorpion existing within the project site shall be captured and relocated to adjacent suitable habitat immediately prior to construction activities. In order to accomplish this, qualified biologists shall rake substrate in suitable habitat to find any individuals of these three animal species in the area designated for construction on each day prior to construction. Any captured animals shall be relocated to adjacent suitable habitat. Detailed plans explaining capture techniques and relocation areas shall be developed by a qualified wildlife biologist. These plans shall be included in contractor work specification and are subject to review and approval by the city prior to issuance of a grading permit. If no sensitive species are found as a result of this examination, this condition of approval will become null and void.

6. A pre-construction survey shall be performed for individuals of the burrowing owl prior to construction activities. If burrowing owls are observed at the project site, they shall be captured and relocated to city-controlled suitable habitat. This shall be indicated on the final construction plans and contractor work specifications subject to review and approval by the city prior to issuance of a grading permit.

7. The following design changes shall be incorporated into the project plans in order to reduce or eliminate conflicts between bicyclists and motor vehicles where the proposed project is located on or crosses roadways or driveways. The location of these recommended design changes are identified in the traffic analysis report for the proposed project:
   a. Provide center line striping on the bike path near the retaining wall under Highway 1; the proposed four-inch wide edge line striping is not required according to the highway design manual (Sheet 3).
   b. Provide "Bike Lane" signs at all intersections and every one-half mile throughout the entire project (Sheet 4).
   c. Install a "Stop" sign on the Monterey Recreational Trail westbound approach to the crossing at Roberts Avenue (Sheet 4).
   d. At all bike lane street crossings, replace "Bike Lane" sign with "Pedestrian Crossing Symbol" or "Bicycle Symbol" signs. These signs are considered warning signs and are appropriate for use with "X'ing Sign"; the currently proposed "Bike Lane" sign is not a warning sign (Sheets 4-11).
   e. Locate proposed "Stop" signs on bike path approaches to all crossing locations on the right-hand side of the approach (Sheets 4-11).
   f. Install a fence (minimum of 4.5 feet high) along the drainage channel between Roberts Avenue and Canyon Del Rey Boulevard to serve as a guard rail (Sheet 5).

g. Provide center line striping on the bike path under Highway 1 along Canyon Del Rey Boulevard. The six-inch white strip along the edge of this section of the proposed project is not necessary (Sheet 5).

h. Remove fencing and vegetation, as necessary, to improve sight distance along the bike trail approaches to the Canyon Del Rey Boulevard crossing between the Highway 1 southbound ramps and Sand Dunes Drive (Sheet 5).

i. Change regulatory signs "Walk Bikes Downhill" to warning signs that are advisory in nature. The proposed signs are not enforceable as regulatory signs (Sheets 9-10).

j. Provide a "Reverse Turn" warning sign with a 20 mile per hour advisory speed plate on the westbound bike trail adjacent to the Highway 1 southbound on-ramp near its intersection with Fremont Boulevard (Sheet 11).

These recommended design changes shall be incorporated into the final construction plans subject to review and approval by the city prior to issuance of a grading permit.

Other Conditions of Approval

8. As a condition of coastal development permit approval for the proposed project, the final construction plans shall delete the proposed 50 foot right-of-way grading for the future extension of Sand Dunes Drive between Tioga Avenue and Fremont Boulevard. The final project plans shall include only construction and grading associated with the proposed bike path, including slope stabilization and native plan revegetation as described in the Final EIR.

9. The final construction plans shall include the following components, identified in the response to comments, prior to review and approval of the City Engineer and City Plan Checker/Building Inspector.

   a. The final construction plans will include performance standards based on plant cover and species diversity to evaluate plant establishment success as supplied by Bellinger and Foster, landscape architects to the proposed project.

   b. The final project plans will not include Santa Barbara Island buckwheat (*Eriogonum giganteum*), Seaside daisy (*Erigeron glaucous*), and Dune strawberry (*Fragaria chiloensis*) in all revegetation planting west of Highway 1.

   c. The final project plans will not include hydromulch technique of stabilizing sand areas to be seeded. Instead, the proposed project will use a combination of crimped straw bundles to stabilize dune slopes and an application of straw mulch over seeded areas.

   d. The final project plans will be revised to locate the bicycle crossing of the railroad tracks as close as possible to the existing at-grade street crossing at the intersection of Highway 1 and Fremont Boulevard.

10. Pursuant to Sand City LCP Policy 4.3.23, the proposed project shall submit final construction drawings, which include specific dune stabilization and native plant revegetation for review and approval by the California Department of Fish and Game and the California Department of Parks and Recreation.

11. Pursuant to Sand City LCP Policy 4.3.33 and Policy 4.3.34 the project proponent shall complete a preliminary cultural resources reconnaissance for the small portion of the proposed project located within the LCP identified archaeologically sensitive area prior to

preparation of final project plans. and shall provide protection of archaeological resources if any are found during construction. If archaeological resources are uncovered during site preparation or construction activities, work will be halted in the immediate areas of the find and qualified archaeologist will be retained to evaluate the find, recommend appropriate mitigation measures, and oversee implementation of the mitigation measures.

12. Pursuant to Sand City LCP Policy 5.3.4, the proposed project shall be consistent with the design standards identified in this policy. The proposed project shall utilize native plant materials, conformance to natural and manmade contours, create distinct separation between auto, pedestrian , and bicycle pathways wherever possible, and shall use of wood signs and wood supports (or wood trim around signs) with painted and/or carved graphics where appropriate and consistent with Caltrans Bicycle construction standards.
13. Pursuant to Sand City LCP Policy 5.3.5 the proposed project construction plans shall be approved for a design permit from the city design review committee.
14. The proposed project shall be constructed in two separate phases so that Segment I and II (south of Tioga Avenue) are to be constructed first, after authorization for construction is received from the California Transportation Commission ("CTC"). Segment III (north of Tioga) of the bike path shall be constructed after Segment I and II are completed and authorization of Segment III construction allocation is received from the CTC. During construction of Segment III, temporary bike lanes (street stripping) or route markings shall be developed along Tioga Avenue to Del Monte Boulevard and then to Fremont Boulevard at Highway One, connecting to the existing regional bike path north through Fort Ord.
15. The proposed project shall be constructed in accordance within the construction allocation time requirements of the CTC, as amended by the CTC in accordance with the City of Sand City construction phasing program, and the approved budget in the Proposition 116 grant application ("Seaside - Sand City Beach Front Alignment Bike Path") approved by the CTC in February 1992.
16. Construction of Segment III shall be timed to coincide with private and public coastal development north of Tioga. In the event construction of the proposed project, as analyzed in the Final EIR and as described in the Coastal Development Permit, is not possible north of Tioga due to funding or delays in coastal zone development timing, the project proponent shall construct Segment III in a manner consistent with the one or combination of Alternatives analyzed in the Final EIR.
17. The project applicant shall obtain "proof of interest in property", as required by the California Coastal Commission as part of its CDP application requirements. This includes land within the project plan line (as described in the Final EIR) for bike path construction and for the grading/slope stabilization and native plant revegetation elements of the proposed project. The documents may be either a recorded deed, easement, or encroachment permit from legal title holders of property, or other proof of interest satisfactory to the Coastal Commission. Such proof of interest shall also provide for temporary access for ingress and egress for construction and/or on-going monitoring and maintenance of native plant revegetation and slope stabilization materials.