

**CALIFORNIA COASTAL COMMISSION**

NORTH CENTRAL COAST DISTRICT  
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**STAFF REPORT: REGULAR CALENDAR**

**APPLICATION FILE NO.:** 2-00-033

**APPLICANTS:** Marius and Susan Nelsen

**PROJECT DESCRIPTION:** Construction of a 2,095-square-foot, 18.9-foot-tall single-family residence, 678-square-foot attached garage, 1,440-square-foot patio, sand filter septic system, 1,000-square-foot parking area, 72-square-foot propane tank enclosure, and landscaping.

**PROJECT LOCATION:** APN: 195-090-45  
16 Dipsea Road, Stinson Beach, Marin County  
(Exhibit 1, Regional Map)

**LOCAL APPROVALS:** Marin County Design/Architectural Review

**SUBSTANTIVE FILE DOCUMENTS:** See Appendix A.

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**1.0 EXECUTIVE SUMMARY**

The applicants propose to construct a 2,095-square-foot, one-story, single-family residence with an attached 678-square-foot garage, 1,440-square-foot patio, sand filter septic system, 1,000-square-foot parking area, 72-square-foot propane tank enclosure, and landscaping on a 45,551-square-foot parcel (Exhibit 4, Project Plan). Commission staff recommends approval of the permit with conditions to mitigate impacts related to geologic hazards, environmentally sensitive habitat areas, and polluted runoff.

**STAFF NOTE**

The proposed project is located in the Norman's Seadrift Subdivision of Stinson Beach in Marin County (Exhibit 2, Project Location Map). Although Marin County has a certified LCP, the project site is located on filled public trust lands over which the State retains a public

trust interest. Therefore, pursuant to Section 30519 of the Coastal Act, the Commission maintains development review authority. The standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act. The policies of the Marin County LCP serve as guidance only and are not the standard of review for this project.

## **2.0 STAFF RECOMMENDATION**

The staff recommends that the Commission approve Coastal Development Permit No. 2-00-033 subject to the conditions in Sections 2.1 and 2.2 below.

### ***Motion:***

I move that the Commission approve Coastal Development Permit No. 2-00-033 subject to conditions pursuant to the staff recommendation.

### ***Staff Recommendation of Approval:***

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

### ***Resolution to Approve the Permit:***

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

## **2.1 Standard Conditions**

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

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

## 2.2 Special Conditions

### 1. Conformance of Plans to Geotechnical Recommendations.

- A. All final design and construction plans, including foundations, grading and drainage plans, shall be consistent with all recommendations contained in the report entitled *Geotechnical Investigation, Nelsen Residence, 16 Dipsea Road, Stinson Beach, California* prepared by SalemHowes Associates, Inc. and dated January 24, 2000. ***Prior to the issuance of the coastal development permit,*** the applicants shall submit, for the Executive Director's review and approval, evidence that an appropriate licensed professional has reviewed and approved all final design and construction plans and certified that each of those final plans is consistent with all of the recommendations specified in the above-referenced geologic evaluation approved by the California Coastal Commission for the project site.
- B. The applicants shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

### 2. Assumption of Risk, Waiver of Liability and Indemnity.

- A. By acceptance of this permit, the applicants acknowledge and agree:
1. that the site may be subject to hazards from seismic activity;
  2. to assume the risks to the applicants and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development;
  3. to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and
  4. to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amount paid in settlement arising from any injury or damage due to such hazards.
- B. ***Prior to the issuance of the coastal development permit,*** the applicants shall execute and record a deed restriction, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition. The deed restriction shall include a legal description of the applicants' entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of

the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

3. Revised Plan.

- A. *Prior to the issuance of the coastal development permit*, the applicants shall submit, for the review and approval by the Executive Director, a revised site plan for the proposed project. The site plan shall demonstrate that no portion of the proposed patio be located closer than 100 feet from the edge of the mean high tide line of Bolinas Lagoon.
- B. The applicants shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

4. Future Development Deed Restriction.

- A. This permit is only for the development described in Coastal Development Permit No. 2-00-033. Pursuant to Title 14 California Code of Regulations Section 13250(b)(6), the exemptions otherwise provided in Public Resources Code Section 30610(a) shall not apply. Accordingly, any future improvements to the single family residence authorized by this permit, including but not limited to repair and maintenance identified as requiring a permit in Public Resources Section 30610(d) and Title 14 California Code of Regulations Sections 13252(a)-(b), shall require an amendment to Permit No. 2-00-033 from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government.
- B. *Prior to the issuance of the coastal development permit*, the applicants shall execute and record a deed restriction in a form and content acceptable to the Executive Director, reflecting the above restrictions on development. The deed restriction shall include legal descriptions of both the applicants' entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

5. Landscaping.

- A. *Prior to the issuance of the coastal development permit*, the applicants shall submit, for the review and approval by the Executive Director, a revised landscaping plan for the project site. The landscaping plan shall show the types of plants and the locations of plantings and shall not significantly interfere with the function of the septic system. The septic tank, sand filter, and distribution bed and the areas in the vicinity of the

septic tank, sand filter, and distribution bed shall not be planted with any plants with roots that may grow beyond a depth of 12 inches.

6. Construction Period Erosion Control Plan.

*Prior to the issuance of the coastal development permit*, the applicants shall submit, for review and approval of the Executive Director, an erosion control plan to control erosion on the site from entering Bolinas Lagoon. The plan shall be designed to minimize the potential sources of sediment, control the amount of runoff, and retain sediment on-site during construction. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and ensure the application of nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to Bolinas Lagoon.

A. Best Management Practices (BMPs)

1. The Erosion Control Plan shall include, at a minimum, the Best Management Practices specified below:
  - a. Install silt fencing as far from the mean high tide line of Bolinas Lagoon as feasible, but in no case shall silt fencing be installed within 25 feet of the mean high tide line of Bolinas Lagoon.
  - b. Control wind-born dust through site watering and/or the installation of wind barriers such as hay bales. Site watering shall be monitored to prevent runoff.
  - c. Establish construction staging areas at least 100 feet from the mean high tide line of Bolinas Lagoon, and design these areas to control runoff.
  - d. Soil and/or other construction-related material stockpiled on site shall be placed a minimum of 100 feet from the mean high tide line of Bolinas Lagoon. Stockpiled soils shall be covered with tarps at all times of the year.
  - e. Maintain and wash equipment and construction vehicles in confined areas specifically designed to control runoff and more than 100 feet away from the mean high tide line of Bolinas Lagoon.
  - f. Provide sanitary facilities for construction workers.
  - g. Store, handle, apply, and dispose of pesticides, petroleum products, and other construction materials properly.
  - h. Develop and implement spill prevention and control measures that are adequate to minimize the risk of spills of hazardous substances, including but not limited to fuels, lubricants, paint, or solvents on the project site or into coastal waters.
  - i. Develop and implement nutrient management measures, including properly timed applications, working fertilizers and liming materials into the soil to depths of 4 to 6 inches, and reducing the amount of nutrients applied by conducting soil tests to determine site nutrient needs.
  - j. Provide adequate disposal facilities for solid waste, including excess asphalt, produced during construction. Excess fill shall not be disposed of in the Coastal Zone unless authorized through either an amendment to this coastal development permit or a new coastal development permit.
  - k. All pollutants contained in BMP devices shall be contained and disposed of in an appropriate manner.

2. The plan shall include, at a minimum, the following components:
  - a. a narrative report describing all temporary runoff and erosion control measures to be used during construction and all permanent erosion control measures to be installed for permanent erosion control.
  - b. a site plan showing the location of all temporary erosion control measures.
  - c. a schedule for installation and removal of the temporary erosion control measures.

B. The applicants shall be fully responsible for advising construction personnel of the requirements of the Erosion Control Plan.

C. The applicants shall undertake development in accordance with the final erosion control plan approved by the Executive Director. No proposed changes to the approved final erosion control plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

6. Post-Construction Stormwater Pollution Prevention Plan.

A. *Prior to issuance of the coastal development permit*, the applicants shall submit, for review and approval of the Executive Director, a post-construction pollution prevention plan showing final drainage and runoff control measures. The plan shall be prepared by a licensed engineer and shall incorporate structural and non-structural Best Management Practices (BMPs) designed to control the volume, velocity and pollutant load of stormwater leaving the developed site after completion of construction.

1. The pollution prevention plan shall demonstrate that:
  - a. runoff from the project shall be prevented from entering Bolinas Lagoon.
  - b. runoff from all roofs and other impervious surfaces and slopes on the site shall be collected and discharged to avoid ponding or erosion either on or off the site.
  - c. appropriate vegetation around the splashguards shall be planted at the downspout outlets.

2. The Post-Construction Stormwater Pollution Prevention Plan shall include, at a minimum, the components and Best Management Practices (BMPs) specified below:
  - a. The final site plan shall show the finished grades and the locations of the drainage improvements, including downspouts and splash guards.
  - b. Native or drought-tolerant adapted vegetation shall be selected, in order to minimize the need for fertilizer, pesticides/herbicides, and excessive irrigation.
  - c. Irrigation within 100 feet of Bolinas Lagoon is prohibited.
  - d. Use vegetated filter strips to trap sediment contained in sheet flow. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.

- e. The applicants shall modify site plans to specify that the parking areas and driveway shall not be paved, but instead constructed with gravel.
- B. The applicants shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

### 3.0 FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

#### 3.1 Site Description

The parcel is located on the filled extension of the natural sand spit between Bolinas Lagoon and Bolinas Bay in Stinson Beach, Marin County (Exhibit 2, Project Location Map). The parcel is north of Dipsea Road and immediately south of Bolinas Lagoon in Norman's Seadrift Subdivision, within the privately-maintained, gated Seadrift community (Exhibit 3, Assessor Parcel Map).

#### 3.2 Project Description

The applicants propose the construction of a single-story, 2,095-square-foot single-family residence, an attached 678-square-foot garage, a 1,440-square-foot patio, an approximately 1,000-square-foot paved parking area, an approximately 340-square-foot raised walkway, a propane tank enclosure consisting of a 72-square-foot concrete pad and four-foot tall fence, and a sand filter septic system on a 42,551-square-foot parcel (Exhibit 4, Project Plan). (A 13,331-square-foot portion of the parcel is in Bolinas Lagoon, leaving a buildable area of 29,220 square feet.) The septic system consists of a 2,000-gallon concrete septic tank, 126 feet of leach lines, an intermittent sand filter, and a 1,500-gallon pump chamber.

#### 3.3 Hazards

Section 30253 of the Coastal Act states in relevant part:

*New development shall:*

1. *Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
2. *Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

SalemHowes Associates, Inc. submitted a geotechnical investigation, dated January 24, 2000 as part of the project application. The investigation notes that the project is located within the San Andreas Fault Zone, approximately 4,000 feet east of the 1906 fracture trace (Exhibit 5, Local Geologic Map), and that "the fault passes through the Bolinas Lagoon in a broad riff [sic] zone approximately a mile wide and continues southeast directly under Seadrift". The investigation states that an earthquake of magnitude 6.5 or above with an epicenter on the San Andreas Fault in the vicinity of the project would subject the site to liquefaction below the

water table to a depth of 30 feet. The geotechnical investigation concludes that there is "an inherent risk of instability associated with any construction adjacent to the San Andreas Fault, which is located on saturated sands ... therefore we are unable to guarantee the stability of any construction subjected to a significant seismic event." To mitigate the geotechnical risk to the project, the investigation specifies design measures for soil preparation, foundation design, and construction inspection. According to the investigation, "construction in accordance with the recommendations of this report will be stable under static conditions, and that the risk of future instability during an earthquake is within the range generally accepted for construction on the Seadrift spit."

Given the information presented above, the Commission finds that the subject lot is an inherently hazardous piece of property. In order to minimize the development's risk to life and property in an area of high geologic hazard consistent with Section 30253 of the Coastal Act, the applicants have incorporated the geotechnical report's recommended design measures into the project. To ensure that all design and construction plans conform to the recommended geotechnical design measures, the Commission imposes **Special Condition 1**, which requires the applicant to submit evidence that all final plans are consistent with the geotechnical report recommendations.

In addition, because the applicants propose development on a geologically hazardous site, the Commission also imposes **Special Condition 2**, which requires the landowner to assume the risks of any losses associated with the proposed development due to seismic, geologic, and geotechnical hazards of the property, waive any claim of liability on the part of the Commission for such losses, and indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand hazards. The Commission finds that **Special Condition 2** is required because the applicants have voluntarily chosen to implement the project despite the risk of hazards. Recordation of the deed restriction will also provide notice of potential hazards of the property and eliminate false expectations of potential buyers of the property, lending institutions, and insurance agencies that the property is safe for an indefinite period of time and for further development indefinitely into the future. In addition, the condition ensures that future owners will be informed of the Commission's immunity from liability and the indemnity afforded the Commission.

Therefore, as conditioned, the proposed development minimizes risks to life and property in areas of high geologic, flood, and fire hazard and is consistent with Section 30253 of the Coastal Act.

### 3.4 Biological Resources

Section 30231 of the Coastal Act States:

*The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging waste water reclamation,*

*maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30240(b) of the Coastal Act states:

*Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

The applicants submitted a biological assessment of the parcel by Sycamore Associates dated January 22, 2001. The assessment states that no state or federally listed endangered, threatened, rare or candidate plant or wildlife species were detected on the project site during the reconnaissance-level survey conducted on January 3, 2001.

Bolinas Lagoon is part of the Gulf of the Farallones National Marine Sanctuary, one of four national marine sanctuaries in California and one of thirteen in the nation. The Sanctuary was designated in 1981 to protect and manage the 1,255 square miles encompassing the Gulf of the Farallones, Bodega Bay, Tomales Bay, Drakes Bay, Bolinas Bay, Estero San Antonio, Estero de Americano, Duxbury Reef, and Bolinas Lagoon. The approximately 2.2-square-mile (1,400-acre) lagoon contains environmentally sensitive habitat, including wetland and mudflats. The lagoon provides an important haul-out and birthing site for harbor seals. In addition, benthic invertebrates and fish in the lagoon support a great diversity and abundance of wintering and migratory shorebirds, waterfowl, gulls, and other water-associated birds (Marin County LCP 1981). The lagoon is the only designated "Wetland of International Significance" on the Pacific Flyway as determined by the Convention on Wetlands of International Importance in 1998, and was recognized particularly for its waterfowl habitat. Approximately 245 species of birds have been identified at the Lagoon and its surrounding watershed. Twenty-three of these species are considered rare, threatened, or endangered. Shorebirds and waterbirds such as the brown pelican, snowy plover, dunlin, great blue heron, black crowned night heron, willet, sandpiper, and greater sand plover have been observed on the lagoon. Heron and egret are known to nest in the lagoon. Of the fifty or so estuaries that have formed along the Pacific Coast, Bolinas Lagoon is one of only 13 that sustains large numbers of migratory shorebirds. Furthermore, the Bolinas Lagoon Management Plan prepared by Marin County in 1996 also identified three species each of amphibians and mammals that frequent Bolinas Lagoon as rare, threatened or endangered (Bolinas Lagoon Ecosystem Restoration 2001). Marin County designates Bolinas Lagoon as a County Nature Preserve. The U.S. Army Corps of Engineers found that Bolinas Lagoon is part of a larger natural habitat complex that is part of or adjoins the Sanctuary, encompassing the Pt. Reyes National Seashore, Golden Gate National Recreation Area, Central California Coast Biosphere Preserve, Mt. Tamalpais State Park, and the Audubon Canyon Ranch Bird Sanctuary (USACOE 1997).

The Commission considers Bolinas Lagoon to be a unique and important coastal wetland and environmentally sensitive area and finds that any development proposed on properties adjacent to the lagoon must be sited and designed to avoid impacts that would significantly degrade the habitat value of the lagoon. Development adjacent to the lagoon may disturb birds and other wildlife that depend on the lagoon habitat, inconsistent with Section 30240(b) of the Coastal Act.

The septic tank is sited 50 feet from Bolinas Lagoon and the distribution bed (also called leachfield or disposal bed) is located 100 feet from the lagoon, consistent with the standards of

the Stinson Beach County Water District (District) for setbacks from water bodies. The septic tank, intermittent sand filter, pump chamber, and pressure lines will be located within 100 feet of the lagoon. These portions of the septic system within 100 feet of the lagoon cannot feasibly be located further from the lagoon because the septic system requires an area of about 3,000 square feet, and the parcel does not contain a sufficient area to accommodate both the residence and the entire septic system beyond the 100-foot setback. On April 22, 2000, the District granted a variance to the requirements of the District's wastewater disposal regulations to allow the applicants to install a raised bed drain field on the property to maintain a three-foot separation to groundwater. The District found that the seasonal high groundwater of the site does not allow strict compliance with its regulations, but that the variance will not result in a cumulative adverse detrimental effect on surface or ground waters or materially adversely affect the condition of adjacent watercourses or wetland or the conditions of subsurface water under adjacent properties. To prevent adverse impacts to surface or ground waters, the District will inspect the septic system for effectiveness every two to three years and conduct on-call visits as necessary. On May 24, 2000, the District granted conditional final design approval for the installation of the proposed septic system. The Commission therefore finds that the septic system does not impact the biological productivity and quality of coastal waters and is consistent with Section 30231 of the Coastal Act.

The proposed septic tank, pump chamber, and pressure lines are located completely underground, and access to the tank and pump chamber are provided by lids and manholes raised two inches from the ground surface. Two feet of the approximately four-foot-tall intermittent sand filter will be above ground and visible. The installation of the septic tank, pump chamber, and pressure lines will require excavation of approximately 60 cubic yards of fill with the use of a backhoe. This work will result in minor temporary disturbance impacts within 100 feet of Bolinas Lagoon. Occasional maintenance and inspection of the system will also cause minor disturbance impacts within 100 feet of the lagoon. Maintenance consists of pumping sludge from the septic system every two to three years. The District's inspection of the septic system, conducted about once every one to three years, consists of surveying the condition of the ground surface and septic tank, measuring scum and sludge levels in the septic tank, testing the quality of effluent, the operation of the pump, and the alarm system, and inspecting the sand filter, distribution bed, and other system components. However, because the disturbance associated with the installation of the septic system will be limited to a short-term temporary disturbance only, and the maintenance and inspection of the system will cause only minor and occasional disturbance, the Commission finds that the proposed installation and maintenance of a septic system do not have the potential to significantly degrade the habitat value of the lagoon. Therefore, the Commission finds that the septic system as proposed conforms with Section 30240(b) of the Coastal Act.

The applicants also propose to locate a 72-square-foot enclosure for a 325-gallon propane tank about 80 feet from Bolinas Lagoon and 10 feet from the Dipsea Road right-of-way (Exhibit 4, Project Plan). Like the construction of the septic system, the construction of the propane tank enclosure will create minor temporary disturbance impacts within 100 feet of the lagoon. Refilling the propane tank approximately once every month will also produce minimal disturbance. The refilling is done by connecting hoses from the propane truck parked on Dipsea Road to the tank and takes less than an hour. This activity will not significantly degrade the habitat value of the lagoon. The minimal temporary disturbance caused by refilling the propane tank may actually be less than that caused by the use of Dipsea Road itself, since the right-of-

way in the project vicinity is located within 100 feet of Bolinas Lagoon. Since the limited activity associated with the propane tank and enclosure does not constitute disturbance that would significantly degrade the habitat value of the lagoon, the Commission finds that the propane tank and enclosure as proposed are consistent with Section 30240(b) of the Coastal Act.

The applicants propose the construction of a 1,440-square-foot concrete and brick patio between the residence and the lagoon. The patio and residence are sited approximately 80 and 100 feet, respectively, from the adjacent lagoon. Approximately 800 square feet of the patio is within 100 feet of the lagoon. In past permit actions, the Commission has required a buffer of 100 feet between new development and sensitive coastal resources. Specifically related to the Seadrift area, in 1984 the Commission certified an amendment to the County Local Coastal Program to increase the number of developable lots on the south side of Dipsea Road, across the street from Bolinas Lagoon. In its action approving the LCP amendment, the Commission recognized the LCP's requirements for a 100-foot buffer "to be maintained in a natural condition along the entire periphery of the lagoon (CCC 1984)". (The LCP policies for the 100-foot buffer are contained in Appendix B.) The findings for the amendment note that the lots created by the amendment are located greater than 100 feet away from Bolinas Lagoon and thus are consistent with the LCP requirements for a 100-foot development buffer around Bolinas Lagoon. The applicant was evidently aware of the 100-foot buffer policy at the time that the permit application was submitted, as the buffer is clearly indicated on the project plans (Exhibit 4). Additionally, the subdivision map for Norman's Seadrift Subdivision, within which the project site is located, shows the 100-foot wetlands setback (Exhibit 3).

As discussed above, the proposed septic system and propane tank and enclosure will result in only minor disturbance impacts during construction and occasional maintenance and therefore will not significantly affect the habitat value of the lagoon. The residence will produce some disturbance impacts due to construction and use, but generally the main uses of the residence are enclosed in the house and are not likely to directly disturb wildlife activity in the lagoon. However, use of the patio will likely cause frequent and regular disturbance to birds and other wildlife that use the lagoon throughout the lifetime of the development. Such disturbance will interfere with foraging, resting, and other essential subsistence activities of wildlife in the lagoon and may eventually lead to long-term adverse effects on individuals, species populations, and wildlife communities (Knight and Cole 1995). Human activities may impact migratory birds that fly great distances and make limited stops at the lagoon to feed and rest. Repeated disturbance can force birds to consume five times their normal intake to maintain body weight because extra energy is expended in disturbance-related flight (Ports of Los Angeles and Long Beach 2000). The increased time spent watching for and reacting to disturbances may also cause a decrease in the food intake of the birds. Furthermore, the LCP states:

*...(T)he significant coastal issue at Seadrift is the potential impact of development on wildlife resources...Residential development at Seadrift introduces increased human and pet population which can be disturbing to wildlife, particularly the shorebirds that feed in the lagoon...For the most part, the potential of most impacts is only indirectly related to the specific location of new development at Seadrift. However, the location and intensity of future development can do much to either intensify or mitigate such impacts.*  
[emphasis added]

The Commission finds that the proposed placement of the patio within 100 feet of the lagoon would significantly degrade the habitat value of the lagoon. The Commission therefore imposes

**Special Condition 3** to require the applicants to remove the portions of the concrete and brick patio within 100 feet of the lagoon. The removal of this portion of the patio still allows the 600 square-foot patio proposed outside of the 100-foot buffer and is consistent with the Marin County LCP requirements to maintain a buffer strip with a minimum width of 100 feet in a natural condition along the periphery of the lagoon. As conditioned, the proposed project will not significantly degrade the habitat value of Bolinas Lagoon and is compatible with the continuance of the environmentally sensitive habitat area, consistent with Section 30240(b) of the Coastal Act.

In addition, the Commission notes that future development on the site such as additions to the residence, construction of outbuildings, or installation of fencing could be sited and designed in a manner that would result in adverse impacts to the lagoon. Much of this kind of development is normally exempt from the need to obtain coastal development permits pursuant to Section 30610 of the Coastal Act as an addition to an existing structure. Thus, the Commission would not normally be able to review such development to ensure that impacts to sensitive habitat are avoided.

To avoid such impacts to coastal resources from the development of otherwise exempt additions to existing residences, Coastal Act Section 30610(a) requires the Commission to specify by regulation those classes of development that involve a risk of adverse environmental effects and require that a permit be obtained for such improvements. Pursuant to Section 30610(a) of the Coastal Act, the Commission adopted Section 13250 of Title 14 of the California Code of Regulations. Section 13250(b)(6) specifically authorizes the Commission to require a permit for additions to existing single-family residences that could involve a risk of adverse environmental effects by indicating in the coastal development permit issued for the original structure that any future improvements would require a coastal development permit. As noted above, certain additions or improvements to the approved residence could involve a risk of adverse impacts to the lagoon adjacent to the site. Therefore, in accordance with provisions of Section 13250(b)(6) of Title 14 of the California Code of Regulations, the Commission imposes **Special Condition 4** to require a coastal development permit or a permit amendment for all future development on the subject parcel that might otherwise be exempt from coastal permit requirements. This condition will allow future development to be reviewed by the Commission to ensure that future improvements will not be sited or designed in a manner that would result in adverse lagoon impacts. **Special Condition 4** also requires recordation of a deed restriction to ensure that all future owners of the property are aware of the requirement to obtain a permit for development that would otherwise be exempt. This requirement will reduce the potential for future landowners to make improvements to the residence without first obtaining a permit as required by this condition.

The Commission also notes that the future development deed restriction requirement is consistent with the surrounding open space uses of the adjacent properties to the west (see Section 3.6) and with Lagoon Protection Policy 18 of the County LUP (Unit 1) and Sections 22.156.130.G(4) and 22.57.96(2)(b) of the Zoning Ordinance which establish a 100-foot buffer from Bolinas Lagoon (Appendix B).

Finally, the applicants propose to landscape the distribution bed with plants and shrubs, including pride of Madeira, a perennial shrubby species. No landscaping is proposed between the residence and the lagoon. Because roots extending beyond 12 inches into the soil may block pipes or infiltrate gravel and reduce or cease septic system effectiveness, the Stinson Beach

County Water District recommends that property owners not plant trees or large shrubs on or near sand filters, leachfields or mounds of pressurized or gravity septic systems. In particular, the District notes that the *Echium* species (to which pride of Madeira or *Echium fastosum* belongs) produces deep roots that cause difficulties for septic systems. Effluent that is treated improperly due to root interference with the septic system may enter Bolinas Lagoon and impact the biological productivity of its coastal waters. For this reason, the proposed planting of pride of Madeira over the septic system has the potential to significantly degrade coastal water quality. The Commission therefore imposes **Special Condition 5** to require the applicants to submit a revised landscaping plan and to landscape the area over the septic system only with plant species with roots that do not grow longer than 12 inches deep. The landscaping plan, showing the types of plants and the locations of plantings, will be reviewed and approved by the Executive Director to ensure that the landscaping will not significantly interfere with the function of the septic system. As conditioned, the proposed development will not adversely affect the biological productivity and the quality of coastal waters and is designed to prevent impacts to environmentally sensitive habitat areas, in conformance with Sections 30231 and 30240(b) of the Coastal Act.

### 3.5 Erosion and Polluted Runoff

Section 30231 of the Coastal Act states:

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

The existing project site is relatively flat and slopes approximately 1.2 percent in the direction of Bolinas Lagoon. The applicants' geotechnical investigation characterizes the substrate as medium dense fine-grained gravelly sand with some sandstone cobble (SHA 2000). This sandy substrate allows a rapid rate of percolation into the water table relative to other soil types.

The project involves a minimal amount of grading. Approximately 60 cubic yards of material will be excavated for the septic tank and sand filter and leachfield. The excavated material will be used on site to construct a raised disposal bed for the septic system and to raise the grade of the driveway and walkway. The applicants state that little to no excavation is required for the foundation of the residence.

To address erosion that may occur during project construction, the applicants propose to place a six-inch layer of base rock at the construction entrance of the project site to reduce the transport of mud onto the street and to control dust. The base rock will be reused to raise the driveway and parking area after the residence construction is completed. The applicants further propose to install a two-foot-tall silt fence at a minimum of 25 feet from Bolinas Lagoon. To ensure that the construction of the silt fence creates minimal disturbance within the lagoon setback, the Commission imposes **Special Condition 6** to require the applicants to

install silt fencing as far from the mean high tide line of Bolinas Lagoon as feasible, but in no case within 25 feet of the mean high tide line of Bolinas Lagoon. As conditioned, the silt fence protects the biological productivity and the quality of coastal waters and is consistent with Section 30231 of the Coastal Act.

As proposed, the project will create over 4,900 square feet of new impervious surface. This includes the rooftops of the residence and garage, the paved walkway, driveway, parking area, and propane tank platform, and the concrete and brick patio. To control runoff from the residence, the applicants propose to install rain gutters on the roof and place splash blocks at the bottom of roof leaders to dissipate water flow and prevent erosion at the gutter outlets. This runoff will be allowed to percolate on site between the residence and Bolinas Lagoon. A drainage swale is also proposed to carry runoff from the roof and paved parking area around the west side of the residence and discharge to the undeveloped area between the residence and the lagoon. The raised walkway slopes toward the lagoon, carrying runoff from the south side of the residence. The driveway is proposed to slope and direct runoff toward Dipsea Road.

Although the project area is sandy and capable of treating precipitation onsite in its currently undeveloped state, erosion or polluted runoff caused by the development may enter Bolinas Lagoon and adversely impact the biological productivity and quality of its waters, in conflict with Section 30231 of the Coastal Act. In addition, the Marin County LCP, which serves as guidance for the Commission in its review of the proposed coastal development permit, states that, "High levels of ground coverage (buildings, driveways, decks, etc.) can significantly increase peak storm water flows and velocities. This increased storm run-off over suburban density developments adds increased levels of heavy metals, hydrocarbons and nitrates into the lagoon." As discussed in Section 3.4 above, Bolinas Lagoon is a significant wildlife area. The Gulf of the Farallones National Marine Sanctuary considers urban runoff a threat to sanctuary waters and one of its major resource management issues, in addition to oil spills, sewage, toxic chemicals, petroleum products and pesticides. To protect the biological productivity and quality of its waters, the Sanctuary prohibits discharges such as surface runoff.

To ensure that the proposed development controls runoff and maintains the biological productivity of coastal waters, the Commission imposes **Special Conditions 6 and 7** to require the applicants to employ best management practices to prevent the runoff of sediments into Bolinas Lagoon. **Special Condition 6** requires the applicants to submit an erosion control plan to minimize the potential sources of sediment, control the amount of runoff, and retain sediment on-site during construction. The plan must also limit the application, generation, and migration of toxic substances and ensure the proper storage and disposal of toxic materials without causing significant nutrient runoff to Bolinas Lagoon. **Special Condition 7** requires the applicants to submit a stormwater pollution prevention plan to control the volume, velocity, and pollutant load of stormwater on the developed site after project construction. As conditioned, the development will not result in significant impacts to coastal water quality during or after construction. The Commission therefore finds that the proposed development will protect the biological productivity and the quality of coastal waters and conforms with Section 30231 of the Coastal Act.

### 3.6 Public Access

Section 30210 of the Coastal Act 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.*

Section 30211 of the Coastal Act states:

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

Section 30212 of the Coastal Act states:

*(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 exist 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.*

In its application of these policies, the Commission is limited by the need to show that any denial of a permit application based on these sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to offset a project's adverse impact on existing or potential public access.

The project parcel is located between the first public road and the sea but within a gated private community. The applicants do not propose public access on the parcel, and the County does not designate the parcel for public access. However, the County's Open Space District does retain an open space easement and a limited pedestrian access easement over a strip of lagoon-front land west of the project parcel. This approximately 15-acre strip on the north side of Dipsea Road, from 16 Dipsea Road to near the western end of Dipsea Road, is owned by the Seadrift Homeowners Association. Periodic use of the land is allowed for educational and environmental organizations only by appointment with the Association (Miska, pers. comm.). In particular, the Association has permitted organized groups to access the land to observe birds on the Bolinas Lagoon (Kamieniecki, pers. comm.). Thus, the land adjacent to the project parcel does not provide unrestricted public access to Bolinas Lagoon. Public access around Bolinas Lagoon is guaranteed only below the mean high tide line.

Since the proposed development will not increase the demand for public access to the shoreline and will have no other significant adverse impacts on existing or potential public access, the Commission finds that the proposed project is consistent with Sections 30210, 30211, and 30212 of the Coastal Act.

#### **4.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

Section 13096 of the California Code of Regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the

application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effects which the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, as conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impacts which the development may have on the environment. Therefore, the Commission finds that the proposed project has been conditioned to mitigate the identified impacts and can be found consistent with Coastal Act requirements to conform to CEQA.

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**EXHIBITS:**

1. Regional map
2. Project location map
3. Assessor parcel map
4. Project site plans, floor plan, and residence elevations
5. Local geologic map

**APPENDICES:**

- A - Substantive File Documents
- B - Marin County LCP Policies related to 100-foot setback from Bolinas Lagoon

## APPENDIX A: SUBSTANTIVE FILE DOCUMENTS

Bay Area Stormwater Management Agencies Association. *Start at the Source: Design Guidance Manual for Stormwater Quality Protection*. 1999.

Bolinas Lagoon Ecosystem Restoration 2001. Web site [www.bolinaslagoon.org](http://www.bolinaslagoon.org).

California Coastal Commission. Findings for Commission approval of Local Coastal Program Amendment 1a-84, March 8, 1984, CDP 2-00-014 (McCullagh), July 13, 2000, and CDP 2-00-017 (Nickel), September 15, 2000.

Knight, Richard L. and David N. Cole. *Wildlife Responses to Recreationalists in Wildlife and Recreationists: Coexistence Through Management and Research*, Richard L. Knight and Kevin J. Gutzwiller, Editors, 1995.

Marin County Local Coastal Program, Unit 1, certified by the California Coastal Commission on June 3, 1981.

Ports of Los Angeles and Long Beach. *Harbor Safety Plan*. November 2000.

SalemHowes Associates, Inc. *Geotechnical Investigation, Nelsen Residence, 16 Dipsea Road, Stinson Beach, California*. January 24, 2000.

Stinson Beach County Water District. *1999 Bi-Annual Water Quality Report*. 1999.

Sycamore Associates LLC. *Biological Habitat Assessment of a Proposed Single-Family Residence at 16 Dipsea Road, Stinson Beach, Marin County, California*. January 22, 2001.

United States Army Corps of Engineers. *Preliminary Analysis the Bolinas Lagoon Study*. 1997.

### Personal communication:

Greg de Nevers, Audubon Canyon Ranch, February 8, 2001.

Richard Dinges, Stinson Beach County Water District, February 22 and 23, 2001.

Alicia Giudice, Marin County Planning Department, February 8, 2001.

Richard Kamieniecki, Seadrift Homeowners Association, February 12, 2001.

Ron Miska, Marin County Open Space District, February 13, 2001.

Norman Nordquist, de Carli's Petaluma Butane, February 22, 2001.

Pat Norton, Stinson Beach Fire Protection District, February 22 and 23, 2001.

Trish Tatarian, Sycamore Associates, February 2, 2001.

John Winkelman, U.S. Army Corps of Engineers, February 7, 2001.

## **APPENDIX B: MARIN COUNTY LCP POLICIES RELATED TO 100-FOOT SETBACK FROM BOLINAS LAGOON**

### **Land Use Plan Policy**

#### **Bolinas Lagoon Protection Policy 18:**

*To the maximum extent feasible, a buffer strip, a minimum of 100 feet in width, shall be maintained in natural condition along the periphery of all wetlands as delineated by the Department of Fish and Game and in accordance with Section 30121 of the Coastal Act and with the criteria developed by the U.S. Fish and Wildlife Service. No uses other than those dependent upon the resources shall be allowed within the buffer strip.*

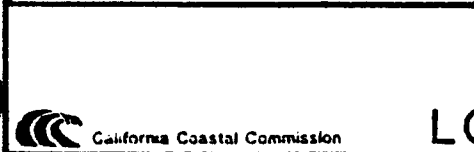
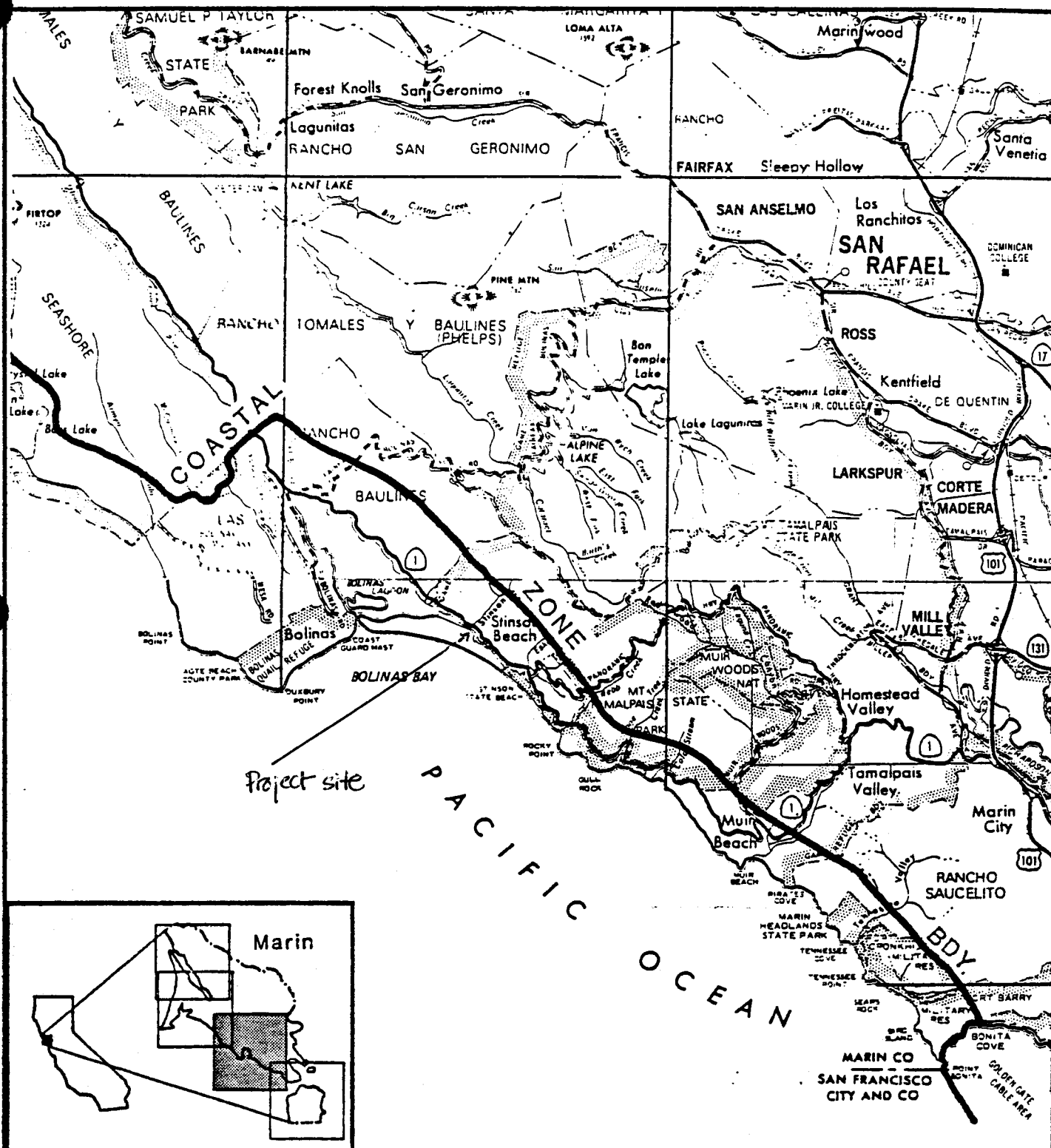
### **Zoning Ordinance Policies**

#### **22.56.130.G Stream and Wetland Resource Protection:**

- (4) *Development applications on lands surrounding Bolinas Lagoon and other wetlands as identified on the appeals area map(s) shall include the designation of a wetland buffer area. The buffer area shall include those identified or apparent wetland related resources but in no case shall be less than a minimum of 100 feet in width from the subject wetland. To the maximum extent feasible, the buffer area shall be retained in a natural condition and development located outside the buffer area. Only those uses dependent upon the resources of the wetland shall be permitted within the wetland buffer area.*

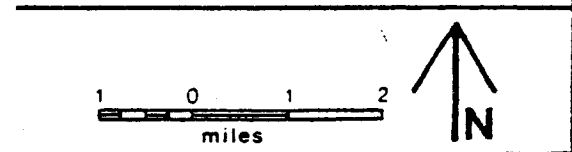
#### **22.57.96 Specific Master Plan Areas:**

- (2)(b) *All improvements shall be located a minimum of 100 feet from the waters of Bolinas Lagoon.*



County of Marin

EXHIBIT NO. 1
APPLICATION NO.
2-00-033 (NELSEN)
REGIONAL MAP



Sheet 3 of 3



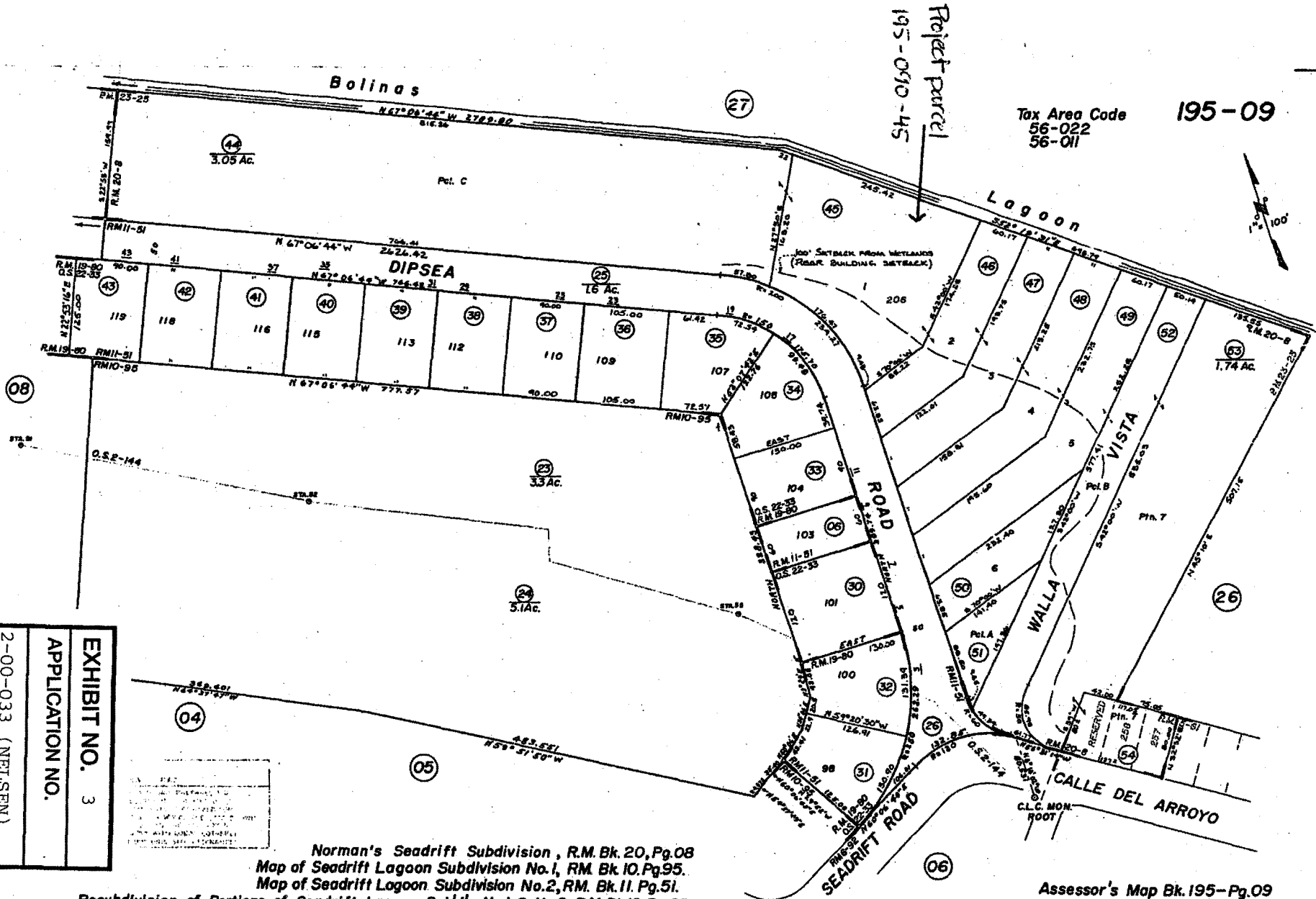
EXHIBIT NO. 3
APPLICATION NO.
2-00-033 (NELSEN)
APN MAP

NOTICE: This map is a preliminary map and is subject to change without notice. It is not to be used for legal purposes. The Assessor's Office is not responsible for any errors or omissions. The Assessor's Office is not responsible for any errors or omissions.

Norman's Seadrift Subdivision, R.M. Bk. 20, Pg. 08  
Map of Seadrift Lagoon Subdivision No. 1, R.M. Bk. 10, Pg. 95.  
Map of Seadrift Lagoon Subdivision No. 2, R.M. Bk. 11, Pg. 51.  
Resubdivision of Portions of Seadrift Lagoon Sub'd's No. 1 & No. 2, R.M. Bk. 19 Pg. 80

NOTE - Assessor's Block Numbers Shown in Ellipse's  
Assessor's Parcel Numbers Shown in Circles

Assessor's Map Bk. 195 - Pg. 09  
County of Marin, Calif.



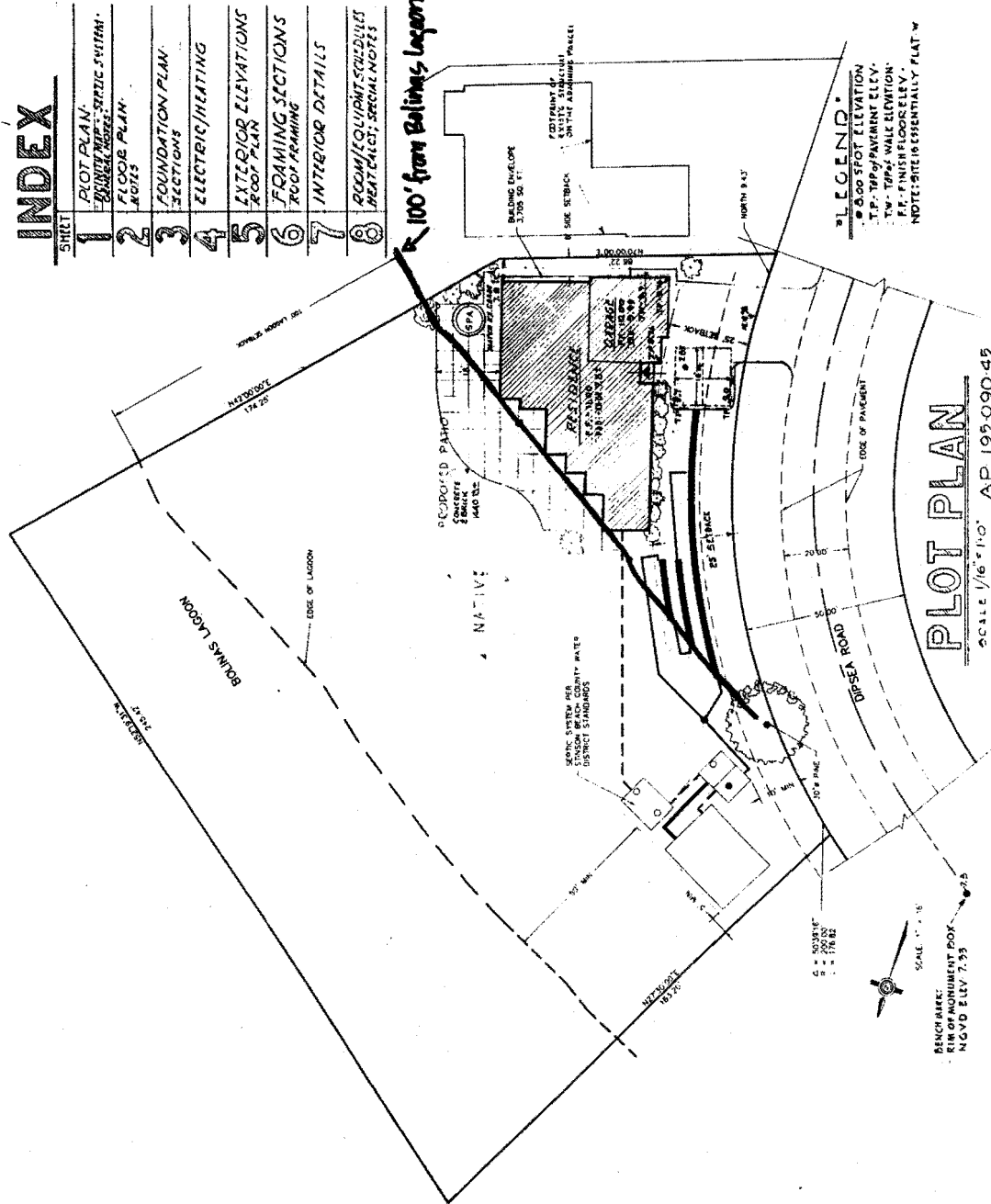
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SHEET	
1	PLOT PLAN: EXISTING IMPROVEMENTS WITHIN FLOOD PLAN NOTES
2	FOUNDATION PLAN: SECTIONS
3	ELECTRIC/HEATING
4	EXTERIOR ELEVATIONS ROOF PLAN
5	FRAMING SECTIONS ROOF FRAMING
6	INTERIOR DETAILS
7	ROOM/EQUIPMENT SCHEDULES HEAT CALC. SPECIAL NOTES

R 100' from Bolinas lagoon



**EXHIBIT NO. 4**

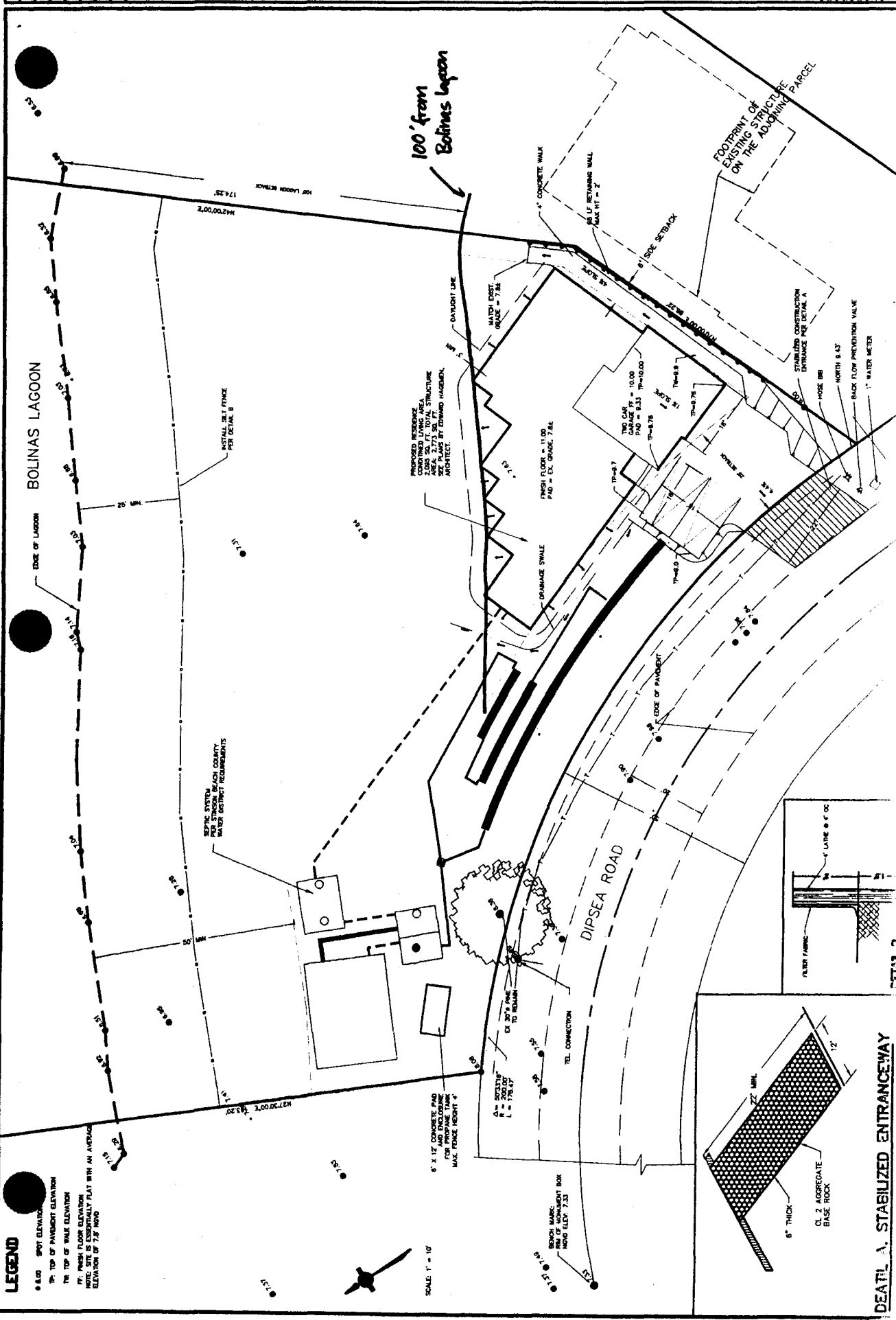
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2-00-033 (NELSEN)  
(4 pages)

**SITE PLANS, FLOOR PLANS,  
RESIDENCE ELEVATIONS**

**GENERAL NOTES:**

- [illegible]



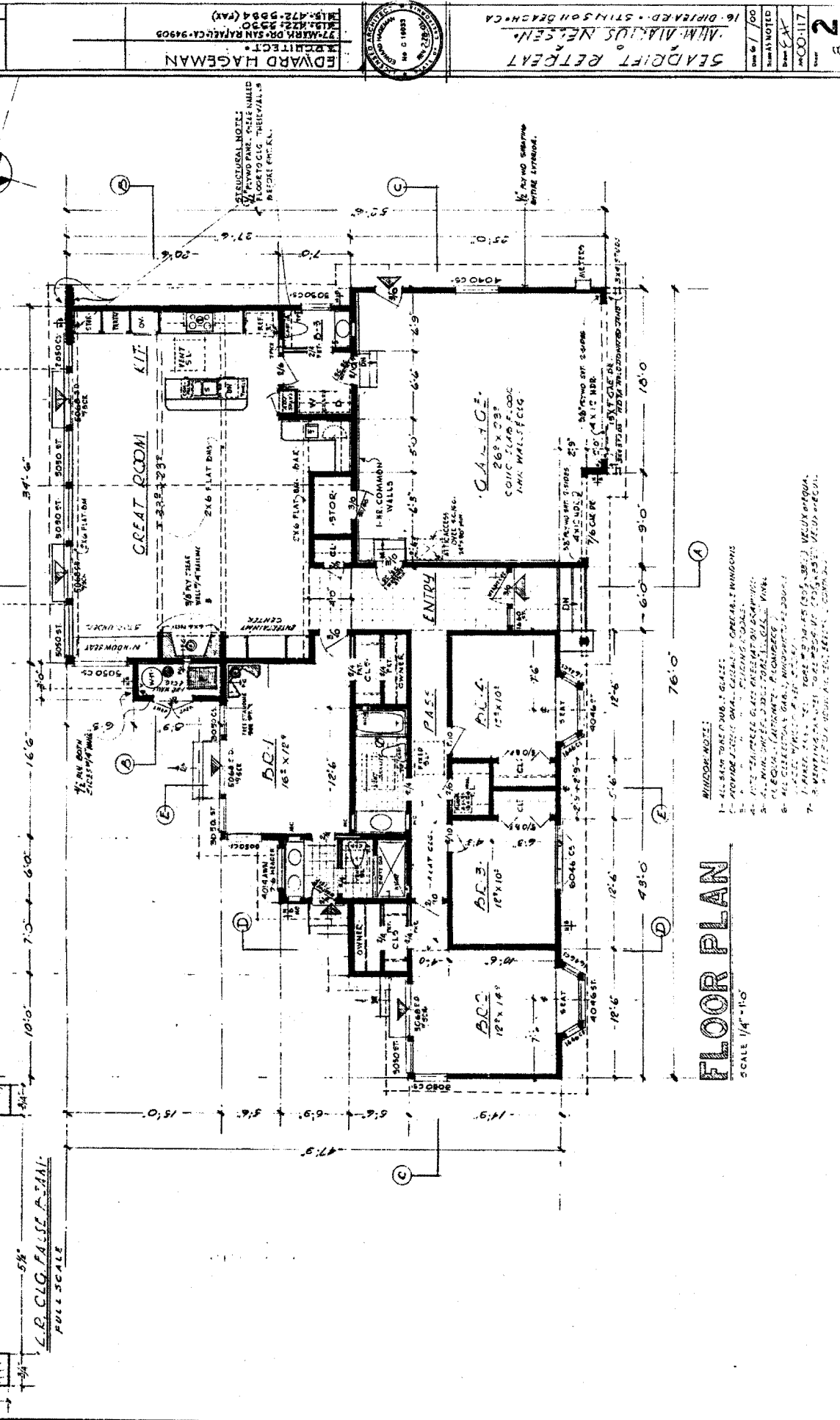
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L.R. CLO. FLOOR PLAN

FULL SCALE



# FLOOR PLAN

SCALE 1/4"=1'-0"

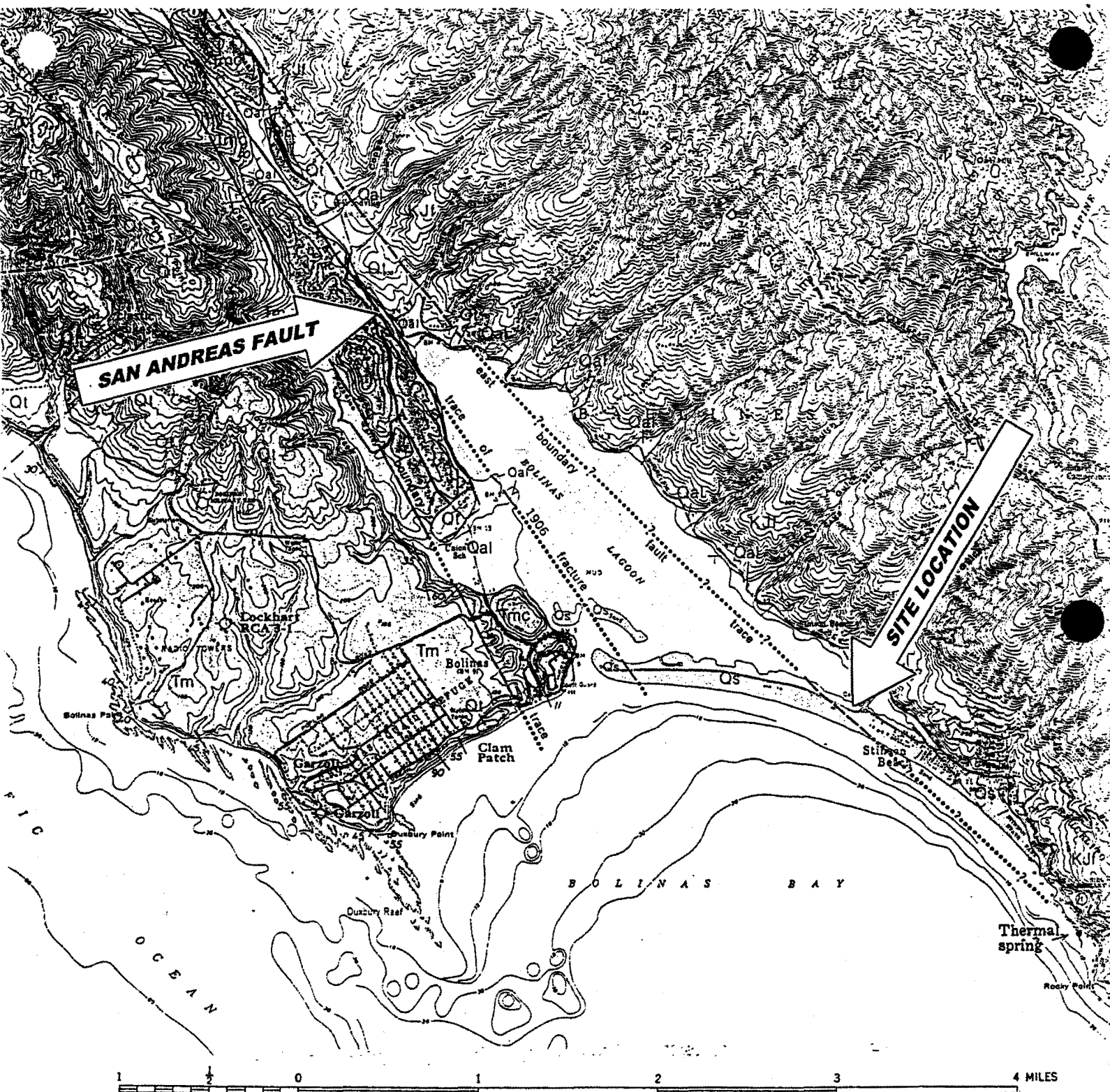
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EDWARD HAGEMAN  
ARCHITECT  
37 MARSH DR. S.W. ALBUQUERQUE, N.M. 87102  
TEL. 472-9994 (FAX)  
16. DIRECTION - STINSON DESIGN CO.

SEA DRIFT RETREAT  
ALBUQUERQUE, N.M.

2





See following page for  
for explanation of  
symbols on the map



# LOCAL GEOLOGIC MAP

1" = 4000'

From: Galloway<sup>(1)</sup>

EXHIBIT NO. 5

APPLICATION NO.

2-00-033 (NELSEN)

LOCAL GEOLOGIC MAP