CALIFORNIA COASTAL COMMISSION

CENTRAL COAST AREA OFFICE 725 FRONT STREET, STE. 300 SANTA CRUZ, CA 95060 (408) 427-4863 **HEARING IMPAIRED: (415) 904-5200** 

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Commission Action:

4/10/96 - Substantial Issue

and Continue

STAFF REPORT: APPEAL DE NOVO HEARING

LOCAL GOVERNMENT: San Mateo County

**DECISION:** 

**Approval With Conditions** 

APPEAL NUMBER:

A-3-SMC-96-008

APPLICANT:

KATHLEEN MCKENZIE

APPELLANTS:

Mark Nolan

PROJECT LOCATION:

921 Pigeon Point Road, Pescadero, San Mateo County

PROJECT DESCRIPTION: Demolition of existing warehouse type structures, and construction of a 9 unit Country Inn with 1,800 square foot storage/maintenance

building, 14 off-street parking spaces, a septic system and a

domestic well

SUBSTANTIVE FILE DOCUMENTS: San Mateo County Coastal Development Permit File No.

CDP 95-0022; San Mateo County Certified Local Coastal Program

#### **SUMMARY OF STAFF RECOMMENDATION:**

The staff recommends approval of the project, subject to special conditions. These recommended conditions of approval are necessary to provide project consistency with San Mateo County certified Local Coastal Program policies and ordinances regulating the allowable density of new development, as well as those protecting sensitive habitat areas and visual resources. The recommended conditions will require: reduction of the number of guest units from 9 to 6; conformance with applicable County permit conditions; submission of final construction, fencing and landscape plans; subsequent Commission review and approval of a domestic well and sewage treatment system adequate to serve the development; mitigation measures required to protect adjacent sensitive habitat areas; architectural design revisions to

the maintenance/storage building; recordation of a deed restriction limiting the allowable length of visitor stays; and annual submission of Transient Occupancy Tax records to document continued availability as a public accommodation. These requirements reflect the sensitivity of the site, which is regarded as one of the most scenic settings for a historic lighthouse on the entire West Coast.

#### 1. STAFF RECOMMENDATION ON COASTAL DEVELOPMENT PERMIT

The staff recommends that the Commission, after public hearing, approve a coastal development permit for the project, subject to the recommended conditions below, and adopt the following resolution:

Approval with Conditions. The Commission hereby grants, subject to the conditions below, a permit for the proposed development as modified, on the grounds that, as conditioned, the modified development will be in conformance with the provisions of the San Mateo County certified Local Coastal Program (LCP), the public access and recreation policies of the California Coastal Act of 1976 (Coastal Act), and will not have any significant adverse impact on the environment within the meaning of the California Environmental Quality Act (CEQA).

#### II. STANDARD CONDITIONS

Attached as Exhibit A

#### III. SPECIAL CONDITIONS

- 1. Scope of Permit. This permit authorizes the development of a 6 unit Country Inn, the use of an existing warehouse building for storage and office purposes only (no occupancy), and visitor parking spaces. PRIOR TO TRANSMITTAL OF THE COASTAL DEVELOPMENT PERMIT, the permitee shall submit, for Coastal Commission review and approval, the specific plans and details for the project's water supply and sewage treatment systems, as approved by the San Mateo County Department of Environmental Health. Reductions in the scope of this permit may be required during the Commission's subsequent review of these project elements, if the Commission finds that such reductions are necessary to ensure project consistency with the San Mateo County certified Local Coastal Program or the coastal access and recreation policies contained in Chapter 3 of the Coastal Act.
- 2. <u>Compliance with Local Conditions of Approval</u>. All 29 conditions of San Mateo County Coastal Development Permit # 95-0022 become conditions of this permit, with the exception of County Condition # 1. (See Exhibit B of this report for a copy of the local conditions of approval). PRIOR TO TRANSMITTAL OF THE COASTAL DEVELOPMENT PERMIT, the permitee shall provide evidence to the Executive Director that those conditions requiring action prior to the commencement of any work have been signed-off by the appropriate County official. Evidence of subsequent condition compliance must also be submitted to the Executive Director at the required stage. In the event that County officials do not exercise such authority, permitee shall submit condition compliance materials to the Executive Director for review and approval.

- 3. <u>Revised Final Plans</u>. PRIOR TO TRANSMITTAL OF THE COASTAL DEVELOPMENT PERMIT, the permitee shall submit, for Executive Director Review and approval, final project plans which include the following:
  - a. Deletion of the three units proposed on the east side of the gully leading to Whaler's Cove beach.
  - b. Architectural elevations of all buildings, including revisions to the inn units and to the maintenance/storage building which improve their design compatibility with the existing highly scenic historic structures at Pigeon Point. These design modifications shall include, but not be limited to: installation of traditional window designs in the guest units; and, for the maintenance/storage building, a change in the pitch of the roof, the removal of the skylights or screening of the skylights from the public view, and similar design characteristics needed to make the new structures resemble similarly sized support buildings associated with the comparably situated traditional lighthouses. The depictions submitted by the applicant's architect on June 26, 1996 (Exhibit S) represent an appropriate design model for the complete required architectural elevations.
  - c. Final locations of the water well, water storage tank, septic system, and utility lines. If any of these project elements encroach outside of the parcel on which the project is located, the required easements or encroachment permits must be submitted concurrently.
  - d. Detailed fencing plan indicating the design, materials, and location of all fencing which will be installed as a component of the project.
  - e. A signing plan illustrating the exact design, location, and content of all permanent signs that will be posted on the site. This shall include the signs that will be posted in the guest units informing visitors that dogs must be on leash, and that both guests and dogs are not permitted on the beach when marine mammals are present.
- 4. Visitor Serving Use Only. PRIOR TO TRANSMITTAL OF THE COASTAL DEVELOPMENT PERMIT, the permitee shall submit, for Executive Director review and approval, a deed which indicates that this coastal permit authorizes the development of a 6 unit Country Inn, a visitor serving use exclusively available to the general public. This deed restriction shall also specify that visitor length of stays are limited to no more than 29 consecutive days, and no more than 84 days per year. Furthermore, the deed restriction shall indicate that conversion of any portion of the approved facilities to a private or member only use, or the implementation of any program to allow extended or exclusive use or occupancy of the facilities by an individual or limited group or segment of the public is specifically not authorized by this permit and would require an amendment to this permit which may require a reduction in project density in order to maintain compliance with the density regulations of the San Mateo County certified Local Coastal Program. Upon approval of the Executive Director, the deed restriction shall be recorded within 15 days and a conformed copy submitted for the record. ON AN ANNUAL BASIS COMMENCING AT THE CONCLUSION OF THE FIRST YEAR OF PROJECT OPERATION, the permitee shall submit to the Executive Director copies of the project's Transient Occupancy Tax records in order to ensure compliance with this condition.

- 5. Compliance with Geotechnical Recommendations. Final project plans and project construction shall conform to and incorporate the recommendations contained in the Geotechnical Investigation prepared for the subject project by UPP Geotechnology, Inc., dated September 25, 1995. PRIOR TO THE TRANSMITTAL OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for Executive Director review and approval, drainage and erosion control plans, accompanied by written evidence that UPP geotechnology has reviewed these plans and concurs with their content.
- 6. <u>Construction/Operations Plan</u>. PRIOR TO TRANSMITTAL OF THE COASTAL DEVELOPMENT PERMIT, the permitee shall submit, for Executive Director review and approval, a project construction and operations plan which includes the following components:
  - a. the timing and/or phasing of all elements of project construction;
  - b. the location of construction staging areas and washdown facilities;
  - c. identification of the disposal site for excavated agricultural soils, excess grading spoils, demolished buildings, and any other construction wastes; and,
  - d. means of assuring that access to and from the lighthouse along Pigeon Point road will not be disrupted during project construction.
- 7. <u>Landscape Plan</u>. PRIOR TO THE ISSUANCE OF THE PERMIT, the permitee shall submit, for Executive Director review and approval, a landscape plan which includes the following:
  - use of local drought resistant native plants in all areas that will be disturbed during project construction, as well as in all areas that will be exposed as a result of building demolition;
  - b. use of Monterey cypress and local drought resistant native vegetation to screen project elements including, but not limited to the water storage tank, water treatment facility, and septic pumps; and
  - c. an irrigation and maintenance plan necessary to ensure the survival or replacement of the required landscaping.

#### IV. FINDINGS AND DECLARATIONS

#### A. Project History:

On December 13, 1995, the San Mateo County Planning Commission approved a Coastal Development Permit (File # CDP 95-0022) for the development of a 9 unit Bed and Breakfast facility at the subject site, and adopted a Negative Declaration pursuant to the California Environmental Quality Act. Rather than being appealed to the San Mateo County Board of Supervisors, the locally-approved Coastal Development Permit was directly appealed to the Coastal Commission. On March 14, 1996, the Coastal Commission opened and continued the public hearing on this appeal. On April 10, 1996, the Commission determined that the appeal

raised a substantial issue regarding project conformance with the certified LCP. The de novo hearing was continued, in order to provide the applicant with additional time to respond to the concerns expressed by the Commission and contained in the staff report prepared for the April Commission meeting (e.g., demonstration of an adequate water source to serve the proposed development). Upon the request of the applicant, the continuance of the De Novo hearing on this project was postponed from June, 1996, until the July, 1996, in order to provide more time to obtain the necessary additional information. Completion of the De Novo hearing on this project, and action on the coastal development permit for the proposed development, is currently before the Commission.

#### B. Project Description:

The subject project proposes the partial demolition of existing warehouse-type structures on the property, and development of a 9-unit Country Inn with a ± 1800 square foot storage/maintenance building, 14 off-street parking spaces, and a domestic well. The previously proposed repair of an existing private stairway to the coastal bluff has been eliminated from the current project before the Commission. In addition, the applicant has recently proposed to eliminate landscaping as a component of the subject project. Four buildings with a combined area of 7,659 square feet, constructed to serve a previously operating oyster farm, originally occupied the 4.5 acre site. One of these buildings, the largest and easternmost warehouse building, has already been demolished, without the benefit of the required coastal development permit.

The subject project proposes to demolish 5,800 square feet of the existing buildings (including the one which has already been illegally demolished), and maintain approximately 1,800 square feet of one of the buildings as a "storage/maintenance building", the exterior of which will be remodeled to match the proposed new development. No landscaping in the areas of existing buildings proposed for demolition has been provided by the proposed project. The floor plans for the "maintenance/storage" building show that the majority of the building will be used for the storage of vehicles, maintenance equipment, and miscellaneous materials. Approximately 150 square feet of this building is proposed to be used for linen storage and a lavatory (Exhibit G).

Eight of the proposed nine individual guest units are 600 square feet each (20 feet by 30 feet), with one of the units having 700 square feet (20 feet by 35 feet), totaling 5,500 square feet of new development. The 9 units are grouped in three clusters of 3 units each, with two of the clusters within the previously developed western portion of the site, and the third cluster located on an undeveloped eastern portion of the site (Exhibit F). The County's approval of this project described the development as being completed in three phases: the first two phases involve the construction of 6 units within the general vicinity of the existing buildings; Phase III would consist of the development of the remaining 3 units located on the currently undeveloped eastern portion of the 4.5 acre site. As illustrated in the submitted plans, each of the 9 units would contain a bedroom/living room with a fireplace, bathroom with a "soak tub", and kitchenette with a microwave oven.

The proposed architectural design of the units is illustrated by Exhibit J. According to the applicant's architect, the proposed design is intended to compliment the style and size of the Pigeon Point Lighthouse caretaker's living quarters, located immediately west of the site. The units would be 16 feet in height from the floor to the peak of the roof, covered by wood siding

with a gray color, and private patios would extend from each unit and offer a view of the ocean.

Due to the geologic constraints of the parcel, the units will be located slightly above grade (approximately 1 1/2 feet above ground), on piers that will be drilled into the highly compacted soils of the Pigeon Point formation. According to the submitted grading plan, only minor grading limited to the area of the units' footprints, is necessary to prepare the site for the development.

No information regarding the maximum length of stay allowed is contained within the project proposal or County record, which has raised concerns that the self-sufficient units, similar in size and facilities to a one bedroom apartment, could be rented out as residences. The parcel on which the project is located has one density credit and is zoned Planned Agricultural District, which conditionally allows one single family residence, or a density of development equivalent to two single family residences if for a Coastal Act priority visitor serving use. Residential uses are not eligible for the 100% density bonus granted for visitor-serving projects by the San Mateo County certified LCP. Thus, as discussed in the following findings, conditions requiring a limit of stay for visitors, and the periodic submission of Transient Occupancy Tax records is necessary to ensure that the proposed development actually functions as a visitor serving facility in perpetuity.

Other important elements of project construction include the installation of a domestic well to serve the project, as well as a sewage treatment system. The details of these facilities have yet to be developed. As a result, assurances that such facilities will be adequate to serve the development without adversely affecting coastal views, marine habitats, and water quality, are essential. The recommended conditions of approval, as further discussed in the following findings of this report, are intended to address these issues.

With respect to project operation, a resident manager will not be present on site. According to the applicant, a manager will reside within a few miles of the premises, will attend to the site as needed, and will be available by phone 24 hours per day. Laundry service would take place off-site, and no meal service, other than continental breakfasts for each room, will be provided. The applicant will allow pets, including dogs, within the rooms, and anticipates that most guests will be couples, primarily from the Bay Area. With respect to the protection of marine mammals, which occasionally haul out on the adjacent Whaler's Cove beach, the applicant has proposed to post signs within each of the rooms which inform guests that neither humans nor dogs are allowed on the beach when marine mammals are present.

#### C. Project Location:

The subject 4.5 acre parcel at 921 Pigeon Point Road is directly adjacent to the eastern side of the Pigeon Point Lighthouse Reservation, on the west side of Highway One, in a rural area of the southern San Mateo County coastline (Exhibits C, D, and E), and is included within the State Scenic Highway Corridor. The adjacent Lighthouse is a State of California Historic Landmark, and is listed in the National Register of Historic Places. The Archaeological Reconnaissance Survey completed for this project indicates a rich history of maritime activities on the project site and within the project vicinity.

Pigeon Point, a small point jutting southwesterly into the Pacific Ocean, offers dramatic coastal views which are known to provide excellent opportunities to view migrating Gray whales and

other marine life, and is rich in maritime and whaling history. The historic lighthouse on the point is known as one of California's most picturesque lighthouses. The existing ancillary buildings surrounding the lighthouse are currently used as a youth hostel, which provides overnight accommodations for up to 50 people. Other than limited local produce stands, the nearest place for visitors to find food would be the Town of Pescadero, approximately 10 miles north of the site, or the City of Half Moon Bay (approximately 35 miles north of the site), or the Town of Davenport on the north coast of Santa Cruz County (approximately 20 miles south of the site).

#### D. Site Description:

The subject parcel, on the southern portion of Pigeon Point east of the lighthouse, is approximately 875 feet long, and varies in width between approximately 120 feet and 300 feet, as defined by the coastal bluffs (Exhibit F). The seaward side is bounded by the Monterey Bay National Marine Sanctuary. The jagged shoreline is marked by steep bluffs ranging in height from 35 to 40 feet. At the base of these bluffs are three small cove beaches, rocky shoreline, and the Pacific Ocean. The westernmost cove beach, closest to the proposed development, is known as Whaler's Cove, indicating its past use by the whaling industry. The parcel is bounded by Pigeon Point Road to the north, and undeveloped coastal land owned by San Mateo County to the east. The County-owned land to the east of the subject site currently offers unimproved parking and an unofficial, hazardous accessway to the beach. Only during low tide can Whaler's Cove be reached from the adjacent unofficial County-owned beach access.

Vegetation on the subject site includes native species of coastal strand habitat, as well as exotic species such as ice plant. Other than Monterey Pine planted amongst the existing buildings, there are no trees on the site.

The extreme western portion of the site was developed with 4 modular structures (one of which has been removed) which cover approximately 7,700 square feet of land, and are surrounded by fences. The existing buildings, originally developed in the 1960's for aquaculture purposes, are currently used for private storage. In the past, one of the buildings has been used as a residence, and another rented as a lodging facility, without the benefit of the required coastal development permits. Other existing development on the property includes a failing wooden walkway leading from the existing development to a promontory at the southwest property corner which then connects to a rickety stairway that leads down the bluff to a lower bluff; an underground water tank; two concrete pads between the buildings; a large black plastic water tank; a gravel driveway; planting areas; and an existing well on the southeastern portion of the property.

To the east of the existing developments is an abandoned road, also described as a "gully" in the County staff report, which leads from Pigeon Point Road to Whaler's Cove. Because this abandoned road serves as a primary drainage for the property, it has been deeply eroded. According to a settlement agreement reached between the State of California, the State Lands Commission, the Coastal Commission, and the property owners, the Whaler's Cove beach is owned by the State of California. Other than the abandoned road on the subject parcel, the only means of accessing this beach is by boat, or at low tides from County owned land southeast of the property, which provides an unofficial, hazardous trail down to the intertidal area southeast of Whaler's Cove.

In responding to comments submitted regarding the Negative Declaration, the County states "the applicant proposes to restore native vegetation on the sides of the gully while leaving an informal path down the center to allow for emergency access to the beach". The applicant has recently proposed to eliminate landscaping from the project proposal. It is assumed that the proposed project will maintain this accessway to the beach for private use by the facility's guests.

The Whaler's Cove beach, in addition to providing exceptional coastal views and containing important historical artifacts, is also is used by pinnipeds (seals and sea lions) as an occasional haul-out area. Another attraction which makes this beach a desirable destination for coastal recreation, especially during the spring and summer, is the fact that it is protected from the predominantly strong north west winds. In letters received from fishermen, divers, school groups, and other members of the public, have stressed that the unique characteristics of this beach provide coastal access and recreation opportunities for the public that are unavailable elsewhere. Over 200 letters to the Commission and Commission staff, stressing the importance of public access to this beach, were received and referenced in the previous staff report presented to the Commission at the April, 1996 hearing.

#### E. Density of Development:

#### 1. Background:

The San Mateo County certified Local Coastal Program (LCP) establishes standards for development which regulate, among other things, the allowable density of development. The appropriate application of LCP density standards is very important, especially in rural areas of the County, as it serves to limit non-agricultural development in order to preserve agricultural land and natural resources, ensure that development takes place consistent with limited public service capacities (e.g., water, sewer, roads); and maintain the projected buildout figures contained in the certified LCP.

The density regulations contained in the San Mateo County LCP are based on the concept of density credits, which each parcel is assigned, according to a variety of factors. Every legal parcel is entitled to at least one density credit, which can be used to build a single family residence, or the equivalent thereof. In order to encourage Coastal Act priority uses, the LCP provides a 100% bonus for such development. For example, a visitor serving development equivalent to two single family residences could be built on a parcel with one density credit. This LCP density bonus is intended to implement the Coastal Act mandate which preserves limited public services for coastal dependent and coastal related development, and gives priority to those uses which are either require a close proximity to the ocean, or enhance public enjoyment of the coast.

One of the problems associated with the LCP's method of calculating allowable density is the difficulty in establishing the equivalent of a single family residence. In developing the LCP, alternatives for objectively determining, on a quantifiable basis, the amount of development equivalent for one density credit were evaluated. In considering elements of development which could provide a means for determining the allowable intensity of development per density credit, such as site coverage, traffic generation, or water use, the County chose water use.

Water use is thus simply a "yardstick" for determining the density of development equivalent to a single family home for the purpose of allocating the amount of use for one density credit. Water conservation is <u>not</u> the thrust of this policy. In fact, extreme water conservation would significantly increase density projected in the certified LCP. For example, extreme water conservation could allow three single family residences, rather than one, per density credit, thus tripling buildout and inflicting unknown impacts on resources and infrastructure. So far, water conservation has not been used as a tool to obtain additional single family residences on a site with one density credit. However, water conservation <u>has</u> been used as a tool to increase the allowable density of development for uses other than single family residences.

In order for the density formula contained in the certified LCP to work, non-residential density of development must, from a common sense view, be equated to the density of a single family residence. It is this density equivalency that is the issue, not the manipulation of water use to achieve a greater amount of non residential development. Proper analysis of the allowable density of development according to the certified LCP must evaluate the maximum amount of daily water use based on normal water duties, not on water conservation. This is because the single family residence standard is based on typical water use, not on conservation schemes. To increase density in return for water conservation circumvents the point of the policy, and will cumulatively result in a substantial, unplanned increase in density in rural San Mateo County. This position has been consistently represented by Commission staff since the Kleinfelder Rural Area Water Use Study, prepared for San Mateo County in 1991, was released as a draft (staff comments attached as Exhibit M). It is also noted that Coastal Commission certification of the San Mateo County LCP, which took place in 1981, followed 1980 revisions to the Plumbing Code, which required installation of water conserving fixtures in all new development. As a result, water conservation has already been figured into the County's density allocation system, and to allow for a greater density of development based on water conservation would be "double counting".

#### 2. LCP Policies and Ordinances:

The following LCP Policies and ordinances regulate the allowable density of development at the project site:

#### a. Policy 1.8c.:

"Land Uses and Development Densities in Rural Areas"

- "c. Require density credits for non-agricultural land uses in rural areas, including any residential use, except affordable housing ... and farm labor housing. One density credit shall be required for each 315 gallons maximum daily water use as a result of a land use. For purposes of this ordinance, a single family dwelling unit shall be deemed to use 315 gallons per day. In order to give priority to Public and Commercial Recreation land uses, one density credit shall be required for those uses for each 630 gallons of maximum daily water use. Water use shall be calculated on the best available information and shall include all appurtenant uses, e.g., landscaping, swimming pools, etc."
- b. Section 6356 of the Zoning Regulations, states in relevant part:

"Maximum Density of Development."

"In order to equate the density credit accrued for different uses permitted in the PAD [Planned Agricultural District], one density credit shall equal 630 gallons/day of water for Public and Commercial Recreation uses, and 315 gallons/day of water for all other uses. For the purpose of this ordinance, a single-family dwelling shall be deemed to use 315 gallons per day. Any uses requiring more than 315 or 630 gallons/day of water shall consume the number of additional whole credits needed. Water use shall be calculated on the best available information and shall include all appurtenant uses, e.g., landscaping, swimming pools, etc. ..."

# 3. Project Consistency with LCP Density Regulations:

#### a. Visitor Serving Density Bonus

In order to qualify for the 100% density bonus provided by the LCP for Coastal Act priority developments, the subject project must function as a public or commercial recreational facility. The subject project proposes nine 600-700 square foot "Country Inn" units, and a 1,800 square foot maintenance/storage building, but does not include length of stay limitations that will ensure that the project will truly function as a visitor serving use. If the proposed visitor serving use was converted to a residential use, the resulting density of development would be twice as much as that currently allowed by the LCP. The concern that the proposed project may be used for residential rather than visitor serving purposes is heightened by the following: the size and type of the proposed units could easily be converted to residential units as they are completely self sufficient; the project lacks the typical Country Inn support facilities (e.g., laundry, manager's residence, dining facility, guest lounge) which is especially peculiar given its remote location; and, the County did not condition its approval of the project in a manner which ensures that the development can only be used for visitor serving purposes.

As a result, Special Condition 4 attached to this permit requires that a deed restriction be recorded which indicates that this permit is for a visitor serving use only, and specifies a maximum length of stay 29 consecutive days, and 84 days out of the year, per visitor. Similar length of stay requirements have been used by the Commission in approving permits for other visitor serving developments, such as in the case of the Hotel Oceano in San Luis Obispo County. Evidence that the requirements of this deed restriction are complied with is also required by Special Condition 4, through the periodic submission of Transient Occupancy Tax records. In addition, Special Condition 4 specifically identifies that a conversion to residential use requires an amendment to this permit, and acknowledges that such a conversion would require a reduction in density.

#### b. Water Use

According to the applicable requirements of the San Mateo County certified LCP, the allowable density of visitor serving development on a parcel with one density credit can not exceed a maximum daily water use of 630 gallons. These requirements state that water use shall be calculated on the best available information and shall include all appurtenant uses, (e.g., landscaping, swimming pools, etc.).

The County's approval of this project allowed 9 units based on a Rural Area Water Use Study prepared for the County by Kleinfelder, Inc. in 1991, which asserts that hostelries, hotels, and motels with water conservation fixtures can support 9.33 units per one density credit. The County's complete reliance upon this study in its approval of 9 units does not ensure project consistency with LCP density standards for the following reasons:

- The water use study referred has not been adopted by the County and is not a certified component of the LCP. A project specific analysis is required by the LCP in order to determine the allowable density of development.
- The study asserts that the development of 9 visitor serving units per density credit is within the maximum daily water use limit of 630 gallons based upon "average daily use with water conservation fixtures". The certified LCP does not provide for additional density in return for water conservation. Furthermore, there is no factual basis supporting the asserted amount of water savings that could be achieved.
- Maximum water use associated with the proposed project, including all appurtenant uses, was not evaluated.

In response to these shortcomings, the applicant's consultant recently prepared a project specific water use assessment (attached to this report as Exhibit K). This study assumed that the project would not use any water for the irrigation of landscaping, and did not evaluate the quantity of water required for housecleaning needs. In summary, the methodology used by the consultant to determine the anticipated water use by the proposed project was to:

- establish an estimation of average daily water use per unit based on documentation of observed uses for similar types of development (90 gallons per unit per day);
- 2) calculate total daily water consumption for the project (900 gallons per day including the manager's office/storage area); and,
- 3) calculate water consumption for the project utilizing low flow and ultra low flow fixtures, assuming that such fixtures would result in 53% and 68% water savings, respectively.

Applying the above methodology and assumptions, the report concludes that the project will result in a peak consumption of 628 gallons per day using low flow fixtures, 428 gallons per day using ultra low flow fixtures. This translates to 62.8 and 42.8 gallons per day, respectively, for each of the units and the manager's office. The unreasonably low water consumption represented by these figures is obvious: consider, for example, that it takes approximately 30 gallons to fill a normal sized tub<sup>1</sup>. Therefore, two people renting one unit would consume approximately 60 gallons of water per day by bathing alone. It is inappropriate to assume that water conserving fixtures would decrease the amount of water required for bathing; it takes the same amount of water to fill a tub regardless of the type of fixture that the water comes out of.

<sup>&</sup>lt;sup>1</sup> Practical Handbook of Environmental Control (page 136), Conrad P. Straub, CRC Press, Boca Raton, FL, 1989

In addition to the fact that water conserving fixtures will save water only in limited circumstances, the following additional flaws are contained in the submitted water use assessment:

- Water conserving fixtures have been required to be installed in all new development by the Plumbing Code since 1980<sup>2</sup>. As a result, the water use study's assertion that water consumption can be reduced by 53% with low flow devices, and 68% with ultra low flow devices is inaccurate. In fact, we should expect that the estimated average daily water use of 90 gallons per unit already accounts for the water saved through the use of water conserving fixtures because the referenced studies were all written during or after 1987.
- The average daily water use per unit used by the assessment was determined by averaging estimated hotel/motel unit water consumption figures contained in other studies. The consultant averaged water consumption figures for motel and lodging room facilities without kitchens with those that did have kitchens, artificially lowering the average water use consumption for lodging facilities with kitchens, the category in which this project falls.
- The study did not evaluate water needed to clean the facility, or to irrigate landscaping. Although the applicant has proposed to eliminate landscaping from the project proposal, some landscaping is required to maintain consistency with LCP Policies protecting visual resources (further discussed in section IV.H. of this report). Landscaping was also cited by the Negative Declaration adopted by the County pursuant to CEQA as a means to prevent erosion on the subject site. While the use of drought resistant native vegetation will be required, some degree of irrigation will be needed to ensure successful establishment. In addition, it is assumed that the applicant will desire some degree of ornamental landscaping to increase the visual attractiveness of the project.
- The project is in a relatively isolated location, several miles from the nearest restaurant or deli, which may increase the frequency of kitchen use when compared to typical transient facilities with kitchens.

The applicant and the water use consultant that prepared this report have been asked to respond to the above issues (Exhibit N), but no response has been received to date.

Commission staff has independently researched typical water use by visitor serving facilities, and developed the following information:

• In approving a Coastal Development Permit for the Ventana Inn of Big Sur, Monterey County, the Coastal Commission required an intensive water conservation and monitoring program intended to minimize project impacts on the adjacent creek from which the project's water supply was derived. Water use information submitted in compliance with this permit indicates that actual water use by the Ventana Inn averages 69 gallons per day per unit, independent of all other water using facilities (e.g., landscape irrigation, restaurant, pool, campground, staff, etc.). None of the Ventana Units have kitchens.

<sup>&</sup>lt;sup>2</sup> personal communication with Toby Goddard, City of Santa Cruz Water Conservation Department, June 19, 1996

- The water use assessment prepared for the Marchant Hotel Resort in Half Moon Bay by M.J. King and Aqua Science Engineers in March, 1989, used water use figures of three similar hotels in the Half Moon Bay area. The results of this analysis found that the lowest water consuming facility, the Harbor View Inn, which sends out its laundry and does not provide food service, used an average amount of 106.21 gallons per day per room between 1986 and 1988. None of the Harbor View units contain kitchens.
- The water use assessment prepared for the Cascade Ranch project by Brown and Caldwell in February, 1988 found that a water conserving lodge room would use 38.3 gallons per day per capita (76.6 gallons per day for a unit with two people). Again, none of these rooms contained kitchens.
- The County of Marin's Water District uses a "Calculated Average Consumptions Comparison Chart" for ascertaining the water demand of different projects (Exhibit K) based on water use estimates developed by the Counties of Monterey, Santa Barbara, and Marin. This table, last updated in March, 1991, indicates that the Monterey County Water District applies a figure of 0.0934 acre feet per year in estimating the amount of water used by one bed and breakfast unit. At 325,828.8 gallons in an acre foot, this amount translates to 30,432 gallons per year per unit, or 83 gallons per day per unit. This table also indicates that for a lodge/motel unit, the Marin Water District estimates a consumption of 0.103 acre feet per year per room; the Monterey County Water District estimates a consumption of 0.1208 acre feet per year per room; and the Santa Barbara County Water District estimates a consumption of 0.13 acre feet per year per room. These figures translate to 92 gallons per day per unit, 108 gallons per day per unit, and 116 gallons per day per unit, respectively.
- In estimating the potential buildout within the Monterey Peninsula Water Management District in July, 1988, EIP Associates consulting firm applied a 0.137 acre feet per year per room for hotel water use. This is equivalent to 122 gallons per day per unit.
- The Rural Area Water Use Study prepared for San Mateo County by Kleinfelder in 1991 recommends an average daily water use of 125 gallons per day for hotel/motel rooms, and a peak water use of 184 gallons per day per unit. Although this report goes on to state that these water use figures can be reduced based on the use of water conservation figures, such reductions are highly questionable due to the fact that many of the references used to develop the daily water use figures contained in the report likely already incorporate water saving fixtures due to the 1980 revisions to the Plumbing Coda.

As the above information indicates, estimates of daily water use per hotel unit range from 69 gallons per day to 184 gallons per day, averaging 108 gallons per day per unit. Similarly, in conducting the water use study for San Mateo County, Kleinfelder found a range of water use estimates between 50 and 357 gallons per day per room. In order to account for these discrepancies, Kleinfelder averaged the values reported by Michael Redlin (Water Consumption in the Lodging Industry, 1990), the Monterey Peninsula Water Management District, the City of Santa Barbara, and South Bay Cities Sanitation District, (which ranged between 101 and 149 gallons per day per room), and recommended an average water use of 125 gallons per day per room. Kleinfelder's Rural Area Water Use study goes on to state that, in considering peak water use, average water use figures must be multiplied by a factor of 1.47 in order to account for seasonality and occupancy rates, which are built in to the average water

use figures. This is why Kleinfelder recommends a peak daily water use rate for hotel/motel rooms of 184 (125 x 1.47 = 183.75). The multiplication of average water use figures by a factor of 1.47 to calculate peak water consumption (i.e., 100% occupancy) is necessary to account for the variable occupancy rates that figured into the average use figures.

Again, it must be emphasized that the water use figures analyzed above were based on actual observed water use figures generated after 1980, when the Plumbing Code was revised to require the installation of water conserving fixtures in new development. As a result, it is inappropriate to assume that these figures could be significantly reduced by additional water saving fixtures. Furthermore, it is inconsistent with LCP requirements to allow a density bonus based on water conservation. This practice would require an amendment to the certified LCP which specifically allows for such density bonuses. Such an amendment would be extremely difficult to reconcile with Coastal Act policies because it would significantly increase the overall buildout originally contemplated by the LCP, resulting in cumulative adverse impacts to coastal resources.

While it is clear that an additional density bonus can not be granted, consistent with LCP standards, on the basis of water conservation, the question remains as to whether or not it is acceptable to base density on average daily water use as opposed to maximum daily water use. While Policy 1.8c. specifically states "In order to give priority to Public and Commercial Recreational land uses, one density credit shall be required for those uses for each 630 gallons of maximum daily water use" (emphasis added), this policy goes on to state that "Water use shall be calculated on the best available information". Commission staff's interpretation of this policy, consistent with the ruling of the Court of Appeals on the Cascade Ranch case, is that average daily water use figures are the best means of calculating a project's anticipated water use, as these figures take into consideration changes in water use associated with seasonality and occupancy rates. The "maximum" daily water use of 630 gallons per day refers to the fact that average water use figures can not exceed a water demand of 630 gallons per day per density credit.

Taking the average water consumption rates developed by Commission staff (108 gallons per day per unit), and averaging it with the three figures contained in the project specific water assessment for "motel rooms with kitchens" contained in the Kleinfelder Report (80, 100, and 110 gallons per day per unit), each unit would average 99.5 gallons per day of water use. Using the average of the three Kleinfelder figures alone, each unit would average 96.7 gallons per day. Applying either of these figures, only six units can be developed within the 630 gallon per day limit. Under the first scenario, 33 gallons per day would remain for cleaning, irrigation, and water use by the project manager, 51 under the second. A spare supply of 30 to 50 gallons of water per day for such uses appears to be the bare minimum necessary to keep the project clean and operational.

#### 4. Conclusion:

As detailed in the above analyses, the proposed project raises two issues regarding conformance with LCP policies regulating the allowable density of development. These include the project's eligibility for the visitor serving density bonus, and whether or not the project falls within the established 630 gallon per day maximum water use per density credit for a visitor serving facility.

In order to ensure that the project will truly function as a visitor serving use, Special Condition 4 that a deed restriction be recorded which indicates that this permit is for a visitor serving use only, and specifies a maximum length of stay 29 consecutive days, and 84 days out of the year, per visitor. Evidence that the requirements of this deed restriction are complied with is also required by Special Condition 4, through the periodic submission of Transient Occupancy Tax records. In addition, Special Condition 4 specifically identifies that a conversion to residential use requires an amendment to this permit, and acknowledges that such a conversion would require a reduction in density..

With respect to the density limit established by the LCP, the project is not entitled to more than 6 units. Therefore, special Condition 1 and 3 require the project to be reduced from 9 units to 6. This condition is necessary to ensure project consistency with LCP density regulations which establish a maximum daily water use of 630 gallons a day per density credit for visitor serving facilities, based upon the best information available to the Commission regarding the anticipated water demand of the proposed project. Accordingly, only as conditioned, the project will be consistent with the LCP.

It is noted that the applicant has the ability to maintain actual water use information, and if in the future, such information indicates that actual water use falls below the 630 gallon per day density limit, the applicant can pursue an amendment to the coastal development permit for an increase in density. Similarly, and as discussed in the following section of this staff report, subsequent review by the Commission of the water supply necessary to serve the permitted development may require a further reduction in the allowable density of development.

#### F. Agricultural Resources:

# 1. Background:

The project site is within the Planned Agricultural District (PAD) of the San Mateo County Zoning Regulations, which serve as the Implementation Program for land designated for agricultural use in the San Mateo County certified LCP. This PAD designation indicates the LCP's intent to preserve existing and potential agricultural operations on the site, and to minimize conflicts between agricultural and non-agricultural land uses within the project vicinity. This zoning district, and its associated regulations for development, are integral components of the San Mateo County LCP, as they provide the means for achieving the protection of coastal agriculture mandated by the Coastal Act of 1976. Consistent implementation of these regulations is necessary to protect the extensive agricultural resources of southern San Mateo County's coastal area, which is subject to intensive development pressures due to its location between the cities of Santa Cruz and San Francisco, as well as its scenic beauty and recreational resources.

The project site contains almost equal portions of both prime agricultural soils, and non-prime agricultural soils (otherwise referred to as lands suitable for agriculture by the LCP). The entirety of the proposed development is outside the areas containing prime agricultural soils, which are located within the eastern portion of the site, with the exception of the proposed well and leachfield. It is noted that during the County's review of the subject project, the leachfield was also proposed outside of prime agricultural soils, but has since been relocated to the eastern portion of the site due to percolation constraints.

The site has not been under agricultural development in recent history, but is located across Pigeon Point Road from an agricultural field typically farmed for Brussels sprouts. The project has received approval from the County's Agricultural Advisory Committee, and as approved by the County, the applicant is required to record a "Right to Farm" statement in order to minimize project conflicts with adjacent agricultural operations. This condition, originally required by the County, is maintained by Special Condition 2 of this permit, which incorporates most of the County's conditions (attached as Exhibit B).

As evidenced by the need to record a "Right to Farm" statement, an important component of the agricultural resource protection policies contained in the LCP is to prevent non-agricultural development from adversely affecting agricultural operations. This includes the protection of agricultural water supplies, which are extremely limited along the southern San Mateo coastline. As a result, the LCP policy identified below requires that prior to approving a development permit for non-agricultural development, it must be demonstrate that the site has an adequate on-site water source to serve the proposed development, which does not adversely affect agricultural water supplies, or those water supplies necessary for the survival of a sensitive habitat area.

## 2. LCP Requirements:

LCP Policy 5.22a., "Protection of Agricultural Water Supplies", states:

"Before approving any division or conversion of prime agricultural land or other land suitable for agriculture, require that:

- "a. All non-agricultural uses permitted on a parcel demonstrate the existing availability of a potable and adequate on-site well water source.
- "b. Adequate water supplies needed for agricultural production and sensitive habitat protection in the watershed are not diminished.
- "c. All new non-agricultural parcels are severed from land bordering a stream and their deeds prohibit the transfer of riparian rights."

# 3. Project Consistency:

The applicant has not yet demonstrated that an adequate well exists on-site to serve the proposed development. As expressed by many of the Commissioners at the April 1996 hearing on this project, resolution of this issue was a prerequisite to final Commission consideration of this project.

In complying with the directives of the Commission, staff met with the applicants and their representatives immediately following the April, 1996 hearing. At this meeting, the involved parties reviewed the additional information necessary to return the project for final consideration by the Commission, including approval by the San Mateo County Department of Environmental Health of a well adequate to serve the proposed development. A follow up letter to the applicant summarizing the additional information necessary (including well approval) was sent on April 24, 1996, and is attached to this report as Exhibit O.

Since that time, the applicant has failed to obtain the requested well approval from Environmental Health. The applicant has submitted, however, a Well Test Report summary (Exhibit Q), and a water quality analysis (Exhibit R). The results of these investigations have raised concerns regarding the well's ability to adequately serve the proposed project, as discussed below. The Commission indicated at the April, 1996 hearing that the water supply issue should be resolved before review of this project was completed; however, many Commissioners also expressed a desire to meet the applicant's needs for a timely hearing, and requested that the project be scheduled for the June, 1996 meeting. This hearing date was postponed until the July Commission meeting upon the request of the applicant, due to the fact that the information necessary for the continued hearing (including well approval) was not yet available.

The applicant asserts that an adequate degree of information has been submitted for the Commission to take action. It has also been stated that the issue of the well's adequacy will be resolved in time for the July hearing. The information necessary to ensure the well's adequacy has not, however, been submitted in time for inclusion in this report. As a result, and in keeping with the Commission's desire to accommodate a timely continuance, staff has developed a recommendation which will allow for Commission action at the July, 1996 meeting, irrespective of the status of the project's water supply. This recommendation is dependent upon subsequent Commission review and approval of the project's water supply system, as such a safeguard is necessary in light of LCP requirements, as well as the precedent set by the Sundstrom vs. Mendocino County court case. If the adequacy of the project's water supply is resolved in time for the July hearing, as asserted by the applicant, the Commission can revise the requirement for subsequent review and approval of the water supply as appropriate.

The submitted well test report indicates that on June 5, 1996, a 24 hour well test was undertaken (the location of the well is depicted by Exhibit P). The subject well, which was drilled to a depth of 735 feet, started the test with the water level at 80 feet. At the conclusion of the test, the water level was at a depth of 672 feet, indicating a total drawdown of 592 feet over the 24 hour test period. The total production of the well over the 24 hour period was 7,250 gallons, resulting in an average yield of 5.03 gallons per minute. Although the final sustained yield was not determined, the report states that the "well stabilized at 5 gpm [gallons per minute] at the top of the pump".

The above information is not adequate to determine the adequacy of the proposed well because there is no indication of the level at which, and at what point during the test, the well stabilized. This "time versus drawdown" information is necessary to determine the well's ability to recharge during and after the withdrawal of water, which directly relates to the well's capacity to serve the proposed development over the long term. In addition, there has been no analysis of the materials encountered during the drilling of the well. This information applies to the type, size, and geologic stability of the aquifer, which also relates to the well's long term ability to serve the proposed development.

The submitted water quality analysis (Exhibit R) identifies the presence of total coliforms, as well as characteristics and constituents within the water which exceed drinking water standards. These include conductivity, total dissolved solids, chloride, and fluoride. As a result, the proposed water system will require treatment, the extent of which has not been identified. The need to treat the water in order to meet public health standards raises concerns

that the amount of water available for use by the project may be reduced, and that the treatment may result in the need to dispose of effluent in the surrounding environment. As discussed later in this report, the low permeability of the surrounding soils may complicate the disposal of such effluent, and therefore result in adverse impacts to adjacent marine habitats and water quality.

Other concerns raised by the proposed water supply, and the fact that it has not been approved by the San Mateo County Department of Environmental Health, include:

- The well's proximity to the ocean and its depth below sea level, which increase the possibility of salt water intrusion. This concern is heightened by the fact that the submitted water quality analysis indicates levels of conductivity and total dissolved solids which exceed public health drinking water limits. Such characteristics are indicative of salinity.
- The geologic characteristics of the area in which the well is located, commonly referred to as the "Pigeon Point Formation", and known for its highly compacted soils, indicates that the aquifer from which the water will be derived is a "fractured" aquifer as opposed to the more common "porous" aquifer. This feature may not only reduce the reliability of the water source, but may increase the potential for salt water intrusion. The Commission staff has discussed the hydrogeologic characteristics of the site with a certified geologist<sup>3</sup>, who described the Pigeon Point formation as a "graveyard of dry holes", and the potential for seawater intrusion was confirmed. This geologist, who participated in the water availability analysis for the Cascade Ranch project, also stated that from his experience in looking for water at the adjacent Campbell's Mushroom Plant, where 18 test wells came up dry, he would not consider looking for water on the western portion of Cascade Ranch underlain by the Pigeon Point formation.

With respect to the well's affect on agricultural water supplies, the applicant has stated that the surrounding agricultural operations use agricultural impoundments, as opposed to wells, for irrigation. The applicant has stated that a letter confirming this fact will be provided, but such a letter has not been received as of the writing of this staff report. Such evidence, however, does not address the potential for seawater intrusion posed by the proposed well, which would result in adverse impacts to future agricultural operations, should such activities require the use of groundwater supplies.

#### 4. Conclusions:

The project can not be approved consistent with LCP Policy 5.22 until it has been demonstrated that an adequate and potable water supply exists on site to serve the proposed development, that will not result in adverse impacts to water supplies needed for agriculture and the protection of sensitive habitats. As detailed above, evidence that the proposed well will adequately serve the proposed development has not been provided. In addition, the proposed well has the potential to cause seawater intrusion, which could adversely affect groundwater supplies on adjacent properties. Furthermore, the disposal of effluent resulting from the required treatment of the water supply has the potential to adversely affect adjacent marine habitats.

<sup>&</sup>lt;sup>3</sup> Personal Communication with Barry Hecht of "Balance Hydrolics", June 20, 1996

As a result, Special Condition 1 attached to this permit requires subsequent review and approval of the proposed water system, once such a system has been approved by the San Mateo County Department of Environmental Health. This condition is necessary to ensure project consistency with the specific requirements of LCP Policy 5.22a. In addition, this condition is necessary in light of the precedence set by the Sundstrom vs. County of Mendocino court case.

Special Condition 1 specifically acknowledges that should the Commission's subsequent review of the proposed water supply reveal that it is not adequate to serve the proposed development, or will result in adverse impacts to agricultural water supplies or sensitive habitats, a reduction in the density of development may be required.

# G. Sensitive Habitats:

#### 1. Background:

The ocean waters adjacent to the project site fall within the boundaries of the Monterey Bay National Marine Sanctuary. According to Policy 7.1 of the certified LCP, marine habitats and coastal tide lands are defined as sensitive habitats. Policy 7.22 specifically designates Pigeon Point as a marine and estuarine habitat requiring protection. Whaler's Cove beach, on the south side of Pigeon Point and directly adjacent to the proposed project, is used periodically as a seal haul-out area and may also be used for pupping activities. Other features of the Whaler's Cove beach and intertidal areas which are representative of their sensitive habitat designation include: tidepools which provide habitat for a wide variety of marine life, including abalone; "Prisoner Rock", a seastack (i.e., geologic feature in the form of a small but tall rocky island protruding from the ocean) which is used as a haul out area by marine mammals such as harbor seals; and, the close proximity Gray whales during their annual migrations. Because the subject project is directly adjacent to such habitat areas, LCP policies protecting sensitive habitat areas apply to the proposed development.

#### 2. LCP Requirements:

#### Policy 7.3, "Protection of Sensitive Habitats", states:

- "a. Prohibit any land use or development which would have significant adverse impact on sensitive habitat areas."
- "b. Development in areas adjacent to sensitive habitats shall be sited and designed to prevent impacts that could significantly degrade the sensitive habitats. All uses shall be compatible with the maintenance of biologic productivity of the habitats."

#### Policy 7.5, "Permit Conditions", states in part:

- "a. As part of the development review process, require the applicant to demonstrate that there will be no significant impact on sensitive habitats..."
- 3. Project consistency:

In summary, the proposed project has the potential to adversely effect the adjacent sensitive habitat areas by:

- Attracting visitors, and their canine pets, to the site when seals or sea lions are present.
- Increasing the rate of erosion, as well as the quantity of sediment and urban pollutants contained in runoff from the site, as a result of project construction and operation. Such impacts can diminish water quality and biological productivity, adversely affecting sensitive habitats and the species dependent upon these habitats.
- Discharging contaminants to the marine environment from the disposal of effluent resulting from the required treatment of the water supply, and/or from a sewage treatment system that does not function properly.

These potential impacts, and their relative significance, are analyzed in more detail in the following paragraphs.

The applicant will require that dogs be kept on leash when outside the guest units, and will advise project guests that neither humans nor dogs are permitted on the Whaler's Cove beach when marine mammals are present. These rules will be described in signs posted in each guest unit, which must receive Executive Director review and approval prior to the issuance of the permit pursuant to Special Condition 3. Considering these safeguards, and in light of the small scale of the project, as well as the fact that the adjacent beach area is not currently considered a significant marine mammal haul-out area, the project's impacts to adjacent sensitive habitat areas resulting from limited numbers of additional visitors is not considered significant.

The potential for erosion and sedimentation as a result of project implementation was identified by a geotechnical investigation of the project site and proposed development undertaken in September 1995. This study found that "the soil that blankets the site is poorly consolidated", and, as a result, stated that the "control of surface drainage is critical to the successful development of the property" as "the results of improperly controlled run-off may include erosion, gullying, ponding, and potential slope instability". The report recommends controlling drainage and surface runoff via closed conduit discharge system with an energy dissipater. Such a feature, has not, however, been incorporated into current project plans.

The impacts of erosion, sedimentation, and urban pollutants on marine and intertidal habitat areas can be significantly adverse if they are not properly controlled. Sources of erosion, sedimentation, and urban pollutants include: an increase in the quantity and velocity of stormwater runoff resulting from the increased extent of impervious surfaces; instability of surface soils caused by earth moving activities and the demolition of existing structures; improper control of stormwater during project construction; inadequate or poorly designed drainage facilities; washdown and use of improperly maintained construction equipment; and the increased quantity of automobile fluids (i.e., oil and coolant) contained in stormwater runoff as a result of increased visitation by the public using automobiles.

Erosion, sedimentation, and urban pollutants can significantly degrade intertidal and marine habitats by: reducing water clarity, thereby diminishing the amount of sunlight available to bottom dwelling organisms dependent upon sunlight; directly removing habitat areas through the erosive forces of high velocity runoff; smothering (with sediment) habitat areas dependent upon water circulation for survival; and introducing toxic substances to the marine environment which can result in mortality, reproductive failure, or other adverse impacts to biological resources within intertidal and marine environments.

As a result of the potentially significant impacts described above, Special Conditions have been attached to this permit which ensure that such impacts are minimized to an insignificant level. Special Condition 6 requires compliance with the recommendations contained in the Geotechnical Investigation conducted for the project, and requires the submission of drainage and erosion control plans for Executive Director review and approval. This condition provides the mechanism for ensuring that project construction and project drainage facilities will not result in adverse impacts to adjacent habitat areas or reduce the stability of surface soils and coastal bluffs. Special Condition 7 requires the submission of a construction operations plan which identifies construction staging and washdown areas, as well as methods of spoils disposal, for Executive Director review and approval. The intent of this condition is to minimize site disturbance, and ensure that proper precautions are implemented during project construction, in order to prevent sediment and contaminants from entering adjacent habitat areas. Special Condition 8 requires Executive Director review and approval of a landscape plan for the portion of the site proposed for development. Installation and maintenance of native vegetation enhances soil stability, especially in areas that will be disturbed as a result of project implementation. The Negative Declaration adopted by the County of San Mateo for this project pursuant to the California Environmental Quality Act states "protective native landscaping is proposed to prevent acceleration of erosion at this site". However, the applicant has recently proposed to eliminate landscaping from the project proposal. Therefore, the landscaping requirement not only provides a means to reduce erosion and control sediment in order to protect adjacent habitats, but also maintains project conformance with the Negative Declaration adopted by the County.

The impact from discharging water treatment effluent on marine and intertidal habitats, as well as from potential contaminants from the proposed septic system, must be assessed at the development review stage pursuant to LCP Policy 7.5a.. With respect to the project's water supply, the extent of the required treatment is currently unknown. This information is crucial to identifying the quantity and constituents of the effluent resulting from water treatment. Due to the low permeability of the soils on the project site and the extent of the proposed septic system (addressed in more detail in the following paragraphs), upland on-site disposal of the effluent will be problematic, and may result in ocean disposal. This has the potential to adversely affect marine and intertidal habitats through a reduction in water quality, depending upon the quantity and constituents of the effluent. As a result, subsequent review and approval of the proposed water supply system, including the specific details of the required treatment process, is required by Special Condition 1. This can be accomplished concurrently with the Commission's future review and approval of the adequacy of the proposed well, also required by Special Condition 1.

Regarding the issue of sewage treatment, the constraints of the site's geology and irregular narrow shape, as well as its proximity to the marine environment, demands an in depth review

of the proposed septic system in order to ensure that it can adequately handle the effluent generated by the project, and not result in significant adverse impacts to adjacent sensitive habitat areas. Potential effects of an inadequate or malfunctioning septic system include the introduction of bacteria and toxic substances to the marine environment and/or subsurface waters, which can diminish the biological productivity of marine habitats and result in human health risks.

Initial percolation tests undertaken at the project site found that the terrace deposits underlying the project site failed to percolate adequately. As a result, subsequent percolation tests were conducted within surficial soils (at a depth of two feet). These surface soils exhibited very good percolation rates. Based upon these test results, the geotechnical consultants recommend "installing a shallow leachfield system utilizing 4-foot deep trenches. The leachfield should be located in the areas outlined in Figure 2 [Exhibit O]. We do not recommend using the driveways and parking areas to the north of the existing structures as part of the leachfield area because the shallow soils have been disturbed by vehicular traffic and do not exhibit adequate percolation rates. We do not recommend using the area around Pits 12 and 13 because the mantle of silty topsoil is less than approximately 2 feet thick in this area...". The proposed leachfield location includes a 100 foot setback from the proposed well, a 50 foot setback from the coastal bluffs, and a 10 foot setback from the northern property boundary adjacent to Pigeon Point road. As a result of these setbacks, the report states that in the consultants opinion, "it is unlikely that effluent will surface along these cuts or create slope instability problems".

While the consultants have stated that the site can accommodate a shallow leachfield on its eastern portion, it is unclear how the recommended 4-foot trenches will function properly since the percolation tests indicated that the soil did not percolate at a depth of 4 feet. In addition, there has been no analysis of the size of the leachfield or septic tank needed to accommodate the quantity of effluent resulting from the project. This analysis may prove the need to expand the size of the leachfield proposed by the consultants, thereby reducing the setbacks from the coastal bluff or well, and exacerbating potential risks to the health of adjacent habitats, humans, and the stability of the coastal bluffs.

Other constraints identified by the percolation testing report include the "possibility that surface water infiltrating the permeable silty surficial soils could perch on top of the less permeable terrace deposits", and the possible occurrence of groundwater within 3 feet of the bottom of the leachfield. The report states that these constraints could be mitigated by installing an approximately 8-foot deep subdrain uphill of the leachfield, which would intercept both perched water and high groundwater. Upon review of this report, the County of San Mateo Health Services Agency submitted a letter concurring with this mitigation measure, and identifying the need to install the subsurface drain prior to the construction of the septic system. This report also noted that "a detailed design of the proposed septic system employing the shallow drainfield with its equivalent sidewall capacity will need to be submitted ... for review and approval prior to the issuance of the building permit". The required size of this leachfield will be determined at this stage of review, and remains unresolved as of the writing of this staff report.

The report also acknowledges that the location of the leachfield, uphill of the proposed guest facilities, will require pumping of the effluent. Pumping of sewage currently requires a variance from the County, and is subject to problems during power outages, which are common at the subject site. Other difficulties posed by the proposed leachfield location include routing of

water lines around the leachfield, which lies directly between the proposed well and guest units. In addition, access to the proposed cluster of units on the east side of the beach access gully would be problematic, as the leachfield would be located between these units and Pigeon Point Road and driveways are not permitted to be constructed over leachfields. This, however, is a most point, due to the fact that the density of development allowed by the LCP is a maximum of six units, thereby requiring the removal of three of the proposed units. Because of the potential compaction problems associated with the driving across the leachfield, as well as other problems discussed in the following Visual Resource analysis of this report, the cluster of three units on the east side of the gully is the most appropriate to remove. This requirement is contained in special condition 3 of this permit.

Due to the potentially significant impacts to sensitive habitats posed by on-site sewage disposal, resulting from the unique characteristics of the subject property, the Commission staff requested, within an April 24, 1996 letter to the applicant, San Mateo County Department of Environmental Health approval of a septic system adequate to serve the proposed development. The basis of this request was to allow Commission staff to establish project consistency with the previously identified LCP sensitive habitat protection policies, which require such a finding to be made prior to the approval of a coastal development permit. Because the adequacy of the proposed septic system remains unresolved, a finding that the project is consistent with LCP sensitive habitat protection policies can not be made. As a result, a condition has been attached to this permit, which requires the final septic system design, as approved by the San Mateo County Department of Environmental Health, to be submitted for subsequent Coastal Commission review and approval.

#### Conclusions:

As detailed by the above analysis, significant adverse impacts to sensitive habitat areas adjacent to the project are posed by the potential increase in erosion, sedimentation, and urban contaminants resulting from project construction and operation, as well as by the potential discharge of contaminants from the required water treatment and sewage disposal systems.

Special Conditions have therefore been attached to this permit, which ensure that appropriate mitigation measures will be implemented during project construction, and in the design of the project's drainage system, in order to protect adjacent sensitive habitat areas from the adverse impacts of erosion, sedimentation, and urban pollutants. In addition, these conditions require subsequent review of the project's water treatment and septic systems, in order to ensure that their final designs adequately protect adjacent intertidal and marine habitats within the waters of the Monterey Bay National Marine Sanctuary.

Only with the implementation of the special conditions summarized above can the project be found to be consistent with the policies of the San Mateo County certified LCP protecting sensitive habitat areas.

#### H. <u>Visual Resources</u>:

# 1. Background:

The proposed project is directly adjacent to the Pigeon Point Lighthouse, which is described in National Register of Historic Places as a highly visible and important component in the development and heritage of the San Mateo County's coast. This lighthouse is one of the most picturesque in the State, and is a popular subject for artists and photographers.

The scenic qualities of this lighthouse are supplemented by the extensive views of rural coastline and open ocean which surround Pigeon Point. The vistas available from Pigeon Point are also known to provide excellent opportunities to view whales and other marine life. The significance of these views, and their accessibility by motorists and bicyclists traveling along Highway One, are evidenced by the fact that this area is included within the California State Scenic Highway Corridor. From the project site and adjacent Pigeon Point public road, expansive views of the ocean and coastline to the south of Pigeon Point are available, including views of Point Ano Nuevo and Ano Nuevo Island.

Based on the adverse visual impact that the proposed development would have on the adjacent lighthouse, the County's Historic Resources Board voted 5-3 to deny the project. As indicated in the County staff report for this project, the Historic Resources Board action did not have any impact upon the approval granted by the County Planning Commission, other than resulting in conditions of approval requiring the protection of archaeological resources.

The County staff report and Negative Declaration prepared for this project, indicated that visual impacts resulting from the proposed development were to be mitigated by the construction of a public viewing platform. This mitigation measure, however, was not reflected in the County's conditions of approval, and has since been dropped from project plans.

## 2. LCP Requirements:

The following policies contained in the San Mateo County certified LCP regulate the impact of new development on visual and scenic resources of the San Mateo County coastal zone and apply to the subject project:

#### a. Policy 8.4b.:

"Set back bluff top development and landscaping from the bluff edge (i.e., decks, patios, structures, trees etc.) sufficiently far to ensure it is not visually obtrusive when viewed from the shoreline except in highly developed areas where adjoining development is nearer the bluff edge, or in special cases where a public facility is required to serve the public health, safety, and welfare."

#### b. Policy 8.5:

"Minimize the number of structures located in open fields and grassland areas; require that structures be designed in scale with the rural character of the region, and that they be clustered near existing and natural or man-made vertical features."

#### c. Policy 8.10:

"Replace vegetation removed during construction with plant material (trees, shrubs, ground cover) which are compatible with surrounding vegetation and is suitable to the climate, soil, and ecological characteristics of the area.

# d. Policy 8.12c.:

"Locate and design new development and landscaping so that ocean views are not blocked from public viewing points such as public roads and publicly owned lands."

## e. Policy 8.13d.:

"Encourage new buildings to incorporate architectural design features found in the historic buildings of the community (see inventory listing), i.e., clean and simple lines, precise detailing, steep roof slopes, symmetrical relationship of windows and doors, wood construction, white paint, etc. Require remodeling of existing buildings to retain and respect their traditional architectural features, if any.

# f. Policy 8.15:

"Prevent development (including buildings, structures, fences, un-natural obstructions, signs, and landscaping) from substantially blocking views to or along the shoreline from coastal roads, roadside rests and vista points, recreation areas, and beaches."

# g. Policy 8.16a.:

"Use plant materials to integrate the man-made and natural environments and to soften the visual impact of new development."

#### h. Policy 8.18a.:

"Require that new development be located, sited, and designed to fit the physical setting, so that its presence is subordinate to the preexisting character of the site, enhances the scenic and visual qualities of the area, or maintains the natural characteristics of existing major water courses, established and mature trees, or dominant vegetative communities."

- Policy 8.21 regulates the design and location of commercial signs.
- j. Policy 8.22 requires new utility lines within State Scenic Corridors to be installed underground, unless a specific exception is granted by the Planning Commission on the basis of constraints posed by topographic features.
- 3. Project consistency with Visual Resource policies:

Six of the nine proposed guest units are located within an area of the site which was previously developed with 4 buildings that were a component of an oyster farm, one of which has already been removed. The existing buildings are very utilitarian in nature and design, and are not

considered an asset to the visual qualities of Pigeon Point. While the proposed removal of 3 of these buildings will clearly be an asset to the visual resources at Pigeon Point, the new development proposed in this area will be taller than the existing development, thereby increasing its visibility from the public beach area and adjacent public roads.

The project also proposes to utilize an existing 1,800 square foot building as storage/maintenance building, the siding of which will be replaced in order to match the new development. Replacing the siding of this building will not, however, adequately address the architectural design considerations required by LCP policy 8.13d. and 8.18a.. This is primarily due to the fact that the roof of the existing building is almost flat, and contains 6 large bubble shaped skylights which are incompatible with the design of the proposed development and the historic buildings of the surrounding area. It may be possible to resolve this visual incompatibility by replacing the roof of this building, or constructing a false roof over the exiting one. Special Condition 3 therefore requires final project plans to address this design consideration, and be submitted for Executive Director review and approval.

The remaining three units proposed as a component of this project are located on the eastern side of the existing access road to the beach, in an open space area of the parcel which has not been previously developed. These units will result in the blockage of significant ocean views available from Pigeon Point road, and will also be clearly visible from the adjacent public beach area, inconsistent with LCP policies 8.4b., 8.5, 8.12c., and 8.15.

The adverse visual impact of this component of the proposed development was acknowledged by the County staff report and Negative Declaration prepared for this project, which proposed to mitigate this impact with the construction of a public viewing platform. However, implementation of this mitigation measure was not required by the County's conditions of approval, and has since been removed from project plans. As a result, no mitigation is currently provided for this impact.

Due to the unmitigated significant adverse visual impact resulting from this component of development, in combination with the reduction in the intensity of development required to maintain consistency with LCP density regulations (refer to Section IV.D. of this report), and the complications of gaining vehicle access to this unit over the proposed leachfield location (refer to section IV.E. of this report), removal of these three units is required by Special Conditions 1 and 3. This requirement eliminates the need to mitigate the visual impacts resulting from this component of the proposed project that would otherwise be required in order to maintain consistency with LCP visual resource protection policies as well as the Negative Declaration adopted by the County for this project pursuant to CEQA.

With respect to the architectural compatibility of the permitted 6 units with the surrounding historical buildings, one outstanding feature, as originally submitted, is the large modern corner windows. These windows, as illustrated in the submitted elevation plans (Exhibit I), are out of character with the smaller paned windows of the surrounding historical buildings, and therefore inconsistent with LCP Policy 8.13d.. (The applicant's architect submitted on June 26, 1996, alternative window designs to address this issue, attached as Exhibit S. While these revised drawings represent an appropriate design solution, they do not constitute the complete architectural elevations needed to find consistency with LCP visual policies).

Another visual resource issue associated with the proposed project is LCP landscaping requirements. While the County's approval of the proposed project included landscaping, the

applicant has recently proposed to delete landscaping from the project proposal. The elimination of landscaping is clearly inconsistent with LCP policies 8.10 and 8.16a. previously cited, which require vegetation removed during construction to be replaced with suitable plant materials, and use of landscaping to soften the visual impact of new development. As a result, Special Condition 8 requires a landscape plan responding to these requirements to be submitted fro Executive Director review and approval.

The remaining issues regarding project consistency with LCP visual resource protection policies, have to do with project fencing, and utility lines. The submitted project plans do not identify the type of fencing that will be used, nor do they address the LCP requirements that new utility lines be installed underground. These issues will be resolved during the Executive Director's review of final project plans, as required by Special Condition 3.

#### 4. Conclusions:

The subject project is proposed within an area of significant visual resources, and must therefore be designed and constructed in strict adherence to the visual resource component of the San Mateo County LCP. As the above analysis indicates, the subject project will result in the beneficial visual impact of removing existing warehouse type buildings that are incompatible with surrounding historical structures. However, the new development proposed will be taller than the existing buildings, increasing their visibility from Whaler's Cove beach and Pigeon Point Road. As proposed, the project will also result in adverse impacts to visual resources by increasing the visibility of development from the adjacent public beach area, covering undeveloped open space lands, and blocking significant coastal views available from Pigeon Point road that are currently unobstructed. Other visual impacts include design incompatibilities between the proposed development and the surrounding historical buildings and the complete lack of landscaping, and the possible impairment of views by fencing, signs, or overhead utilities for which no plans have been provided.

The most significant visual impact associated with the proposed project is the blockage of significant coastal views available from Pigeon Point Road that would result from the development of the three units on the undeveloped east side of the beach access gully, as well as the visibility of these units from the adjacent Whaler's Cove public beach. Considering the significant adverse visual impacts resulting from these units, in combination with the fact that three units must be removed from the plan in order to maintain consistency with LCP density regulations (addressed previously in this report), Special Condition 1 specifically requires removal of these units, thereby avoiding this impact.

Other Special Conditions attached to this permit address the remaining visual impacts by requiring Executive director review and approval of final project plans, including landscaping, signing, fencing, and utility plans, which must respond to these requirements. Only with the implementation of these conditions can the project be found to be consistent with the Visual Resource Component of the San Mateo County certified LCP.

#### I. Public Access and Recreation:

# 1. Background:

As described in Part IV.C. of this staff report, the site on which the subject project is located contains the only safe accessway to the adjacent Whaler's Cove beach, which according to a settlement agreement reached between the State of California, the State Lands Commission, the Coastal Commission, and the property owners, is owned by the State of California. Other than this abandoned road, the only means of accessing this beach is by boat, or only by the most adventurous at low tides from County owned land south east of the property, which provides an unofficial, hazardous trail down to the intertidal area southeast of Whaler's Cove.

The unique characteristics of Whaler's Cove beach make it an attractive place for coastal access and recreation activities, including swimming, diving, sunbathing, fishing, and boating. The qualities of this beach which make it so attractive for the above activities include: shelter from strong winds, waves, and ocean currents; the ability to transport a small boat from the nearby public roadway and launch it in a protected area; and the opportunity to observe tidepools and marine life, including migrating whales. Other unique features which have made this beach a popular destination for educational groups ranging from elementary schools to university students and elder hostels, include: its rich history of maritime and whaling activities; the biological productivity of the intertidal and offshore marine environment; and the unique geologic characteristics of the Pigeon Point formation.

Attached to the previous staff report distributed to the Commission at the April, 1996 hearing, were examples of letters received from fisherman, divers, school groups, and other members of the public, which expressed that the unique characteristics of this beach provide coastal access and recreation opportunities for the public that are unavailable elsewhere. Over 200 of these letters to the Commission and Commission staff, stressing the importance of public access to this beach, were received.

The project site, including the accessway to Whaler's Cove beach, is subject to a settlement agreement which resolves issues of implied dedication to the general public (i.e., whether the public, by virtue of historic use, has obtained an easement over some portion of the property), and what portion of the site is subject to the public trust. According to the terms of this settlement agreement, the beach area of the project site has been conveyed to the State of California, under the jurisdiction of the State Lands Commission. Regarding the issue of implied dedication relevant to the path across the subject property which leads to the beach, both the State of California and the County of San Mateo have acknowledged and agreed that they are precluded from finding that the existence or possible existence of implied dedication rights in the site constitute a basis for imposing any public access conditions.

The settlement agreement does not, however, bar the Coastal Commission or the County of San Mateo from considering other public access issues which are not, in whole or in part, based on any claim of implied dedication. The County and the Coastal Commission can impose appropriate public access conditions that are based on issues outside the scope of implied dedication.

At the County hearing on this project, the applicant volunteered to incorporate limited public access provisions across the subject property. As worded by the County's conditions of approval, this component of the project includes "limited access as provided herein, to school

groups and fishermen over the path designated by the owner on the owners property from Pigeon Point Road to the public beach, provided that any such group or fishermen have entered into a written agreement with the owner providing reasonable terms and conditions governing such access, including without limitation release of any liability of owner, reasonable insurance requirements, and regulations of hours of use and minimizing disturbance of project guests. No access shall be permitted when any pinnipeds are present on the beach. Owner shall not be required to permit access to more than one school group per week in months July through December and more than two school groups per week in months January through June. Fishermen shall be limited to launching portaged boats for pole and line fishing from the boats."

## 2. Coastal Act Policies:

- a. Coastal Act Section 30212 states, in relevant part:
- "(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:"
- "(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,"
- "(2) adequate access exists nearby, or"
- "(3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway".
- b. Section 30210 states:

"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."

- c. Section 30214 states, in relevant 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 the adjacent residential uses."

- "(4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter."
- "(b) It is the intent of the legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. ..."

## 3. <u>LCP Requirements:</u>

The following access policies of the San Mateo County LCP apply to the subject project:

a. Policy 10.1, "Permit Conditions for Shoreline Access":

"Require some provision for shoreline access as a condition of granting development permits for any public or private development permits (except as exempted by Policy 10.2) between the sea and the nearest road. The type of provision, the location of the access and the amount and type of improvements required shall be consistent with the policies of this component."

b. Policy 10.13:

"Require the establishment and improvement of vertical (trails) and lateral (shoreline destinations) public access and parking consistent with Policy 10.22(e) as a condition of approval for obtaining a permit for commercial and industrial development along the shoreline, except where the establishment of access would disrupt activities which are essential to public safety."

(note: Policy 10.22(e), referenced by the above policy, calls for the provision of trails linking parking facilities to nearby shoreline destinations that do not have existing parking facilities because such facilities would be inconsistent with other parking policies.)

c. Policy 10.22d.:

"New commercial or industrial parking facilities of 10 or more spaces within 1/4 mile radius of an established shoreline access area shall designate and post 20% of the total spaces for beach user parking between 10:00 a.m. and 4:00 p.m."

d. Policy 10.30:

"Requirement of Minimum Access as a Condition of Granting Development Permits"

"a. Require the provision of shoreline access for any private or public development between the sea and the nearest public road."

"b. Base the level of importance and development of access support facilities at a site on the Locational Criteria and Development Standard Policies and the Site Specific Recommendation contained in Table 10.6."

note: Table 10.6 lists the subject site under "Beaches Along Pigeon Point Road", and contains the following site specific recommendations: "consolidate bluff trails"; "develop interpretive educational displays discussing the fragile nature of the tidepools at Pigeon Point and prohibiting removal of species"; "construct short staircases to beaches"; "landscape parking area at Yankee Jim Gulch"; and, "include public access in all plans for the development of Pigeon Point Lighthouse". This table also recommends, for special consideration, to "close Pigeon Point Road to vehicular traffic. Retain existing right of way for use by bicycles, hikers, and limited traffic to the lighthouse".

- "c. Base the responsibility and requirements of the property owner for the provision of this access on: (1) the size and type of development, (2) the benefit to the developer, (3) the priority given to the type of the development under the Coastal Act and (4) the impact of the development, particularly the burden the development would place on the public right of access to and use of the shoreline. Determine the minimum requirements according to the following:"
- "...(3) For large agricultural and non-agricultural developments (i.e., developments of more than one single family house, major subdivisions, commercial and industrial developments, and large greenhouses and agricultural processing plants), require the property owner to provide, improve, and maintain shoreline access consistent with the policies of this component."

<u>Note</u>: Since the subject development constitutes a non-agricultural commercial development, part 3 of Policy 10.30c. applies to this project.

#### e. Policy 10.31:

"Require additional access areas, improvements or operation and maintenance beyond the minimum when a project decreases the existing or potential public access to the shoreline by: (1) removing or infringing upon an area which has historically been subject to public use without permission or effective interference by the owner and/or (2) decreasing the amount of sandy beach by building seawalls, etc., and/or (3) removing future recreation opportunities by committing lands suitable for recreational development to uses which are not assigned priority for use of oceanfront land by Section 30222 of the Coastal Act."

#### 4. Precedential Court Decisions:

The application of the above Coastal Act and San Mateo County LCP access policies must be taken in context with important court decisions which have set a precedent regarding the

implementation of these policies. The following discussion summarizes the relationship between the proposed project and applicable court decisions:

#### a. Nollan vs. California Coastal Commission:

The applicable legal point made in the Nollan decision was that there needed to be a direct connection, or "nexus" between the impact caused by a project and the mitigation proposed to address it. This decisions requires that in order for the Commission to impose an access condition on the subject development, it must find that the project will result in an adverse impact to public access which must be mitigated.

## b. Dolan vs. City of Tigard:

The Dolan decision refined the Nollan decision discussed above by finding that, in addition to limiting mitigation measures to those that have a direct nexus to the impact of the project, such mitigation measures must be "roughly proportional" to the extent of the impact. As a result, in order to impose a condition requiring public access as a component of project approval, the Commission must find the benefits of such a condition are equivalent to the project impacts on public access which the condition is intended to offset.

#### 5. Analysis:

In order to determine the applicability of the Coastal Act and LCP access policies previously identified, the degree to which the proposed project will impact public access must be determined, in light of the precedents set by the above court decisions. In this particular case, this analysis must also consider, and be consistent with, the terms of the Settlement Agreement which resolved the issue of implied dedication, and to which the Coastal Commission was a party.

As described in Part IV.J.1. of this report, the terms of the Settlement Agreement preclude the State of California and the County of San Mateo from finding that the existence or possible existence of implied dedication rights at the site constitutes a basis for imposing any public access conditions. This effectively bars the Commission or County from asserting that the project will adversely impact public access by blocking the accessway to the beach located on the subject property.

The settlement agreement does not, however, bar the Coastal Commission or the County of San Mateo from considering other public access issues which are not, in whole or in part, based on any claim of implied dedication. The County and the Coastal Commission can impose appropriate public access conditions that are based on issues outside the scope of implied dedication.

In light of the terms of the Settlement Agreement, the only impacts that the project could have on public access and recreation opportunities would be intensifying the use of Whaler's Cove beach, and adversely affecting the sensitive habitat areas which is one of the reasons why this beach is an attractive destination. Because the issue of project impacts on sensitive habitat areas are addressed in detail in Section IV.E. of this report, the following analysis focuses on whether or not an intensified use of the site will affect the public access and recreation opportunities. Such an analysis is mandated by Coastal Act Section 30214, which requires that the capacity of a site to sustain a certain level of intensity of use be considered. This

analysis is also required by LCP Policy 10.30c., which bases requirements for public access on "the impact of the development, particularly the burden the development would place on the public right of access to and use of the shoreline", among other factors.

The increased intensity of use of Whaler's Cove beach that will result from the subject project, and the burden that this will place on the public right of access to, and use of, shoreline areas is directly related to the project's density of development. As conditioned, the project is limited to 6 guest units, which would introduce approximately 12 visitors per day, and a smaller number of dogs, to the beach during periods of high occupancy. It is likely that these visitors will recreate on the beach for limited periods of time, and at different times of day, thereby reducing the number of project guests that are on the beach at one time. This minor addition of visitors to the beach should not significantly affect the public's ability to access or recreate on this beach.

## 5. Conclusions:

The minor increase in the intensity of beach use that will result from the subject project will not reduce the public's ability to access or recreate on Whaler's Cove beach, and therefore does not provide a nexus for a public access requirement pursuant to the Nollan decision. Similarly, a requirement for public access would not be proportional to the insignificant impact of a few additional beach users, and can not be pursued consistent with the precedent set by the Dolan case. Furthermore, because the project interferes with a coastal access route which the public has no established legal right to use, the Commission does not have a basis for requiring public access across the subject site as a condition of development approval.

#### J. Violations:

Violations of the Local Coastal Program have taken place on the subject property in the recent past. These include:

- a. Erection of a fence without benefit of a coastal development permit;
- b. Use of the agricultural storage building as a guest residence/rental; and,
- Demolition of a building without benefit of a coastal development permit.

In response to the first two violations mentioned above, the County of San Mateo required the applicant to apply for coastal development permit for the fence, and to re-establish the agricultural storage building to its permitted use. An "after the fact" coastal development permit exemption was subsequently issued by the County for the fence.

With respect to the recent demolition of an existing building on the site, the County issued a demolition permit in January, 1996, but did not issue the required coastal development permit. This violation has yet to be resolved.

Although violations have taken place on the subject property prior to Commission review of this project, consideration of this project has been based solely on the project's conformance with applicable policies of the San Mateo County certified LCP and the Coastal Act. The Commission's action on this permit is without prejudice, as if the unpermitted development had

not previously occurred. This action does not, however, constitute a waiver of any legal action with regard to any violation of the Coastal Act that may have occurred.

## K. Relationship to Local Permits:

San Mateo County issued a coastal development permit for this project (CDP 95-0022), along with a Planned Agricultural Permit (PAD 95-0008) and Architectural Review (AR 95-0007), subject to 29 conditions attached to this report as Exhibit B. By finding "substantial issue" on April 10, 1996, the Coastal Commission stayed San Mateo County's coastal permit approval. With this action, the Coastal Commission approves and will issue the Coastal Development Permit, subject to the stated conditions. These conditions incorporate the local conditions of coastal permit approval, with the exception of local condition number 1 (which gives approval of 9 rather than 6 units). While many of these conditions overlap, they are internally consistent, and can be implemented without contradiction. Except as they may require modification to conform with the Commission's action, the other County permits remain valid; however, no development can commence until the applicable terms of this Coastal Development Permit are satisfied. Any future proposed changes to this project or the conditions of approval must be submitted to the Coastal Commission for approval.

# L. California Environmental Quality Act (CEQA):

The County of San Mateo County adopted a Negative Declaration for the subject project on December 13, 1996. This Negative Declaration included six mitigation measures designed to ensure that the proposed development would not have a significant impact on the environment.

The County's conditions of approval for this project, which are incorporated into the conditions of approval for this permit, do not, however, incorporate, or require compliance with, two of the six mitigation measures. These include:

- "3. The applicant shall either provide for public access on the proposed stairway to the beach, or the stairway shall be removed from the plan", and
- "4. If the applicant eliminates the stairway to the beach, a public viewing point shall be established on-site prior to the completion of Construction of Phase III of the project".

As previously stated, the applicant has removed the proposed stairway to the coastal bluff (as opposed to the beach) from the project plans, thereby complying with Mitigation 3 of the Negative Declaration. Mitigation 4, intended to provide compensation for the visual impacts of the project, is no longer applicable, due to the fact that visual impacts of the subject project have been reduced to an insignificant level through the imposition of Special Condition 3 attached to this permit, which requires the deletion of the cluster of three units on the eastern portion of the property from final project plans.

Other potentially significant environmental impacts which may result from project implementation have been mitigated to an insignificant level by the special conditions attached to this permit. This is documented in detail throughout the text of this staff report. As a result, approval of this permit, as conditioned, will not have a significant adverse impact on the environment within the meaning of the California Environmental Quality Act.

# COASTAL DEVELOPMENT PERMIT

# 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. <u>Compliance</u>. 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. <u>Interpretation</u>. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- 5. <u>Inspections</u>. The Commission staff shall be allowed to inspect the site and the project during its development, subject to 24-hour advance notice.
- 6. <u>Assignment</u>. 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.
A-3-SMC-96-08

McKenzie

Standard Condition

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access to the beach area. The "gully," which lies between Phases I and II and Phase III of the project, and which has been the subject of claims of public and private access, will not be developed. The status of this "gully," and any other claims of implied access over the property, is the subject of an action to quiet title brought by the owners of the property against the State of California, the State Lands Commission, the Coastal Commission and the County of San Mateo. This lawsuit, entitled McKenzie v. County of San Mateo. et al., will resolve any claims of implied public access over the beach area and the upland property. If, for any reason, it is judicially determined that such rights exist, the proposed development would not impede such access. Further, the proposed development would not impede such access. Further, the proposed development would not impede any private prescriptive rights that may be perfected in the future by private individuals or groups.

c. Development of Phases I and II will not result in impacts to coastal views in that the site for these phases is currently developed with warehouse structures of the approximate size and location as the proposed development. For this reason, no conditions are necessary as to Phases I and II to protect coastal views. Phase III of the project, however, will occur on a site that is not currently developed, and thus will result in a blockage of coastal views.

# Regarding Architectural Review:

8. Found that the project, as described in the application materials and as conditioned, is in compliance with the Architectural and Site Control within the Cabrillo Highwater Corridor.

# EXHIBIT NO. B APPLICATION NO. A-3-5MC-96-08 McKenzie Local Conditions

#### CONDITIONS OF APPROVAL

#### Planning Division

- This approval is for the nine one-bedroom units, well, parking area and conversion of the warehouse unit into a manager's office, repair of a bluff top stairway and installation of utilities. Any major modifications to this project shall be subject to subsequent review and planning permits.
- 2. If any significant cultural materials are exposed or discovered during site clearing of site work, or during subsurface construction, operations shall stop within ten (10) feet of the find immediately and a qualified archaeologist retained for professional recommendations. Significant artifacts or features include, but are not limited to, aboriginal human remains, chipped stone, groundstone, shell and bone artifacts, concentrations of fire cracked rock, ash, charcoal, shell, and bone; and historic

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> features such as privies or building foundations. Appropriate mitigation of significant cultural resources may include the systematic scientific excavation and removal of the cultural resource. Any artifacts or samples collected, as part of the initial discovery, monitoring or mitigation phase must be properly conserved, cataloged, analyzed, evaluated, and curated along with associated documentation in a professional manner consistent with current archaeological standards. artifacts and samples collected shall be submitted to the San Mateo County Historical Museum for curation. The project archaeologist shall submit all recommendations for mitigation to the Planning Division for review and approval. The Planning Division will require any recommended mitigation or conditions contained within the project archaeologist's report to be incorporated into the project. All documentation prepared during the initial discovery, monitoring, or mitigation phase shall be submitted to the Planning Division and the San Mateo County Historical Museum.

- The applicant is required to retain the services of a qualified Archaeologist and to implement an archaeological monitoring program during the initial soil exposure after the following removal and prior to the issuance of any building permit(s): (1) vegetative removal, concrete pad(s) removal, existing building(s) removal, and parking and driveway encroachment areas for Phase I, (2) vegetative removal in the area proposed for Phase II building including the parking and driveway encroachment areas east of the main ravine on the property, and (3) waterline construction, to prepare a professional general reconnaissance report and recommended mitigation for archaeological resources for those areas identified above. All documentation prepared during the initial discovery, monitoring, or mitigation phase shall be submitted to the Planning Division and the San Mateo County Historical Museum. The project archaeologist shall submit the general reconnaissance report and recommended mitigation to the Planning Division for review and approval. The Planning Division will require any recommended mitigation or conditions contained within the project archaeologist's report to be incorporated into the project. All artifacts and samples collected shall be submitted to the San Mateo County Historical Museum for curations. If during this phase of monitoring and report preparation the project archaeologist determines the existence of significant cultural resource(s), the applicant shall retain the services of a qualified historian or historical archaeologist to prepare a focused historical research and report for the McKenzie Pigeon Point property to detail the history of land use on the property and the association with the significant cultural resource(s) as required by this condition.
- 4. Owner shall permit limited access as provided herein, to school groups and fishermen over the path designated by owner on the owner's property from Pigeon Point Road to the public beach, provided that any such group



- 5. Storm water runoff from the site shall be controlled so as not to increase the velocity of the runoff and to maintain the same or improved quality of the surface runoff from this site. Drainage improvements shall be assessed at the building permit stage.
- Prior to completion of construction of Phase I of the project, the applicant shall record the "Right to Farm" statement, pursuant to Local Coastal Program Policy 5.15.a (Mitigation of Land Use Conflicts), on the deed for the property.
- 7. The applicant shall submit a night lighting plan of the site to the Planning Director for review and approval prior to installing outdoor lighting on this site. The outdoor lighting shall be designed to minimize glare and visibility from the right-of-way along Highway 1, and shall not directly illuminate areas beyond the project site. The lights shall be located as close to ground as possible with the use of motion sensitive lighting encouraged where necessary.
- 8. Prior to completion of the building permit, the applicant shall submit a sample of the exterior color and materials to be used on the units for review and approval by the Planning Director. No reflective or bright colors shall be permitted.
- 9 All landscaping installed by the applicant shall consist of native segetation in Prior to Extended the building permit for Phases I and II, the applicant that Torovide a landscape plan for review and approval by the Planning Olyector intendscaping that the prior to completion of continuation of Phases I and II.
- Exterior trash receptacles shall be screened from view from off-site locations. Vegetation or fencing shall be employed to screen dumpsters and trash receptacles.
- 11. Prior to installation of signs on this site, the applicant shall submit a sign program to the Planning Director for review and approval.

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- 12. The water storage tank shall be screened from public view. Prior to issuance of a building permit for the water storage tank, the applicant shall submit a screening plan consisting of either native Vegetation or a wooden fence to screen the tank from public view.
- 13. The applicant shall be responsible for assuring that 1) all dogs outside of guest units on the site shall be leashed or contained; and 2) no people or their dogs shall be allowed access to the beach when marine mammals are present.
- 14. The applicant shall provide to guests, and prominently display in each unit, a "right to farm" notice which informs them of the inconvenience which may accompany residing adjacent to agricultural operations. This notice shall be to the satisfaction of the Planning Director.
- 15. If the applicant fences the property, open fencing shall be utilized around the perimeter of the site to allow visibility. Fencing around courtyards adjacent to units may be closed.

### Department of Public Works

- 16. Prior to issuance of the building permit, the applicant will be required to provide payment of "roadway mitigation fees" based on the square footage (assessable space) of the proposed bed and breakfast operation per Ordinance #3277.
- 17. The provisions of the San Mateo County Grading Ordinance shall govern all grading on and adjacent to this site. Unless exempted by the Grading Ordinance, the applicant may be required to apply for a grading permit upon completion of the County's review of the development plans.
- 18. The applicant shall submit a driveway "plan and profile" to the Department of Public Works, showing the driveway access to the parking lot areas complying with County standards for driveway slopes (not to exceed 20%) and to County standards for the driveways (at the property line) being the same elevation as the center of the access roadway (Pigeon Point Road). The driveway plans shall also include and show specific provisions and details for handling both the existing and the proposed drainage.
- 19. No construction work within the County right-of-way shall begin until Public Works requirements for the issuance of an encroachment permit, including review of the plans, have been met and an encroachment permit issued.

Ms. Kathleen McKenzie January 12, 1996 Page 7

### **Building Inspection Section**

- 20. Fire sprinklers shall be required to be installed in each unit.
- 21. The applicant shall submit plans for review and approval of a demolition permit and building permit prior to commencement of demolition of existing structures or construction of new structures on site.
- 22. A survey of the site shall be required for a building permit.

### Fire Marshal

- 23. Upon submittal of a final site plan and building plans, the Fire Marshal shall review the plans to establish a "fire lane" in the parking area serving six units.
- 24. Upon submittal of building plans, the Fire Marshal shall determine the quantity of water storage, the size of the water mains, location of hydrants and pressure pump requirements for fire suppression needs.
- 25. The applicant shall design emergency pedestrian access around the units to the satisfaction of the Fire Marshal.
- 26. All chimneys shall have an approved spark arresting device installed prior to final approval of the building permit to the satisfaction of the Fire Marshal.

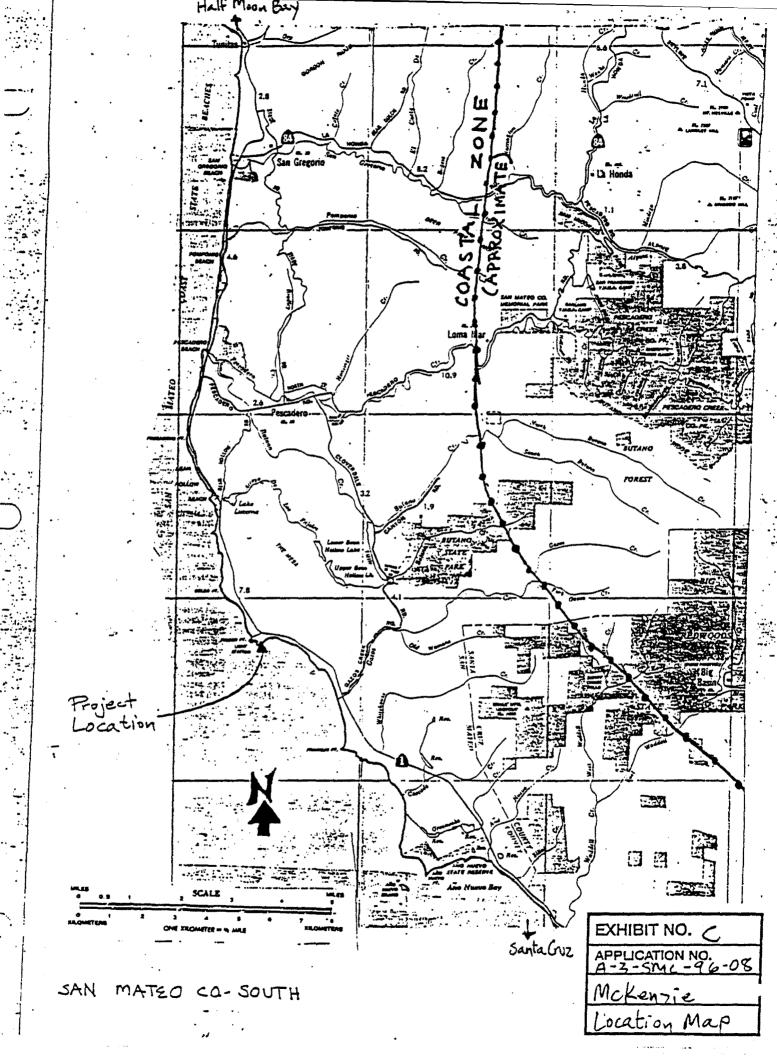
### Environmental Health Division

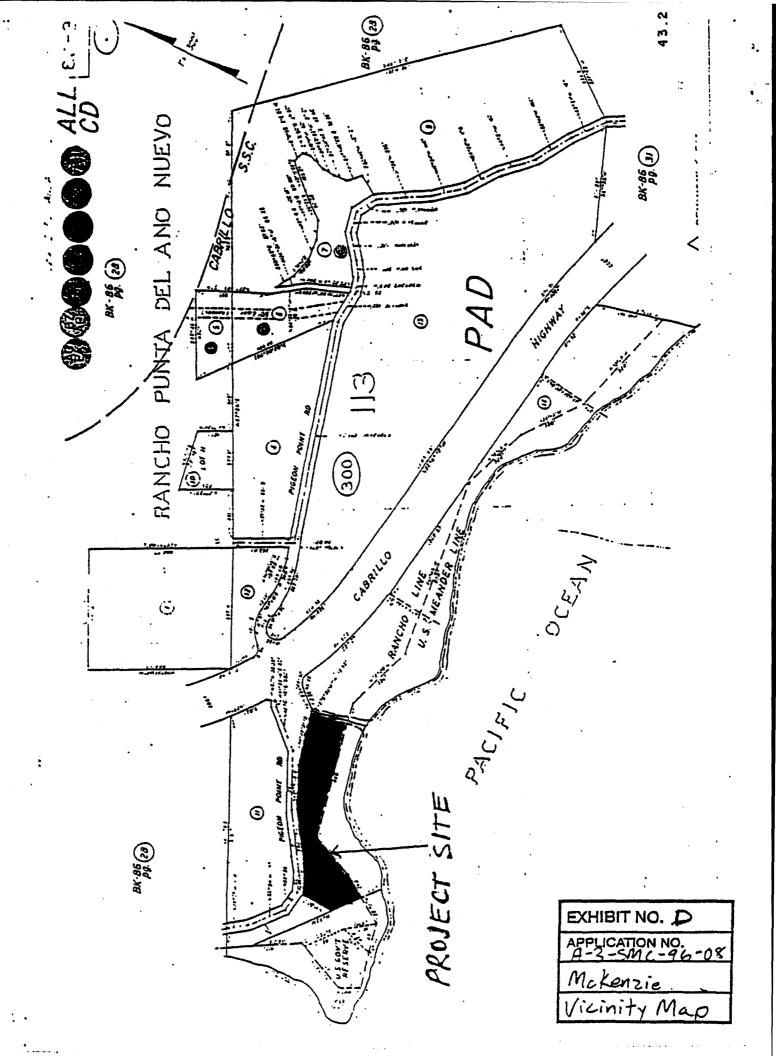
- 27. The applicant shall submit a plot plan showing the existing and proposed septic drainfield and water supply to the Environmental Health Division for review and approval prior to issuance of a building permit. The septic system shall be required to meet Environmental Health standards prior to issuance of the building permit.
- 28. The applicant shall submit water quality tests for the new and existing well to the Environmental Health Division for review and approval prior to issuance of the building permit.

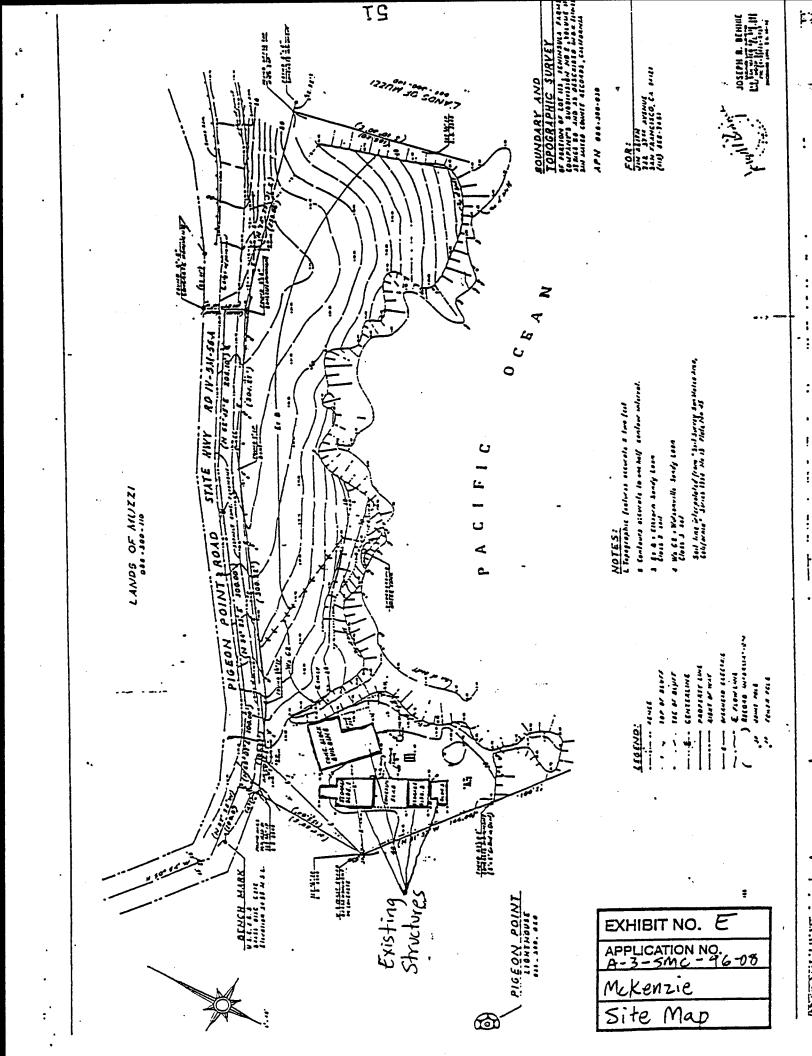
### Geotechnical Division

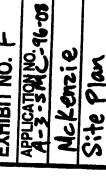
29. The applicant shall submit a geotechnical report for review and approval by the Geotechnical Division to ensure the stability of the proposed construction prior to issuance of a building permit for this project.

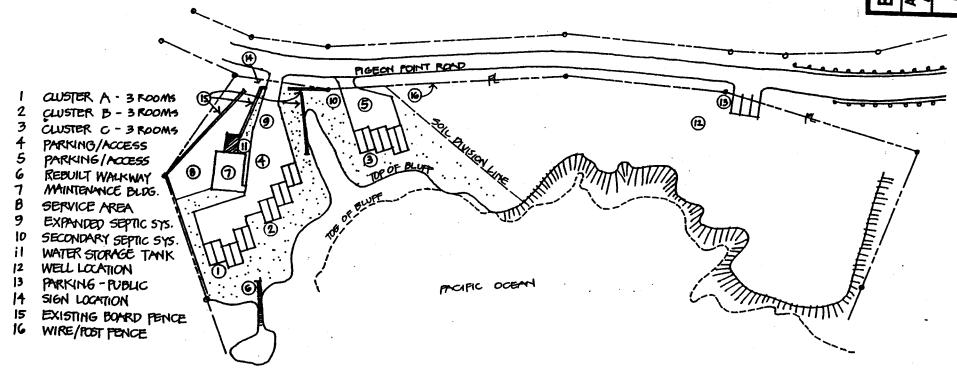
Any interested party aggrieved by the determination of the Planning Commission has the right of appeal to the Board of Supervisors within ten (10) days from











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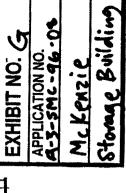
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COASTAL COMMISSION
CENTRAL COAST AREA

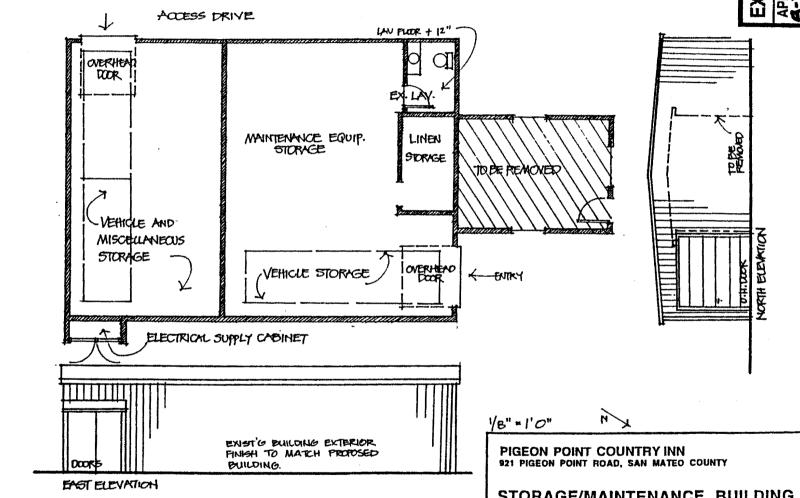
PIGEON POINT COUNTRY INN 921 PIGEON POINT ROAD, SAN MATEO COUNTY

SITE DEVELOPMENT

REV-MY96 55 • FEB 1996

HELLMUTH. OBATA + KASSABAUM, INC . SAN FRANCISCO . 415/243 0555 . FEB 1996

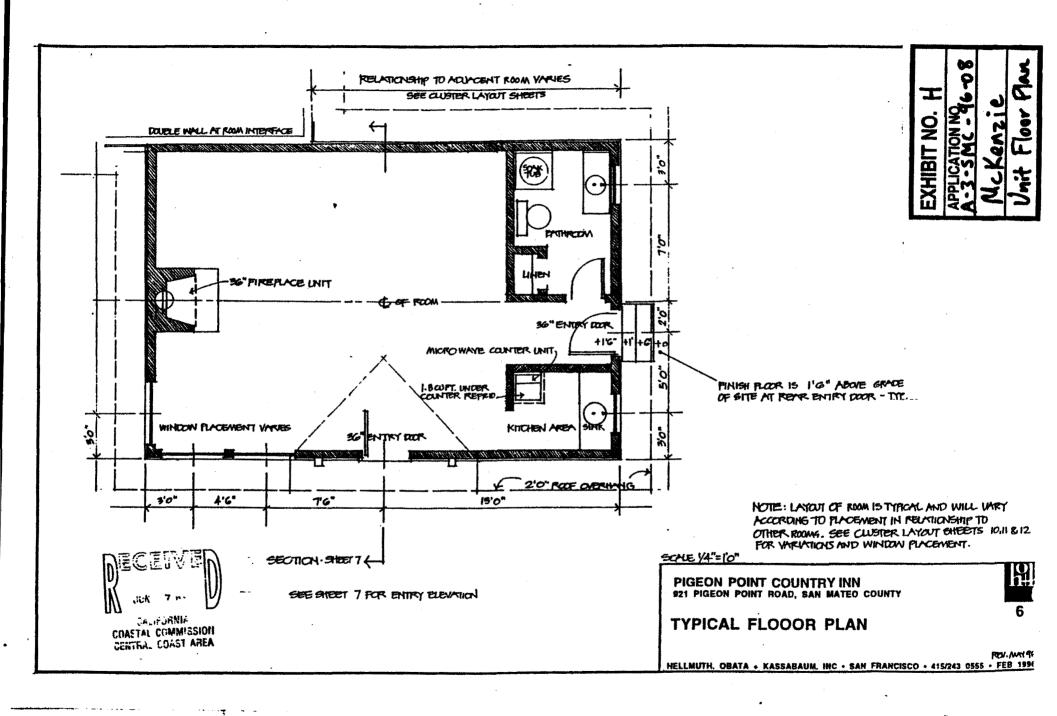


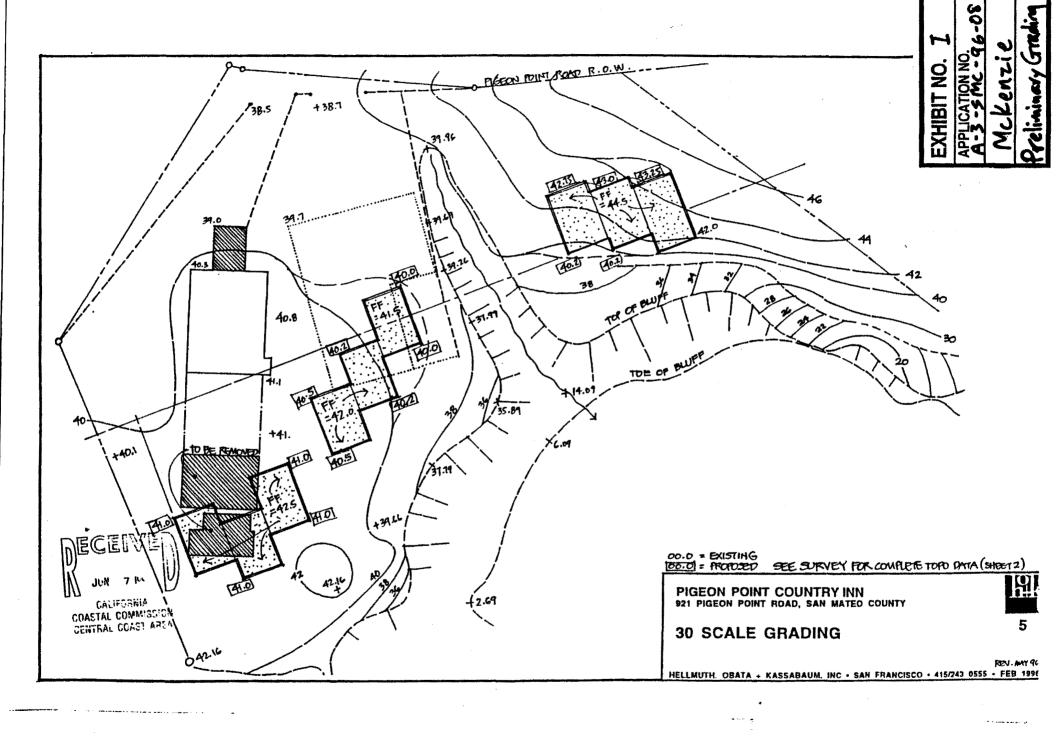


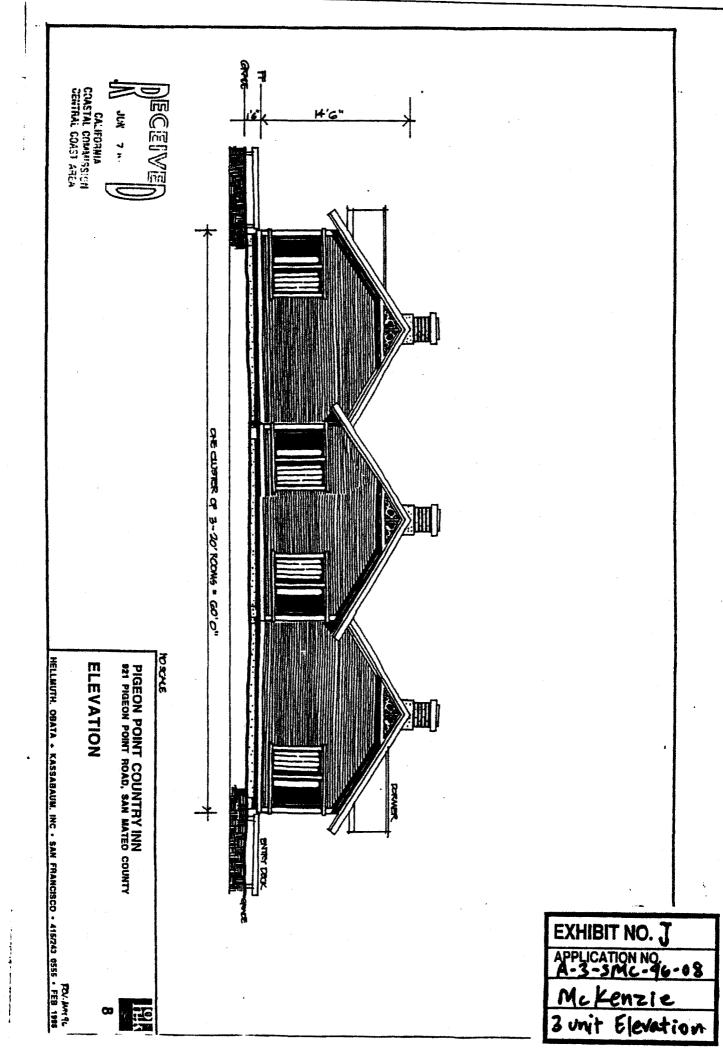
### STORAGE/MAINTENANCE BUILDING

REV- MAY 91

HELLMUTH. OBATA + KASSABAUM, INC + SAN FRANCISCO + 415/243 0555 + FEB 1996







WATER USE ASSESSMENT PIGEON POINT COUNTRY INN SAN MATEO COUNTY, CALIFORNIA

June 6, 1996

JUN 7 1996

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

05-96-68 21-339001 Copyright

APPLICATION NO.
A-3-SMC-96-08
Mc Kenzie
Water Use Assessed

### 1 INTRODUCTION

Kleinfelder, Inc. has prepared this water use assessment for the proposed Pigeon Point Country Inn located at 921 Pigeon Point Road, San Mateo County, California. This water use assessment is a planning document for use by the owner and by the architects Hellmuth, Obata & Kassabaum, Inc., San Francisco, California.

The proposed Pigeon Point Country Inn will be located on a parcel of land located adjacent to the Pigeon Point Lighthouse. The property is described as a "portion of lot 113, Peninsula Farms Company's subdivision No. 2, volume 11 at page 28 and as described in O. R. 84101858, San Mateo County records, California".

This water use assessment will evaluate the projected water consumption for the proposed development of nine tourist units and one manager's office/storage area.

### 2 BACKGROUND

The proposed facility will consist of nine identically plumbed guest units, in three groups of three units, and one separate manager's office/storage area. The floor plan of the proposed development indicates that similar bathroom and kitchen facilities are planned for each unit. Each unit will comprise one shower, one toilet, one bathroom basin and one kitchen sink. The units will not include laundry facilities nor appliances such as dishwashers, water treatment, or washing machines. No saunas, hot-tubs, spas, swimming pools, irrigation for landscaping or fountains will be utilized at the proposed facility. Washing facilities such as for automobiles or housekeeping are not considered in the assessment. Laundering will be conducted off-site.

A well has been constructed on the property. At the time of drilling and development, the well was airlift tested at the rate of 5 gallons per minute. This flow rate should only be used as a guide to determine the supply capacity of the well. A formal pump test including constant pumping and drawdown and recovery data will be conducted in order to evaluate the sustained supply capacity of the well.

### 3 WATER DEMAND

No generally recognized standards for water use in "country" inns are available that can be used as a guideline for design of this system. However, information for average and peak consumption in hotels and motels (including rooms with kitchens) was available from several sources including texts and publications (see reference section). Principal documents are publications by The Environmental Protection Agency (EPA) and "Rural Area Water Use Study" prepared for San Mateo County by Kleinfelder in 1991. Texts are Water Quality, Tchobanoglous and Schroeder, 1987 and Wastewater Engineering, Metcalf and Eddy, 1991.

### **Average Water Consumption**

Review of the selected data is directed towards assessment of motel or hotel rooms with a double occupancy rate. These motel and hotel units have water usage similar to the guest units proposed in the architectural plans. This is based on one shower, one toilet, one washbasin, and one kitchen sink in each unit. Water consumption for the individual units and all units combined is calculated from the average of water consumption rates published in the reference material and presented in Table 4. These consumption rates are based on measured historical data and refer to conventional appliances and fixtures.

### Relative Percentage Consumption Per Guest Unit

The use of water in the guest units for hotels and motels is generally consistent with residential water use. A general list of residential water use is described by Kleinfelder, 1991 and is made up of four components. These components are toilet, shower, and washbasin consumption in the bathroom, and consumption for cooking and cleaning in the kitchen. These percentages show the ratio of consumption of each of the fixtures, to the total consumption for each guest unit. The percentages are not altered by average or peak consumption caused by occupancy rates.

### Percentage Consumption of Water per Guest Unit

Toilet 40 percent

Shower 30 percent

Bathroom Faucets 15 percent

Kitchen Faucets 15 percent

Total 100 percent

These figures are consistent with water use figures for hotels and motels as presented by Kleinfelder, 1991.

### **Peak Consumption Factor**

Peak daily water use assumes that the nine guest units are fully occupied with two guests in each unit. This does not take into account any seasonal factors where the occupancy rate is likely to be less than 100 percent. Occupancy rates for the project are not available; however, it is considered necessary to evaluate the effect of occupancy rates on water consumption. (see Table 1)

Occupancy Rate	Average consumption/ guest unit	Average consumption for project	n Peak Consumption for project	Peak Consumption using low flow devices	Peak Consumption using Ultra-low flow devices
	Gallons/day	Gallons/day	Gallons/day	Gallons/day	Gallons/day
40%	36	358	. 527	248	169
60%	54	537	790	371	253
80%	72	717	1053	495	337
100%	90	896	1317	628	428

The peak daily consumption was estimated based on individual customer account records supplied by the Coastside County Water District. The records were taken from the 1987 billing year, the last year to include available records for maximum available water supply.

The average daily water use rate is taken as the average daily water use rate for the whole of the billing year. The peak daily water use rate was taken as the average daily water use rate for the two month billing period with the highest consumption for the whole of the billing year. The peak daily water use factor is derived by the ratio of the peak daily water use to the average daily water use, for the billing period. This peak use factor is applied to the average daily consumption to calculate the peak water consumption rate for the project. The adjusted peak daily water use for hotels and motels as reported by Kleinfelder, 1991 is 1.47 times average daily water use.

This peak water consumption rate is a conservative planning figure. The peak rate assumes 100 percent occupancy at all times. Occupancy rates for guest units at hotels and motels are generally not one hundred percent at all times. However, due to the storage capacity being considered, peak consumption may be achieved over a five day period and the peak rate factor considered should be viable. Based upon the information presented in Table 1, the water demand

for the project is anticipated to be 428 gallons per day. This requires a constant supply rate from the well of approximately 18 gallons per hour.

### Water Conservation Techniques.

The water consumption rates calculated thus far are attributed to conventional water fixtures. Low flow devices such as Low flow flush toilets and low flow shower heads and faucet flow control devices can significantly reduce the consumption of water, (see Table 2).

		TAB	LE 2		
Appliance or Fixture		Consumption using Low Flow fixtures	Percent savings	Consumption using Ultra Low Flow fixtures	Percent savings
Toilet (gailons/flush)	6.00	3.50	42	1.50	75
Shower (gallons/minute)	8.00	2.00	75	2.00	75
Bathroom faucet (gallons/minute)	5.00	2.75	45	2.50	50
Kitchen (gallons/minute)	5.00	2.75	45	2.50	50

Savings made by utilizing these fixtures is estimated to average 53 percent of average flows with conventional fixtures. The use of Ultra low flush toilets can reduce water consumption by approximately 75 percent per flush, when compared to conventional flush toilets. This contributes to an overall saving of approximately 68 percent over conventional fixtures. This factor is applied to the peak water consumption figure to determine the water usage rates that will be applicable when water conservation devices are used., (see Table 3).

	TAB	LE3	
Appliance of Fixture	Percent Use	Percent Saving contribution using Low Flow fixtures	Percent Saving contribution using Ultra Low Flow fixtures
Toilet	40	17	30
Shower	30	23	23
Bathroom faucet	15	. <b>7</b>	8
Kitchen	15	7	8
Total	100	53	68

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### **Water Consumption**

The calculation for water consumption rates for the project is based on the consumption of nine guest units and one manager's office/storage area. The manager's office/storage area is for daytime use as an office and is not expected for use as overnight accommodation. The construction of the manager's office/storage area will, however include similar fixtures as the guest units and, to be conservative, all calculations are based on full occupancy and equivalent water usage of the guest units and manager's office/storage area at peak loads. Table 4 presents a summary of water consumption based upon the aforementioned information.

TABLE 4						
Unit Description	Average Consumption / Guest Unit	Average* Consumption for Development		Peak Consumption for Development using uitra low flow fixtures	Source	
	Gallons/day	Gallons/day	Gallons/day	Gallons/day		
Smail Hosteiry, Hotei/Motei room	125	1250	406	597	Rural Area Water Use Study	
Motei Room	70	700	228	334	Wastewater Engineering, Metcalf and Eddy, 1991	
Motel Room	62	620	202	296	Water Quality, Tchobanogious and Schroeder, 1987	
Motel Room with Kitchen	· 80	800	260	382	Wastewater Engineering, Metcalf and Eddy, 1991	
Motel Room with Kitchen	110	1100	358		Water Quality, Tchobanoglous and Schroeder, 1987	
Motel Room with Kitchen	100	1000	325	470	Manual of Individual and Non-Public Water Supply systems, EPA, 1991.	
Lodging House and Tourist Home	80	800	260	382	Wastewater Engineering, Metcalf and Eddy, 1991	
Average	90	896	291	428		

<sup>\*</sup> Assumes 10 guest units.

The method of calculation takes the following steps:

0	Calculate the average water consumption from conventional fixtures based on the reported consumption rates published in the selected texts and publication:
	Average Consumption = 90 gallons per unit per day
٥	Calculate the total consumption using the number of guest units multiplied by the average consumption per unit (The managers office/storage area is included in this calculation).
	Total number of guest units equals 10.
	Total Consumption = Average Consumption * Number of Units =>
	90*10=900 gallons per day.
0	Calculate the total consumption using ultra low-flow (ULF)devices and appliances based
	on the total consumption rate minus the percentage reduction (percentage reduction is 68 percent)
	Total ULF Consumption = Total Consumption *(1-percentage reduction)=>
	900*(1-0.68)=291 gallons per day
<b>a</b>	Calculate peak consumption using ULF devices and appliances using total ULF
	consumption multiplied by the peak use factor which is 1.47.
	Peak Consumption using ULF devices = Total ULF Consumption * peak use factor =>
	201*1 47=428 callons per day

The anticipated water consumption for the project was selected based upon the average rates of consumption for several types of accommodations as presented in Table 4. Based on the preceding calculations our estimate is a peak water consumption rate of 428 gallons per day for the project. This projection is based on the installation of ultra low-flow devices throughout the project. Kleinfelder further estimates that a peak consumption rate of 628 gallons per day for the project is achievable using low-flow fixtures throughout the project



### 4 WATER STORAGE

### Fire Fighting

Water reserved for fire fighting must be considered in the calculation for storage requirements. The Office of the Fire Marshall of San Mateo County has released the following guidelines.

The storage requirements for fire use is based on the number of square feet of the building multiplied by a conversion factor equal to 1.6. The area of each guest unit is approximately 600 square feet. Therefore, each three-unit guest structure has a floor plan area of approximately 1800 sq. ft. The managers office/storage area is assumed to be approximately the equivalent of four guest units or 2,400 square feet. The storage requirements are presented in Table 5

	TABLE 5	
Building	Approximate Area	Storage required for fire
	square feet	flighting gallons
Cluster "A"	1800	2880
Cluster "B"	1800	2880
Cluster "C"	1800	2880
Office and Storage	2400	3840

Each of the clusters and the office and storage building are separated and can be considered separate buildings, thus the minimum storage requirement for fire safety, based upon the largest square foot, is 3,840 gallons. Office of San Mateo County Fire Marshall requires that this storage requirement not be included in storage calculation for daily guest or manager office/storage area water consumption for the project.

### Water Storage Requirements

San Mateo County requires a storage tank capacity calculated for three days of peak consumption. Kleinfelder recommends that the capacity be increased to five days. The increased storage capacity will better accommodate down capacity for possible repairs and the importance of maintaining a supply of water to the guests. These extended down times for pump and piping repairs may be expected because of to the remote location of the project. Storage capacity is calculated using the following steps.

Calculate storage capacity required assuming peak consumption using ULF devices multiplied by number of days of storage required. (Kleinfelder recommends 5 days of storage, San Mateo County requires a minimum of 3 days of storage)

Storage capacity = Peak ULF consumption rate \* No of days of storage required =>

428 \* 3 = 1284 gailons

(San Mateo County)

428 \* 5 = 2140 gallons

(Kleinfelder)

Peak consumption and storage capacity requirements are presented in Table 6.

TABLE 6					
Unit Description	Peak Consumption using Ultra Low flow devices	Capacity required (for 3 days storage	Capacity required for : days storage	5 Information Source	
	Gallons/day	Gallons	Gallons		
Small Hosteiry, Hotel/Motel room	597	1792	2986	Rurai Area Water Use Study	
Motel Room	334	1003	1672	Wastewater Engineering, Metcalf and Eddy, 1991	
Motel Room	296	889	1481	Water Quality, Tchobanoglous and Schroeder, 1987	
Motel Room with Kitchen	382	1147	1911	Wastewater Engineering, Metcalf and Eddy, 1991	
Motel Room with Kitchen	526	1577	2628	Water Quality, Tchobanogious and Schroeder, 1987	
Motel Room with Kitchen	478	1433	2389	Manual of Individual and Non-Public Water Supply systems. EPA, 1991.	
Lodging House and Tourist Home	382	1147	1911	Wastewater Engineering, Metcalf and Eddy, 1991	
Average	428	1284	2140		

### **Total Storage Requirement**

The water storage requirements are calculated as the sum of the storage requirements for fire safety and the water requirements for project use.

Total Storage Requirement = Storage for fire safety + Storage for project use.

= 3840 + 1284 = 5124 gallons (San Mateo County)

= 3840 + 2140 = 5980 gallons (Kleinfelder)

Based upon the base capacity required for fire safety and the average capacity required for five days of storage at the peak consumption using low flow devices, Kleinfelder suggests that the tank size be approximately 6000 gallons. The size recommended to fulfill the requirements of the San Mateo County is approximately 5000 gallons.

### **5 RECOMMENDATIONS**

	felder makes the following recommendations for water consumption and storage capacity e country inn project at Pigeon Point, San Mateo County, California.				
	The storage capacity for the project is recommended to be approximately 6000 gallons.				
0	Ultra low-flow devices and fixtures should be used throughout the whole project.				
0	Install devices and fixtures that will deliver flows as listed below				
Toilet	1.1 - 1.5 gallons per flush				
Show	er head 2 - 2.5 gallons per minute				
Fauce	ts 2 - 2.5 gallons per minute				
Kleinithe was consensed. The forates:	felder recommends that each guest receive a water conservation pamphlet that highlights atter conservation features of the facility. The pamphlet should encourage each guest to receive water and should provide guests with water conservation practices that can be followed.  Following water saving practices are recommended in order to decrease water consumption				
	Repair all leaks as soon as they are discovered				
0	Flush only human waste and toilet paper.				
٥	While shaving or brushing teeth, only turn the water on as needed, do not leave the water running continuously.				
đ	Wash dishes and then rinse them all at once, do not rinse the dishes before washing them.				
<b>.</b>	·				
0	Don't use running water to thaw frozen food.				

JUN-13-96 THU 14:30

# CALCULATED AVERAGE CONSUMPTIONS COMPARISON CHART updated 3/12/91

FAX NO. 4159274953

(acre feet/year unless otherwise noted)

	<b>.</b>	MARIN W.D.	MONTEREY W.D.	SANTA BARBARA W.
	Auto Repair	NA	.03/1000sq ft	.11/1000sq ft
	Bar	NA	.0202/seat	NA
	Bank	.021/1000sq ft	.16/1000sq ft	.17/1000sq ft
	Beauty Shop*	.089/station	.02576/station	NA ·
	Bed & Breakfast	NA .	.0934/unit	NA
	Car Wash w/Recycle*#	.441/1000sq ft	.52/1000sq ft	NA
	Church*	.064/1000sq ft		.17/1000sq ft
	Church w/School*	.121/1000sq ft	NA	.18/1000sq ft
	Cleaners/Comm. Laundry		.64/1000sq ft	
	Condominiun	NA .	NA	.28/unit .
	Ci;iema*	.0028/seat	NA	NA
	Convalescent Hosp.*		NA	.11/bed
	Delicatessen*	.168/1000sq ft		NA
	Gas/Mini Market*	.37/1000sq ft	NA	-49/1000sq ft
	Grocery/Market		.63/1000/sq ft	
	Health Club*	.4/1000sq ft	NA	.32/1000sq ft
	Hospital*	.18/1000sq ft .17/houseboat	.3/1000sq ft	NA NA
_	Houseboat Industrial Assembly	.1//dogseboat	NA	NA
	& Manufacturing	NA .	NA	.085/1000sq ft
	Industrial R&D	NA NA	NA NA	.15/1000sq ft
	Launderette/self-serve		.1275/machine	NA
	Lodge/Motel		.1208/room	.13/room
	Lodge/Restaurant	NA NA	NA	.15/room
	Lodge/restaurant		*****	
	bar/laundry	.168/room	NA	NA
	Lodge/laundry	.135/room	NA	NA
	Lodge/restaurant			
	& bar	.136/room	NA	NA ·
	Lodge/bar	.65/room	NA·	NA ·
	Medical Office*	.21/1000sq ft		.15/1000sq ft
	Medical/Dental*	.365/1000sq ft		_23/1000sq ft
	Meeting Hall	NA ·	.02/1000sq ft	NA .
•	Multi-Family Apt.	NA	NA .	.24/1000sq ft
	Nursing Home	NA	.1323/room	NA
	Office	.087/1000sq ft	.16/1000sq ft	.10/1000sq ft (%) 4 / /
	One person-resi. Open Space (non-turf)	70gals./day 3/acre	NA .88/acre	NA NA
	Open Space (turf)	4/acre	1.76/acre	NA .
	Photographic*	2.275/1000sq ft		NA
		.074/1000sq ft	.016/1000sq ft	NA .
	Public Restroom	NA	.1012/toilet	Nλ
	Restaurant*	.023/seat	.0171/seat	.0;
	Restaurant, 24hr*	.036/seat	NA	8.
	Rest., Fast Food*	.905/1000sq ft	.0161/seat	1.: EXHIBIT NO.
	Retail-Large	NA	NA	.01 APPLICATION NO.
	Retail-Small	.025/1000sq ft	.03/1000sq ft	.1: A-3-5MC-96-08
	Retail-Photo	NA	.09/1000sq ft	NA McKenzie
		NA	NA	
	School-Childcare	.016/student	.24/1000sa ft	NA Water Use Chart

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST AREA OFFICE 640 CAPITOLA ROAD SANTA CRUZ, CA 95062 (408) 479-3511



November 15, 1991

Mark Duino
San Mateo County Planning Department
County Government Center
Redwood City, CA 94063

Dear Mark:

Thank you for sending the "Rural Area Water Use Study" prepared by Kleinfelder and dated October 21, 1991. I have reviewed the material and offer the following comments:

### DOCUMENTATION OF WATER USE

The author did an excellent job of researching water use figures for the various land uses included in the study. The analysis of figures from a variety of sources (EPA, EIR's, Water District, Water Studies) provides an objective rationale for the final figures selected for each land use category (Table 3). The inclusion of both average and maximum daily figures also allows the County to clearly and quickly calculate the effects on project density which occur throughout the use of one set of figures or the other. Commission staff notes that Policy 1.8(c) of the Certified LCP indicates that maximum water use figures should be applied.

# CALCULATION OF WATER USE BASED ON WATER CONSERVATION AND OTHER VARIABLES

Table Seven of the study indicates water use figures for the various land uses if adjusted for water conservation and then if further adjusted for average rather than maximum daily use. The author of the study did not include an adjustment for "seasonality" because, as he correctly points out on page 59, the sources from which the use figures have been derived have already adjusted for "seasonality." In any event, this Table is very useful because it clearly demonstrates the dramatic effect that these adjustments have on the density of some of the land uses. For example, hotel units could be increased by as much as 300% if adjusted for average rather than maximum water use and then adjusted again for water conservation.

As presently adopted, the LCP does not provide for what is, in effect, a density bonus for water conservation. As indicated in our earlier comments on the preparation of this study, water conservation is laudable but is not relevant to this process. The establishment of water use figures in this case, has less to do with water use per se than with using the figures to set

EXHIBIT NO. M

APPLICATION NO.
A-3-SMC-96-08

McKenzie

comments on water study

San Mateo County Planning Department November 15, 1991 Page 2

an objective density for non-residential land uses in the rural areas. Thus, the policy thrust of the LCP — which is to limit density in the rural areas consistent with resource protection goals — is a significant factor to be considered along with the technical water use data in setting the final numbers.

Again, thank you for the opportunity to comment on this thorough, well documented study. We will present a report on the study to the Coastal Commission at the December 1991 meeting in Los Angeles.

Very truly yours,

David Loomis Assistant District,Director

Diane S. Landry Legal Counsel

DL/DSL/cm

5908A

# CALIFORNIA COASTAL COMMISSION CENTRAL COAST AREA OFFICE 640 CAPITOLA ROAD SANTA CRUZ, CA 95062



September 10, 1990

Mark Duino
San Mateo County Planning Department
County Government Center
Redwood City. CA 94063

#### Dear Mark:

Thank you for sending along the July 27, 1990 procedural report on the Rural Area Water Study for our review and extending an invitation to attend the Board of Supervisors meeting on Tuesday. Unfortunately, neither Dave nor I will be able to attend. I will be at the Commission hearing in Los Angeles and Dave is heavily scheduled in Santa Cruz.

We did receive the material on August 29, 1990 and have both reviewed the proposal. We offer the following brief comments:

METHODOLOGY: The methodology proposed for gathering data on water consumption, pg. 11-12, appears straightforward and is similar to the approach we used in developing use information for the Cascade Ranch recommendation. The consultants may save some time, and money, by making use of the information already generated in that report as it includes the rates used by Department of Parks and Recreation and the Department of Water Resources, as well as others. You may also wish to conduct the Monterey Water Management District as they have a similar climate and have been maintaining detailed records of water consumption for a variety of land uses for the past twelve years.

We note that important assumptions used in developing standardized water use data sometimes vary. In most instances, for example, an occupancy rate has already been factored into the equation. In some cases, the use rates are based on older plumbing fixtures and in other instances on the newer, more conserving fixtures. It is therefore helpful to learn the basic assumptions behind the data to gain a clearer picture of how one rate compares with another.

<u>PROPOSED DENSITY TABLE</u>: (pgs. 6-10) The format proposed is logical and easy to follow. We are concerned, however, about the impact of providing what are essentially density "bonuses" based on seasonality and water conservation.

Mark Duino San Mateo County Planning Department September 10, 1990 Page 2

## THE FUNCTION OF WATER CONSUMPTION RATES WITHIN THE BROAD SCOPE OF THE LCP

It is understandable that this proposal focuses on water consumption and, in that context, explores the effect of variables on that rate. It is, in this case, however, essential to pull back from this narrow technical area and reflect on its place in the broader scope of the Certified LCP.

A foundational premise of the LCP was that the various specific policies of the LCP would adequately protect the County's considerable natural resources so long as the overall density, at build-out, did not exceed the equivalent of +1700 single family homes. The effective implementation of the LCP is thus predicated on not only a rigorous application of specific policies, but also on an understanding that, in the final large picture, density must not exceed a certain level. Therefore, in this case, water use per se is not the fundamental issue. Water, in the larger context of the LCP, is a device to ensure that overall density limitations will not be exceeded.

In summary, if the issue was simply setting density based on water consumption then it would no doubt be useful to look at all the variables. In San Mateo County, however, the density has already been set in the LCP, and the job of this work program is to ensure that the certified density of  $\pm 1,700$  single family home equivalents is what will occur. An essential part of this project would be to estimate the final build-out densities based on whatever figures or scenarios are ultimately determined to be the most appropriate. If the final densities are higher than the certified amount then an LCP amendment should be considered.

## THE SEASONALITY FACTOR PRESENTS PLANNING AND ENFORCEMENT PROBLEMS

The consideration of seasonality as a factor in determining density presents some problems. The most obvious problem is one of effective enforcement — both legally and from a practical standpoint. The other issue to consider is the effect on the ultimate build-out under the plan, i.e., is it consistent with planning objectives to protect coastal resources to maintain excessive density for part of the year?

It may well be that in certain limited circumstances it would be appropriate to factor in seasonability. The potential impacts of such a course should, however, be fully considered as they relate to other plan objectives.

Mark Duino San Mateo County Planning Department September 10, 1990 Page 3

# WATER CONSERVATION ALLOWANCES COULD RESULT IN EXCESSIVE DENSITY

Water conservation is certainly a laudable planning goal. Policies which require or encourage water conservation are becoming increasingly popular. As a vehicle for conserving a valuable resource, there is no question that such a policy body is highly appropriate. In this case however, a water conservation policy is extended to affect another planning objective — appropriate land use density. According to the work program, density could increase over 100% if water conservation was factored into the equation. This increase in density could cumulatively result in a substantial impact on coastal resources, particularly as other non-water effects are considered, i.e., traffic, site coverage, number of people. An equity issue is also present in that it appears that all land uses — with the exception of single family homes could take advantage of the increased density due to water conservation. We would therefore encourage the County to have a water conservation policy, but not one which offers such a generous density bonus.

Very truly yours,

David Loomis Assistant District Director

Viane Landny

Diane S. Landry Coastal Planner

DL/DSL/cm

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### CALIFORNIA COASTAL COMMISSION

CENTRAL COAST AREA OFFICE 725 FRONT STREET, STE. 300 SANTA CRUZ, CA 95060 (408) 427-4863 HEARING IMPAIRED: (415) 904-5200



June 19, 1996

Christopher S. Johnson Kleinfelder, Inc. 1410 F Street Fresno, CA 93706

### BY FAX

Subject: Water Use Assesment for Pigeon Point Country Inn (Kleinfelder Job No. 21-339001)

Dear Mr. Johnson:

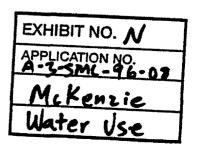
As a follow up to our telephone conversation this morning, I am faxing you this request for clarification regarding information contained within the above referenced report.

Please explain the figures contained in Table 3, specifically the "percent saving contibution" amounts, and how these amounts were derived. In addition, please provide a source of reference for the "percent savings" figures contained in Figure 2. Finally, please explain the basis for:

- o averaging water consumption figures of units that do not have kitchens with those that do (Table 4), when it is known that this project includes kitchens in all 9 of the units; and
- o applying the calculated "percentage reduction" to the project's overall water use, when it appears that water conserving fixtures will reduce water use for certain activities, but not others (e.g., filling a bath tub or kitchen sink).

I am also interested in your professional opinion regarding the accuracy of assuming that the project, with water conserving fixtures, will not consume more than 628 gallons per day at peak consumption, and with ultra low flow fixtures, will not consume more than 428 gallons per day at peak consumption. Please consider the following factors when responding to this request:

- o the project proposes a "soak tub" in each unit;
- o the project is located in an isolated location, several miles from the nearest restaurant or deli, which will likely increase the frequency of kitchen use when compared to typical transient facilities; and



o some degree of landscaping will be required as a condition of project approval. At a minimum, landscaping will be required to be installed within areas of disturbance that will not be covered by structures or facilities. This may include the entire leachfield area, which, due to its shallow depth, will require backfilling. Although the use of drought resistant native vegetation will be required, it is necessary to consider that even these type of plants require some degree of irrigation to become established. It also seems reasonable to assume that the applicant will want to have some ornamental landscaping in order to enhance the visual attractiveness of the project.

Thank you for your anticipated response. If you have any questions rearding the information requested, or wish to discuss these issues further, please contact me at (408) 427-4863.

Sincerely,

Steve Monowitz<sup>(</sup> Coastal Planner

cc: Harry O'Brien

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### CALIFORNIA COASTAL COMMISSION

CENTRAL COAST AREA OFFICE 725 FRONT STREET, STE. 300 SANTA CRUZ, CA 95060 (408) 427-4863 HEARING IMPAIRED: (415) 904-5200

, 8



June 20, 1996

Christopher S. Johnson Kleinfelder, Inc. 1410 F Street Fresno, CA 93706

### BY FAX

Subject: Addendum to June 19, 1996 Request for Information on Water Use Assessment for Pigeon Point Country Inn (Kleinfelder Job No.

21-339001)

Dear Mr. Johnson:

As a follow up to the above referenced letter, please also address the following issue in clarifying the information contained in the subject assessment:

In researching the amount of water that can reasonably be expected to be saved through the use of ultra-low flow fixtures, it has come to our attention that standard plumbing codes have required the installation of low flow fixtures in all new developments since approximately 1980. Please discuss how this fact may affect the 53% savings through low-flow fixtures, and 68% water savings through ultra low flow fixtures, asserted by the subject report.

It appears that the average consumption figures contained in Table 4. which were all developed in 1991 or 1987, may already include water conserving fixtures. As a result, to figure additional savings of 53% or 68% would be double counting.

We recommend that you address this issue by:

- revising Table 2 to indicate conventional consumption levels according to current plumbing code standards:
- calculating the percent savings that could be achieved when compared 0 to the above amounts; and
- correcting the "percent savings contributions" and overall estimated 0 project water consumption accordingly.

Thank you for your anticipated cooperation. Please contact me if you require further explanation of this request.

Sincerely,

Steve Monowitz

Coastal Planner

EXHIBIT NO. APPLICATION NO

cc: Harry O'Brien

Brian Zamora, San Mateo County Health Services Agency

### CALIFORNIA COASTAL COMMISSION

CENTRAL COAST AREA OFFICE 725 FRONT STREET, STE. 300 SANTA CRUZ, CA 95060 (408) 427-4863 HEARING IMPAIRED: (415) 904-5200



April 24, 1996

Harry O'Brien Coblentz, Cahen, McCabe & Breyer 222 Kearny Street, 7th Floor San Fransisco, CA 94108-4510

Subject: Additional Information Needed for the June 1996 Coastal Commission Hearing on the McKenzie Appeal (A-3-SMC-96-008)

Dear Mr. O'Brien:

Thank you for meeting with us today, and for providing supplemental information regarding the proposed bed and breakfast project at 921 Pigeon Point Road. As a follow up to our meeting, this letter summarizes the additional information which must be submitted to this office by the project applicant in order for the Commission staff to adequately analyze the subject project. This information should be submitted as soon as possible, and no later than May 13. 1996, in order for Commission staff to present a recommendation to the Commission at the June, 1996 Commission meeting. As our discussion revealed, a general description of the project which better details how the facility will be managed, who the targeted clientele will be, etc. will also be helpful.

The additional information required for processing the permit includes:

- A. Water Source.
  - 1. San Mateo County Department of Environmental Health approval of a well adequate to serve the proposed development under full occupancy.
  - 2. Hydrologic analysis evaluating the impact of the well on agricultural water supplies within the project's vicinity.
- B. Sewage Treatment.
  - 1. San Mateo County Department of Environmental Health approval of a sewer treatment facility (percolation, septic tank, and leach field) adequate to serve the proposed development under full occupancy.
- C. Plans (to scale and reproducible).
  - 1. Site plan including location of <u>all</u> development (well and sewer as approved by Environmental Health, water tank, fencing, and utility lines) and indicating existing developments to remain and be removed;
  - Floor plans for all units and manager's office (including extent of kitchen facilities);

APPLICATION NO.
A-3-5Mc-96-08
McKenzie
Ast April Hrg. Ltr.

- 3. Elevation drawings of all new development (guest units, renovated manager's office, water tank);
- 4. ' Foundation plans;
- 5. Drainage plans;
- Landscape/irrigation plans;
- 7. Grading plans;
- 8. Stairway plans, prepared by a certified engineer, indicating what portions of the existing stairway will remain and what will be replaced; and
- 9. Summary description of signing and outdoor lighting plans.

### D. Water Use.

- Analysis of maximum anticipiated daily water use (under full occupancy, considering "kitchennete" use, meal service, and facilities for staff).
- 2. Maximum daily water use associated with landscaping.
- Water use associated with special events (e.g., weddings, family reunions, conferences)

### E. Visual Impacts.

Using photos and elevation drawing overlays, illustrate the visual impact of all elements of the proposed development (units, water tank) on views of the ocean and lighthouse available from Highway One, Pigeon Point Road, and Whaler's Cove. (The visual information presented at the meeting should be supplemented with an analysis of impacts to ocean views from Pigeon Point Road and as viewed from Whaler's Cove beach).

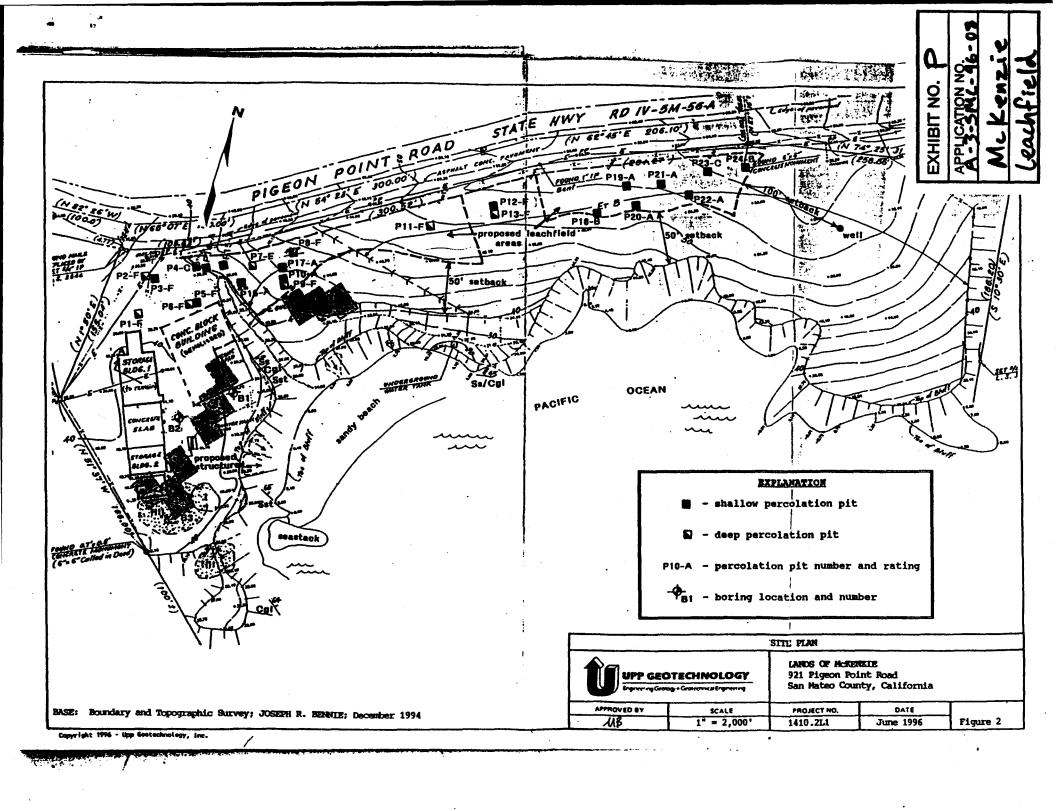
- F. Marine Resource Protection Provisions.
  - 1. Rules for keeping dogs on site, and how they will be enforced; and
  - 2. Rules regarding guest use of Whaler's Cove beach when marine mammals are present, and how they will be enforced.

If you have any questions regarding these requirements, please contact me, or staff analyst Steve Monowitz, at (408) 427-4863.

Sincerely.

Tami Grove

District Director



# MAGGICRA BROS. DRILL IG, INC

DRILLING CONTRACTORS - PUMP SALES & SERVICE CALIFORNIA CONTRACTOR'S LICENSE NO. 249967
(800) 728-1480 . .

Corporate Office 595 Airport Boulevard Watsonville, CA 95076 (408) 724-1338

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WELL TEST REPORT

Branch Office 2001 Shelton Drive Hollister, CA 95023 (408) 637-8228

A. Customer.		NZIE / JAMES KEI		_Telephone:_4	15-879-1455
Mail address:		<u>AN FRANCISCO, C</u>	A 34121	APN:	
	921 PIGEON POIN		<u> </u>		DOOC DOLLING INC
Date Drilled:	MAY 11, 1996		By:	MAGGIORA	BROS, DRILLING, INC.
B. Well Data:		Previously Rep	oorted:		Measured in Test 735'
•	of Well:				5" PVC
	eter of Casing:			_	3 740
•	of Perforation:				FACTORY PERF.
	of Perforation:			-	80'
	ing Water Level:			<del>-</del>	
•	Type and HP:			-	GRUNDFOS 3HP
Серп	Pump Set			-	672'
C. Well Test		Date of Test		JUNE 5, 199	8
	ater Level at Start			80	ft.
* *	stained Pumping Le	vel:		672	ft.
• • •	awdown (1-2):			592	ft
• •	et Duration:			1440	min.
• •			***************************************		**,
[X]					, ,*** ,***
, ,	served Total Produc			7250	gal:
(8) Av	erage Yield for Test	Period (5/4):		5.03	gpm
	1				
me	nal Sustained Yield:				gai. :
	iculated Total Produ	ction (4x7):			gpm:
• •		• • •			
	np Broke Suction Du		Yes[		NOIX
	teriological Analysis		Y85 [	K]	No[]
Chi	mical Analysis Attac	hed	Yest	K]	No[ -]
D. Water System	Visual Inspection (N	VOb means not obse	erved):		
Pumo	Operation:	Normai [ x]	Defic	ient [ ]	N/Ob []
•	cal Equip:	Normal [ ]	Defic		NOP KI
_	ure Tenks:	Normal [ ]	Defic		NOD R
	Pipes:	Normal [ ]	Defic		MOP IX
	je Tanks:	Normal [ ]	Defic		MOP (X)
E. Comments:		AT 5 GPM AT THE		• •	
Deted:	N RIC 7 1006			Hules	7-14
Rev. 11/94	JUNE 7, 1996			<u></u>	ICHAEL MACCIODA
M84 - 11/ 24	•	Dage 1 of 7		IVI	ICHAEL MAGGIORA

Page 1 of 2

PLEASE SEE DEFINITIONS AND ADDITIONAL TERMS OF THE R

DRILLING — Municipal, Industrial, Agricultural, Domestic, Foundation, Test Holes, Envi PUMPS — Turbine, Submersible, Centrifugal, Jet, Split Case, Waste &

"WATER IS OUR BUSINESS"

APPLICATION NO.
A-3-5ML-96-0X
McKenzie
Well Test

TO

### DEFINITIONS AND ADDITIONAL TERMS

Sustained yield. Sustained yield is the pumping rate at which long-term pumping can be maintained, and is the rate normally used to compare wells. If the test is of sufficient duration (and assuming the aquifer has a large storage capacity), sustained yield is the best indicator of long term well production during regular operation. As used in this report, sustained yield is the production rate measured at the conclusion of a test in which the pumping level in the well is held constant for the period of time indicated.

Average yield. In many wells, especially wells with small diameter casings, water levels cannot be monitored during pumping, and sustained yield can only be approximated by calculating average yield (which is total volume pumped divided by total pumping time including any period in which the pump breaks suction). Since the pumping level may be declining while testing, and the measured water production may include water in storage in the well and surrounding formation at the start of the test, average yield calculations may be significantly higher than the true sustained yield (particularly where the pumping time is less than four hours).

Unusual pumping conditions. Wells which break suction while pumping, or have high drawdowns in relation to the standing water level, are often indicative of marginal long term water producers. These wells should always have protective shutoff devices on the pumps to prevent pump burnout from lack of water. A smaller capacity pump may improve electrical efficiency and sustain less wear by enabling longer pumping cycles. Conversely in stronger wells, the pump itself may be too small to pump the full well capacity, and thus the true sustained (or average) yield may be higher than observed in this test.

<u>Sole report</u>. This report contains the sole observations and conclusions of the company pertaining to the testing of the Customer's well. Any prior statements of the agents or employees of the company which are not contained herein are superseded by this report, and shall be relied upon at the Customer's own voluntary risk.

Test limitations. The data and conclusions provided are based upon the tests and measurements of the company using standard and accepted practices of the groundwater industry. However, conditions in water wells are subject to dramatic changes in even short periods of time. Additionally, the techniques employed may be subject to considerable error due to factors within the well and groundwater formation which are beyond the company's immediate control or observation. Therefore, the data are valid only as of the date and to the extent of the observational limitations of the test or installation indicated.

Use of test. The test conclusions are intended for general comparison of the well in its present condition against known water well standards or guidelines, and should not be relied upon to predict either the future quantity or quality of water that the well will produce. Wells should be periodically retested to show both seasonal and long-term fluctuations.

Disclaimers. In presenting the data and conclusions, the company makes no warranties, either express or implied, as to future water production of the well. Further, the company, unless expressly stated to the contrary, does not represent (1) that the well or pump system is in any particular condition or state of repair, or (2) that the test results will satisfy cognizant governmental ordinances or regulations, or (3) that the test duration or methodology is sufficient to meet local water system or new construction permit standards (which usually require 24 hour or more tests), or (4) that the water is adequate for a particular purpose contemplated by Customer, (5) the accuracy and reliability of the report for any purpose more than one year after the date of the test.

Customer's release. In accepting this report, the Customer releases and holds the company harmless from liability for consequential or incidental damages arising (I) out of the breach of an express or implied warranty of future water production, or (2) in any manner through the further dissemination of this report, or its conclusions, by either Customer or third parties, except as the dissemination is required to complete the project or other activity for which the report was prepared.

Page 2 of 2 (Rev 11/94)

Exhibit Q, p.2

TOTAL P.03 408 724 3228 PAGE.003 JUN-18-1996 15:50 FR

MAGGIORA BROS. DRILLING

TO

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Tet 401 7243422 FAX: 401 7243141

# SOIL CONTROL LAB



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115018- 459

A Division of Control Laboratories Inc.

Maggiora Bros. 595 Airport Blvd. Watsonville CA

95076

10 Jun 1996

## CERTIFIED ANALYTICAL REPORT

BACTERIOLOGICAL EXAMINATION OF WATER FOR COLIFORM ORGANISMS

MATERIAL:

Water sample received 07 JUN 1996

REPORT:

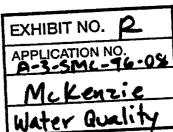
Bacteriological examination of water for total and facal coliforms by MMO-MUG procedure using

100 millilter sample is as follows:

Identification	Total Coliforms	Fecal Coliforms	
different control of the second secon			
#60350-3: KATHLEEN MCKENZI	PRESENT	ABSENT	

Public Health Drinking Water Standards for bacteriological quality of drinking water are met when coliform organisms are absent in a water sample. If coliform organisms are present, the water is considered unsafe to drink unless the water is treated to remove the bacteria. NOTE: The above test does not establish whether this water meets Public Health Standards for chemical composition of drinking water

The undersigned certifies that the a accurate report of the findings of



JUN-18-1996 15:50

4159565469

TO

14159891663

ANALYTICAL CHEMISTS

FR

BACTERIOLOGISTS

W 408 7745472 NJ 406 7745 190

MAGGIORA BROS. DRILLING

115001-2-459

A Division of Control tuboratorus au

Maggiore Bros. 595 Airport Blvd. Watsonville CA 95076

17 JUN 96

## CERTIFIED ANALYTICAL REPORT

IDENTIFICATION:	Water sample Job #60350-3, Sampled 6/5/1	Public Health Drinking Water Limits <sub>1</sub>	
	Quantitative follows expri liter (parts		
pH Value (units)		8.4	10.6
Conductivity (micro	apos/as)	1900	1600
Carbonate Alk. (s	us CaCO <sub>2</sub> )	20	120
Bicarbonate Alk. (a		425	•
Total Alkalinity (4		445	•
Total Hardness (s	LE CACO <sub>1</sub> )	50	•
Total Dissolved Sol		1200	1000
Nitrate (1	re NO3)	1.1	45
Chloride (Cl)		410	250
Sulfate (304)		15	250
Fluoride (F)	•	1.7	1.0
Colcium (Ca)		. 12	•
Magnesium (Mg)		4,9	•
Potassium (K )		5.2	•
Sodium (Na)		475	•
Total Iron(Fe)		0.53	0.3
Manganess (Mn)		0.03	0.05
Mitrite (am NO <sub>2</sub> )		< 0.5	•

California Administrative Code; Title 22

The undersigned certifies that the above is a true and accurate report of the findings of this !

JUN-18-1996 15:50 06/18/96 15:10 FRE MAGGIORA BROS. DRILLING

TO

14159891663 P.03

ARACTERIC CHAMISTS

BACTERIOLO MISTS Approved by State of Colfonia

12 408 7745422 443 408 7744218

# SOIL CONTROL LAB



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115001-2-459

A Division of Control Information to:

Maggiora Bros. 595 Airport Blvd. Watsonville CA 95076

17 JUN 96

### CERTIFIED ANALYTICAL REPORT

MATERIAL: IDENTIFICATION:			Public Health
REPORT: Quantitative chemical anal follows expressed as milli liter (parts per million):		chemicul analysis is as	Drinking Water Linits <sub>1</sub>
pH value (units) Conductivity (micrombos/cm)		8.4 2000	10.6 1600
Carbonate Alk. Bicarbonate Alk Total Alkalinin	(45 CACO <sub>3</sub> ) :. (48 CACO <sub>3</sub> )	20 430 450	120
Total Hardness Total Dissolved Mitrate		40 1300 < 1	1000 45
Chloride (Cl) Sulfate (SO <sub>4</sub> ) Fluoride (F)		445 14 1.7	250 250 1.0
Calcium (Ca) Magnasium (Mg) Fotassium (K )		7.7 5.0 6.2	•
Sodium (Na) Total Iron(Fe) Manganese (Mn) Mitrite (as )	(0 <sub>2</sub> )	485 0.12 < 0.03 < 0.5	0.3

<sup>1</sup>California Administrative Gode; Title 22

The undersigned certifies that the above is a true and accurate report of the findings of this backstory.

Exhibit R, p.3

