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Appeal Received:	2/15/2016
Action Deadline:	None
Staff:	S. Fiala - SF
Staff Report:	3/25/2016
Hearing Date:	4/13/2016

APPEAL OF EXECUTIVE DIRECTOR'S DETERMINATION

Appeal Number: **A-2-MAR-08-028-A1-EDD**

Applicant/Appellant: **Lawson's Landing Inc.**

Location: Lawson's Landing facility located at 137 Marine View Drive in the Tomales Dunes complex at the mouth of Tomales Bay, south of Dillon Beach, in Marin County.

Description: The Applicant submitted an amendment application that included a proposed sewage treatment system in an area that was designated as ESHA by the Commission in its original CDP decision. Because this area is ESHA, and because the terms and conditions of the Commission's original CDP decision only allow resource-dependent development within this ESHA (i.e., restoration), the Executive Director was required by the Commission's regulations to reject the amendment application because it would lessen and avoid the intended effect of the Commission's CDP action. As allowed by the regulations, the Applicant is appealing the Executive Director's determination to the Coastal Commission.

Staff Recommendation: Concur with the Executive Director's determination/deny the appeal

SUMMARY OF STAFF RECOMMENDATION

Lawson's Landing is a 960-acre property that includes a 75-acre campground located in the Tomales Dunes complex at the mouth of Tomales Bay, immediately south of Dillon Beach in Marin County. On July 13, 2011, the Commission approved a coastal development permit (CDP) for both new and after-the-fact recreational and agricultural development and uses on the

property, including: recreational vehicle and tent spaces and 20 visitor-serving recreational vehicles with drains; day use parking; boating facilities, including for mooring and launching; support facilities including store, offices, recreational center, employee housing, boat sales and repair, fuel service and storage; road improvements; a 465-acre Natural Resource Conservation Service (NRCS) conservation easement; and habitat restoration activities (CDP A-2-MAR-08-028).

In its CDP approval, the Commission designated all existing habitat areas on the site (including the foredunes, central dune scrub, bare sands, and deflation plains) as environmentally sensitive habitat areas (ESHA) pursuant to the Coastal Act. The Commission's action made clear that even ESHA areas that had been disrupted by unpermitted development were still considered ESHA regardless of their condition. The Commission's adopted findings state that except where development had been previously authorized, the entirety of Area 6 is considered ESHA. Special Condition 2(C)(6) of the CDP states that no new development is authorized in Area 6 unless: the development is proposed in previously legally developed areas; the Permittee provides evidence that such previous development was authorized; and an amendment to the CDP is approved.

On December 31, 2015, the Applicant, Lawson's Landing Inc., requested an amendment to its CDP to allow development in Area 6, including construction of a septic leach field in a portion of Area 6 that supports central dune scrub vegetation, that has never been legally developed, and that is, therefore, deemed ESHA pursuant to the terms and conditions of the CDP. In response to the amendment request, the Executive Director rejected the amendment application (**Exhibit 7**), pursuant to Section 13166(a) of the Commission's regulations,[1] which states as follows:

> *The executive director shall reject an application for an amendment to an approved permit if he or she determines that the proposed amendment would lessen or avoid the intended effect of an approved or conditionally approved permit unless the applicant presents newly discovered material information, which he could not, with reasonable diligence, have discovered and produced before the permit was granted.*

The Executive Director determined that the proposed amendment was designed to extend the wastewater treatment system development into ESHA where that was not allowed pursuant to the terms and conditions of the Commission's CDP, and thus that the amendment would lessen and avoid the intended effect of the CDP.[2] The Commission's regulations thus *require* the Executive Director to reject the amendment application.[3] In his rejection, the Executive Director made clear that other elements of the proposed amendment could be considered (i.e., the application included a wide variety of proposed changes and development, of which the proposed development in ESHA was but a small part), and recommended that the Applicant pursue those elements of the project and abandon the proposed development of a sewage treatment system in ESHA. Instead of pursuing that course of action, the Applicant chose to

[1] Title 14, Division 5.5, California Coastal Commission Regulations (CCR).

[2] Such development would also be inconsistent with the Coastal Act's ESHA policies.

[3] CCR Section 13166(a) states "The executive director **shall** reject an application…" (emphasis added).

appeal the Executive Director's rejection of the amendment application, as is allowed by the Commission's regulations.[4]

In its appeal, the Applicant asserts that it is presenting newly discovered material information that should allow for consideration of such development, and in particular the Applicant asserts that the soils in Area 6 are well-suited for supporting a septic leach field. Staff does not believe that the Applicant has presented any new information that could not with reasonable diligence have been discovered and presented before the CDP was granted, which is the standard pursuant to CCR Section 13166(a) that must be met to allow Commission consideration of such an amendment.

The potential environmental impacts associated with, and alternative locations for, the proposed Lawson's Landing wastewater treatment system, including a treatment facility and septic leach field, were explored in depth through the Master Plan Environmental Impact Report (EIR) finalized in 2008, and through the CDP process, first at the County level and then through the appeal to the Commission. The Scale House Hayfield area, east and uphill of Area 6, was determined through the EIR and CDP process to be the least environmentally damaging location for the septic leach field consistent with Coastal Act policies protecting agricultural resources, water quality and sensitive habitats. In other words, although the Applicant asserts it as new information, the Commission already debated and decided on this portion of the project, including that the eastern portion of Area 6 was required to be set aside as ESHA and left undeveloped. The Applicant's information is not new, and this issue was already discussed, deliberated on, and a decision rendered by the Commission in 2011. The Commission's regulations do not allow a future Commission to reconsider a prior Commission's action in this respect, and require that this amendment request be rejected.

Staff notes that it has discouraged the Applicant from submitting this amendment application. Commission staff attempted to encourage the Applicant to instead focus its efforts on other aspects of a proposed amendment application that didn't raise such issues. Staff communicated with the Applicant and/or its representatives via phone calls in 2015 on October 12th and October 28th; via emails on October 19th, October 28th, November 12th, and November 13th; and during an in-person meeting on December 17th. during which time, staff made clear its opinion that an amendment application proposing new development in ESHA would be required to be rejected by the Executive Director pursuant to the Commission's regulations, unless the Applicant presented newly discovered material information, which it could not, with reasonable diligence, have discovered and produced before the Commission acted on the CDP. Despite this communication, the Applicant chose to submit the amendment application nonetheless. At that point, staff again communicated with the Applicant and again encouraged the Applicant to submit a revised amendment application for the portion of the proposed development outside of ESHA in order to move forward on those portions of the proposal. The Applicant chose not to pursue that process, instead focusing its efforts on an appeal to the Commission.

[4] CCR Section 13166(a)(1) states: "An applicant may appeal the executive director's determination to the commission…."

Staff continues to be prepared to work with the Applicant on a revised CDP amendment application that does not include this disallowed component, including as articulated to the Applicant in staff's letter dated January 29, 2016 (**Exhibit 7**). Thus, staff recommends that the Commission concur with the Executive Director's determination to reject the proposed amendment application. The single motion necessary to implement staff's recommendation is found on page 5 below.

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I. MOTION AND RESOLUTION

Staff recommends a **NO** vote on the motion below. Failure of this motion, as is recommended by staff, will result in the Commission upholding the Executive Director's determination rejecting the amendment application and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of Commissioners present.

Motion: *I move that the Commission overturn the Executive Director's decision to reject Coastal Development Permit Amendment Application Number A-2-MAR-08-028-A1, and I recommend a* ***no*** *vote.*

Resolution: *The Commission hereby concurs with the Executive Director's determination to reject Coastal Development Permit Amendment Application Number A-2-MAR-08-028-A1 on the grounds that the proposed amendment would lessen or avoid the intended effect of an approved or conditionally approved permit and that there is no newly discovered material information which, in the exercise of reasonable diligence, could not have been discovered and produced before the permit was granted.*

II. CDP AMENDMENT REGULATIONS

The Coastal Commission's regulations[5] identify the procedures that apply to proposed CDP amendments. Among other things, those procedures require a threshold evaluation of proposed amendments by the Executive Director to determine if the amendment would lessen or avoid the intended effect of the Commissions CDP action. CCR Section 13166(a) states:

The executive director shall reject an application for an amendment to an approved permit if he or she determines that the proposed amendment would lessen or avoid the intended effect of an approved or conditionally approved permit unless the applicant presents newly discovered material information, which he could not, with reasonable diligence, have discovered and produced before the permit was granted.

Thus, unless an applicant provides newly discovered material information, which he could not, with reasonable diligence, have discovered and produced before the permit was granted, the Executive Director is required to reject such amendment application. This is not a discretionary decision for the Executive Director, rather the regulations make it clear that this is a mandatory requirement under such circumstances.[6] The regulations also make it clear that an applicant may appeal such an Executive Director determination to the Commission. CCR Section 13166(a)(1) states:

An applicant may appeal the executive director's determination to the commission. The appeal must be submitted in writing and must set forth the basis for appeal. The appeal must be submitted within 10 working days after the executive director's rejection of the

[5] Id (Title 14, Division 5.5, California Coastal Commission Regulations (CCR)).

[6] CCR Section 13166(a) states "The executive director **shall** reject an application…" (emphasis added).

> *amendment application. If timely submitted, the executive director shall schedule the appeal for the next commission hearing or as soon thereafter as practicable and shall provide notice of the hearing to all persons the executive director has reason to know may be interested in the application.*

The regulations allow the Commission to overturn an Executive Director's determination to reject a CDP amendment. In order to do so, the Commission would need to find that either: (1) the proposed amendment would not lessen or avoid the intended effect of an approved or conditionally approved permit, or (2) the Applicant has presented newly discovered material information that could not, with reasonable diligence, have been discovered and produced before the permit was granted. If the Commission overturns the Executive Director's determination, then the CDP application would be accepted for review by the Executive Director, and would be processed as a standard CDP amendment.

In this case, and as is described in more detail in the findings below, the Executive Director has rejected the Applicant's proposed CDP amendment, and the Applicant is appealing that rejection to the Commission. If the Commission should overturn the Executive Director's determination, then Commission staff would review the Applicant's proposed CDP amendment application for completeness over the 30-day period extending from the date of such Commission decision, and would begin the amendment process with the Applicant. If the Commission should concur with the Executive Director's determination, then the CDP amendment would be rejected. The Applicant would be free to propose the other development in its application that does not raise these same rejection issues, and staff would be happy to work with the Applicant on such an application, but the Applicant could not propose such development in ESHA again.

III. CDP AMENDMENT DETERMINATION

A. PROJECT LOCATION

Lawson's Landing is a 960-acre property that includes a 75-acre campground located in the Tomales Dunes complex at the mouth of Tomales Bay, immediately south of Dillon Beach in Marin County (**Exhibit 1**). Access to the property is provided from Dillon Beach Road, Beach Avenue, and Cliff Street (**Exhibit 2**). The property is bounded by Tomales Bay to the south and Bodega Bay to the west. Lawson's Landing is incredibly rich in natural resources. Though no longer pristine, the Tomales Dunes Complex consists of coastal foredunes, central dune scrub, bare sands, and deflation plains, including dune-slack wetlands and uplands, that together constitute rare habitat that performs the important ecosystem function of supporting a rare plant community, rare plant and animal species, including the federally-threatened California red-legged frog and western snowy plover.

The certified Marin County LCP provides guidance that Lawson's Landing be retained as a public recreational area, and states that it has the potential for expansion, but that any such expansion must be based on a plan that takes into account environmental constraints. The property spans both the Coastal Commission's original permit jurisdiction and the County's LCP permit jurisdiction.

B. ORIGINAL CDP ACTION AND HISTORY

In December 2006 the Commission issued a Consent Cease and Desist Order to the Applicant that recognized that there was significant unpermitted development at Lawson's Landing that required a CDP, including unpermitted grading, fill of wetlands, and the construction or placement of trailers, a campground, mobile homes, roads, restrooms, water lines and water tanks, sewage lines and leach fields, a sewage disposal station, sheds, garages, parking lots, a boat house, a snack bar, a shop, a boat mooring facility, boat yard, boats, a laundry facility, and a pier. Pursuant to the Order, Commission staff coordinated closely with Marin County staff and the Applicant on processing CDPs: a Marin County CDP for development within their jurisdiction, and a Coastal Commission CDP for development in the Commission's retained CDP jurisdiction.

On November 18, 2008, Marin County approved a CDP, Master Plan, and Tidelands Permit. The County's CDP decision was appealed to the Commission[7] with Appellants raising issues of consistency with LCP wetland, ESHA, visitor-serving, recreation, and public services policies. On January 7, 2009, the Commission found that the appeals raised substantial issues of conformance with the wetland, ESHA, visitor-serving, recreation and public services policies of the certified LCP. Specifically, the Commission found that the County's action raised a substantial issue of conformance with LCP policies because the County-approved development: (1) was located within wetlands and within the required 100-foot buffer from wetlands; (2) was located immediately adjacent to central dune scrub sensitive habitat; (3) raised questions about the feasibility and timing of the new septic system; and (4) raised questions about residential uses in the C-RCR (resort-recreation) zone and whether the appropriate balance between public access and private interests was being met through the approval. The Commission had not yet acted on the portions of the project located in its retained CDP jurisdiction at that time. Ultimately, the County, the Applicant and the Executive Director agreed to consolidate the CDP application pursuant to Section 30601.3 of the Coastal Act, and thus the standard of review for the entire project was, and continues to be the Coastal Act.

On July 13, 2011, the Commission approved a CDP for both new and after-the-fact recreational and agricultural development and uses on the property, including: recreational vehicle and tent spaces and 20 visitor-serving recreational vehicles with drains; day use parking; boating facilities, including for mooring and launching; support facilities including store, offices, recreational center, employee housing, boat sales and repair, fuel service and storage; road improvements; a 465-acre Natural Resource Conservation Service (NRCS) conservation easement; and habitat restoration activities (CDP A-2-MAR-08-028).

Because much of the existing development at Lawson's Landing had not been approved by a CDP and was considered unpermitted, the Commission reviewed much of the project "after-the-fact". Where development is unpermitted, ESHA and wetland areas disrupted by the illegal development are still and must be considered ESHA and wetlands regardless of their current condition.[8] This conclusion is consistent with the Commission's longstanding practice of

[7] By two Coastal Commissioners as well as the Environmental Action Committee of West Marin, the Marin Audubon Society, the Sierra Club-Marin Group, and the Alliance of Permanent Trailers.

[8] See, for example, LT-WR, L.L.C. v. California Coastal Com. (2007) 152 Cal.App.4th 770, 796-707.

evaluating a site for Coastal Act consistency as if unpermitted development had not already occurred. Any other approach would reward an applicant for circumventing the Coastal Act's permit requirements by allowing the applicant to claim there was no ESHA and wetlands on-site even though the resources had been impacted or removed without the benefit of a required CDP.

In its natural state, the entire coastal Tomales Dunes complex at Lawson's Landing, consisting of foredunes, active unvegetated dunes, vegetated backdunes, dune swales and deflation plains, clearly meets the definition of ESHA contained in the Coastal Act. Significantly, all the pieces of this dune complex are still present today, albeit in a somewhat to significantly degraded condition. Therefore, the dune complex of foredunes, central dune scrub, bare sands, and deflation plains, including the dune-slack wetlands and uplands, is rare, performs the important ecosystem function of supporting a rare plant community, rare plant and animal species, including the federally-threatened California red-legged frog and western snowy plover, and is easily disturbed by human activities. Therefore, the Commission determined that all the existing habitat areas of the dune complex at Lawson's Landing were ESHA. Such areas include Areas 3, 4, and 5, Area 7, and the undeveloped portions of Areas 6 and 8 that are contiguous with the adjacent areas of extensive open space characterized by a mosaic of unvegetated sand and degraded central dune scrub.

Because two aspects of the Applicant's development proposal, the Lawson's Landing Center and the wastewater treatment system, were not after-the-fact development and were only conceptual at the time of the July 2011 CDP approval by the Commission, the approved CDP described possible future development phases to be handled by separate CDP amendments. First, a new "Lawson's Landing Center" would relocate the existing store, administration offices, storage, employee laundry, boat sales, boat storage, fuel storage, and storage containers, from their current location in Area 2 near the beach to Area 6 near the entrance of Lawson's Landing (**Exhibit 3**). The new Landing Center would require demolition of existing buildings in Area 6 and construction of a cluster of new buildings in the existing building development footprint. The new buildings would be one and two stories, not to exceed a 25-foot maximum height with a total floor area of about 15,000 square feet consistent with the existing building area. This future development proposal would represent a potential increase in land use intensity and vehicle traffic to the site. Accordingly, also included in any future CDP amendment proposal for this phase of development would be an analysis of potential project impacts, including an analysis regarding moving the primary road access for the campground from the existing access on Cliff Road to what is known as Sand Haul Road. In order to acknowledge the Applicant's future plans to redevelop Area 6, CDP A-2-MAR-08-028 Special Condition 2 stated that for Area 6:

a. *No development is authorized, including but not limited to relocation of boat and trailer storage, boat repairs and sales, fuel bunker, and fuel service, unless: (1) development is proposed in legally developed areas; (2) the Applicants provide evidence that such previous development was authorized; (3) an Amendment to this coastal development permit is approved.*

b. *No future development shall occur unless authorized consistent with the limitations on development identified in Special Condition 22.*

CDP A-2-MAR-08-028 Special Condition 22 states:

No development, as defined in Section 30106 of the Coastal Act shall occur in Areas 5-8 as shown in Exhibit 3[9] *except for:*

1. *The development authorized by this permit as identified in Special Conditions 1 and 2; and*
2. *The following development, if approved by the Coastal Commission as an amendment to this coastal development permit:*
   a. *Agriculturally-related development permitted consistent with the certified LCP, including the limitations on uses allowed within agriculturally zoned property; and*
   b. *Improvements to Sand Haul Road, consistent with the requirements of Special Condition 13.*

The approved CDP also described conceptual plans for a new sewage disposal system, proposed to be developed in the upland area known as "Scale House Hayfield" and "Scale House Field West Pasture," located on the northeast portion of the property. The plans consisted of two acres of leach field for winter operation plus spray irrigation in the dry season over a six-acre pasture (**Exhibit 5**). A Septic Tank Effluent Pumping (STEP) system with remote secondary treatment and disposal was also planned, with tanks sited in close proximity to the travel trailers and restrooms they would serve, with delivery of treated effluent to the leach field area via a proposed septic line located underneath existing roads. A wastewater treatment plant was proposed to produce advanced secondary treated effluent, suitable for water recycling with a subsurface drip dispersal system, and for spray irrigation of five to six acres of pastureland. The general location and proposed design for the new wastewater treatment and disposal system was identified at the time of Commission CDP approval, with the specifics to be determined through a follow up amendment to the CDP. Requirements for the new sewage disposal system identified in the original CDP were outlined in CDP A-2-MAR-08-028 Special Condition 8 as follows:

A. The Permittee shall construct the new wastewater treatment and disposal system, as generally depicted on Adobe Associates Sheets 2, 3 and 8, dated October 2010 (exhibit 3 of this Staff Report) and Questa Figure 1 "Test Location Map Lawson's Landing" (exhibit 42 of this Staff Report), and Questa Sheet 1 of 1 "Sand Point Proposed STEP Sewer Schematic Plan", dated 4/4/2008, and Questa Figure 1 "Typical STEP Unit Non Traffic Area" (exhibit 23 of this Staff Report) within three years of permit approval (by July 13, 2014).[10] *The Executive Director may extend this deadline to July 13, 2016 for good cause.*

B. BY JULY 13, 2012, or within such additional time the Executive Director may grant for good cause, the permittee shall submit a Coastal Development Permit Amendment Application for the new wastewater treatment and disposal system and abandonment of the 167 individual septic systems. The Application shall include the final plans for the wastewater treatment and disposal system as approved by the Regional Water Quality

[9] Illustrated in this report in Exhibit 4.

[10] See Exhibit 5 for the referenced exhibits from CDP A-2-MAR-08-028.

Control Board and the Marin County Environmental Health Services. Consistent with the provisions of Special Condition 2, the wastewater treatment and disposal system shall be located outside a 100-foot buffer area from all wetlands, outside a 50-foot buffer area for all central dune scrub ESHA, and 300-feet from California Red Legged Frog breeding ponds. The wastewater treatment and disposal system may not block public access to the coast nor significantly obstruct public views to the coast from significant public vantage points, and shall be of adequate capacity to process and dispose of all wastewater generated by the development.

C. APPLICANT'S PROPOSED CDP AMENDMENT

On December 31, 2015, the Applicant submitted an application for a CDP amendment to construct the following in Area 6: 1) improvements at the entrance kiosk; 2) Lawson's Landing Center, including an administrative office, emergency services center, store, bicycle, boat and equipment storage, and boat repair; 3) a covered or canopy area to store electric carts, electric charging stations, and solar collectors; 4) a wastewater secondary treatment plant, consisting of three buried 15,000 gallon tanks, eight AdvanTex pods, approximately 1,000 square feet of largely buried equipment, and a small control room with a building footprint of about 100 square feet; 5) an underground leach field for dispersal for winter season flows and partial summer flows, requiring the excavation of 3,750 lineal feet of 3-foot wide trenches; 6) a lift station to pump secondary treated wastewater to the Scale House Hayfield area; and 7) photovoltaic or solar thermal collectors on the roofs of most buildings and canopies. The amendment application also proposed to pump treated wastewater uphill for peak dry season irrigation of six acres of pasture in the Scale House Hayfield area (from April to October) (**Exhibit 6**).

In support of this amendment application, the Applicant submitted a "Geotechnical Investigation for Lawson's Landing," dated August 8, 2014, which included cone penetration testing results, dated December 15, 2011, that had been conducted in support of the Applicant's building permit application to Marin County. The amendment application also included results collected in 2014 from groundwater monitoring wells installed by the Applicant in and south of Area 6. Additional evidence submitted by the Applicant to support the amendment included 1) the Global Warming Solutions Act of 2006 (California State Assembly Bill 32), which requires California to reduce its greenhouse gas emissions to 1990 levels by 2020; 2) the Water Conservation Act of 2009 (California Senate Bill X7-7), which mandated water efficiency; 3) the Hydrological Assessment, drafted in 2015 by the Scientific Review Panel (SRP) for the Lawson's Landing Sensitive Resource Protection, Restoration, and Enhancement Plan, which recommended a reduction in pumping of water supply wells and a return of grey water to increase wetland saturation; 4) Regional Water Quality Control Board (RWQCB) staff consultation in 2015; and 5) the United Nations Climate Change Conference (COP 21) in 2015, which mandated energy efficiency.

The Applicant's proposed amendment would redevelop portions of Area 6, which is located on the northwestern side of the Lawson's Landing property (**Exhibit 3**). Portions of Area 6 are currently developed with an entrance gate and kiosk, Mike Lawson's residence, a maintenance shed, an employee residence, boat repair tents, an employee rest area, a truck shed, an equipment shed, an oil shed, and a vehicle ingress/egress area. Central dune scrub vegetation occurs east of the vehicle ingress/egress area, as well as north, east and south of Area 6 (**Exhibit 4**). The

undeveloped portions of Area 6 are contiguous with adjacent areas of extensive open space, characterized by a mosaic of unvegetated sand and degraded central dune scrub, which were determined by the Commission to be ESHA under Coastal Act Section 30240. Thus, Area 6 is considered partially legally developed and partially ESHA. Area 6 is adjacent to a California red-legged frog breeding pond, located in the dune area to the west, and Area 6 is considered a likely movement corridor for the frog.

D. EXECUTIVE DIRECTOR'S DETERMINATION

On January 29, 2016, the Executive Director rejected the Applicant's amendment application (**Exhibit 7**), explaining that the proposed amendment must be rejected pursuant to CCR Section 13166 because construction of an underground leach field in a portion of Area 6 and in an area extending outside of Area 6 that has not been legally developed and that constitutes ESHA would lessen and avoid the intended effect of the CDP, and because no newly discovered information was submitted as part of the amendment application that could not, with reasonable diligence, have been produced before the CDP was granted.

The Commission's original approval and any future proposed development must comply with several relevant policies in the Coastal Act, including Coastal Act Section 30240, which states:

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

In its findings for CDP A-2-MAR-08-028, the Commission determined that Area 6 and the area to the south of Area 6 are considered ESHA, with the exception of those portions of Area 6 that have been legally developed. The CDP states that no development is authorized in Area 6 unless: 1) development is located in such legally developed areas; 2) the Permittee provides evidence that such previous development was authorized; and 3) an amendment to the CDP is approved.

Commission staff previously engaged in a long process with the Applicant to determine which portions of Area 6 had been legally developed, and thus could be pursued for development through a CDP amendment. In that exercise, the objective was to identify what development then existing either (1) pre-dated CDP requirements and received all necessary approvals required to be developed, or (2) received a valid CDP. As summarized in letters to the Applicant dated May 9, 2014 and May 11, 2015, the western portion of Area 6 (i.e., Mike Lawson's residence, the maintenance shed, the original mobile home, the gate house, and the employee rest area) was considered to be legally developed prior to CDP requirements; and the mobile home and associated vehicle ingress/egress in Area 6 were considered to be legally developed through CDP processes (in the 1990s). Thus, per the terms and conditions of the CDP, these are the only portions of Area 6 where the Applicant is allowed to pursue development through a CDP amendment (**Exhibit 7**). The remainder of Area 6 is ESHA, and development, other than resource-dependent development, is prohibited in that area under the CDP and the Coastal Act.

The Applicant's current proposed CDP amendment proposes sewage treatment facilities in ESHA, specifically the 'middle' and 'upper' leach fields and the additional dispersal area south of Sand Haul Road. These are not resource dependent uses allowed in ESHA, they are inconsistent with Coastal Act Section 30240, they are inconsistent with the terms and conditions of the original CDP, and they lessen and avoid the intended effect of the Commission's conditionally approved CDP.

Thus, the Executive Director has determined that the proposed amendment is designed to extend sewage treatment system development into ESHA where that was not allowed pursuant to the terms and conditions of the Commission's CDP, and thus that the amendment would lessen and avoid the intended effect of the CDP.[11] The Commission's regulations thus require the Executive Director to reject the amendment application.[12] At the same time, the Executive Director has also determined that there are other elements of the proposed amendment that do not need to be rejected and that could be considered (i.e., the application included a wide variety of proposed changes and development, of which the proposed development in ESHA was but a small part), and has recommended that the Applicant pursue those elements of the project and abandon the proposed development of a sewage treatment system in ESHA. Instead of pursuing that course of action, the Applicant has instead chosen to appeal the Executive Director's rejection of the amendment application, as is allowed by the Commission's regulations.[13]

E. APPLICANT'S APPEAL OF THE EXECUTIVE DIRECTOR'S DETERMINATION

The Applicant appealed the Executive Director's Determination in a letter received on February 15, 2016, requesting that the Commission follow the procedures provided by CCR Section 13166 and schedule a hearing on the determination (**Exhibit 8**). The Applicant contends that newly discovered material evidence has been presented, which could not, with reasonable diligence, have been discovered and produced before the CDP was granted in July 2011. Specifically, the Applicant contends that historical activities and existing development of structures in Area 6 removed it from serious consideration as a site to be explored for wastewater treatment during the years of planning leading up to the CDP hearing in 2011. The Applicant acknowledges that priority areas explored for wastewater treatment and dispersal in 2011 were influenced by input and peer review conducted as a part of the Master Plan EIR for Lawson's Landing, which identified several alternative locations for wastewater dispersal, all located on higher terrain, primarily in farmland areas of Lawson's Landing and that Area 6 was not identified as a potential alternative in any peer review or in the Master Plan EIR. However, subsequent to the CDP hearing in 2011, subsurface cone penetration tests of deep soil in Area 6, conducted in December 2011, and the installation and logging of twelve ground water monitoring wells, conducted in December 2014, have indicated that Area 6 has considerable depth to groundwater and is largely comprised of sand and silty sand, which the Applicant contends is a more appropriate location for wastewater dispersal than the uphill shallow soils previously considered for a drip dispersal system.

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[11] Such development would also be inconsistent with the Coastal Act's ESHA policies.

[12] CCR Section 13166(a) states "The executive director **shall** reject an application…" (emphasis added).

[13] CCR Section 13166(a)(1) states: "An applicant may appeal the executive director's determination to the commission…."

The Applicant also contends that regulations pertaining to onsite wastewater treatment systems (OWTS) in California have changed since 2011, most notably with the adoption of the State Water Board policy on OWTS in June 2012, which established numerical standards for advanced OWTS in areas near impaired water bodies, such as Tomales Bay. These standards would provide clarity in the RWQCB's review of any proposed wastewater treatment system. The Applicant also argues that the proposed location in Area 6 would reduce greenhouse gas emissions associated with pumping the effluent uphill to the Scale House Hayfield area, in accordance with AB 32 (2006) and COP 21 (2015). Further, the Applicant argues that the proposed location for the septic leach field in Area 6 would be in accordance with the Hydrological Assessment's (2015) recommendations, RWQCB staff's preliminary conceptual approval, Norm Hantzsche's (Questa Engineering) knowledge of wastewater dispersal, and the water-saving mandate of SB X7-7 (2010). The Applicant argues that locating the treatment system and leach field in Area 6 would also have advantages for operation and maintenance and would serve to concentrate development in previously disturbed areas with low ecological value. The Applicant proposes that the installation of the leach field trenches would allow for restoration of central dune scrub habitat in the eastern portion of Area 6, which they contend is currently dominated by invasive species, such as kikuyu grass, and would prevent the discontinued agricultural use of the Scale House Hayfield area, which Applicant contends would need to be fenced off from grazing cattle after the leach field was installed.

F. Analysis of Applicant's Appeal

Although the Applicants submitted fairly recent subsurface cone penetration testing and groundwater monitoring in Area 6, this information, though 'newly discovered', could easily have, with reasonable diligence, been produced before the Commission acted on the CDP in 2011. The potential environmental impacts and alternative locations of the proposed wastewater treatment facility for the Lawson's Landing Center were explored in depth through the Master Plan EIR finalized in 2008, and through the CDP process, first at the County and then at the Commission level. Numerous alternative locations for the septic leach field were explored, such as in the dune habitat in the western portion of Area 2. However, the Master Plan EIR concluded that "construction of a wastewater treatment system and lines could adversely affect active dunes, wetlands, and coastal scrub." In order to reduce all potentially significant impacts to sensitive habitats, the Applicant agreed to relocate the wastewater treatment facility to the northern portion of the project site outside of on-site sand dunes (i.e., to the Scale House Hayfield area, which is characterized in the EIR as a non-native grassland). Area 6, on the other hand, is characterized in the EIR as a wet meadow. Numerous EIR mitigation measures in the Lawson's Landing Project Mitigation and Monitoring Reporting Program require the relocation and installation of the sewage disposal system, including the wastewater treatment facility and septic leach field, away from the sand dunes, to a non-sand dune location, such as in the northern portion of the project site (**Exhibit 9**). Thus, the Scale House Hayfield area was determined through the EIR process to be the least environmentally damaging location for the wastewater treatment facility, and Area 6 was determined through the CDP process to be ESHA.

Further, based on the numerous studies conducted by Questa Engineering on soils, percolation, depth to groundwater, and wastewater demand, the Commission approved CDP stated that the proposed location of the leach field in the Scale House Hayfield area would provide adequate wastewater disposal to serve the proposed development on an ongoing basis consistent with

Coastal Act Section 30250. However, as stated above, the designs had not been finalized at the time of CDP approval and are still subject to Regional Board review. In terms of wastewater treatment, the design and location of the proposed treatment system was less developed by the Applicant in 2011 than the leach field. Due to the numerous constraints on the Lawson's Landing property, including wetlands, dunes, and other ESHA, as well as potential conflicts with public access, visual resources, and agricultural activities and the lack of information about the treatment facility's location, the Commission lacked sufficient evidence to find that the proposed wastewater treatment system was consistent with the Coastal Act and LCP.

However, the Commission determined that a new wastewater treatment and disposal system is necessary for the approved development and required by Coastal Act Sections 30250 and 30231 in order to adequately support the Lawson's Landing development approved by the Commission with conditions. Therefore, the Commission imposed Special Condition 8, which required the Applicant to apply for and receive an amendment to the CDP within three to five years, incorporating the updated sewage treatment and disposal system into the project, to be located in the Scale House Hayfield area of the project site. The Commission's findings state that locating the leach field and wastewater treatment facility in the Scale House Hayfield area would: (1) not result in significant impacts to agricultural resources; (2) benefit the water quality of Tomales Bay and human health; and (3) allow for the operation of a priority ocean-front visitor serving use. Thus, the Commission found that the proposed development should be located in the Scalehouse Hayfield area, and that as conditioned to allow for a future amendment to permit the wastewater treatment system once developed by the Applicant in the Scale House Hayfield area was in conformance with Coastal Act Sections 30230-30231 and30241-30242.

With regard to the Applicants' other appeal contentions, first, the adoption of the State Water Board policy on OWTS in June 2012 may represent new information, but it would not affect the conclusion that development cannot be located in ESHA. Second, the proposed location of the leach field in Area 6 may reduce greenhouse gas emissions associated with pumping the effluent uphill to the Scale House Hayfield area, may improve energy and water efficiency and may provide advantages for operation and maintenance, but again, this would not affect the conclusion that a leach field cannot be located in ESHA.

Third, the Applicant's argument that the proposed location for the septic leach field would be in accordance with the Hydrological Assessment (HA)'s recommendations is misguided. Scientific Review Panel (SRP) members, the authors of the HA, stated that the Applicant was using the HA inappropriately to support the requested relocation of the leach field. The HA recommends water conservation measures in order to minimize groundwater withdrawals from onsite wells. The HA does not recommend return flows of septic and grey water unless they do not carry a waste load burden to the NRCS wetland. SRP members are concerned that relocating the leach field to Area 6 would pose a long-term risk to the NRCS wetland due to the expected duration of waste loading and potential for wet season saturated flow conditions, which would contradict the ongoing and primary focus of the CDP in reducing and removing anthropogenic waste loads from the NRCS wetland. This intent and the general objection to discharges in close proximity to the wetland have been clearly documented over the years leading up to CDP approval. Moving the septic system to Area 6 would reduce the efficacy of the CDP in meeting this goal.

In response to their contention concerning approval by the County and the Regional Board, although the Applicant and their representatives have communicated informally with RWQCB staff, the amendment application, if accepted by the Commission, would need to include the final plans for the wastewater treatment and disposal system as approved by the RWQCB and the Marin County Environmental Health Services.

Fifth, in a memo dated April 22, 2010, Norm Hantzsche of Questa Engineering described various wastewater treatment and disposal alternatives for Lawson's Landing, which were evaluated over the course of many years, dating back to the mid-1990s. The Wastewater Facilities Master Plan (Questa, 1997) compared the feasibility of four alternative wastewater treatment options, all proposed to be located in the dune area, west of Area 2. However, the EIR, finalized in 2008 for the Lawson's Landing Master Plan, recommended against the dune leach field plan in favor of the Scale House Field West Pasture, which was identified as the least environmentally damaging alternative location because it avoided conflicts with sensitive habitats, water supply and agricultural activities. Thus, the development of a wastewater system utilizing a portion of the Scale House Hayfield area for a combination of winter leach field/drip field and dry season spray irrigation was proposed by Questa Engineering in June 2007, based on direction from the Draft EIR and site specific soil investigations. This plan to locate the leach field in the Scale House Hayfield area was developed more fully over two-plus years through additional soil and groundwater studies and was conditionally approved by the Commission in CDP A-2-MAR-08-028.

Sixth, the Commission determined that Area 6 is ESHA and is not considered to have low ecological value. The Applicant's proposal to restore central dune scrub after installing the leach field in Area 6 to improve the habitat is also misguided. Although kikuyu grass and other invasive species are not preferred, they can coexist with a community of native species. Installing a leach field in ESHA would require the removal of the existing plant community and digging trenches three feet into the soil, which could facilitate increased non-native species invasion. Even when replanted with native species, disturbance can lead the plant community down an unforeseen trajectory.

G. CONCLUSION

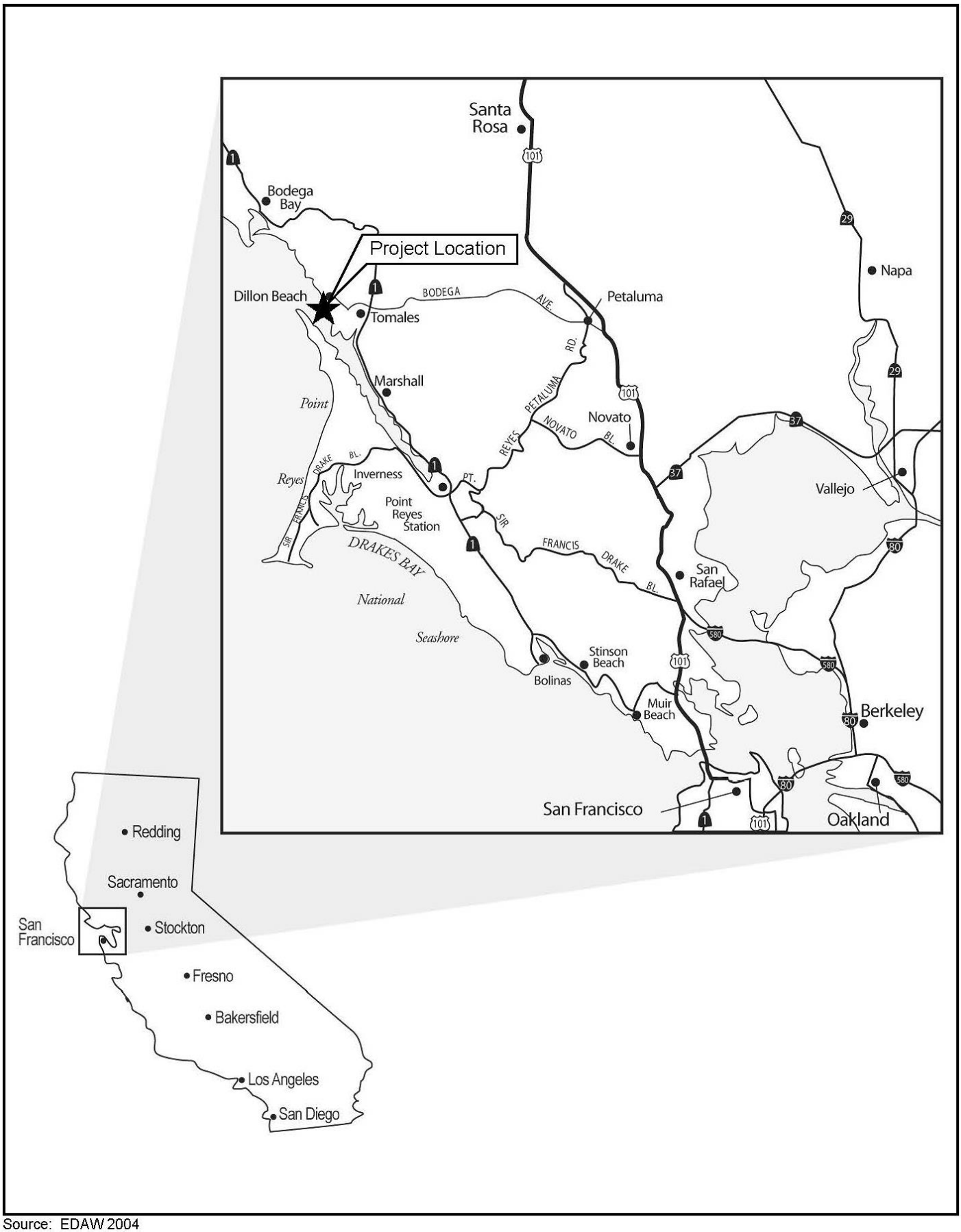
Thus, the Commission concurs with the Executive Director's Determination to reject the subject amendment application, A-2-MAR-08-028-A1, which requests the construction of a septic leach field located in an undeveloped portion of Area 6 and areas within central dune scrub outside of Area 6. The appeal of the Executive Director's determination to reject Amendment Application A-2-MAR-08-028-A1 must be denied pursuant to the requirements of Section 13166 of the Commission's regulations because: 1) the proposed amendment to construct a leach field in ESHA would lessen and avoid the intended effect of the CDP, and 2) the Applicant has not presented any newly discovered material information that could not, with reasonable diligence, have been discovered and produced before the permit was granted.

However, portions of the proposed CDP amendment would appropriately form the basis of a revised amendment application related to Area 6, including all development proposed in previously legally developed areas. Separate from the Area 6 issues, the additional portion of the amendment application covering the proposed construction of six acres of seasonal spray

irrigation in the Scale House Hayfield area could also be part of such a revised amendment. If the Applicant were to submit a revised amendment application, staff would likely need information to file the application as complete, including but not limited to, analysis of traffic impacts resulting from the potential change in intensity of use in Area 6, an exploration of moving the primary road access for the campground from the existing access on Cliff Road to what is known as Sand Haul Road, and final plans for the wastewater treatment and disposal system as approved by the Regional Water Quality Control Board and the Marin County Environmental Health Services.

Appendix A - Substantive File Documents

- Final Environmental Impact Report for the Lawson's Landing Master Plan (September 28, 2007)
- Adopted Findings for CDP Number A-2-MAR-08-028



Source: EDAW 2004

Exhibit 1
A-2-MAR-08-028-A1-EDD
Project Vicinity Map
Page 1 of 1

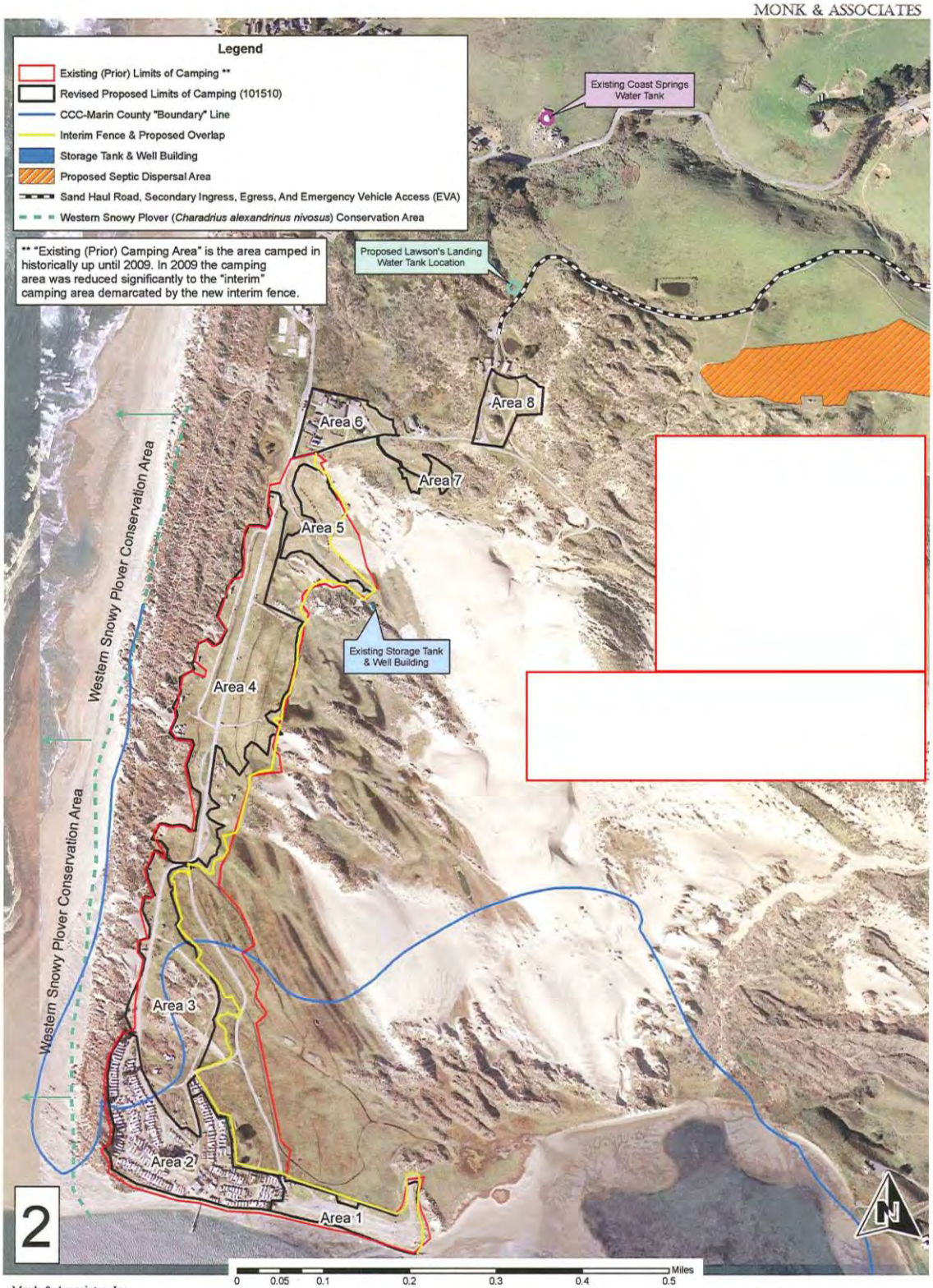
Source: Pacific Watershed Associates 2000

Exhibit 2
A-2-MAR-08-028-A1-EDD
Project Location Map
Page 1 of 1

Source: California Coastal Records Project

Exhibit No. 3
2-06-018
/ A-2-MAR-08-028
Lawson's Landing
Project plans
Page 12 of 18

Exhibit 4
A-2-MAR-08-028-A1-EDD
CDP A-2-MAR-028-08 Project Plans - Area 6 Detail
Page 1 of 1



Monk & Associates, Inc.
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Proposed Number of Camping Sites
within Proposed Camping Areas
Lawson's Landing, Dillon Beach, California

Map Revision Date: October 15, 2010
Aerial Photograph Source:
Adobe Associates &
http://marinmapims.marinmap.org

Exhibit No. 3
2-06-018
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Lawson's Landing
Project plans
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Exhibit No. 3
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Project plans
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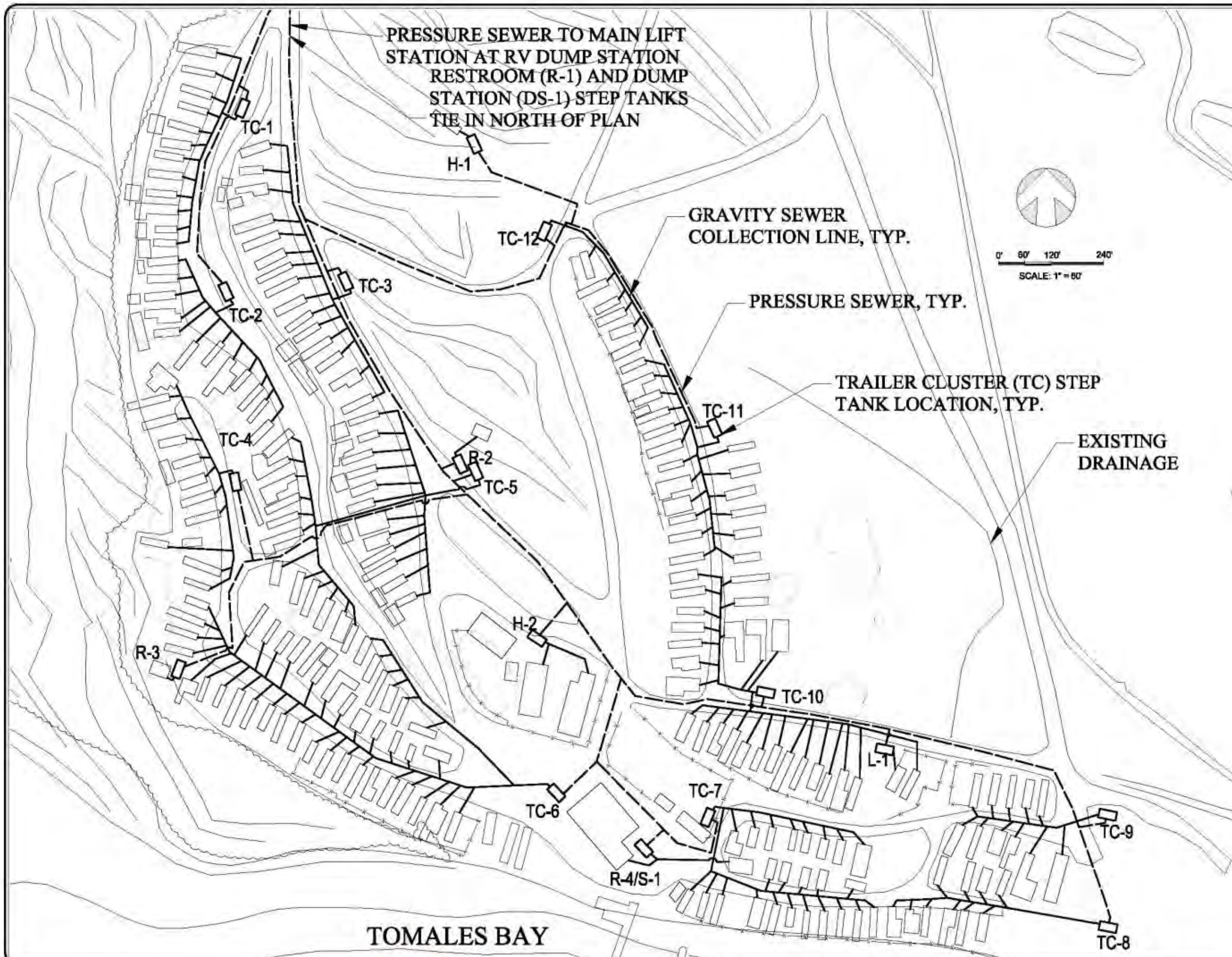


LAWSON'S LANDING

WASTEWATER COLLECTION SYSTEM NOTES:

1. PROPOSED COLLECTION SYSTEM IS A CLUSTER STEP SYSTEM, INCLUDIING SEPARATE STEP (PUMPING) UNITS FOR THE FOLLOWING CONNECTIONS:
   - (12) TRAILER CLUSTERS, SERVING FROM 6 TO 40 CONNECTIONS PER CLUSTER (TC-1 THROUGH TC-12)
   - RESTROOMS (R-1 THROUGH R-4)
   - STORE (S-1)
   - LAUNDRY (L-1)
   - HOUSES (H-1, H-2)
   - RV DUMP STATION (DS-1)
2. CLUSTER STEP UNITS FOR TRAILERS CONSIST OF:
   - 4-INCH LATERAL SEWER TO EACH TRAILER
   - GRAVITY COLLECTION SEWERS (4 TO 8-INCH DIA.)
   - STEP UNITS CONSISTING OF SEPTIC TANK(S) FOR PRIMARY TREATMENT AND PUMP SYSTEM
   - STEP UNITS LOCATED FOR MINIMUM CONFLICT WITH ACTIVITIES AND USES, TO MEET MIN 50-FT SETBACK FROM WATER FEATURES, AND PROTECTED WITH BOLLARDS OR EQUAL.
   - SEPTIC TANKS CAPACITY = 2 X DAILY DESIGN FLOW
   - DUPLEX STEP PUMP UNIT W/RESERVE EMERGENCY CAPACITY AND TRANSFER SWITCH FOR PORTABLE POWER OPERATION
3. SEPARATE STEP UNITS ARE PROVIDED FOR STORE, LAUNDRY, HOUSES, AND RESTROOMS LOCATED ADJACENT TO EACH BUILDING.
4. STEP UNITS FOR RESTROOMS TO INCLUDE SURPLUS STORAGE CAPACITY FOR FLOW EQUALIZATION DURING PEAK FLOW PERIODS.
5. EFFLUENT FROM ALL STEP UNITS TO BE COLLECTED IN A COMMON PRESSURE SEWER LINE, LEADING TO A MAIN LIFT STATION AT VICINITY OF RV DUMP STATION. MAIN LIFT STATION TO INCLUDE FLOW EQUALIZATION, EFFLUENT FILTERS, AND HIGH HEAD PUMPS. FORCE MAIN FROM MAIN LIFT STATION WILL FOLLOW ENTRANCE ROAD AND TERMINATE AT OR NEAR THE TREATMENT PLANT SITE IN THE VICINITY OF THE SCALE HOUSE.

Exhibit No. 23
2-06-018
/ A-2-MAR-08-028
Lawson's Landing
STEP systems

LAWSON'S LANDING
DILLON BEACH, CALIFORNIA

QUESTA ENGINEERING CORP.
Civil Environmental & Water Resources
P.O. Box 70356 1220 Brickyard Cove Road Point Richmond, CA 94807

Sht	Rev	Date	By	Description	Apprd

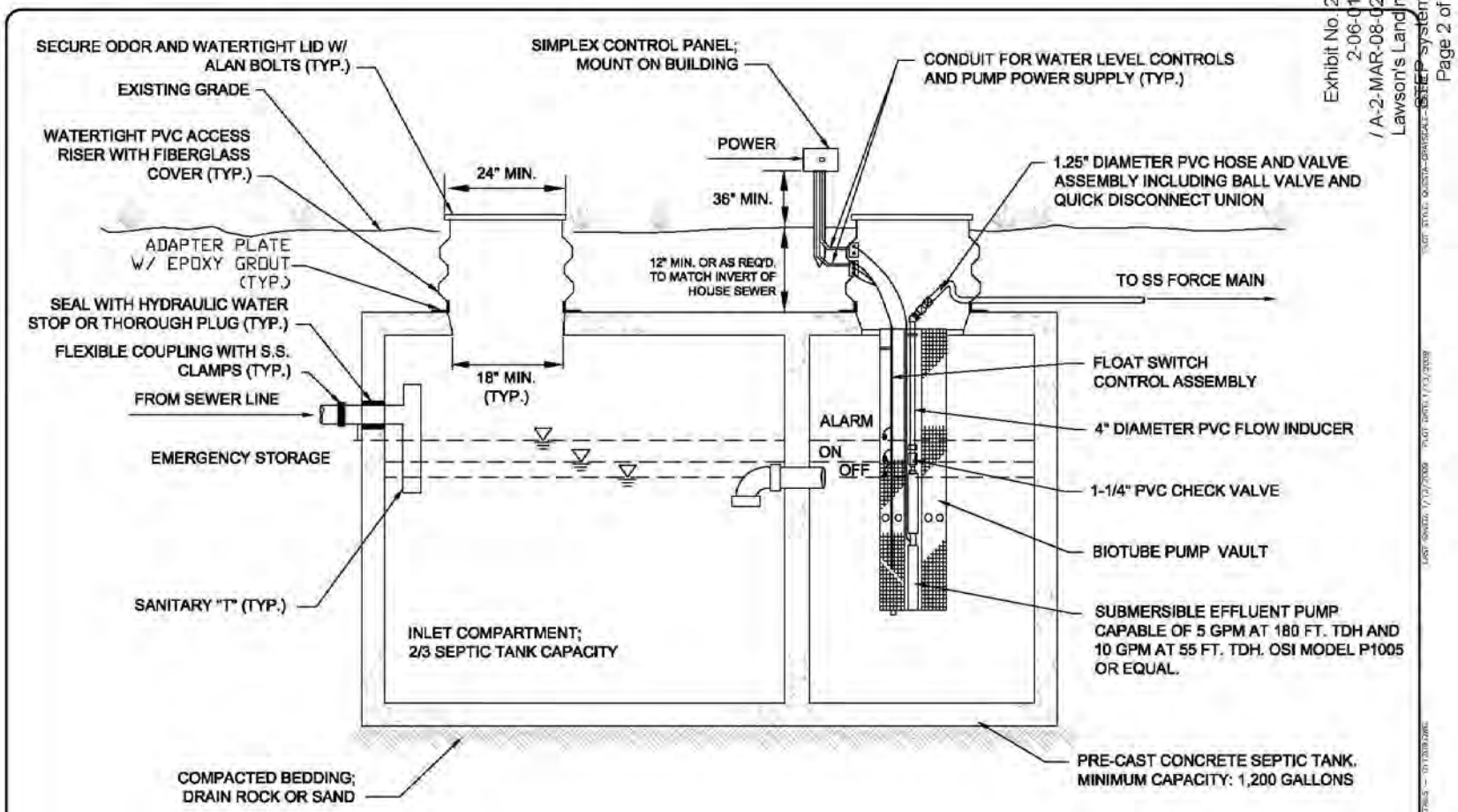
Design:	CHN
Drawn:	CHN
Checked:	NNH
Apprd:	NNH

SAND POINT
PROPOSED STEP SEWER
SCHEMATIC PLAN

Size	D
Dwg. No.	270246
Rev.	0
Scale:	1" = 60'
Date:	4/4/2008
Sheet	1 OF 1

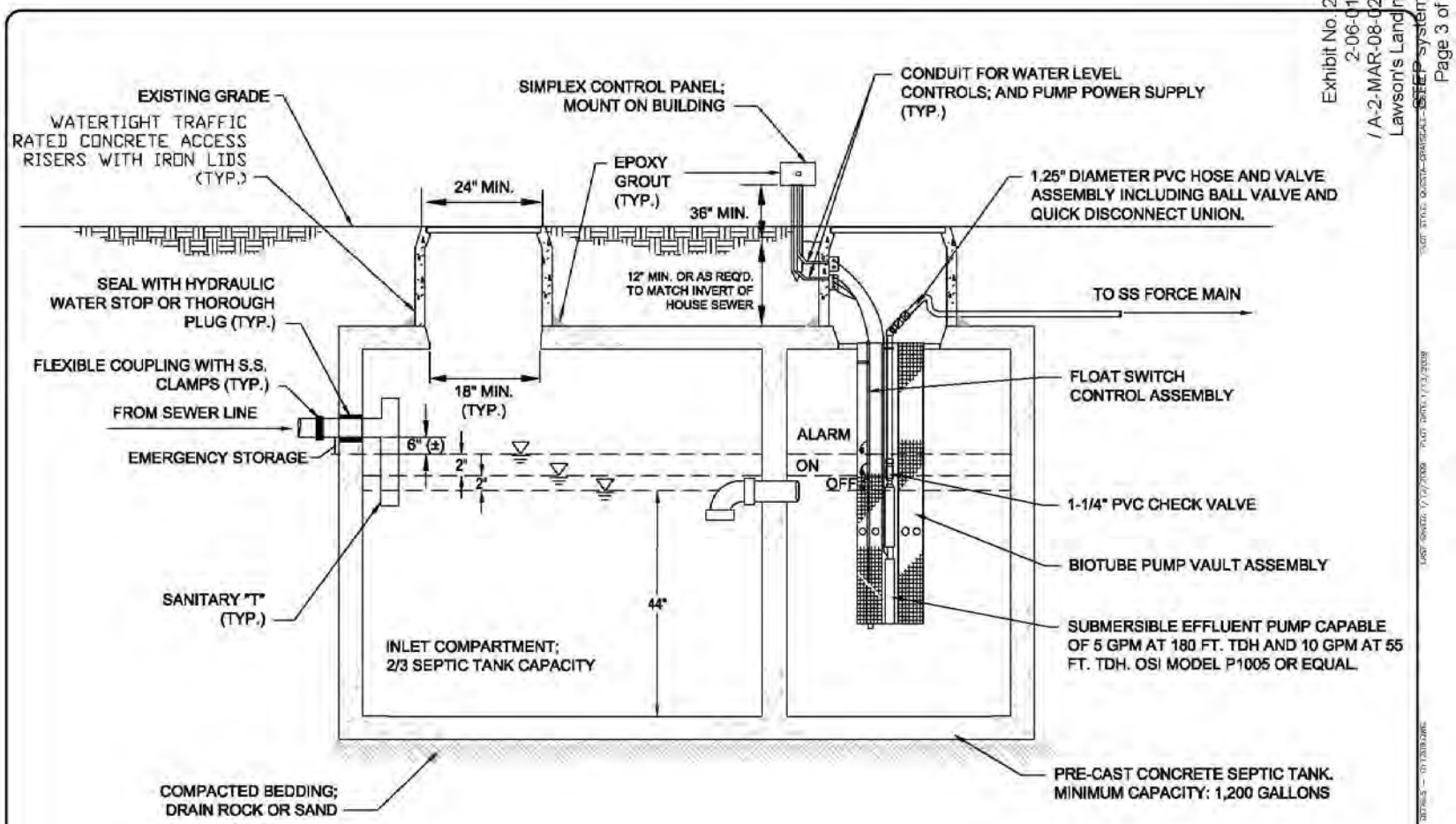
DRAFT

P:\2007\270246_Lawson_Existing_Septic\CAD\270246-Plan.DWG



SEPTIC TANK EFFLUENT PUMP (STEP) UNIT
W/ PVC ACCESS RISERS (NON-TRAFFIC AREAS)

LAWSON'S LANDING MARIN COUNTY, CALIFORNIA	QUESTA ENGINEERING CORP. Civil Environmental & Water Resources (510) 236-6114 FAX (510) 236-3423 P.O. Box 70356 1220 Brickyard Cove Road Point Richmond, CA 94807	Design: NH Drawn: AM Checked: NH Appr'd: NH	**TYPICAL STEP UNIT NON-TRAFFIC AREA** LAWSON'S LANDING	FIGURE 1



TRAFFIC-RATED SEPTIC TANK EFFLUENT PUMP (STEP) UNIT W/ CONCRETE RISERS

LAWSON'S LANDING MARIN COUNTY, CALIFORNIA	QUESTA ENGINEERING CORP. Civil Environmental & Water Resources (510) 236-4114 FAX (510) 236-3423 P.O. Box 70356 1220 Brickyard Cove Road Point Richmond, CA 94807	Design: NH Drawn: AM Checked: NH Appr'd: NH	**TYPICAL STEP UNIT TRAFFIC AREA** LAWSON'S LANDING	FIGURE 2

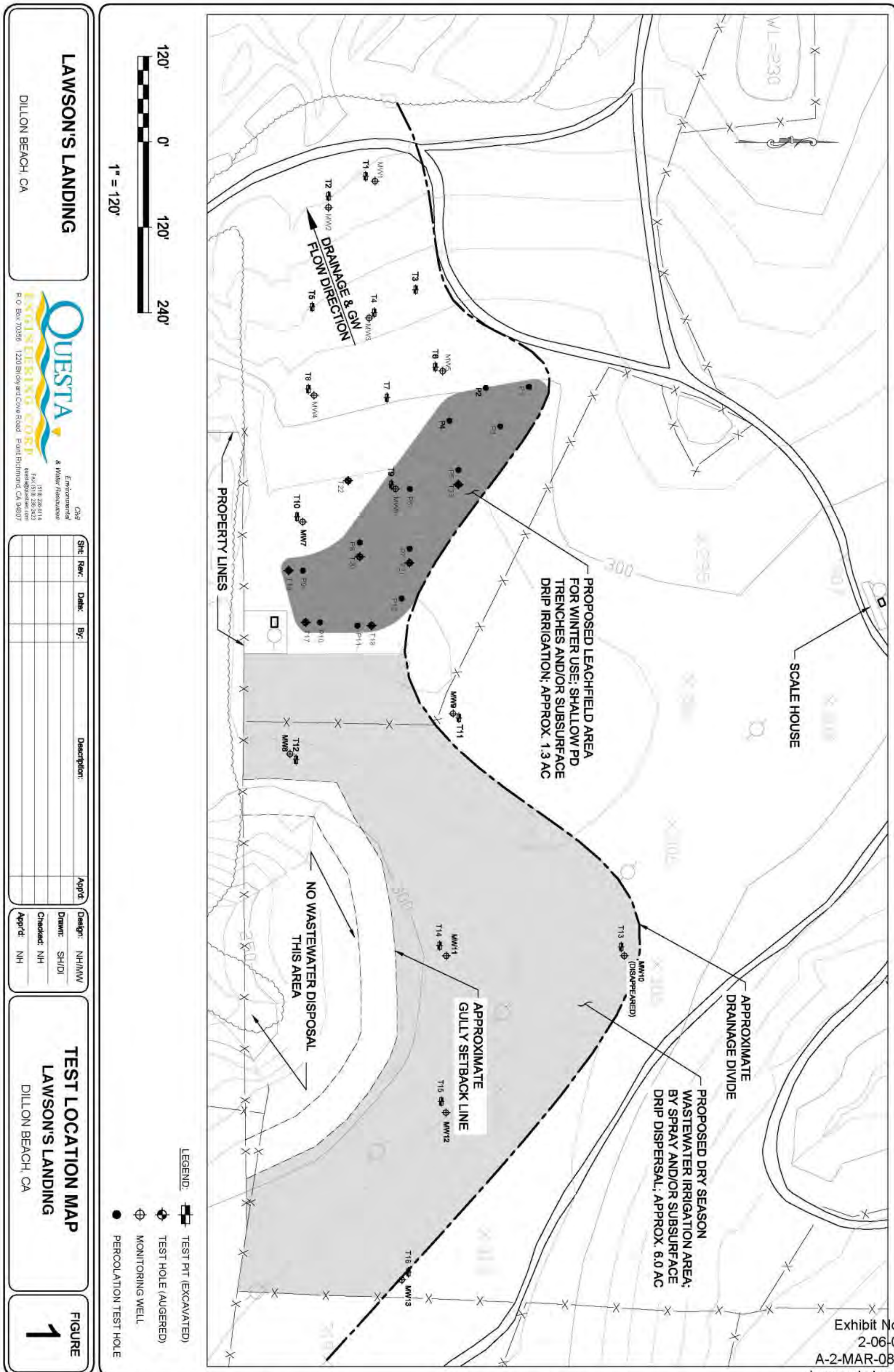


Exhibit No. 42
2-06-018 /
A-2-MAR-08-028
~~Lawson's Landing~~
Leachfield Test Location Map

Exhibit 5
CDP A-2-MAR-08-028-A1-EDD
CDP A-2-MAR-028-08 - Scale House Hayfield / Leach Field Detail

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE 45
FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5260
FAX (415) 904-5400
TDD (415) 597-5885

PERMIT APPLICATION INSTRUCTIONS

A completed application includes the APPLICATION FOR COASTAL DEVELOPMENT PERMIT, the appendices to the application, and Required Attachments.

- Please answer all questions. If a question is not applicable to your project, indicate "N.A."
- Refer to pages 7– 8 of the APPLICATION for a list of Required Attachments.
- Incomplete applications will not be accepted for filing.
- All exhibits must be legible.

The following checklist is provided for the convenience of applicants in gathering necessary application materials; it is not a complete statement of filing requirements.

	Page	Item
☐ Proof of applicant's interest in the property.	7	1
☐ Assessor's parcel map(s) showing the proposed development site and **all** adjacent properties within 100 feet of the property boundary.	7	2
☐ Stamped envelopes *(no postage meter please)* addressed to neighboring property owners and occupants and other interested parties ***and*** a list of the same.	7, 8	4, 5
☐ Vicinity map.	8	6
☐ Two sets of each: project plan(s), site plan(s), and applicable other plans. (Please note the size which plans are required to be submitted.).	8	7, 11
☐ Copy of any environmental documents (DRAFT AND FINAL EIRs, EISs, NEGATIVE DECLARATION) if prepared for the project and any comments and responses.	8	9
☐ Verification of all other permits, permissions or approvals applied for or granted by public agencies.	8	10
☐ Copy of geology or soils report (if necessary).	8	11
☐ Local approval of the project.	Appendix B	
☐ Has the Notice of Pending Permit been posted in a conspicuous place?	Appendix D	
☐ Filing fee.	Appendix E	

☐ Have you and the agent (if appropriate) signed the application at the appropriate lines on pages 9, 10, and 13?

APPLICATION FOR COASTAL DEVELOPMENT PERMIT

SECTION I. APPLICANT

1. Name, mailing address, and telephone number of all applicants.

Mike Lawson, 137 Marin View Drive, P.O. Box 67, Dillon Beach, CA 94929

Carl Vogler Jr., 137 Marin View Drive, P.O. Box 67, Dillon Beach, CA 94929

(Area code/daytime phone number)

Note: All applicants for the development must complete Appendix A, the declaration of campaign contributions.

2. Name, mailing address and telephone number of applicant's representatives, if any. Please include all representatives who will communicate on behalf of the applicant or the applicant's business partners, for compensation, with the Commission or the staff. (It is the applicant's responsibility to update this list, as appropriate, including after the application is accepted for filing. Failure to provide this information prior to communication with the Commission or staff may result in denial of the permit or criminal penalties.)

Thomas Flynn, 10 Willow Ave., Larkspur, CA 94939, 415-924-8250

(Area code/daytime phone number)

SECTION II. PROPOSED DEVELOPMENT

Please answer all questions. Where questions do not apply to your project (for instance, project height for a land division), indicate Not Applicable or N.A.

1. Project Location. Include street address, city, and/or county. If there is no street address, include other description such as nearest cross streets.

2. 137 Marine View Dr.

Number

Dillon Beach Marin

county

Assessor's Parcel Number(s) (obtainable from tax bill or County Assessor):
100-100-48, 100-216-01, 100-20-201 to 208, 100-21-211 to 218

FOR OFFICE USE ONLY

RECEIVED

FILED

FEE

APPLICATION NUMBER

DATE PAID

2. Describe the proposed development in detail. Include secondary improvements such as grading, septic tanks, water wells, roads, driveways, outbuildings, fences, etc. (Attach additional sheets as necessary.)
See attached Addendum to Section II, Item 2, Project Description

a. If multi-family residential, state:

Number of units			Number of bedrooms per unit (both existing and proposed)	Type of ownership proposed
Existing units	Proposed new units	Net number of units on completion of project		☐ rental ☐ condominium ☐ stock cooperative ☐ time share ☐ other _____

b. If land division or lot line adjustment, indicate:

Number of lots			*Size of lots to be created (indicate **net** or **gross** acreage)*	
Existing Lots	Proposed new lots	Net number of lots on completion of project	Existing	Proposed

3. Estimated cost of development (not including cost of land) $

4. Project height: Maximum height of structure (ft.) 25 feet

- above existing (natural) grade .... varies from 23 feet to 25 feet; see A2.1-2.3
- above finished grade .... varies from 17 feet to 25 feet; see A2.1-2.3
- as measured from centerline of frontage road .... 42.5 feet

5. Total number of floors in structure, including subterranean floors, lofts, and mezzanines .... Phase I: 1 floors Phase II: 2 floors

6. Gross floor area excluding parking (sq.ft.) .... Phase I: 9,765 sq ft Phase II: 14,227 sq ft See A-1.3

Gross floor area including covered parking and accessory buildings (sq.ft.) .... Phase I: 10,540 sq ft Phase II: 15,000 sq ft See A-1.3

7. Lot area (within property lines) (sq.ft. or acre) ....

Lot coverage	*Existing (sq.ft. or acre)*	*New proposed (sq.ft. or acre)*	*Total (sq.ft. or acre)*
Building			
Paved area			
Landscaped area	0	17,255 sq. ft.	17,255 sq. ft.
Unimproved area	43,590 sq. ft.	0	0
	Grand Total (should equal lot area as shown in #7 above)		

8. Is any grading proposed? .... ☐ X Yes ☐ No

If yes, complete the following.					
a)	Amount of cut	cu. yds.	d)	Maximum height of cut slope	ft.
b)	Amount of fill	cu. yds.	e)	Maximum height of fill slope	ft.
c)	Amount of **import** or **export** (circle which)	cu. yds.	f)	Location of borrow or disposal site	

Grading, drainage, and erosion control plans must be included with this application, if applicable. In certain areas, an engineering geology report must also be included. See page 7, items # 7 and 11.

Please list any geologic or other technical reports of which you are aware that apply to this property:

Geotechnical Investigation Lawsons Landing Dillon Beach, CA August 8, 2014 Miller Pacific Engineering Group

9. Parking:

Number of parking spaces (indicate whether standard or compact)		
Existing Spaces	Proposed new spaces	Net number of spaces on completion of project
0	48	48

Is any existing parking being removed? No ☐ Yes ☐ No

If yes, how many spaces? _____ size _____

Is tandem parking existing and/or proposed? ..... No ☐ Yes ☐ No

If yes, how many tandem sets? _____ size _____

10Are utility extensions for the following needed to serve the project? (Please check yes or no)

.

a) water	*b) gas*	*c) sewer*	*d) electric*	*e) telephone*
☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ No	☐ No	☐ No	☐	☐ No

No

Will electric or telephone extensions be above-ground? No ☐ ☐

11. Does project include removal of trees or other vegetation? ..... ☐ Yes ☐

If yes, indicate number, type and size of trees 2 Eucalyptus, 20 ft.

or type and area of other vegetation Kikuyu grass, amount of area to be determined

SECTION III. ADDITIONAL INFORMATION

The relationship of the development to the applicable items below must be explained fully. Attach additional sheets if necessary.

1. Present use of property. See attached Addendum to Section III

a. Are there existing structures on the property? .....Yes ☐ Yes ☐ No

If yes, describe
See attached Addendum to Section

b. Will any existing structures be demolished? ..... ☐ Yes ☐ No

Will any existing structures be removed? ..... ☐ Yes ☐ No

If yes to either question, describe the type of development to be demolished or removed, including the relocation site, if applicable.

2. Is the proposed development to be governed by any Development Agreement? ..... ☐ Yes ☐ No

3. Has any application for development on this site including any subdivision been submitted previously to the California Coastal Zone Conservation Commission or the Coastal Commission? ..... ☐ Yes ☐ No

If yes, state previous application number(s) A-2-MAR-08-028/2-06-018

4. a. Is the development between the first public road and the sea (including lagoons, bays, and other bodies of water connected to the sea) ..... ☐ Yes ☐ No

b. If yes, is public access to the shoreline and along the coast currently available on the site or near the site? ..... ☐ Yes ☐ No

If yes, indicate the location and nature of the access, including the distance from the project site, if applicable.
See Section III Addendum

c. Will the project have an effect on public access to and along the shoreline, either directly or indirectly (e.g., removing parking used for access to the beach)? ..... ☐ Yes ☐ No

If yes, describe the effect

5. Does the development involve diking, filling, draining, dredging or placing structures in open coastal waters, wetlands, estuaries, or lakes? (Please check yes or no)

a) diking	*b) filling*	*c) dredging*	*d) placement of structures*
☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ No	☐ No	☐ No	☐ No

Amount of material to be dredged or filled (indicate which) _____ cu. yds

Location of dredged material disposal site _____

Has a U.S. Army Corps of Engineers' permit been applied for? ..... ☐ Yes ☐ No

6. Will the development extend onto or adjoin any beach, tidelands, submerged lands or public trust lands? ..... ☐ Yes ☐ No

For projects on State-owned lands, additional information may be required as set forth in Section IV, paragraph 10.

7. Will the development protect existing lower-cost visitor and recreational facilities? ..... ☐ Yes ☐ No

Will the development provide public or private recreational opportunities? .. ☐ Yes ☐ No

If yes, explain.

See attached Addendum

8. Will the proposed development convert land currently or previously used for agriculture to another use? ..... ☐ Yes ☐ No

If yes, how many acres will be converted? _____

9. Is the proposed development in or near:

a. Sensitive habitat areas (Biological survey may be required) ..... ☐ Yes ☐ No

b. Areas of state or federally listed rare, threatened, or endangered species ..... ☐ Yes ☐ No

c. 100-year floodplain (Hydrologic mapping may be required) ..... ☐ Yes ☐ No

d. Park or recreation area ..... ☐ Yes ☐ No

10. Is the proposed development visible from:

a. State Highway 1 or other scenic route ..... ☐ Yes ☐ No

b. Park, beach, or recreation area ..... ☐ Yes ☐ No

c. Harbor area ..... ☐ Yes ☐ No

11. Does the site contain any: (If yes to any of the following, please explain on an attached sheet.)

a. Historic resources ..... ☐ Yes ☐ No

b. Archaeological resources ..... ☐ Yes ☐ No

c. Paleontological resources ..... ☐ Yes ☐ No

12. Where a stream or spring is to be diverted, provide the following information:

Estimated streamflow or spring yield (gpm) _____

If well is to be used, existing yield (gpm) _____

If water source is on adjacent property, attach Division of Water Rights approval and property owner's approval.

SECTION IV. REQUIRED ATTACHMENTS

The following items must be submitted with this form as part of the application.

1. Proof of the applicant's legal interest in the property. A copy of any of the following will be acceptable: current tax bill, recorded deed, lease, easement, or current policy of title insurance. Preliminary title reports will not be accepted for this purpose. Documentation reflecting intent to purchase such as a signed Offer to Purchase along with a receipt of deposit or signed final escrow document is also acceptable, but in such a case, issuance of the permit may be contingent on submission of evidence satisfactory to the Executive Director that the sale has been completed.

   The identity of all persons or entities which have an ownership interest in the property superior to that of the applicant must be provided.

2. Assessor's parcel map(s) showing the page number, the applicant's property, and all other properties within 100 feet (excluding roads) of the property lines of the project site. (Available from the County Assessor.)

3. Copies of required local approvals for the proposed project, including zoning variances, use permits, etc., as noted on Local Agency Review Form, Appendix B. Appendix B must be completed and signed by the local government in whose jurisdiction the project site is located.

4. Stamped envelopes addressed to each property owner and occupant of property situated within 100 feet of the property lines of the project site (excluding roads), along with a list containing the names, addresses and assessor's parcel numbers of same. The envelopes must be plain (i.e., no return address), and regular business size (9 1/2" x 4 1/8"). Include first class postage on each one. Metered postage is not acceptable. Use Appendix C, attached, for the listing of names and addresses. (Alternate notice provisions may be employed at the discretion of the District Director under extraordinary circumstances.)

5. Stamped, addressed envelopes (no metered postage, please) and a list of names and addresses of all other parties known to the applicant to be interested in the proposed development (such as persons expressing interest at a local government hearing, etc.).

6. A vicinity or location map (copy of Thomas Bros. or other road map or USGS quad map) with the project site clearly marked.

7. Copy(s) of plans drawn to scale, including (as applicable):
   - site plans
   - floor plans
   - building elevations
   - grading, drainage, and erosion control plans
   - landscape plans
   - septic system plans

   Trees to be removed must be marked on the site plan. In addition, a reduced site plan, 8 1/2" x 11" in size, must be submitted. Reduced copies of complete project plans will be required for large projects. NOTE: See Instruction page for number of sets of plans required.

8. Where septic systems are proposed, evidence of County approval or Regional Water Quality Control Board approval. Where water wells are proposed, evidence of County review and approval.

9. A copy of any Draft or Final Negative Declaration, Environmental Impact Report (EIR) or Environmental Impact Statement (EIS) prepared for the project. If available, comments of all reviewing agencies and responses to comments must be included.

10. Verification of all other permits, permissions or approvals applied for or granted by public agencies such as:
    - Department of Fish and Game
    - State Lands Commission
    - Army Corps of Engineers
    - U.S. Coast Guard

    For projects such as seawalls located on or near state tidelands or public trust lands, the Coastal Commission must have a written determination from the State Lands Commission whether the project would encroach onto such lands and, if so, whether the State Lands Commission has approved such encroachment.

11. For development on a bluff face, bluff top, or in any area of high geologic risk, a comprehensive, site-specific geology and soils report (including maps) prepared in accordance with the Coastal Commission's Interpretive Guidelines. Copies of the guidelines are available from the District Office.

SECTION V. NOTICE TO APPLICANTS

Under certain circumstances, additional material may be required prior to issuance of a coastal development permit. For example, where offers of access or open space dedication are required,

preliminary title reports, land surveys, legal descriptions, subordination agreements, and other outside agreements will be required prior to issuance of the permit.

In addition, the Commission may adopt or amend regulations affecting the issuance of coastal development permits. If you would like notice of such proposals during the pendency of this application, if such proposals are reasonably related to this application, indicate that desire. ..... ☐ Yes ☐ No

SECTION VI. COMMUNICATION WITH COMMISSIONERS

Decisions of the Coastal Commission must be made on the basis of information in the public record available to all commissioners and the public. Permit applicants and interested parties and their representatives may contact individual commissioners to discuss permit matters outside the public hearing (an "ex parte" communication). However, the commissioner must provide a complete description of the communication either in writing prior to the hearing or at the public hearing, to assure that such communication does not jeopardize the fairness of the hearing or potentially result in invalidation of the Commission's decision by a court. Any written material sent to a commissioner should also be sent to the commission's office in San Francisco and the appropriate district office for inclusion in the public record and distribution to other commissioners.

SECTION VII. CERTIFICATION

1. I hereby certify that I, or my authorized representative, have completed and posted or will post the Notice of Pending Permit stock card in a conspicuous place on the property within three days of submitting the application to the Commission office.

2. I hereby certify that I have read this completed application and that, to the best of my knowledge, the information in this application and all attached appendices and exhibits is complete and correct. I understand that the failure to provide any requested information or any misstatements submitted in support of the application shall be grounds for either refusing to accept this application, for denying the permit, for suspending or revoking a permit issued on the basis of such misrepresentations, or for seeking of such further relief as may seem proper to the Commission.

3. I hereby authorize representatives of the California Coastal Commission to conduct site inspections on my property. Unless arranged otherwise, these site inspections shall take place between the hours of 8:00 A.M. and 5:00 P.M.

_____

Signature of Authorized Agent(s) or if no agent, signature of Applicant

NOTE: IF SIGNED ABOVE BY AGENT, APPLICANT MUST SIGN BELOW.

SECTION VIII. AUTHORIZATION OF AGENT

I hereby authorize _____ to act as my representative

and to bind me in all matters concerning this application.

_____

Signature of Applicant(s)

(Only the applicant(s) may sign here to authorize an agent)

APPLICATION FOR COASTAL DEVELOPMENT PERMIT

APPENDIX A

DECLARATION OF CAMPAIGN CONTRIBUTIONS

Government Code Section 84308 prohibits any Commissioner from voting on a project if he or she has received campaign contributions in excess of $250 within the past year from project proponents or opponents, their agents, employees or family, or any person with a financial interest in the project.

In the event of such contributions, a Commissioner must disqualify himself or herself from voting on the project.

Each applicant must declare below whether any such contributions have been made to any of the listed Commissioners or Alternates (see last page).

CHECK ONE

☐ The applicants, their agents, employees, family and/or any person with a financial interest in the project have not contributed over $250 to any Commissioner(s) or Alternate(s) within the past year.

☐ The applicants, their agents, employees, family, and/or any person with a financial interest in the project have contributed over $250 to the Commissioner(s) or Alternate(s) listed below within the past year.

Commissioner or Alternate _____

Commissioner or Alternate _____

Commissioner or Alternate _____

_____ _____

Signature of Applicant or Authorized Agent *Date*

Please type or print your name _____

APPENDIX B

LOCAL AGENCY REVIEW FORM

SECTION A (TO BE COMPLETED BY APPLICANT)

Applicant _____

Project Description _____

_____

Location _____

_____

Assessor's Parcel Number _____

SECTION B (TO BE COMPLETED BY LOCAL PLANNING OR BUILDING INSPECTION DEPARTMENT)

Zoning Designation _____ _____ du/ac

General or Community Plan Designation _____ _____ du/ac

Local Discretionary Approvals

☐ Proposed development meets all zoning requirements and needs no local permits other than building permits.

☐ Proposed development needs local discretionary approvals noted below.

Needed	*Received*	
☐	☐	Design/Architectural review Variance for _____
☐	☐	Rezone from _____
☐	☐	Tentative Subdivision/Parcel Map No. _____
☐	☐	Grading/Land Development Permit No. _____
☐	☐	Planned Residential/Commercial Development Approval
☐	☐	Site Plan Review
☐	☐	Condominium Conversion Permit
☐	☐	Conditional, Special, or Major Use Permit No. _____
☐	☐	Other _____

CEQA Status

☐ Categorically Exempt *Class* _____ *Item* _____

☐ Negative Declaration Granted (Date) _____

☐ Environmental Impact Report Required, Final Report Certified (Date) _____

☐ Other _____

Prepared for the City/County of _____ by _____

Date _____ Title _____

Application No. _____

APPENDIX C

LIST OF PROPERTY OWNERS AND OCCUPANTS WITHIN 100 FEET AND THEIR ADDRESSES

(MAKE ADDITIONAL COPIES OF THIS SHEET AS NECESSARY)

APPENDIX D

(Permit Application)

DECLARATION OF POSTING

Prior to or at the time the application is submitted for filing, the applicant must post, at a conspicuous place, easily read by the public and as close as possible to the site of the proposed development, notice that an application for the proposed development has been submitted to the Commission. Such notice shall contain a general description of the nature of the proposed development. The Commission furnishes the applicant with a standardized form to be used for such posting. If the applicant fails to post the completed notice form and sign the Declaration of Posting, the Executive Director of the Commission shall refuse to file the application. 14 Cal. Code Regs. Section 13054(d).

Please sign and date this Declaration of Posting form when the site is posted; it serves as proof of posting. It should be returned to our office with the application.

Pursuant to the requirements of California Administrative Code Section 13054(b), I hereby certify that on, _____ I or my authorized representative posted the Notice
(date of posting)
of Pending Permit for application to obtain a coastal development permit for the development of

_____

_____

_____
(description of development)

Located at _____

_____
(address of development or assessor's parcel number)

The public notice was posted at _____

_____
(a conspicuous place, easily seen by the public and as close as possible to the site of the proposed development)

_____
(signature)

_____
(date)

NOTE: Your application cannot be processed until this ***Declaration of Posting*** *is signed and returned to this office.*

FOR OFFICE USE ONLY

PERMIT NUMBER ..... _____

RECEIVED ..... _____

DECLARATION COMPLETE ..... _____

APPENDIX E

FILING FEE SCHEDULE

(EFFECTIVE JULY 1, 2015)

FEES WILL BE ADJUSTED EACH YEAR ON JULY 1, ACCORDING TO THE CALIFORNIA CONSUMER PRICE INDEX

- Pursuant to Government Code section 6103, public entities are exempt from the fees set forth in this schedule.

- Permits shall not be issued without full payment for all applicable fees. If overpayment of a fee occurs, a refund will be issued. Fees are assessed at the time of application, based on the project as proposed initially. If the size or scope of a proposed development is amended during the application review process, the fee may be changed. If a permit application is withdrawn, a refund will be due only if no significant staff review time has been expended (e.g., the staff report has not yet been prepared). Denial of a permit application by the Commission is not grounds for a refund.

- If different types of development are included on one site under one application, the fee is based on the sum of each fee that would apply if each development were applied for separately, not to exceed $110,800 for residential development and $277,000 for all other types of development.

- Fees for after-the-fact (ATF) permit applications shall be five times the regular permit application fee unless the Executive Director reduces the fee to no less than two times the regular permit application fee. The Executive Director may reduce the fee if it is determined that either: (1) the ATF application can be processed by staff without significant additional review time (as compared to the time required for the processing of a regular permit,) or (2) the owner did not undertake the development for which the owner is seeking the ATF permit.

- In addition to the above fees, the Commission may require the applicant to reimburse it for any additional reasonable expenses incurred in its consideration of the permit application, including the costs of providing public notice.

- The Executive Director shall waive the application fee where requested by resolution of the Commission. Fees for green buildings or affordable housing projects may be reduced, pursuant to Section 13055(h) of the Commission's regulations.

SEE SECTION 13055 OF THE COMMISSION'S REGULATIONS
(CALIFORNIA CODE OF REGULATIONS, TITLE 14)
FOR FULL TEXT OF THE REQUIREMENTS

I. RESIDENTIAL DEVELOPMENT[1]

De minimis waiver	☐	$ 554 $
Administrative permit	☐	2,770[2]

A. Detached residential development

Regular calendar for up to 4 detached, single-family dwelling(s)[3,4]

1,500 square feet or less	☐	$ 3,324/ea $
1,501 to 5,000 square feet	☐	4,986/ea $
5,001 to 10,000 square feet	☐	6,648/ea $
10,001 or more square feet	☐	8,310/ea

Regular calendar for more than 4 detached, single-family dwellings[3,4]

1,500 square feet or less	☐	$ 16,620or $1,108/ea[5] whichever is greater
1,501 to 5,000 square feet	☐	$ 24,930 or $1,662/ea[5] whichever is greater
5,001 to 10,000 square feet	☐	$ 33,240 or $2,216/ea[5] whichever is greater
10,001 or more square feet	☐	$ 41,550 or $2,770/ea[5] whichever is greater

B. Attached residential development

2–4 units	☐	$ 8,310
More than 4 units	☐	$ 11,080 or $831/ea[6] whichever is greater

C. Additions or improvements

If **not** a waiver or an amendment to a previous coastal development permit, the fee is assessed according to the schedule in A. above (i.e., based on the calendar and/or size of the addition, plus the grading fee, if applicable).

If handled as an amendment to a previous coastal development permit, see Amendments (in Section III.F).

---

[1] Additional fee for grading applies. (See Section III.A of this fee schedule.)

[2] Additional fee will apply if the project is removed from the Administrative Calendar and rescheduled on the Regular Calendar.

[3] "Square footage" includes gross internal floor space of main house and attached garage(s), plus any detached structures (e.g., guest houses, detached bedrooms, in-law units, garages, barns, art studios, tool sheds, and other outbuildings).

[4] For developments that include residences of different sizes, the fee shall be based upon the average square footage of all the residences.

[5] Not to exceed $110,800.

[6] Not to exceed $55,400.

II. OFFICE, COMMERCIAL, CONVENTION, INDUSTRIAL (INCLUDING ENERGY FACILITIES), AND OTHER DEVELOPMENT NOT OTHERWISE IDENTIFIED IN THIS SECTION[7,8,9]

A. Based on Gross Square Footage

1,000 square feet (gross) or less	☐	$ 5,540
1,001 to 10,000 square feet (gross)	☐	$ 11,080
10,001 to 25,000 square feet (gross)	☐	$ 16,620
25,001 to 50,000 square feet (gross)	☐	$ 22,160
50,001 to 100,000 square feet (gross)	☐	$ 33,240
100,001 or more square feet (gross)	☐	$ 55,400

B. Based on Development Cost[10]

Development cost up to and including $100,000	☐	$ 3,324
$100,001 to $500,000	☐	$ 6,648
$500,001 to $2,000,000	☐	$ 11,080
$2,000,001 to $5,000,000	☐	$ 22,160
$5,000,001 to $10,000,000	☐	$ 27,700
$10,000,001 to $25,000,000	☐	$ 33,240
$25,000,001 to $50,000,000	☐	$ 55,400
$50,000,001 to $100,000,000	☐	$ 110,800
$100,000,001 or more	☐	$ 277,000

III. OTHER FEES

A. Grading[11]

50 cubic yards or less	☐	$ 0
51 to 100 cubic yards	☐	$ 554
101 to 1,000 cubic yards	☐	$ 1,108
1,001 to 10,000 cubic yards	☐	$ 2,216
10,001 to 100,000 cubic yards	☐	$ 3,324
100,001 to 200,000 cubic yards	☐	$ 5,540
200,001 or more cubic yards	☐	$ 11,080

[7] The fee shall be based on either the gross square footage or the development cost, whichever is greater.

[8] Additional fee for grading applies. (See section III.A of this schedule).

[9] Pursuant to section 13055(a)(5) of the Commission's regulations, this category includes all development not otherwise identified in this section, such as seawalls, docks and water wells.

[10] Development cost includes all expenditures, including the cost for planning, engineering, architectural, and other services, made or to be made for designing the project plus the estimated cost of construction of all aspects of the project both inside and outside the Commission's jurisdiction.

[11] The fee for grading is based on the cubic yards of cut, plus the cubic yards of fill.

B.	Lot line adjustment[12]	☐	$ 3,324
C.	Subdivision[13]		
	Up to 4 new lots	☐	$ 3,324/ea
	More than 4 new lots	☐	$ 13,296 plus $1,108 for each lot above 4
D.	Administrative permit	☐	$ 2,770[14]
E.	Emergency permit	☐	$ 1,108[15]
F.	Amendment		
	Immaterial amendment	☐	$ 1,108
	Material amendment ..... [50% of fee applicable to underlying permit if it were submitted today]	☐	$ _____ (calculate fee)
G.	Temporary event which requires a permit pursuant to Public Resources Code section 30610(i)		
	If scheduled on administrative calendar……	☐	$ 1,108
	If not scheduled on administrative calendar……	☐	$ 2,770
H.	Extension[16] and Reconsideration		
	Single-family residence	☐	$ 554
	All other development	☐	$ 1,108
I.	Request for continuance		
	1st request	☐	No charge
	Each subsequent request (where Commission approves the continuance)	☐	$ 1,108
J.	De minimis or other waivers	☐	$ 554
K.	Federal Consistency Certification[17] [The fee is assessed according to sections I, II, and III, above]	☐	$ _____
L.	Appeal of a denial of a permit by a local government[18] [The fee is assessed according to sections I, II, and III, above]	☐	$ _____
M.	Written Permit Exemption	☐	$ 277

[12] A lot line adjustment is between adjoining parcels where the land taken from one parcel is added to an adjoining parcel, and where a greater number of parcels than originally existed is not thereby created.

[13] The fee is charged for each parcel created in addition to the parcels that originally existed.

[14] Additional fee will apply if the project is removed from the Administrative Calendar and rescheduled on the Regular Calendar.

[15] The emergency application fee is credited toward the follow-up permit application fee.

[16] If permit extension is objected to by the Commission and the application is set for a new hearing, then a new application fee is required, based on type of development and/or applicable calendar.

[17] Fees for federal consistency items will be assessed now that the Commission has received approval from NOAA to amend the California Coastal Management Program.

[18] Pursuant to Public Resources Code section 30602 or 30603(a)(5).

N. Written Boundary Determination ..... ☐ $ 277

O. Coastal Zone Boundary Adjustment ..... ☐ $ 5,540

TOTAL SUBMITTED	$

TO BE COMPLETED BY STAFF

SUBMITTED FEE VERIFIED BY:	*DATE:*
IS SUBMITTED AMOUNT CORRECT? † Yes. Applicant has correctly characterized the development, and payment is appropriate. † Applicant did not fill out form, thus staff has marked the form to compute the fee, and applicant has paid fee. † No. Why? _____ _____	
REFUND OR ADDITIONAL FEE REQUIRED? (STATE REASON) † Refund amount (_____) † Additional fee amount (_____)	
REMINDE R: RECORD FEE PAYMENT IN PERMIT LOG	
FINAL FEE VERIFIED BY: (TO BE COMPLETED AFTER COMMISSION ACTION)	*DATE:*

NOTICE OF PENDING PERMIT

A PERMIT APPLICATION FOR DEVELOPMENT ON THIS SITE IS PENDING BEFORE THE CALIFORNIA COASTAL COMMISSION.

PROPOSED DEVELOPMENT: _____

_____

_____

_____

LOCATION: _____

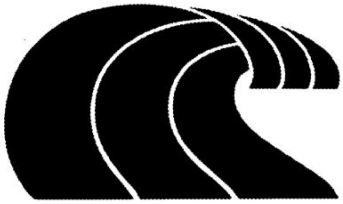
_____

APPLICANT: _____

APPLICATION NUMBER:_____

DATE NOTICE POSTED: _____

FOR FURTHER INFORMATION, PLEASE PHONE OR WRITE THE OFFICE LISTED BELOW BETWEEN 8 A.M. AND 5 P.M., WEEKDAYS.



PRINT ON YELLOW STOCK CARD

CALIFORNIA COASTAL COMMISSION
NORTH CENTRAL COAST DISTRICT OFFICE
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
(415) 904–5260

APPLICATION FOR COASTAL DEVELOPMENT PERMIT

APPENDIX A

DECLARATION OF CAMPAIGN CONTRIBUTIONS

Government Code Section 84308 prohibits any Commissioner from voting on a project if he or she has received campaign contributions in excess of $250 within the past year from project proponents or opponents, their agents, employees or family, or any person with a financial interest in the project.

In the event of such contributions, a Commissioner must disqualify himself or herself from voting on the project.

Each applicant must declare below whether any such contributions have been made to any of the listed **Commissioners** or **Alternates** (see last page).

CHECK ONE

☒ The applicants, their agents, employees, family and/or any person with a financial interest in the project **have not contributed** over $250 to any Commissioner(s) or Alternate(s) within the past year.

☐ The applicants, their agents, employees, family, and/or any person with a financial interest in the project **have contributed** over $250 to the Commissioner(s) or Alternate(s) listed below within the past year.

Commissioner or Alternate

_____

Commissioner or Alternate

_____

Commissioner or Alternate

_____

_____ _____

Carl W. Vogler 12/27/15

Signature of Applicant or Authorized Agent *Date*

Please type or print your name Carl W Vogler JR

APPLICATION FOR COASTAL DEVELOPMENT PERMIT

APPENDIX A

DECLARATION OF CAMPAIGN CONTRIBUTIONS

Government Code Section 84308 prohibits any Commissioner from voting on a project if he or she has received campaign contributions in excess of $250 within the past year from project proponents or opponents, their agents, employees or family, or any person with a financial interest in the project.

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☒ The applicants, their agents, employees, family and/or any person with a financial interest in the project **have not contributed** over $250 to any Commissioner(s) or Alternate(s) within the past year.

☐ The applicants, their agents, employees, family, and/or any person with a financial interest in the project **have contributed** over $250 to the Commissioner(s) or Alternate(s) listed below within the past year.

Commissioner or Alternate

Commissioner or Alternate

Commissioner or Alternate

Michael Lawson

Signature of Applicant or Authorized Agent

Dec. 28, 2015

Date

Michael Lawson

Please type or print your name

MARIN COUNTY SECURED TAX STATEMENT

July 1, 2015 to June 30, 2016

MARIN COUNTY TAX COLLECTOR

USE THIS PARCEL NO. ON ALL CHECKS AND CORRESPONDENCE

3818(02)

QUESTIONS: ON PAYMENTS CALL (415) 473-6133, ON ASSESSED VALUES CALL (415) 473-7215

PARCEL NUMBER	BILL NUMBER	TAX RATE AREA
100-100-48	15-1094433	94-001

KEEP THIS PORTION OF BILL FOR YOUR RECORDS

KITSON MARISA K ETAL
VOGLER CARL W JR ETAL
C/O LAWSONS LANDING INC
PO BOX 67
DILLON BEACH CA 94929

PLEASE MAKE CHECKS PAYABLE TO: MARIN COUNTY TAX COLLECTOR

SITUS ADDRESS 94 MARINE VIEW DR
DILLON BEACH

CSA #31-CO FIRE	(415)473-2631	
CO LIBRARY SPEC TAX	(415)473-4370	
WM PARAMEDIC-CSA#28	(415)473-2631	
MS MOSQUITO #2	(800)273-5167	
SHORELINE SCHOOL	(707)878-2226	
FFX-W.MARIN LIBRARY	(415)473-4370	
MARINEMERGENCY RADIO	(800)676-7516	
VALUATIONS	(415)473-7215	

	FULL/ASSESSED VALUE	EXEMPTION DETAIL	GROSS TAX AMOUNT
LAND	892,940		13,532.86
IMPR	288,244		TAX REDUCTION ATTRIBUTABLE TO THE STATE FINANCED HOMEOWNERS PROPERTY TAX RELIEF PROGRAM
BUS			
PERS			
		NET VALUE	NET TAX PAYABLE
TOTAL	1,181,184	1,181,184	13,532.86

RATES AND DISTRIBUTIONS OF AMOUNTS BY TAXING AGENCIES

TAXING AGENCY	LEVY	RATE / FUND	AMOUNT
BASIC TAX	0	1.0000	11,811.84
SCHOOL BONDS	1	.0594	701.56
HEALTH BONDS	1	.0235	277.56
SHORELINE SCHOOL	3	107641	192.16
CSA #31-CO FIRE	3	101126	152.00
CO LIBRARY SPEC TAX	3	101160	49.00
WM PARAMEDIC-CSA#28	3	102382	128.00
MS MOSQUITO #2	3	105120	90.74
MARINEMERGENCY RADIO	3	109283	58.00
FFX-W.MARIN LIBRARY	3	109108	72.00
TOTAL		1.0829	13,532.86

IMPORTANT INFORMATION

Examine this bill carefully. Make sure it is your bill.
The Tax Collector is not responsible for erroneous payments.
See reverse side for senior, disabled, property tax exemptions and other important tax information.
For Property Tax Exemption information visit our website at:
marincounty.org/propertytaxexemptions

1ST INSTALLMENT	2ND INSTALLMENT	TOTAL TAX
6,766.43	6,766.43	13,532.86
10% PENALTY AFTER DECEMBER 10th	10% PENALTY + $10.00 COST AFTER APRIL 10th	PENALTIES APPLY WHEN SHOWN BELOW

WEBSITES:
marincounty.org
marincounty.org/taxes
marincounty.org/debtandpension
marincounty.org/propertytaxexemptions

MARIN COUNTY SECURED TAX STATEMENT

July 1, 2015 to June 30, 2016

MARIN COUNTY TAX COLLECTOR

USE THIS PARCEL NO. ON ALL CHECKS AND CORRESPONDENCE

3844(02)

QUESTIONS: ON PAYMENTS CALL (415) 473-6133, ON ASSESSED VALUES CALL (415) 473-7215

PARCEL NUMBER	BILL NUMBER	TAX RATE AREA
100-216-01	15-1094493	94-001

KEEP THIS PORTION OF BILL FOR YOUR RECORDS

LAWSON BROTHERS
PO BOX 67
DILLON BEACH CA 94929

PLEASE MAKE CHECKS PAYABLE TO: MARIN COUNTY TAX COLLECTOR

SITUS ADDRESS

	FULL/ASSESSED VALUE	EXEMPTION DETAIL	GROSS TAX AMOUNT
LAND	6,150		380.26
IMPR			TAX REDUCTION ATTRIBUTABLE TO THE STATE FINANCED HOMEOWNERS PROPERTY TAX RELIEF PROGRAM
BUS			
PERS			
		NET VALUE	NET TAX PAYABLE
TOTAL	6,150	6,150	380.26

RATES AND DISTRIBUTIONS OF AMOUNTS BY TAXING AGENCIES

TAXING AGENCY	LEVY	RATE / FUND	AMOUNT
BASIC TAX	0	1.0000	61.50
SCHOOL BONDS	1	.0594	3.60
HEALTH BONDS	1	.0235	1.44
SHORELINE SCHOOL	3	107641	192.16
CSA #31-CO FIRE	3	101126	38.00
CO LIBRARY SPEC TAX	3	101160	49.00
MS MOSQUITO #2	3	105120	5.56
MARINEMERGENCY RADIO	3	109283	29.00
TOTAL		1.0829	380.26

CSA #31-CO FIRE	(415)473-2631
CO LIBRARY SPEC TAX	(415)473-4370
MS MOSQUITO #2	(800)273-5167
SHORELINE SCHOOL	(707)878-2226
MARINEMERGENCY RADIO	(800)676-7516
VALUATIONS	(415)473-7215

IMPORTANT INFORMATION

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For Property Tax Exemption information visit our website at:
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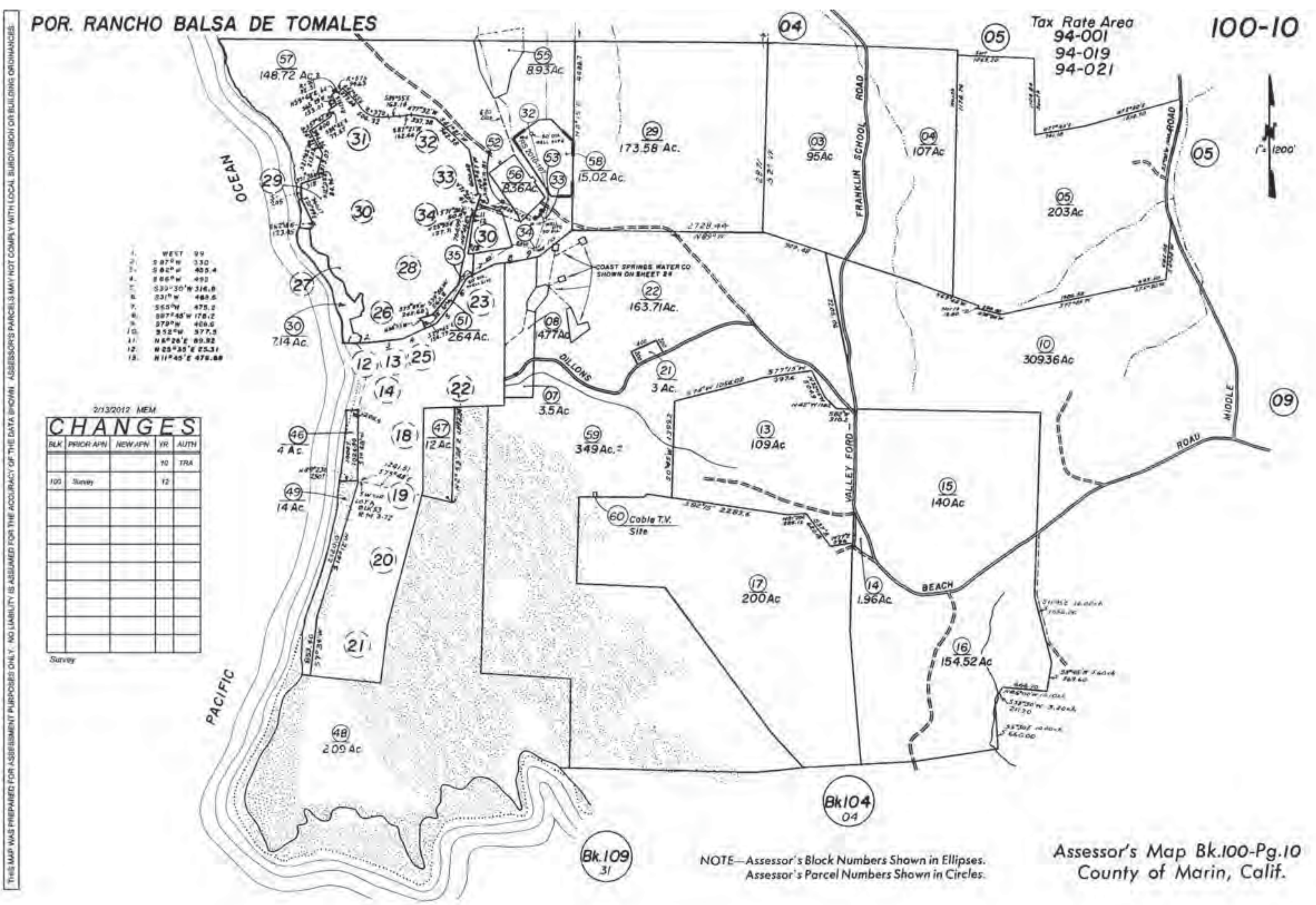
WEBSITES:
marincounty.org
marincounty.org/taxes
marincounty.org/debtandpension
marincounty.org/propertytaxexemptions

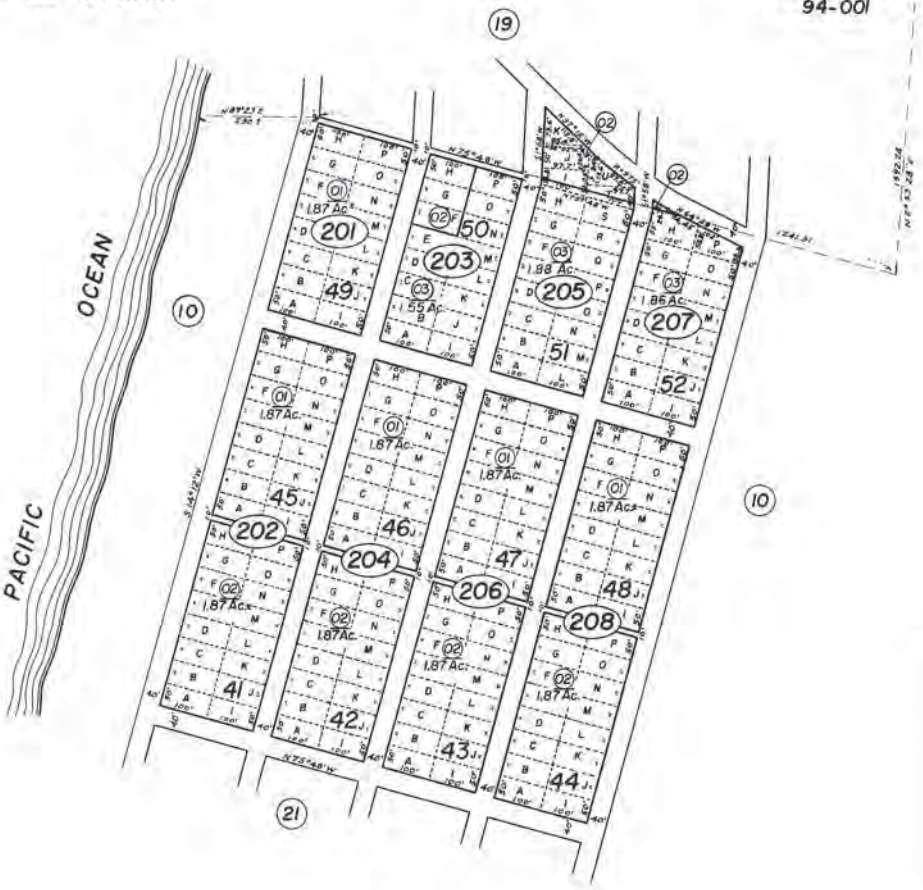
1ST INSTALLMENT	2ND INSTALLMENT	TOTAL TAX
190.13	190.13	380.26
10% PENALTY AFTER DECEMBER 10th	10% PENALTY + $10.00 COST AFTER APRIL 10th	PENALTIES APPLY WHEN SHOWN BELOW


POR. RANCHO BALSA DE TOMALES
100-10
Tax Rate Area
94-001
94-019
94-021
PACIFIC
OCEAN
FRANKLIN SCHOOL ROAD
VALLEY FORD
DILLONS
BEACH
MIDDLE
ROAD
COAST SPRINGS WATER CO. SHOWN ON SHEET 24
173.58 Ac.
163.71Ac.
309.36Ac
349Ac.
200Ac
140Ac
154.52Ac
209Ac
148.72 Ac.
Cable T.V. Site
Bk.104 04
Bk.109 31
2/13/2012 MEM
CHANGES
NOTE—Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.
Assessor's Map Bk.100-Pg.10
County of Marin, Calif.
THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

POR. RANCHO BOLSA DE TOMALES

Tax Area Code
94-001

100-20



1" = 200'

5/15/2015 MEM

CHANGES

BLK	PRIOR APN	NEW APN	YR	AUTH
			15	

Map Page Update

Map of Sub. No. 1, Portola Beach R.M. Bk. 3 - Pg. 72

NOTE—Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.

Assessor's Map Bk. 100-Pg. 20
County of Marin, Calif.

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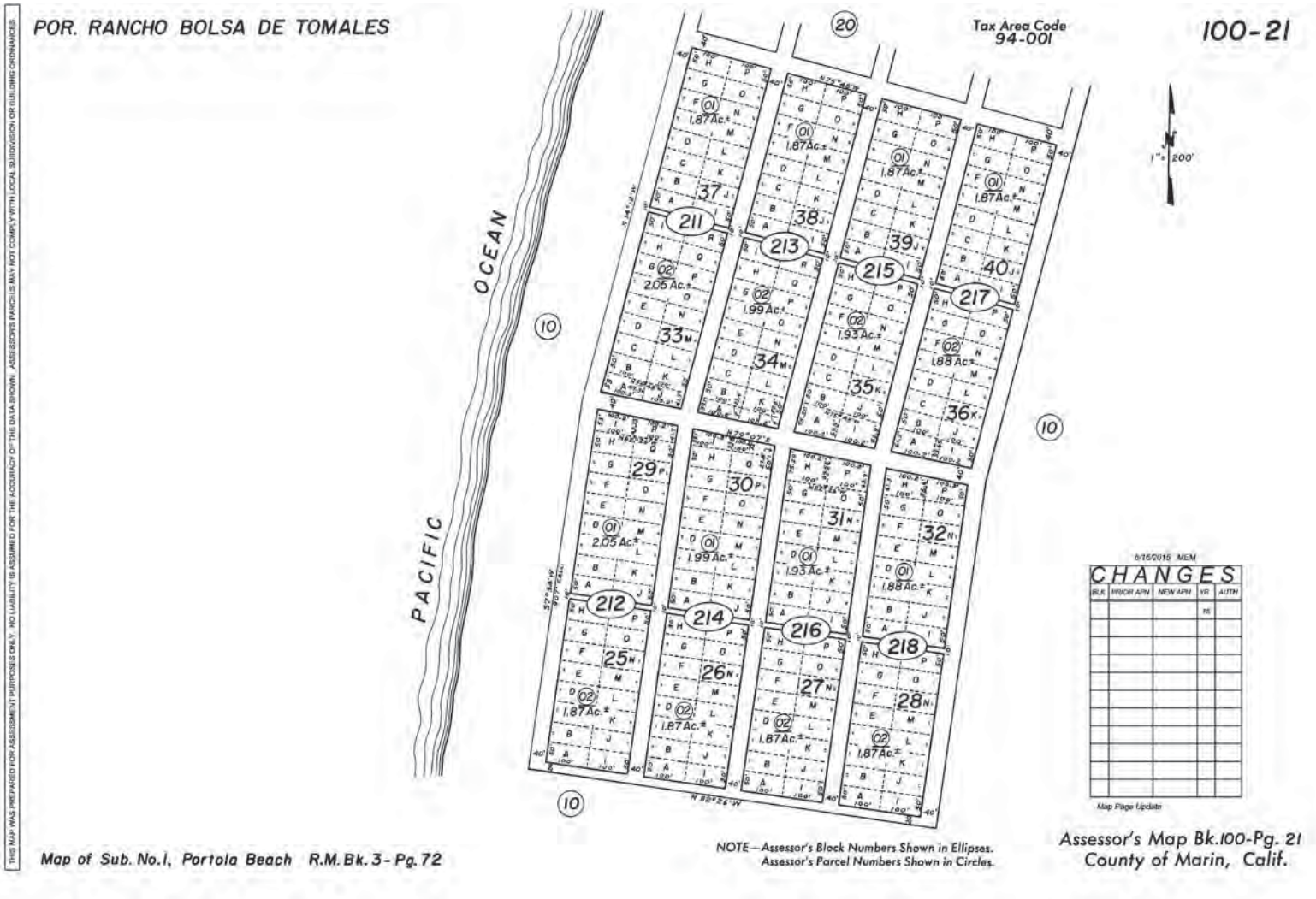


THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

APPLICATION FOR COASTAL DEVELOPMENT PERMIT

Addendum to Section II, Item 2
Describe the proposed development in detail. Include secondary improvements such as grading, septic tanks, water wells, roads, driveways, outbuildings, fences, etc.

The following is a summary list of improvements in Area 6 at Lawsons Landing:

- Gate House will remain but will be improved along with entry improvements.
- Adjacent group of buildings including new administrative office, emergency services center, and store, bicycle, boat and equipment storage and boat repair. Equipment, maintenance, repair and storage has been ongoing in this area.
- Covered or canopy area to store electric carts, electric charging station, and solar collectors mounted and other equipment out of full exposure to the elements.
- The roof of most of the buildings as well as these canopies would have photovoltaic or solar thermal collectors
- Wastewater secondary treatment plant, such as recirculating filter system (AdvanTex or equivalent), is proposed for Area 6. This system will consist of about 1,000 square feet of largely buried equipment and a small control room building footprint of about 100 square feet.
- Underground leach field areas. Wastewater disposal using a combination of subsurface leach field and seasonal spray irrigation of an approximately 6-acre pasture uphill about 300 ft and ¾ of a mile.
- Lift station to pump secondary treated wastewater to dry season spray irrigation area uphill.

Project Description of proposed redevelopment of Area 6 at Lawsons Landing

Reasons to Locate Key Facilities in Area 6

Lawsons Landing is seeking to make feasible the continuance of a family owned business, which provides affordable coastal access and water-dependent recreation. In order to meet (Coastal Development Permit) CDP Conditions requirements, a very large portion of prior income will be eliminated, while extensive costs will be incurred in major improvements in infrastructure and utilities including a new wastewater system.

In the context of preserving affordable coastal access, there are a number of compelling reasons to locate key facilities and services in Area 6. Primary among those reasons are the CDP Conditions themselves, including locating key CDP specified facilities and

services in Area 6 in the most environmentally sound manner.

The proposed facilities, which are in keeping with CDP Conditions are shown in the attached drawings and itemized below in relationship to specific CDP Conditions:

A. Relationship to Traffic Management Plan

Special Condition 12, Traffic Management Plan, of the Lawsons Landing Coastal Development Permit indicates: "The use of on-site facilities by visitors to avoid off-site trips is encouraged" and that the Plan shall provide "Traffic reduction incentives for campsite users, including non-peak day arrivals/departures, multiple-occupant versus single-occupant vehicles, in-camp trip reductions, and shuttle."

The section of Lawsons Landing's Interim Camp Management and Operation plan, which was approved May 25, 2012 by the California Coastal Commission (CCC) addresses CDP Condition 12, Traffic Management Plan on page 6 as follows: "In general, in order to hopefully replace 1) the year round revenue from trailer space rental that will be completely lost, and 2) peak season revenue from camp lots that are being lost, Lawsons Landing hopes to bring groups to stay at Lawsons Landing for family, non profit, and business gatherings on a year round basis." This providing for group stays may be essential to offsetting revenue loss and preserving affordable coastal access in an economically viable and self-sustaining (non taxpayer subsidized) manner at Lawsons Landing.

1. Area 6 as traffic management and transportation hub

a) Area 6 is the logical location to receive and process guests, and provide transportation alternatives especially for groups arriving in multiple-occupant shuttles and vans. After being processed in Area 6, this will be the location where guests can then be offered in-camp shuttles, bicycles, and other alternatives as opposed to single-occupant vehicles.

Lawsons Landing's approved Interim Camp Management and Operation Plan further indicates: "Shuttles clearly will be helpful in reducing traffic, including by keeping visitors inside Lawsons Landing. Shuttles, in contrast to low-occupancy vehicles, can also greatly lower overall environmental impact by bringing groups of guests out to Lawsons Landing."

b) Second in being near the entrance gate, Area 6 is a suitable location for vehicles to move from the entrance gate and provide relief from backups and idling of vehicles. Area 6 would also be used as a secondary camper entry and processing location on peak camping days.

c) As above, Area 6 is an appropriate storage location for rented bikes and electric carts and vehicles, which can be used as low impact transport by those who arrive in multiple occupancy vehicles.

d) Electric vehicle charging stations with solar collectors to power them will also be part of an environmentally responsible design. Electric carts are currently used at Lawsons Landing for maintenance purposes and their use will be expanded to provide a zero emission option for guests staying at Lawsons Landing, whether they arrive in shuttle or large RV. Although not yet commercially available, an electric shuttle or van for on-site transportation would hopefully be available in the future.

2. Area 6 as appropriate location for a store

Area 6 is also a logical place to locate a store to avoid off-site trips as specified in CDP Condition 12, Traffic Management Plan language: “The use of on-site facilities by visitors to avoid off-site trips is encouraged.”

Area 4 is the largest RV area at Lawsons Landing and it is about the same distance from it to the Lawsons Landing boathouse as to the Dillon Beach Store. Area 6 is the appropriate location for a store, especially to avoid Area 4 offsite trips.

3. Areas 6 and 8 be used as a construction staging areas for equipment and materials.

During the construction phases of the project, Areas 6 and 8 are logical areas for location for construction staging including temporary storage of construction materials and equipment. In particular, periodic large deliveries to this area and adequate storage area would avoid the need for frequent trips in and out of Lawsons Landing for construction materials and equipment by contractors working at Lawsons Landing.

B. Relationship to Hazard Response Plan

1. Hazard response, emergency services center

The CCC approved Lawsons Landing Hazard Response Plan, specifies locating a “Command Center/Satellite Station at Area 6. The Marin Office of Emergency Services has indicated strong support for a Command Center at Area 6 for a number of reasons including: 1) it is above the high water mark of the highest anticipated tsunamis (around 20 feet), 2) it is relatively close to Area 4, which is the largest camping area, and 3) it is also close to the Dillon Beach neighborhoods nearby on Cliff and Marine View, which will be separated from the rest of Dillon Beach by the low elevation and tsunami vulnerable area near the Dillon Beach paid entrance area, which extends up the valley of Dillon Creek. In fact all of Dillon Beach is relatively close to Area 6 and will thus make Area 6 the appropriate coordination location between the populations at Lawsons Landing and Dillon Beach at any time. The nearby Dillon Beach neighbors, as well as potentially other Dillon Beach residents and visitors along with Lawsons Landing visitors, may have to rely on the resources available at Lawsons Landing Area 6 including electricity generator and charging station, medical, water, and food supplies, sanitation services, and shelter.”

The Emergency Services Command Center could be in the range of a 1,500 to 2,000 square foot area. It could include a small elevated area to facilitate meetings and a small kitchen for food preparation.

Storage of Emergency supplies will be at the Command and Care Center is the logical place to store materials such as first aid and food supplies, foldable cots, and other essential emergency needs. Such storage of emergency supplies is a key part of the hazard preparedness part of any hazard response plan.

Much of the year, during processing or while waiting for a shuttle, it will be necessary for guests to come inside and get out of the weather. The space of the Command/Care and Emergency Services could be flexible and used for a guest processing and waiting area as well as for orientation and other meetings.

2. Storage location for hazardous and other materials and boat repair
Coastal Development Permit Condition 15. Hazard Response Plan requires: "A(2) Measures to eliminate or minimize the introduction of hazardous materials, toxic chemicals and floating debris into the groundwater and nearby surface waters." Consistent with this, it is a priority to keep most hazardous materials away from the waterfront. Area 6, being above the high water mark of the highest anticipated tsunamis, is hence an appropriate location for storage of hazardous materials as well as other materials, which could become floating debris in the event of a tsunami.

The fuel bunker has already been moved from the more environmentally vulnerable shoreline area of Area 2 to it's new location in Area 6 in accordance with a permit by Marin County. A copy of the he Marin County Unified Program Agency, Hazardous Materials and Hazardous Wastes Regulatory Program Permit is attached.

Moving of hazardous materials away from the waterfront is consistent with the Lawsons Landing Marin County Master Plan for Area 6 as well as with the Lawsons Landing Coastal Development Permit Condition 15.

The north side of the footprint of the existing truck shed would be an appropriate location for storage of trucks and other equipment needed to support the recreational operations at Lawsons Landing as well as some boats, including boats needing repair.

The east side of the general truck shed area could also appropriately include a covered or canopy area to store electric carts and other equipment out of full exposure to the elements. The roof of most of the buildings as well as these canopies would be appropriate for solar collectors to meet current and coming state mandates to minimize carbon footprint of commercial development.

All buildings in Area 6 would have solar panels mounted on them as much as feasible. This renewable, non Green House Gas (GHG) producing source of energy is consistent with overall environmentally sensitive design at Lawsons Landing.

This east side of the Existing Truck Shed has been in use as a truck storage and turn around area since shortly after a permit was issued to Lawsons Landing for their sand quarry and “facilities related thereto” in 1971.

3. Integration with CDP Conditions Plan Requirements and Locations
Hence, reuse of previously developed area in Area 6 is necessarily integrated with both Lawsons Landing’s Traffic Management and Hazard Response Plans. This reuse of Area 6 also facilitates affordable coastal access, particularly for groups, with a relatively low carbon footprint. These factors, along with evidence of prior permitted development, makes an amendment to reuse previously developed Area 6 completely reasonable.

South of the storage area would appropriately serve as a location for Command/Care and Emergency Services space.

South of the Command/Care and Emergency Services space and to the other side of an opening for access between the west and east side of these buildings is where the store would be located.

C. Appropriate Location for Management and Administrative Facilities

1. Entry Gate
The entry gate would remain in it’s present location. The entry gate building may be moved a short distance to accommodate minor entry improvements such as a stacking lane for RVs to avoid congestion at the entry gate.

2. Office
Area 6 is also the appropriate location for management of much of the Lawsons Landing’s operations. Recreational experience is key to the waterfront area, so the limited space in Area 2 is most appropriate for recreational purposes. In contrast, back-of-the-house operations are more appropriate in Area 6. This office would be south of the storage area and just east of the Command/Care and Emergency Services space.

Much of Area 6 is near the Existing Truck Shed and Maintenance Shed have Cypress trees which screen this area from the south and west. These long established trees will be maintained.

D. Other CDP Requirements

1. Free Public Access Parking.
CDP Condition 22 specifies: “No fewer than five (5) free public parking spaces shall be provided, reserved, and maintained in an open and useable condition for free public use in or adjacent to Area 6 outside the entry gate on the property. Use of the free parking spaces and coastal and campground access conveyed therein by members of the

public shall be on a first-come, first-served basis, and shall be for day use only (no after dark or overnight use), with appropriate signage that alerts the public of the parking."

An appropriate location proposed for these public access parking spaces would be the approximate location of what is currently the Lawson family garage, which will be removed to provide for these parking spaces. They will be accessible by the entrance to this area, which is prior to the entry gate.

2. Wastewater Treatment

Consistent with Lawsons Landing CDP Condition 7, Wastewater Treatment and Disposal System Plan, a wastewater system lift station at the base of Sand Haul Road would appropriately be located either near or within Area 6. This lift station would pump wastewater effluent to a previously studied wastewater dispersal site (Scale House area) located uphill 300 feet in elevation and a distance of about a mile.

Area 6 is also the logical location for the wastewater treatment component of the wastewater system since it would be preferable to have treated wastewater pumped up the hill, rather than pumping primary treated septic tank effluent uphill. An advanced secondary treatment plant, such as recirculating filter system (AdvanTex or equivalent), is proposed for Area treatment/storage tanks, a series of partially buried filter units and associated pumps and piping occupying an area of about 10,000 square feet, plus a small control building with a footprint of about 100 square feet. This control building is proposed to be located at either one end of the new truck and equipment storage area or the electric cart canopy area.

Additionally, Area 6 has been investigated and found to have very favorable conditions for subsurface leachfields, which would be able to accommodate a substantial amount of the total wastewater flow from Lawsons Landing (LL). This would limit the amount of pumping and spray irrigation in the Scale House area to periods of peak usage during the dry season only.

3. Measures to increase inundation and soil saturation within the Tomales wetlands/dune complex including leach fields in Area 6

The CDP Special Condition 4, Sensitive Resource Protection, Restoration, and Enhancement Plan (PREP) required a "Hydrological Assessment by a hydrologist with experience in wetland restoration."

The Recommendations of the draft Hydrological Assessment (HA) indicate: "The available fresh water supply to the NRCS wetlands is subject to loss due to consumptive use of upstream water. A reduction in pumping in water supply wells, or return of grey water will contribute to increases in wetland saturation."

The HA Recommendations also indicate: "Maintain, and if possible expand existing groundwater sources to the wetland areas. Potential sources to be evaluated include

grey water returns to the wetland from campground facilities. Do not permit groundwater export."

The original wastewater plan developed in 2011 envisioned pumping all wastewater for treatment and disposal to a drip dispersal field and a summer pasture irrigation area nearly a mile uphill from Area 6 and adjacent NRCS wetlands. While being able to meet applicable wastewater disposal regulations, the original plan would effectively "export" treated water to the most distant location on the property, where it would provide little if any groundwater replenishment benefit to the NRCS wetlands. Most of the treated water would be lost to plant uptake and evapotranspiration in the shallow soils of the drip dispersal field and spray field areas. In contrast, the revised plan with leachfields in Area 6 would provide substantially greater consistency with the HA recommendations. It would provide for subsurface dispersal of treated water to deep sandy soils in areas located much closer to the NRCS wetlands, where the evaporative losses from the leachfield would be nil, and the percolating water would contribute to wetland groundwater supply and saturation levels as encouraged by the HA Recommendations.

It should also be noted that, while the HA Recommendations refer specifically to supplementing wetland groundwater sources with return of "grey water" from campground facilities, the quality of wastewater effluent from the proposed treatment plant will be equal to or better than typical "grey water". The treatment processes will include advanced secondary biofiltration, disinfection and nitrogen removal; plus the system will be subject to continuous monitoring and routine water quality testing. As such it will provide a more reliable source of supplemental groundwater replenishment in support of the the HA Recommendations for wetlands enhancement.

Other consistency with CDP

The CDP Findings concluding on page 104 state "The final approved camping configuration would serve to concentrate development in areas that have been previously disturbed and have low ecological value." Area 6 has been a disturbed area for over six decades with truck, vehicle, boat and equipment management, repairs, and storage as part of both A) permitted sand quarry operation and B) water dependent recreation and lower-cost over-night-stay operations.

In addition, Area 6 land area, which is not currently occupied by buildings, vehicles, boats, or equipment, is vegetated predominately by kikuyu grass, a non-native (African) noxious weed. Kikuyu grass is well known to be an extremely aggressive invasive, which can climb over other plants, producing herbicidal toxins that kill them. Kikuyu also can choke ponds and waterways. The invasive Kikuyu grass area in Area 6 is clearly previously disturbed with low ecological value. Hence it is an appropriate location for treated wastewater dispersal, where the noxious invasive vegetation can be removed during site preparation and leachfield installation, followed by restoration with more desirable native dune species after installation. The proposed leachfield design will include use of "infiltrator chambers" to preclude upward "wicking" and soil moisture and vegetation changes from percolating wastewater effluent.

Other Notes

- Operation and Maintenance. Locating both the treatment system and leachfield in Area 6 rather than at the more remote Scale House area has distinct advantages from an operation and maintenance standpoint, including greater level of routine oversight and attention and faster response time in the event of any emergency or alarm condition.

- Leaching Trenches vs Drip Dispersal. While drip dispersal is a feasible and accepted method for wastewater disposal to land, where soil conditions are suitable traditional leaching trenches are still widely recognized as the preferred dispersal method to lower maintenance requirements and overall reliability.

- Soil and Groundwater Conditions. Supplemental soil studies and ground water monitoring since the CDP approval in 2011 have found much better soil and groundwater for conditions for subsurface wastewater dispersal in Area 6 as compared with the drip field site in the Scale House area. As shown in the attachments Area 6 has deep sandy soils, ranging from 6 to 30+ feet compared with 3 to 4 feet of effective soil depth in the Scale House drip field area. Depths to groundwater in Area 6 are the deepest found anywhere at Lawsons Landing.

- Consultation with RWQCB. Consultation has taken place over the past year with Blair Allen, Regional Water Quality Control Board Water Resources Control Engineer, prior to and following soil and groundwater investigations in Area 6. Positive RWQCB feedback regarding the field findings and overall wastewater plan has reinforced the appropriateness of Area 6 for wastewater treatment and dispersal.

- Field investigations by Questa Engineering has identified suitable conditions for subsurface leach fields in Area 6, which are shown in the attached Questa Preliminary Layout and discussed in attached Area Wastewater Summary. A summary of the wastewater system proposed at Lawsons Landing is found in the appendix of this document.

4. Additional New Material Information and Environmental Benefits of Locating Wastewater System Leach Field in Area 6

The pumping of large volumes of treated wastewater to a drip dispersal area nearly a mile uphill would also require large year round expenditure of energy.
While renewable energy could meet some of these energy requirements, there are a number of challenges associated with this. There are green house gas impacts of creating, shipping and installing certain forms of renewable energy, particularly solar photovoltaic. For these reasons, the California Energy Commission, California Public Utilities Commission, California Air Resources Board and CAISO all have conservation-first policies. These are often referred to as “loading order” policy, which prioritizes investments in energy efficiency ahead of developing new power supplies.

Numerous developments and findings since the time of the Lawsons Landing CDP in July of 2011 warrant greater implementation of energy and water saving potential. These have included AB 32, which according to the California Air Resources Board website does the following:

AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020 — a reduction of approximately 15 percent below emissions expected under a "business as usual" scenario.

Pursuant to AB 32, ARB must adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. The full implementation of AB 32 will help mitigate risks associated with climate change, while improving energy efficiency, expanding the use of renewable energy resources, cleaner transportation, and reducing waste.

Further, Governor Brown issued an executive order in 2015 to reduce greenhouse gas emissions in California 40 percent below 1990 levels by 2030. SB350 passed in October of 2105 further reinforced urgency of a state mandate to reduce greenhouse emissions through efficiency and renewable energy. Additionally the Governor has spearheaded a global pact amongst cities, states and countries - called the Under 2 MOU - to limit the increase in global average temperature to below 2 degrees Celsius - the warming threshold at which scientists say there will likely be catastrophic climate disruptions.

Then United Nations Climate Change Conference in Paris COP 21 in December 2015, resulted in a global agreement on the reduction of climate change, the text of which represented a consensus of the representatives of the 196 nations attending it. Saving energy, where feasible has become a state mandate and part of an international commitment.

- AB32 (2006)
    - The passing of AB32 led to the establishment of state agency teams that developed the "2009 California Climate Adaptation Strategy (CAS)"
    - Water-Energy Team of the Climate Action Team (WET-CAT) continues to evaluate regulatory opportunities to fulfill the objectives of AB32
    - Inter-agency collaboration, combined with the Governor's executive orders, has lead to rapid revisions of water use requirements by the CEC, SWRCB, CPUC since the beginning of 2014

a) Our review of water and wastewater elements has revealed the potential for large energy and GHG reductions, due to large reductions in peak power demands and peak wastewater flow rates. For example:

- ENERGY STAR Appliances increased off-the-shelf availability of beyond-code energy and water efficient appliances, and reduced their pricing
- Standards for ENERGY STAR listings - including water – were raised in 2012
- "To move energy efficiency into the future, EPA continues to increase the stringency of ENERGY STAR performance specifications across all products, homes, buildings and plants. Today, an ENERGY STAR clothes washer uses about 70 percent less energy and 75 percent less water than a standard washer used 20 years ago..."[1]

b) New Water Appliance/Fixture Requirements

- New California building codes were put into effect in 2011, incl. 20% reduction in indoor water use[2]
- California Energy Commission (CEC) changed showerhead requirements from 2.5 gpm to 2.0 gpm effective 7/2016, and 1.8 gpm by 7/2018
- CEC ruling also changed bathroom faucet flow rates from 2.2 gpm to 1.2 gpm by 2018
- Example available Products:
  - Bricor Showerheads 1.5 gpm
  - Niagara Corp. dual-flush toilet averages 1.28 gpf, and 0.8 gpf single-flush toilets

c) Other Regulations

- California Senate Bill (SB)7x7 (2010)
  - Legislative basis for water efficiency
  - Reduce per capita urban (residential) water use by 20% by 2020
  - CA Dept. Water Resources in 2011 developed regulations for implementation which must be incorporated into water plan (enforceable for first time in Urban Water Management Plans at end of 2015)
  - At time of SB7x7 passage, main impact of drought was on Delta fisheries, but since 2012 the continuing drought has directly and significantly impacted human populations, leading to the governor's 2015 executive order to reduce water use in all sectors by 25%

d) Water/Energy Nexus

- 2005 - First CA government report on "California's Water-Energy Relationship" published by CEC, determined that 19% of electricity use and 32% of natural gas use in California is used to pump, heat, and treat water and wastewater.
- 2009-2011 - CPUC, CEC, SWRCB and large water utilities formal regulatory evaluation of the water-energy nexus began with pilot projects to establish quantitative relationship

[1] Energy Star. https://www.energystar.gov/about

[2] 2010 California Green Building Standards Code: *Nation's First Mandatory Statewide Standards Code to Green Construction and Fight Climate Change*

- 2010 - CPUC published "Embedded Energy in Water Studies" - resulted in the development of a water-energy calculation tool in 2014 that is used to quantify impacts of water efficiency on energy and GHG emissions[3]

These developments since the LL CDP was issued in 2011 underscore how water efficiency has become imperative. Water saving measures in compliance and consistent with these developments will reduce the amount of wastewater generation at LL and will make dispersal of a large portion of the treated wastewater at Lawsons Landing in Area 6 leach lines feasible. As above, saving water at LL is consistent with Hydrological Assessment Recommendations. Water savings also demonstrate the water energy nexus/relationship and joint environmental benefits of water and energy savings. Water savings will also help avoid the need and impacts of a drip dispersal system at a 300 foot higher elevation and approximately mile away. During peak periods in the dry months of the year treated wastewater will be pumped uphill for spray irrigation. Year round, wastewater will be pumped from Area 1, 2, 3, and 4 campgrounds to the treatment plant in Area 6. These considerations elucidate the environmental value of water efficiency to lessen the amount of wastewater related pumping.

Appendix

Wastewater Treatment System

Based on preliminary studies conducted by Questa Engineering over the past several years, the new wastewater facilities for Lawsons Landing are proposed to include the following:

Abandonment of the multitude of existing individual septic systems that currently serve the trailers, restrooms, office, laundry, and other support facilities;

Installation of a new septic tank-effluent pump (STEP) collection system, including gravity piping, septic tanks, flow equalization/pump stations and a network of small diameter effluent piping leading a common treatment/disposal area in the vicinity of the Scale House Hay Field;

Secondary treatment plant, such as recirculating sand filter, AdvanTex or equivalent;

Wastewater disposal using a combination of subsurface leach field and seasonal spray irrigation of an approximately 6 -acre pasture

E. Use of Area 8

[3] California Public Utility Commission. *Water Energy Nexus Programs*. http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/Water-Energy+Nexus+Programs.htm

Area 8 includes a home and ancillary garage and storage buildings as well as the building previously referred to as Tractor Shed in prior Quarry Permit documents, such as the 1990 permit documents found in Exhibit J of the previously submitted evidence of Authorized Development. This Tractor Shed is currently used primarily for hay storage and other agricultural use. It is proposed that this building continue to be used for hay storage and other agricultural use while recognizing that a new permit or amendment may be needed to resolve this use.

All sheds and ancillary buildings within 300 feet of the red-legged frog pond will be removed with the exception of the permitted home and garage. The permitted home is to be rebuilt with a new energy efficient home. Area 8 could also serve as an appropriate construction staging area during the redevelopment.

Appendix

Wastewater Treatment System

Based on preliminary studies conducted by Questa Engineering over the past several years, the new wastewater facilities for Lawsons Landing are proposed to include the following:

Abandonment of the multitude of existing individual septic systems that currently serve the trailers, restrooms, office, laundry, and other support facilities;

Installation of a new septic tank-effluent pump (STEP) collection system, including gravity piping, septic tanks, flow equalization/pump stations and a network of small diameter effluent piping leading a common treatment/disposal area in the vicinity of the Scale House Hay Field;

Secondary treatment plant, such as recirculating sand filter, AdvanTex or equivalent;

Wastewater disposal using a combination of subsurface leach field and seasonal spray irrigation of pasture on approximately 6 acres

APPLICATION FOR COASTAL DEVELOPMENT PERMIT

Section III Additional Information

1a) Are there existing structures on the property? Yes If yes, describe

The property located in Area 6 includes the following non residential buildings with their respective square footage.

Existing Facility	Square Footage
Barn: Truck – Tractor	5,184
Barn: Equipment	2,116
Boat Repair Canopy	1,080
Boat Repair Canopy	1,080
Gate House	300
Office at Gate House	330
Shed: Parking Garage	1,225
Shed: At Existing Employee Residence	120
Shed: At Fuel Bunker	288
Shed: At Canopy	45
Utility Shed At Lawson Residence	735

1b) Describe the type of development to be demolished or removed from Area 6, including the relocation site, if applicable

The following buildings and development will be demolished when the new development occurs:

1. Barn, Truck Tractor (also known as Truck Shed),
2. Barn: Equipment (Also known as Equipment Shed),
3. Boat Repair Canopies,
4. Shed at Canopies,
5. Parking Garage (Previously known as Maintenance Shed),
6. Shed at Fuel Bunker (Also known as Oil Storage Shed)
7. Permitted gravity flow septic systems serving the residences and administrative uses in Area 6 would be abandoned in accordance with County Environmental Health standards when new wastewater system is built. Residential and administrative wastewater in Area 6 would subsequently be served by the new wastewater system.

4b) Indicate the location and nature of the access, including the distance from the project site

From the approved Dune Trail Plan: There are currently eight trails for access, of which four will be open at a time and others will close depending on wildlife considerations. Area 1 and 2 has direct access from the entrance, camping and the store.

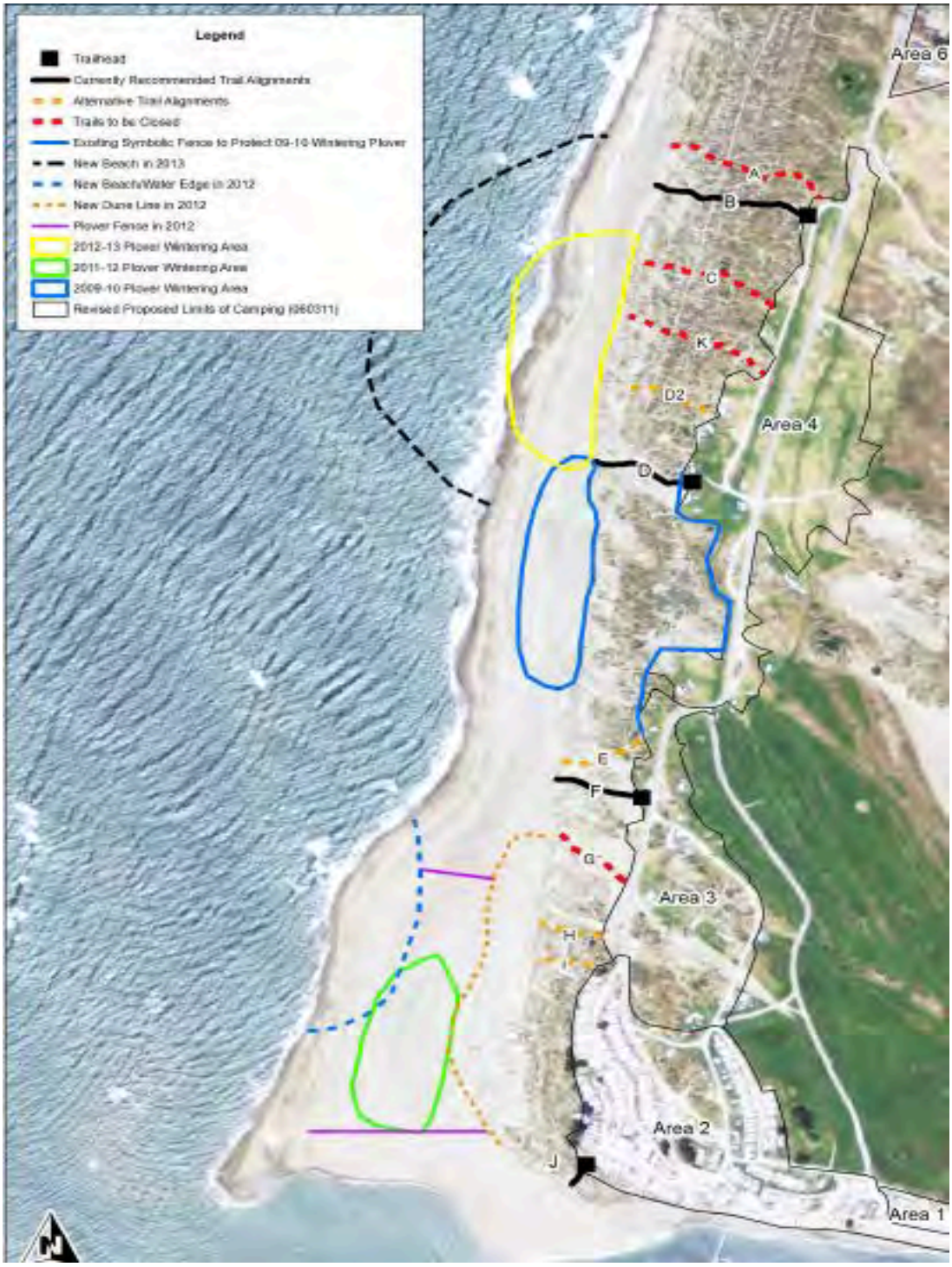
As shown on the figure below, Trails B, D, F, and J are recommended for immediate development with trailheads and cable stays. These trails provide the four best trails providing access from camping and day use areas to the beach. Options to use Trails D2, E, H, and I in lieu of one or more of the recommended trails should remain an option that can be implemented in the future in the event that Trails B, D, F, or J are rested or permanently decommissioned.

A number of existing trails were mapped that will be abandoned permanently for use by the public. Trails will be abandoned based upon limited accessibility, minimization of blowouts, existing low use, and in favor of better trail alignments. Trails that are proposed to be closed include Trails A, C, K, and G. Additional reasons for closure include steep topography, indirect routing, and/or redundancy with other more suitable existing trail alignments.

It is expected that random use of the foredunes in prohibited use areas (i.e., through the establishment of social trails) will cease at Lawson's Landing owing to the designation of formalizing trailheads, signage at all formalized trailheads, and a cable stay system that guides users to stay on designated open trails. In the event that unauthorized social trails continue to be used or that develop in the future, formal steps will be taken by Lawson's Landing staff to discourage use of such trails.

7. Will the development protect existing lower-cost and recreational facilties? Yes
Will the development provide public or private recreational opportunities?
Yes

Explanation: Lawsons Landing has since at least the 1950's provided lower-cost and recreational facilties. The redevelopment of Lawsons Landing will protect these facilties into the future by updating infrastructure such as wastewater system, power, water and roads. Lower cost recreational facilties, which will continue include Recreational Vehicle (RV) and tent camp sites for overnight stays. Lawsons Landing will also continue to provide water dependent recreational services and facilities such as food and beverages, boat launching, servicing of boats, and supplies for fishing. Lawsons Landing hopes to provide additional recreational services, such as docent led tours in Environmentally Sensitive Habitat Areas such as the NRCS easement area.



4c) Describe the effect of the project on public access to and along the shoreline, either directly or indirectly

The property will attempt to balance coastal public access for recreational use and natural resource protection. Areas where the strict application of a 100 foot buffer zone is applied are not proposed for "development." Portions of these buffer areas would

have no building development or new roads built. The MPA is designed to comply generally with the established policies of the Marin County Local Coastal Program (LCP) Unit II and the Coastal Act and balance low cost visitor serving public recreational opportunities in the coastal zone balanced with the need to preserve and protect the unique natural qualities of the coast.

Public pedestrian trails are informal and there is no plan for designed trails except for a trail head sign at the Lawson's Landing Gate House directing public access over the dunes to the beach. Trail access to the beach areas would be informal and follow existing established pathways that are now used. No formal trails are planned for in the beach dune area. Primary beach access would be limited to the one main existing trail with beach access which is located near the Gate House entry.

7) Will the development provide public or private recreational opportunities?

The proposed redevelopment would offer both public and private recreational opportunities. Lawson's Landing has a continuous history of providing coastal recreational uses on the site consistent with local and state policy and land use regulations as set forth in Marin Countywide Plans, the Local Coastal Plan and the Dillon Beach Community Plan. Seasonal RV and recreational camping is proposed to continue at Lawson's Landing.

Lawson's Landing
Area 6 Wastewater Treatment and Disposal Investigation Summary
April 23, 2015

Proposed Usage:

- Secondary wastewater treatment system for entire facility;
- Subsurface leachfield for dispersal of entire winter season flows and partial summer flows;
- Peak dry season flows to be treated at Area 6 and pumped uphill for pasture spray irrigation.

Approximate Area:

- Treatment System: 10,000 sq ft
- Leachfields: 60,000 sq ft

Ground slopes: 5% to 20%

Soil Conditions:

- Some areas of fill soils at the surface (0-2 feet);
- 12 to 30+ feet of clean dune sands with interspersed lenses of clayey sands
- Clay and dense sands underlying dune sand deposits at depth of 15 to 30 ft.

Groundwater Conditions: Groundwater conditions investigated through installation and monitoring of six (6) drilled monitoring wells, and six (6) hand-augered borings. Water table measurements taken in Winter 2015 showed:

- Depth to groundwater typically > 6', (3.9' to 7.4' range) January and February 2015 in proposed leachfield area;
- Sharp drop-off of groundwater in westerly direction toward park entrance (>30' to groundwater);
- Groundwater flow direction radiates to south, southwest and west, generally conforming to surface topography.
- Groundwater gradient: ranges from 0.05 to 0.16

Horizontal Setbacks:

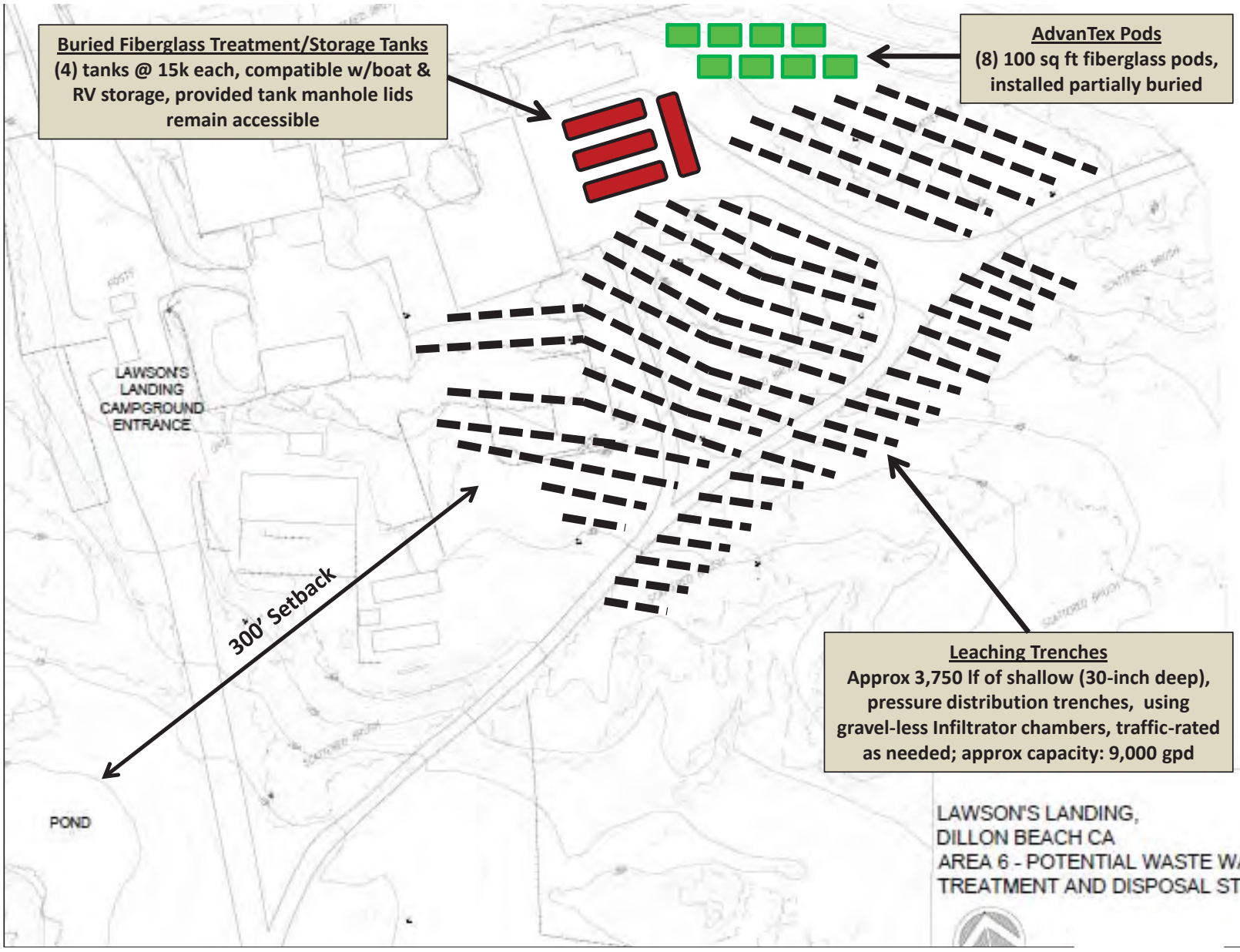
- 300 ft to frog pond
- 950 ft to water supply wells

Proposed Wastewater Treatment System

- Effluent quality objective: advanced secondary treatment, with UV disinfection
- Treatment system design capacity: 30,000 gpd (peak season flow)
- Treatment system: AdvanTex - modular, packed bed, recirculating filter
- Treatment components:
    - (1) 15,000 gal flow equalization tank;
    - (2) 15,000 gallon recirculation tanks;
    - (1) 15,000 gallon treated water storage/dosing tank
    - (8) AdvanTex AX-100 "pods"
    - Pump system and automatic dosing siphons for distribution of treated water to Area 6 leachfields and pasture spray irrigation area (dry season only).

Proposed Wastewater Dispersal System

- Area 6 leachfields:
    - shallow, pressure-dosed trenches using standard (36" wide, 30" deep) "Infiltrator Chambers" in place of drain rock;
    - approximately 3,750 lineal feet of trench, 3-ft wide
    - design loading rate: 0.8 gpd/ ft^2 trench bottom area; 2.4 gpd/lf trench;
    - total leachfield dispersal capacity: 9,000 gpd
    - areal wastewater loading rate: 9,000 gpd/60,000 sq ft = 0.15 gpd/ ft^2
- Dry season pasture irrigation:
    - approximately 6 acres
    - irrigation season: April-October
    - daily irrigation range: 6,000 gpd October to 24,000 gpd July/August


Buried Fiberglass Treatment/Storage Tanks
(4) tanks @ 15k each, compatible w/boat & RV storage, provided tank manhole lids remain accessible
AdvanTex Pods
(8) 100 sq ft fiberglass pods, installed partially buried
LAWSON'S LANDING CAMPGROUND ENTRANCE
300' Setback
Leaching Trenches
Approx 3,750 lf of shallow (30-inch deep), pressure distribution trenches, using gravel-less Infiltrator chambers, traffic-rated as needed; approx capacity: 9,000 gpd
POND
LAWSON'S LANDING,
DILLON BEACH CA
AREA 6 - POTENTIAL WASTE WA
TREATMENT AND DISPOSAL STU

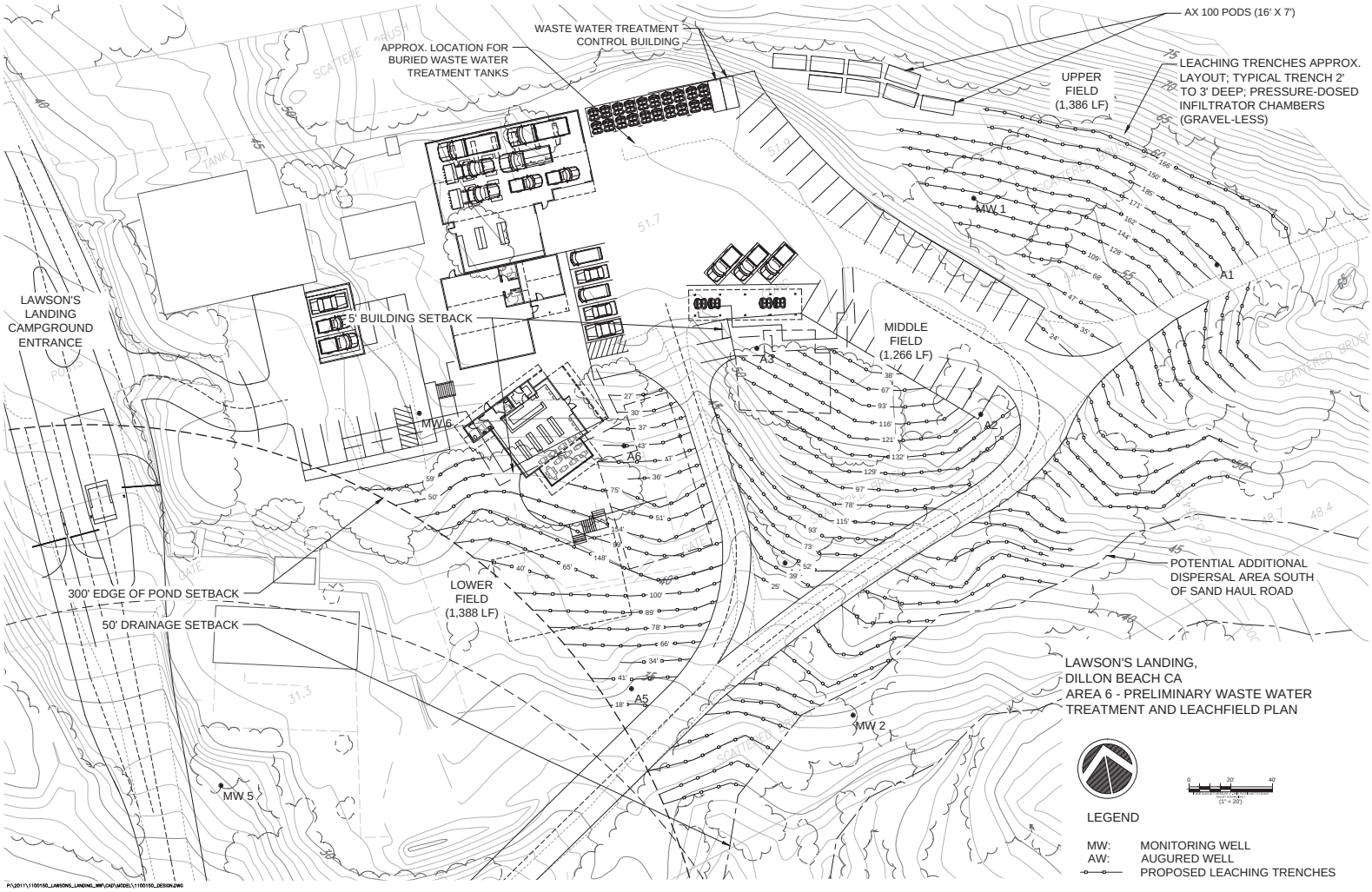


Exhibit 6
A-2-MAR-08-028-A1-EDD
Applicant's CDP Amendment Application (A-2-MAR-08-08-A1)
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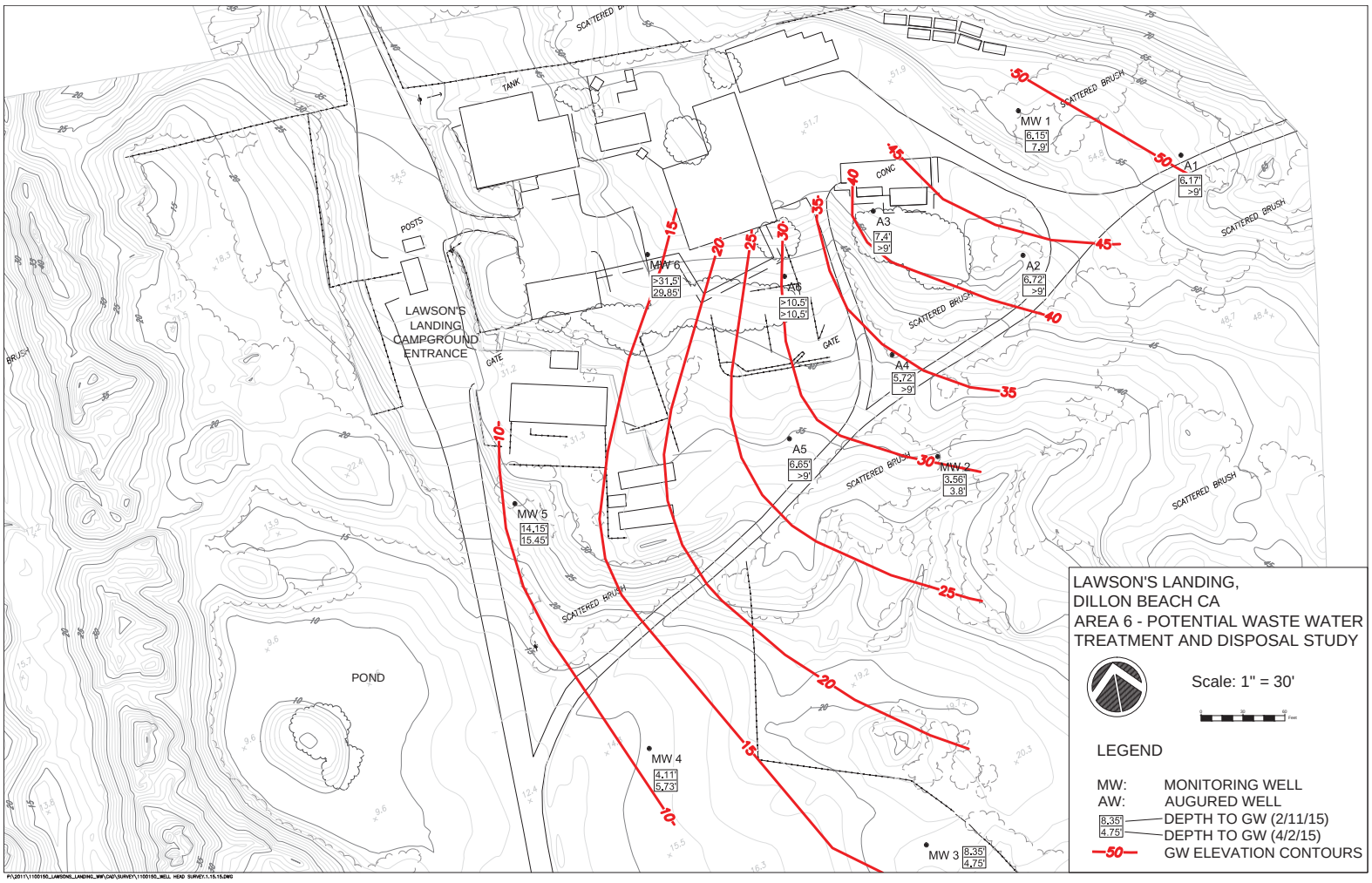
LAWSON'S LANDING CAMPGROUND ENTRANCE
POND
TANK
POSTS
GATE
CONC
SCATTERED BRUSH
MW 1
6.15'
7.9'
A1
6.17'
>9'
A2
6.72'
>9'
A3
7.4'
>9'
A4
5.72'
>9'
A5
6.65'
>9'
A6
>10.5'
>10.5'
MW 2
3.56'
3.8'
MW 3
8.35'
4.75'
MW 4
4.11'
5.73'
MW 5
14.15'
15.45'
MW 6
>31.5'
29.85'
LAWSON'S LANDING,
DILLON BEACH CA
AREA 6 - POTENTIAL WASTE WATER
TREATMENT AND DISPOSAL STUDY
Scale: 1" = 30'
LEGEND
MW: MONITORING WELL
AW: AUGURED WELL
8.35'
4.75'
DEPTH TO GW (2/11/15)
DEPTH TO GW (4/2/15)
50
GW ELEVATION CONTOURS

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CPT 6 - SOIL INTERPRETATION

Lawsons Landing
Dillon Beach, California

Project No. 1783.01 Date 12/15/11

Drawn
Checked

FIGURE

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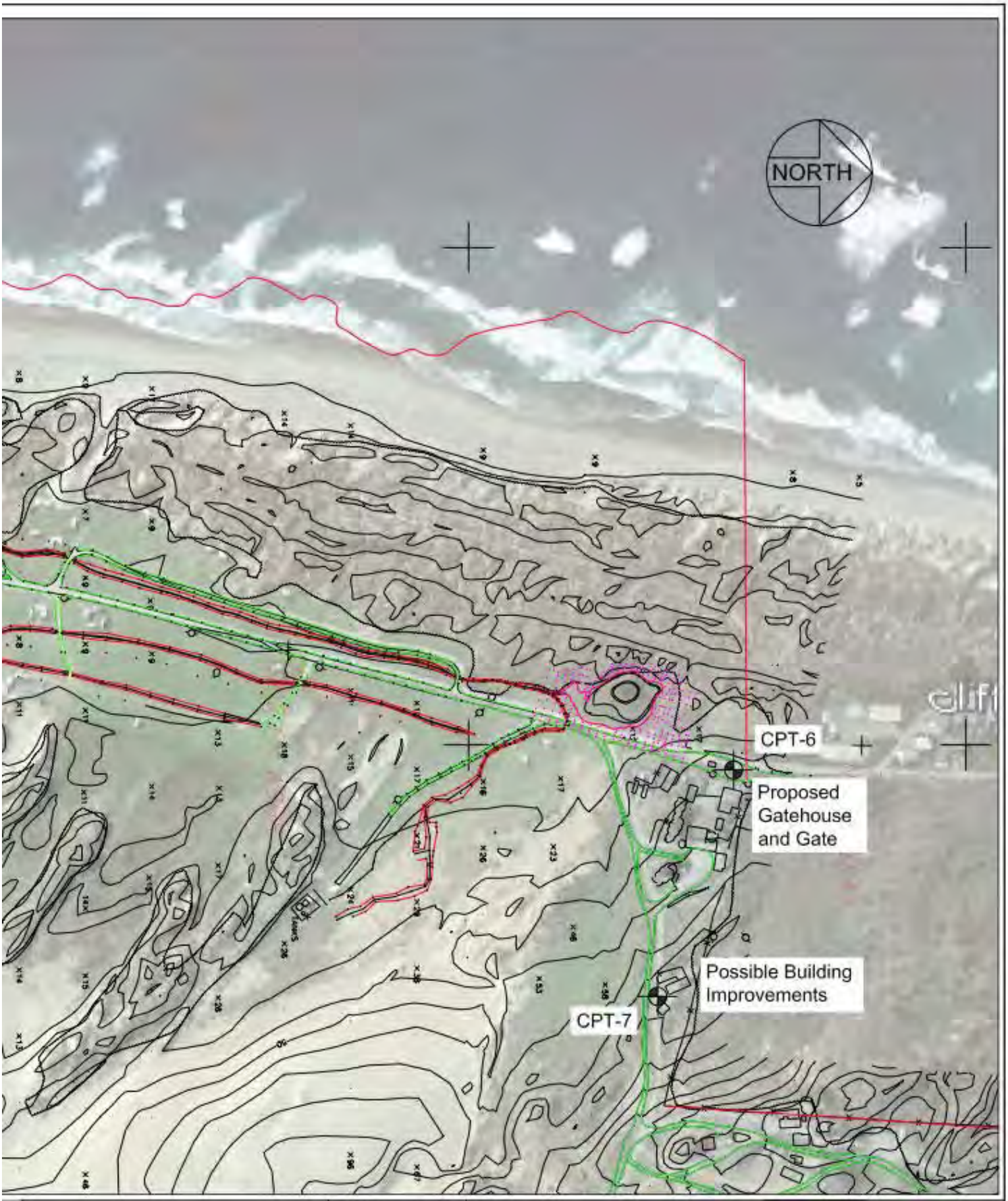
FILE: 1783.01 CPT Figures.dwg



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1783.01 CPTlocations.dwg

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SITE PLAN

Lawsons Landing
Dillon Beach, California

Designed SAS
Drawn EDT
Checked

Project No. 1783.01 Date: 1/5/12

FIGURE 2

MILLER PACIFIC ENGINEERING GROUP

GEOTECHNICAL INVESTIGATION
LAWSON'S LANDING
DILLON BEACH, CALIFORNIA

August 8, 2014

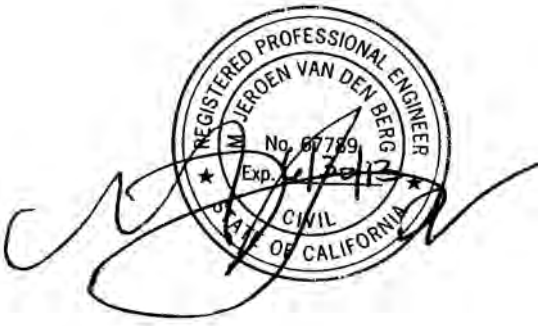
Project 1783.01

Prepared For:
Lawson's Landing
c/o TSF Group
10 Willow Avenue
Larkspur, California 94939

CERTIFICATION

This document is an instrument of service, prepared by or under the direction of the undersigned professionals, in accordance with the current ordinary standard of care. The service specifically excludes the investigation of radon, asbestos, toxic mold and other biological pollutants, and other hazardous materials. The document is for the sole use of the client and consultants on this project. Use by third parties or others is expressly prohibited without written permission. If the project changes, or more than two years have passed since issuance of this report, the findings and recommendations must be reviewed by the undersigned.

MILLER PACIFIC ENGINEERING GROUP
(a California corporation)



M. Jeroen van den Berg
Civil Engineer No. 67789
(Expires 6/30/13)

REVIEWED BY:

Scott Stephens
Geotechnical Engineer 2398
(Expires 6/30/15)

MILLER PACIFIC ENGINEERING GROUP

GEOTECHNICAL INVESTIGATION
LAWSON'S LANDING
DILLON BEACH, CALIFORNIA

TABLE OF CONTENTS

MILLER PACIFIC ENGINEERING GROUP

GEOTECHNICAL INVESTIGATION
LAWSON'S LANDING
DILLON BEACH, CALIFORNIA

I. INTRODUCTION

A. Purpose and Scope of Services

This report presents the results of our geotechnical investigation for the proposed structures and improvements at the Lawson's Landing development in Dillon Beach, California. The project site location is shown on Figure 1. The purpose of our services is to investigate subsurface conditions, evaluate geologic hazards, and develop geotechnical design criteria and recommendations for use in the design and construction of the new structures. This report is intended for the sole use of Lawson's Landing, TSF Group and the project design team. No other use is authorized without the written permission of Miller Pacific Engineering Group.

The scope of our Phase 1 services is a geotechnical evaluation as described in our Agreement for Professional Services dated October 17, 2011. This report summarizes our geotechnical evaluation and includes the following:

- Exploration of subsurface conditions with seven (7) cone penetration tests (CPTs).
- Geologic hazards evaluation and recommended mitigation measures
- Seismicity evaluation including 2010 CBC factors for structural design;
- Criteria for site grading, including compaction criteria and new fill quality;
- Geotechnical design criteria for the recommended foundation systems;
- Design criteria and recommendations for sea wall and retaining structures;
- RV tie-down design criteria;
- Roadway and subgrade preparation and pavement sections;
- Soil engineering drainage, and;
- Utility trench backfill criteria.

Phase 2 services include supplemental geotechnical consultation and plan review during the design phase of the project. Phase 3 services include construction observation and testing during construction to monitor the contractor's compliance with the geotechnical portions of the plans and specifications.

B. Project Description

The Lawson's Landing project site is located along the shoreline of Tomales Bay and Bodega Bay approximately 1.2-miles due south of the small community of Dillon Beach, California. The primary access road is Marine View Drive. Lawson's Landing is a developed tent and recreational vehicle (RV) campground with an existing boat house, fishing pier, boat launch and associated improvements. The proposed new structures include a single-story boathouse structure,

restroom-shower-spa structures, reconfigured RV pads (includes shallow pad grading and tie-downs), 3 to 4 foot high seawall, and roughly 2.3 feet high earth separation/soundwall berms. Some existing roadways within wetland areas will be removed. The proposed site improvements are shown on Figure 2.

The project team includes Lawson's Landing, TSF Group, CSW/Stuber-Stroeh Engineering Group (Civil), Green Building Architects and (Structural).

II. SITE CONDITIONS

A. Regional Geology

The site is located within the Coast Range Geomorphic Province of California. The regional bedrock geology consists of complexly folded, faulted, sheared, and altered sedimentary, igneous, and metamorphic rock of the Jurassic-Cretaceous age (65 to 190 million years ago). The regional topography is characterized by northwest southeast trending mountain ridges and intervening valleys that were formed as a result of tectonic activity between the North American Plate and the Pacific Plate. Extensive faulting during the Pliocene Age (1.8 to 7 million years ago) formed the uneven depression that is now the San Francisco Bay. The more recent tectonic activity within the Coast Range Geomorphic Province is concentrated along the San Andreas Fault zone, a complex group of generally parallel faults. Secondary traces of the San Andreas Fault run through the property in a northwest/southeasterly direction.

A geologic and fault investigation has previously been performed for the project and is included in the Lawson's Landing Master Plan Draft EIR (Environmental Impact Report) by EDAW. Based on the Geology and Soils Section (4.6) of the report, the site is underlain by Holocene dune sands near the surface and at depth by Franciscan complex mélange. Regional geologic conditions are shown on Figure 3.

B. Seismicity

The site is located within the seismically active San Francisco Bay Region and will therefore experience the effects of future earthquakes. Such earthquakes could occur on any of several active faults within the region. The CDMG (1998) has mapped various active and inactive faults in the region. Active faults are defined as those that show evidence of movement in the past 11,000 years (i.e. Holocene) and have reported average slip rates greater than 0.1 mm per year. These faults, defined as either UBC Source Type "A" or "B," are shown on the attached Active Fault Map, Figure 4.

Numerous earthquakes have occurred in the region within historic times. The results of our computer database search indicate that 23 earthquakes (Richter Magnitude 5.0 or larger) have

occurred within 100 kilometers of the site area between 1735 and 2011. The five most significant historic earthquakes to affect the project site are summarized in Table A.

TABLE A
SIGNIFICANT EARTHQUAKE ACTIVITY
Lawson's Landing
Dillon Beach, California

Location (Latitude, Longitude)	Associated Fault	Moment Magnitude	Year	Distance
37.7, -122.5	San Andreas	8.2	1906	10 km[1]
37.6, -122.4	San Andreas	7.0	1838	86 km
37.8, -122.2	Hayward	6.8	1836	82 km
38.2, -122.4	Rodgers Creek	6.2	1898	49 km
37.7, -122.1	Hayward	6.8	1868	96 km
38.0, -123.0	Point Reyes	4.0	1931	25 km

(1) Actual epicenter originated 71km south of the project site. However, surface rupture was reported approximately 10km from the project site.

The historical records do not directly indicate either the maximum credible earthquake or the probability of such a future event. To evaluate earthquake probability in this region, the USGS has assembled a group of researchers into the "Working Group on California Earthquake Probabilities" to estimate the probabilities of earthquakes on active faults. Potential sources were analyzed considering fault geometry, geologic slip rates, geodetic strain rates, historic activity, and micro-seismicity, to arrive at probabilities estimates.

The probability studies focus on seven "fault systems" within the Bay Area. Fault systems are composed of different, interacting fault segments capable of producing earthquakes within the individual segment or in combination with other segments of the same fault system. The probabilities for the individual fault segments in the San Francisco Bay Area are presented in Figure 4.

In addition to the seven fault systems, the studies included probabilities of "background earthquakes." These earthquakes are not associated with the identified fault systems and may occur on lesser faults (i.e., West Napa) or previously unknown faults (i.e., the 1989 Loma Prieta and 2000 Mt. Veeder/Napa earthquake). When the probabilities on all seven fault systems and the background earthquakes are combined mathematically, there is a 67 percent chance for a magnitude 6.7 or larger earthquake to occur in the Bay Area by the year 2032. Earthquakes 6.0 or larger, which are also capable of considerable damage depending on proximity to urban areas,

have about an 80 percent chance of occurring in the Bay Area by 2032 (USGS, 2008).

Additional studies by the USGS regarding the probability of large earthquakes in the Bay Area are ongoing. These current evaluations include data from additional active faults and updated geological data.

C. Surface Conditions

The project property consists of approximately 960 acres of coastal dunes, wetlands and hilly terrain south of the town of Dillon Beach. The hills and dune fields comprising the majority of the relief topography are located in the central and northeastern portion of the property. The proposed improvements are located at the southwest corner of the property on relatively flat terrain. The approximate location of the property developments and topographic features are shown on Figure 2, Site Plan.

D. Subsurface Exploration and Laboratory Testing

We advanced seven cone penetration tests (CPTs) on November 9, 2011. The CPT locations are shown on Figure 2. The subsurface exploration program is discussed in more detail in Appendix A. A CPT Soil Interpretation Chart is presented on Figure A-1. The CPT data plots and soil interpretation logs are presented on Figures A-2 through A-8.

E. Subsurface Conditions

Our subsurface exploration generally confirms the mapped local geologic conditions (dune and beach sand). The CPTs were advanced to a maximum depth of 60 feet with shallower advancements where refusal in rock or very hard soil conditions was encountered. CPT refusal was encountered in CPT 1 at 53 feet, CPT 3 at 49 feet, CPT 4 at 53 feet, CPT 6 at 33 feet and CPT 7 at 41 feet. In general, the CPT data indicates clean sand to silty sand in all of the CPTs throughout the soil columns with a thin veneer (about 1 foot) of clayey soil encountered in CPT-6 above the sandy soil.

F. Groundwater

Groundwater levels measured in the CPTs varied significantly between the CPT locations. The CPTs nearest the shoreline (CPTs 1-5) showed a relatively consistent groundwater level of about 2 to 9 feet below grade (corresponds with elevation +1 to +2) and are likely controlled by tidal levels. The water levels in CPTs 6 and 7 were observed to be at 14.5 feet and 28.6 feet, respectively. These CPTs are located at higher elevations in the northern portion of the project site. Given the relatively close proximity to the shoreline, we expect that groundwater levels will fluctuate with tidal elevations and seasonally with higher groundwater levels anticipated during periods of intense rainfall.

III. GEOLOGIC HAZARDS

We evaluated potential geologic hazards that could affect the site and their significant adverse impacts on structures for human occupancy. The various geologic hazards, their potential impacts and mitigation measures are described below.

A. Fault Surface Rupture

Under the Alquist-Priolo Earthquake Fault Zoning Act, the California Division of Mines and Geology (CDMG) produced 1:24,000 scale maps showing all known active faults and defining zones within which special fault studies are required. The site is located within an Alquist-Priolo Earthquake Fault Zone, as shown on Figure 5.

The project building sites are located on or near primary and secondary traces of the San Andreas Fault system. The EIR concluded the maximum extent of the fault rupture could reach 8 feet along the main fault trace with an additional 1.6 feet within secondary deformation zones. Since the San Andreas is a strike-slip, we predict vertical fault offsets in the bedrock are much less at about 2 feet. Based on subsurface exploration, the bedrock at the project site is overlain with a relatively thick loose sand layer. This sand layer will reduce the ground surface effects of abrupt lateral or vertical offsets in the bedrock during fault rupture.

The average reoccurrence interval, or timeframe in which a seismic event is predicted to occur, for the San Andreas Fault is roughly 300 years. However it is impossible to predict exactly when or where a seismic event will occur. Therefore, the structures should be designed for the worst case surface fault rupture and incorporate mitigation measures in the design.

Surface Fault Rupture Mitigation Measures – The most common mitigation measure for surface fault rupture is avoidance by means of setting back the structures from active fault traces. Due to the extent of the faults and unknown exact location under the project site, we understand relocating the improvements an appropriate distance from the faults is not feasible. Therefore, structures must be engineered to withstand the potential vertical and horizontal offsets associate with fault rupture. The structure should be "decoupled" and designed as a rigid, continuous foundation system strong enough to withstand ground distortion. Foundation recommendations and design criteria are presented in the Section IV of this report.

B. Seismic Shaking

The site will likely experience seismic ground shaking similar to other areas in the seismically active San Francisco Bay Area. Earthquakes along several active faults in the region, as shown on Figure 4, could cause moderate to strong ground shaking at the site. The intensity of ground shaking will depend on the characteristics of the causative fault, distance from the fault, the

earthquake magnitude and duration, and site-specific geologic conditions. The design seismic motions also depend on the evaluation method used. Both deterministic and probabilistic evaluations have been preformed to estimate the strong seismic shaking at the site.

Deterministic Seismic Hazard Analysis – Deterministic Seismic Hazard Analysis (DSHA) predicts the intensity of earthquake ground motions by analyzing the characteristics of nearby faults, distance to the faults and rupture zones, earthquake magnitudes, earthquake durations, and site-specific geologic conditions. Empirical relations provide approximate estimates of median peak site accelerations (PGA). A summary of the principal active faults affecting the site, their closest distance, earthquake moment magnitude and probable peak ground accelerations associated with each fault are shown in Table B. These acceleration values are for an earthquake originating on the closest portion of the fault to the site.

TABLE B
ESTIMATED PEAK GROUND ACCELERATIONS
Lawson's Landing
Dillon Beach, California

Fault	Moment Magnitude for Characteristic Earthquake[1]	Closest Estimated Distance	Median PGA (Stiff Soil)[2]	Median PGA (Bedrock)[2]
San Andreas	7.4	0.10 km	0.56g	0.49g
Point Reyes	7.0	22.5 km	0.17g	0.12g
Rodgers Creek	7.0	32.3 km	0.12g	0.09g
San Gregorio	7.2	45.6 km	0.10g	0.07g
Hayward	7.1	52.9 km	0.09g	0.06g

(1) Cao, et al (2003)
(2) Next generation attenuation relationships by USGS (2011), Abrahamson and Silva (2008), Boore and Atkinson (2008), Campbell and Borzognia (2008), Chiou and Youngs (2008) for stiff soil sites.

Probabilistic Seismic Hazard Analysis – Probabilistic Seismic Hazard Analysis (PSHA) analyzes all possible earthquake scenarios while incorporating the probability of each individual event to occur. The probability is determined in the form of the recurrence interval, which is the average rate at which an earthquake of some size will be exceeded. Therefore, the design earthquake is not solely dependent on any fault, closest distance to the site and/or the largest magnitude, but rather the probability of given seismic events occurring.

The probabilistic Design-Basis Earthquake Ground-Motion (PGA_{DBE}) is based on an earthquake with a 10 percent chance of exceedance in 50-years (475 year return period). Utilizing the FRISKSP program we recommend utilizing the PGA_{DBE} of 0.75g. The ground motions given by

the FRISKSP program were for soil sites.

The potential for strong seismic shaking at the project site is high. Due to seismic activity and proximity, the San Andreas and Rodgers Creek Faults present the highest potential for severe ground shaking. The most significant adverse impact associated with strong seismic shaking is potential damage or collapse of structures and improvements.

Seismic Shaking Mitigation Measures – Design the improvements and structures in accordance with the California Building Code. The CBC is intended to prevent collapse of structures. More stringent design is recommended to reduce the amount of damage during strong ground shaking.

C. Liquefaction Potential

Liquefaction refers to the sudden, temporary loss of soil shear strength during strong ground shaking. Liquefaction-related phenomena include liquefaction-induced settlement, flow failure, and lateral spreading. These phenomena can occur where there are saturated, loose, granular deposits. As shown on Figure 6, the site is mapped as an area of high to very high liquefaction susceptibility. Loose granular saturated soils were encountered during our subsurface exploration. Based on a liquefaction analysis of CPT data, the site may experience 3 to 5 inches of settlement in the dune areas of the project site. Lesser settlement is expected near the project entrance and uphill portions of the site. Estimated vertical settlements are shown on the CPT liquefaction plots on Figures A9 through A16 of Appendix A. Liquefaction is considered a potential, significant geologic hazard.

Liquefaction Mitigation Measures – The foundation system for new structures should be capable of withstanding differential settlement and lateral displacement. A rigid, continuous foundation designed to span over liquefied soil conditions should be utilized. The recommended seismic and foundation design criteria are present in Section IV of this report.

D. Seismic Induced Ground Settlement

Seismic ground shaking can induce settlement of unsaturated, loose, granular soils. Settlement occurs as the loose soil particles rearrange into a denser configuration during seismic ground shaking. Varying degrees of settlement can occur throughout a deposit. Seismic induced settlements could result in differential settlement of structures founded on such deposits. Loose granular soils above the groundwater level were observed during our exploration. The estimated vertical settlements as shown on the CPT plots on Figures A9 through A16 included seismic densification settlements. Seismic induced ground settlement is considered a potential significant geologic hazard.

Seismic Induced Ground Settlement Mitigation Measures – The foundation system for new structures should be capable of withstanding differential settlement and lateral displacement. A rigid, continuous foundation designed to span over liquefied soil conditions should be utilized. The recommended foundation design criteria are present in Section IV of this report.

E. Lurching, Lateral Spreading and Ground Cracking

Lurching, lateral spreading and associated ground cracking can occur during strong ground shaking. The ground cracking generally occurs along the tops of slopes where stiff soils are underlain by soft deposits or along steep slopes or channel banks. Lateral soil movement towards Tomales and Bodega Bay is expected during strong ground shaking. The amount of movement is dependent on the distance from the shoreline, duration of shaking and extent of liquefaction. Rough estimates of lateral displacement at the CPT locations are shown on Figures A9 through A16. The amount of lateral displacement could range from several inches to several feet throughout the project site. Lurching, lateral spreading and ground cracking are considered to be significant hazards at the site.

Lurching, Lateral Spreading and Ground Cracking Mitigation Measures – The foundation system for new structures should be capable of withstanding lateral displacement and span over ground cracking that may develop under the structures. A rigid, continuous foundation should be utilized. The recommended foundation design criteria are present in Section IV of this report.

F. Erosion

Severe erosion typically occurs on moderate slopes of sand and steep slopes of clay subjected to concentrated water runoff. Although there are no moderate to steep slopes, loose dune and beach sands at the project site are susceptible to wave and wind erosion. Therefore, erosion due to wind and waves is a potentially significant hazard.

Erosion Mitigation Measures – At a minimum, erosion control measures as described in the most recent version of the California Regional Water Quality Control Board Erosion and Sediment Control Field Manual should be followed for any areas where vegetation is removed or destroyed during construction. Replanting of disturbed areas will require use of specific plants and possibly erosion control mats to control wind erosion. A landscape architect or other qualified erosion control consultant should be retained to provide site specific recommendations. Near the shoreline, either a new seawall or rip-rap slope should be constructed to limit the extent of beach erosion near the developed areas.

G. Seiche and Tsunami

Seiche and tsunamis are short duration, earthquake-generated water waves in large enclosed

bodies of water and the open ocean, respectively. The extent and severity of a tsunami would be dependent upon the location and magnitude of earthquakes along the Pacific Ocean. Based on studies done for the draft EIR, the largest measured historical tsunami wave run-up near the project site was about 3.3 feet above normal wave height as a result of the 1964 Alaska Earthquake. The wave run-up damaged structures and flooded low-lying areas around Bodega Bay. As shown on Figure 7, tsunami inundation at the project site is considered a potential significant hazard.

Seiche and Tsunami Mitigation Measures – Tsunami's are an unavoidable risk at the project site. Design of structures to mitigate the effects of a large tsunami wave is not feasible given the estimated wave run-up and inundation elevations. The site should be in constant direct communication with the Pacific Tsunami Warning System to receive advance tsunami warnings and to evacuate to higher ground in the event of a design earthquake along the Pacific Rim. RVs and other temporary structures may be partially protected (after personnel evacuation) from tsunami wave run-up damage by anchoring to the ground.

H. Flooding

The adverse impact from flooding is water damage to structures and furnishings. Portions of the site are located at an approximate elevation of +5 to +10 feet above sea level and are mapped within a Federal Emergency Management Agency (FEMA) 100-year Flood Zone (Zone V: coastal flood zone with velocity hazard), as shown on Figure 8. Therefore, the risk of significant flood damage at the site is moderate to high.

Flooding Mitigation Measures – The project team should design pad grades and finish floor elevations above the flood level, or design lower portions of structure to resist flood damage. Non-structural site improvements, such as roads, pathways and landscape areas could be allowed to flood, provided debris cleanup is acceptable if flooding were to occur. Consideration should also be given to sloping of finished grades at the site so that adverse drainage conditions do not allow water to pond around existing structures.

I. Expansive Soil

Expansive soil occurs when clay particles interact with water causing volume changes in the clay soil. The clay soil may swell when saturated and shrink when dried. This phenomenon generally decreases in magnitude with increasing confinement pressure at depth. These volume changes may damage lightly loaded foundations, flatwork, and pavement. Our exploration did not observe plastic or expansive soils. Potential for distress due to expansive soil shrink/swell is not considered to be significant at this site.

No mitigation measures are required.

J. Soil Corrosion

Corrosive soil and sea-water can damage buried metallic structures, underground utilities and cause concrete spalling and deteriorate rebar reinforcement. Laboratory corrosivity testing of the site soils was not in our scope of services; however, utilities and structural steel and concrete elements should account for corrosive environments. Considering the presence of sea-water in and around the project site, we judge the hazard due to corrosion to be high.

Soil Corrosion Mitigation Measures: The project Structural Engineer should specify structural materials that are resistant to corrosive soil and sea-water or provide cathodic corrosion protection. At a minimum, concrete for reinforced concrete structures should use Type V Portland cement with a water-cement ration of 0.45 or less and minimum compression strength of 4000 psi. At least 3-inches of concrete coverage should be provided over reinforcing steel. Underground utilities should be plastic or PVC pipe, metallic piping should be avoided.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

Based on our investigation and previous experience with similar sites and projects, we conclude that the planned improvements are feasible from a geologic and geotechnical standpoint. Primary geotechnical concerns relative to site development are strong seismic ground shaking, surface fault rupture and liquefaction. New structures can be safely supported on thickened reinforced mat slab founded on granular fill that is decoupled from firm native soil. RV tie-downs may be anchored to the ground using small-diameter helical piers. Design recommendations for these and other geotechnical issues are provided below.

B. Site Preparation and Grading

1. Surface Preparation – Clear all organics and oversized debris from areas of new construction. The mat slab excavations should also be clear of loose debris and organic material. Root systems from trees and shrubs should also be removed. Debris should be removed from the site and legally disposed.

2. Materials – Soil generated from the on-site excavations are suitable for use as fill provided the maximum particle sizes are less than 4-inches. Processing may include removal of oversize materials, mixing and moisture conditioning.

   If imported fill is required, the material shall consist of soil and rock mixtures that: (1) are free of organic material, (2) have a Liquid Limit less than 40 and a Plasticity Index of less than 20, and (3) have a maximum particle size of 4-inches. Any imported fill material

should be tested to determine its suitability for use as fill material.

3. Compacted Fill – On-site fill, backfill, and scarified subgrades should be moisture conditioned to near optimum moisture content. Properly moisture conditioned on-site materials should subsequently be placed in loose horizontal lifts of 8 inches thick or less, and uniformly compacted to at least 90 percent relative compaction. Relative compaction, maximum dry density, and optimum moisture content of fill materials should be determined in accordance with ASTM Test Method D 1557, "Moisture-Density Relations of soils and Soil-Aggregate Mixtures Using a 10-lb. Rammer and 18-in. Drop."

4. Slope Grades – Cut or fill slopes should not be inclined steeper than 3:1 (horizontal:vertical). Slopes requiring grades steeper than 3:1 must be specifically evaluated and designed.

C. Seismic Design

As mentioned earlier, clean dune sand was encountered in the proposed construction areas. The magnitude and character of anticipated ground motions will depend on the particular earthquake and the site response characteristics. Considering the close proximity to the San Andreas Fault the estimated design peak ground acceleration at the project site is 0.60g. Based on the interpreted subsurface conditions, we recommend as a minimum utilizing the 2013 CBC coefficients, presented on Table C below, for calculating the design base shear of the new structures.

Based on our calculations, the relatively loose, sandy soil encountered during our field exploration was judged to be susceptible to liquefaction during strong (design) seismic shaking. The 2010 CBC states that sites susceptible to liquefaction must be classified as Site Class "F" and a site-specific response analysis must be performed. However, the proposed improvements at the site (including the Boat House and Bathroom structures) will have a fundamental period of less then 0.5; therefore, a site-specific response analysis is not required. We recommend applying conservative Site Class "E" seismic CBC factors for design in this case.

The CBC peak ground acceleration values given on Table C are on the low end of the range determined by attenuation relationships. The use of the CBC for seismic design should be evaluated by the structural engineer. If requested we can perform a site-specific SHAKE analysis at the site to gain a more accurate estimate of anticipated ground motions.

TABLE C
2013 CBC FACTORS
Lawson's Landing
Dillon Beach, California

Factor Name	Coefficient	Site Specific Value
Site Class[1]	$S_{A,B,C,D,E, or F}$	S_E
Site Coefficient	F_a	0.9
Site Coefficient	F_v	2.4
Spectral Acc. (short)	S_s	2.57 g
Spectral Acc. (1-sec)	S_1	1.24 g

(1) Soil Profile Type S_E Description: Soft soil profile with shear wave velocity less than 600 (180) feet per second (m/s), Standard Penetration Test N value less than 15, and Undrained Shear Strength between less than 1000 (50) psf (kPa) or a soil profile with more than 10 feet of soft clay defined as soil with PI greater than 20, moisture content greater than 40 percent, and shear strength less than 500 (25) psf (kPa).

The effects of earthquake shaking (i.e. protection of life safety) can be mitigated by close adherence to the seismic provisions of the current edition of the CBC. However, some building damage may still occur during strong ground shaking.

D. Foundation Design

It is anticipated that the proposed boat house and restroom structures will exert relatively light foundation loads on the ground surface. Considering the potential for fault rupture, liquefaction induced settlements, reduced bearing capacity and lateral deformations, we recommend a rigid, heavily reinforced and/or post tensioned concrete mat slab capable of spanning over areas of differential settlement and loss of bearing support. Design criteria for the new foundations are presented in Table D below.

TABLE D
SHALLOW FOUNDATION DESIGN CRITERIA
Lawson's Landing
Dillon Beach, California

Rigid Mat Slab

Allowable bearing capacity[1]:	2500 psf
Minimum depth[2]:	12 inches
Lateral passive resistance[3]:	300 pcf
Base friction coefficient:	0.30
Modulus of Subgrade Reaction, k_s:	125 pci
Maximum unsupported interior span[4]:	20 feet
Maximum unsupported edge (corner) cantilever[4]:	15 feet

(1) Dead plus live loads. May increase 1/3 for total design loads, including wind or seismic.
(2) Depth below lowest adjacent grade. May require localized deepening. Near slopes maintain minimum 7-feet horizontal distance to daylight.
(3) Equivalent fluid pressure. Ignore upper 12-inches unless foundations are confined by concrete slabs or asphalt pavements. Not to exceed 3,000 psf.
(4) Assumes rigid slab behavior with idealized fixed end conditions. Mat slab should be designed to span over areas of differential settlement and loss of support with acceptable amounts of structural deflection.

For static conditions, foundation settlements are expected to be less than one inch. Moderate to significant settlement may occur due to seismic densification and liquefaction. Post-seismic re-leveling of the structure could be performed with compaction grouting.

E. Vapor Barrier / Soil-Structure Decoupler

To reduce structural distress due to a horizontal offset under the structure from to fault rupture or lateral spreading, we recommend decoupling the structures from the ground surface. The building subgrade should be excavated and compacted as described in "Site Preparation and Site Grading". To achieve a soil structure decoupler, the concrete mat slabs should be founded on a minimum 0.5-foot thick layer of rounded ¾-inch gravel. A 15 mils vapor barrier should be placed both under and above the compacted ¾-inch gravel. The vapor barrier shall meet the ASTM E 1745 Class A requirements and be installed per ASTM 1643. A schematic detail of this foundation system is presented on Figure 9. The intent of this foundation system is to provide a "ball bearing" decoupling effect between the ground surface and structure. This will allow the underlying ground surface to move while the structure remains relatively in place as it "floats" on the rounded gravel. Eliminating the capillary moisture break and/or vapor barrier may result in excess moisture intrusion through the floor slabs resulting in poor performance of floor coverings, mold growth or other adverse conditions. Unless otherwise approved by the Structural Engineer, a two-inch layer

of dry sand should be placed over the vapor barrier to prevent puncture of the plastic membrane and aid in slab curing.

F. Exterior Concrete Slabs-on-Grade

Exterior reinforced concrete mat slab, such as concrete walks, can be placed directly on subgrade compacted to at least 92percent relative compaction. Exterior slabs should be a minimum of 4 inches thick and reinforced with steel rebar. To improve performance, exterior concrete slabs may be underlain with 4 inches or more of Caltrans Class 2 Aggregate Base compacted to at least 92 percent relative compaction or the slabs may be thickened to 5-inches. Concrete slabs may undergo severe cracking and distortion during strong ground shaking and may need to be repaired or replaced.

G. RV Tie-Downs

Considering the potential difficulties associated with constructing drilled pier foundations (caving of drilled excavations in the saturated granular soils), helical anchors are recommended to provide anchorage to resist uplift and lateral forces. The capacity of the helical anchor is dependent upon helix size, type, and final depth. For the site conditions, a helical anchor with a lead section having 3 helixes of increasing diameter (10", 12" & 14") should obtain a design capacity of about 20 kips at a depth of about 20 feet.

We recommend the required design capacity be specified on the plans and final foundation depths be adjusted during construction to achieve the desired design loads. We would observe installation torque of the helical anchors during construction to confirm they achieve their design capacity.

H. Sea Wall and Retaining Structures

The existing wood seawall at the project site is deteriorated and will likely need to be replaced with a new retaining structure. A couple of retaining structure options that appear suitable for the site conditions are described below:

1. Retaining Walls – Several wall options could be utilized. Wall types that appear best suited for the site conditions include vinyl sheet pile wall, driven concrete piles with lagging walls or interlocking concrete block walls (large concrete block gravity wall or reinforced earth block wall). The sheet pile or drive pile walls could be constructed very close and in front of the existing walls. For wall less than about 5 feet high, cantilevered walls could be designed. Tiebacks may be needed for taller walls. Site retaining walls may be unrestrained (free to rotate at the top of wall), or restrained (tied-back walls). Retaining walls should be designed utilizing the criteria shown in Table E.

TABLE E
RETAINING WALL DESIGN CRITERIA
Lawson's Landing
Dillon Beach, California

Foundation	See Table D
Unrestrained Earth Pressure[1,2]	
Level Ground	40 pcf
2:1 Slope	60 pcf
Restrained Earth Pressure[1,3]	
Level Ground	25 H psf
2:1 Slope	40 H psf
Seismic Surcharge[4]	15 H psf

Notes:
1. Interpolate earth pressures for intermediate slopes.
2. Equivalent fluid pressure.
3. Rectangular distribution.
4. The factor of safety for short-term seismic conditions can be reduced to 1.1 or greater.

Drainage shall be provided for all retaining walls taller than 3 feet. Either Caltrans Class 1B permeable material within filter fabric, drainage panels or Caltrans Class 2 permeable material can be used. The permeable material shall extend at least 12 inches from the back of the wall and be continuous from the bottom of the wall to within 12 inches of the ground surface. Seepage collected in the drain line should be discharged through weep holes through the wall. To maintain the wall drainage system, clean outs shall be installed at the upstream end and at all major changes in direction. A typical detail of retaining wall drainage is shown on Figure 10.

2. Rock Slope Protection – As an alternative to a retaining wall, a rip-rap slope could be constructed. The rip-rap slope would need to be design based on the largest practical wave height and slope angle. For preliminary design, we would recommend a slope inclination of 2:1 (horizontal:vertical). The rock slope would need to be keyed several feet into the existing sand to reduce potential for scour and erosion under the rip-rap rock. Stabilization fabric should be placed between the rip-rap rock and beach sand.

I. Asphalt Concrete Pavements

We have calculated pavement sections in accordance with Caltrans procedures for flexible pavement design (2000) using an R-value of 30. We have provided a range of Traffic Indices (TI) from 4 to 6 depending on the expected traffic loads for a twenty-year design life. In general, areas expected to experience loading from heavy vehicles should be designed using the higher Traffic

Index, while parking areas and other lightly-loaded areas can utilize a thinner pavement section based on the lower Traffic Index. The recommended pavement sections are presented in Table F.

TABLE F
PAVEMENT DESIGN CRITERIA
Lawson's Landing
Dillon Beach, California

	T.I.	Asphalt Concrete	Aggregate Base	Subgrade
Light passenger vehicles/parking	4	2.5 inches	6.0 inches	95% R.C.
Moderate truck traffic/Drive aisles	5	3.0 inches	7.0 inches	95% R.C.
Heavy truck traffic/Fire lanes	6	3.5 inches	8.0 inches	95% R.C.

Subgrade preparation for asphalt-paved areas should follow the recommendations in the site preparation and grading (Section V.C) of this report and the recommendations presented below. The upper 6-inches of subgrade in pavement areas must be scarified, moisture conditioned to near the optimum water content, and then compacted to a minimum 95 percent relative compaction. If hard rock is exposed and is not significantly disturbed during subgrade preparation, scarification will not be required. The compacted surface must also be non-yielding when proof-rolled with heavy construction equipment.

The base rock should consist of compacted Class 2 Aggregate Base (Caltrans, 2010), be conditioned to near optimum moisture content, placed in lifts no more than six inches thick, and compacted to achieve at least 95 percent relative compaction and a non-yielding surface when proof-rolled with heavy construction equipment. The subgrade should also be maintained at near optimum moisture content prior to placement of aggregate base rock. Areas of soft or saturated soils encountered during construction should be excavated and replaced with properly moisture conditioned fill or aggregate base.

J. Underground Utilities

Utilities will likely cross areas susceptible to lateral offsets and differential settlement and may shear during a seismic event. Utilities should be flexible and fitted with automatic and manual emergency shutoff valves at key connection points and the service tie-ins.

Trench excavations having a depth of 5 feet or more must be excavated and shored in accordance with OSHA regulations. Pursuant to OSHA classifications, the onsite soils are Type C. Bedding materials for utility pipes should be non-corrosive sand with 90 to 100 percent of particles passing the No. 4 sieve and no more than 15 percent finer than the No. 200 sieve.

Provide the minimum bedding beneath the pipe in accordance with the manufacturer's recommendation, typically 3 to 6 inches. The Contractor will be responsible for any de-watering and shoring.

On-site soil may be used as compacted trench backfill above the utility. The backfill materials should be placed in uniform lifts (four to eight inches, depending upon the size of compaction equipment), moisture conditioned to near optimum moisture content and compacted to a minimum of 90 percent relative compaction. The upper 12-inches within pavement areas should be additionally compacted to at least 95 percent relative compaction during subgrade preparation. Outside of pavement and building areas (landscape areas), the compaction can be reduced to 85 percent.

K. Site Drainage Considerations

Careful consideration should be given to design of finished grades at the site. We recommend that the building areas be raised slightly and that the adjoining landscaped areas be sloped downward at least 0.25 feet for 5 feet (5 percent) from the perimeter of building foundations. Where hard surfaces, such as concrete or asphalt adjoin foundations, slope these surfaces at least 0.10 feet in the first 5 feet (2 percent). Roof gutter downspouts may discharge onto the pavements, but should not discharge onto any landscaped areas. Provide area drains for landscape planters adjacent to buildings and parking areas and collect downspout discharges into a tight pipe collection system.

V. SUPPLEMENTAL SERVICES

We must review the grading plans and specifications for site development and foundation design when they are nearing completion to confirm that the intent of our recommendations has been understood and incorporated, and to provide supplemental recommendations if needed.

During construction, we must inspect site preparation and foundation excavations. We must verify subgrade preparation and compaction, proper moisture conditioning of soils, and fill placement and compaction. We should also inspect pavement subgrade preparation and placement and compaction of base rock materials.

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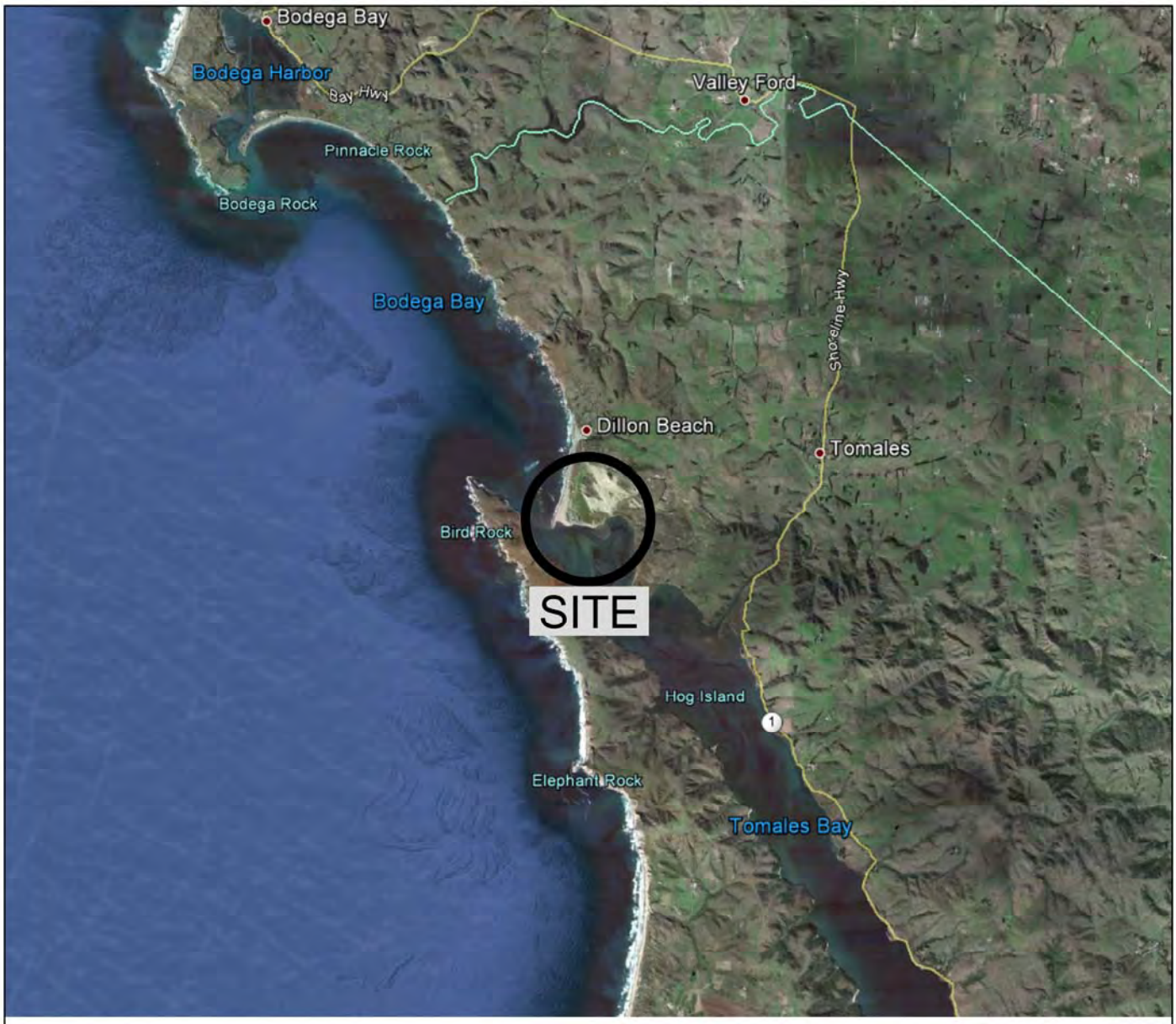

SITE: LATITUDE, 38.2325°
LONGITUDE, -122.9683°

SITE LOCATION

NORTH

REFERENCE: Google Earth, 2011

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FILE: 1783.01 SLM.dwg

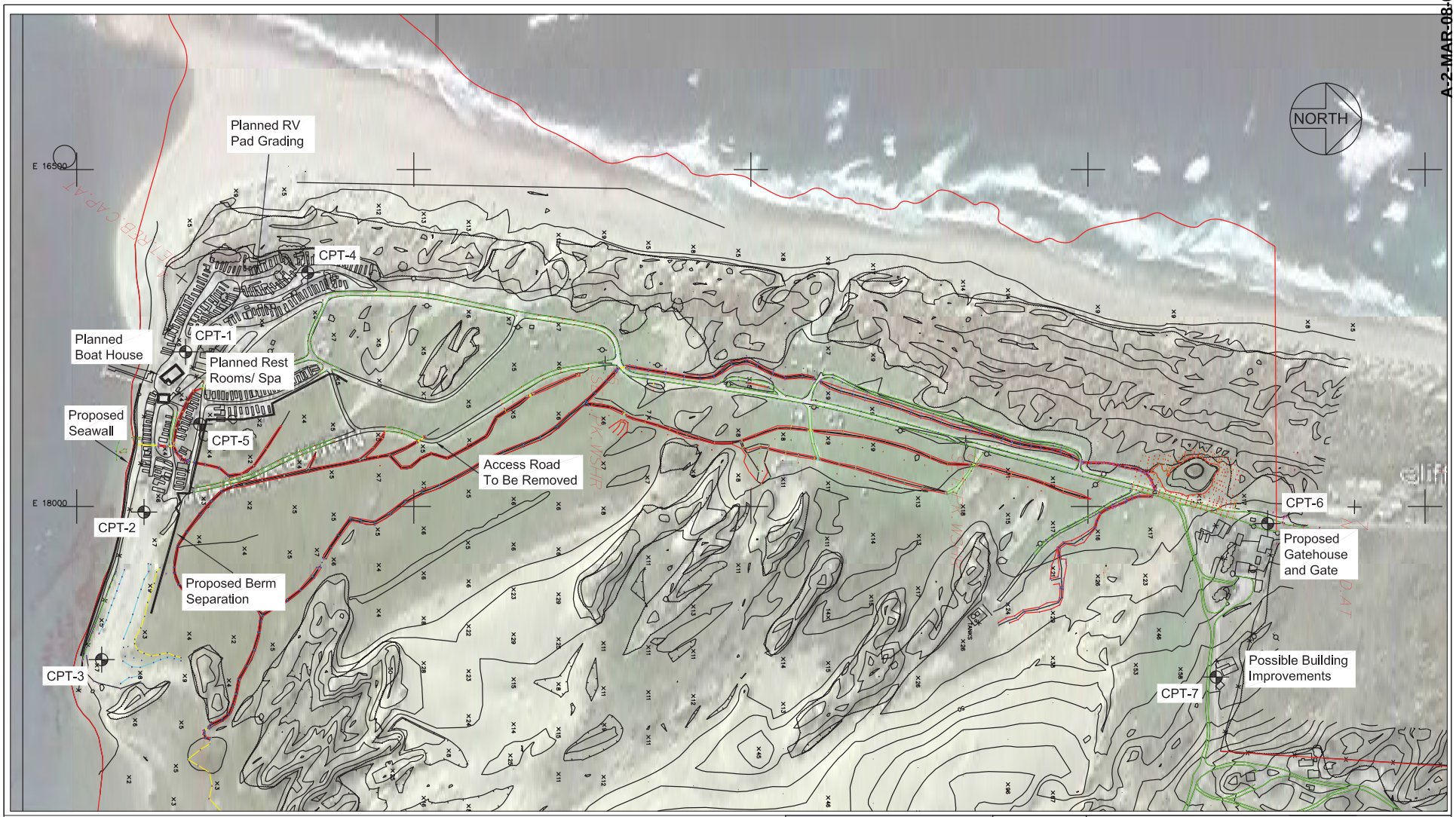
SITE LOCATION MAP

Lawsons Landing
Dillon Beach, California

Drawn JSC
Checked

Project No. 1783.01 Date: 12/15/11

1
FIGURE



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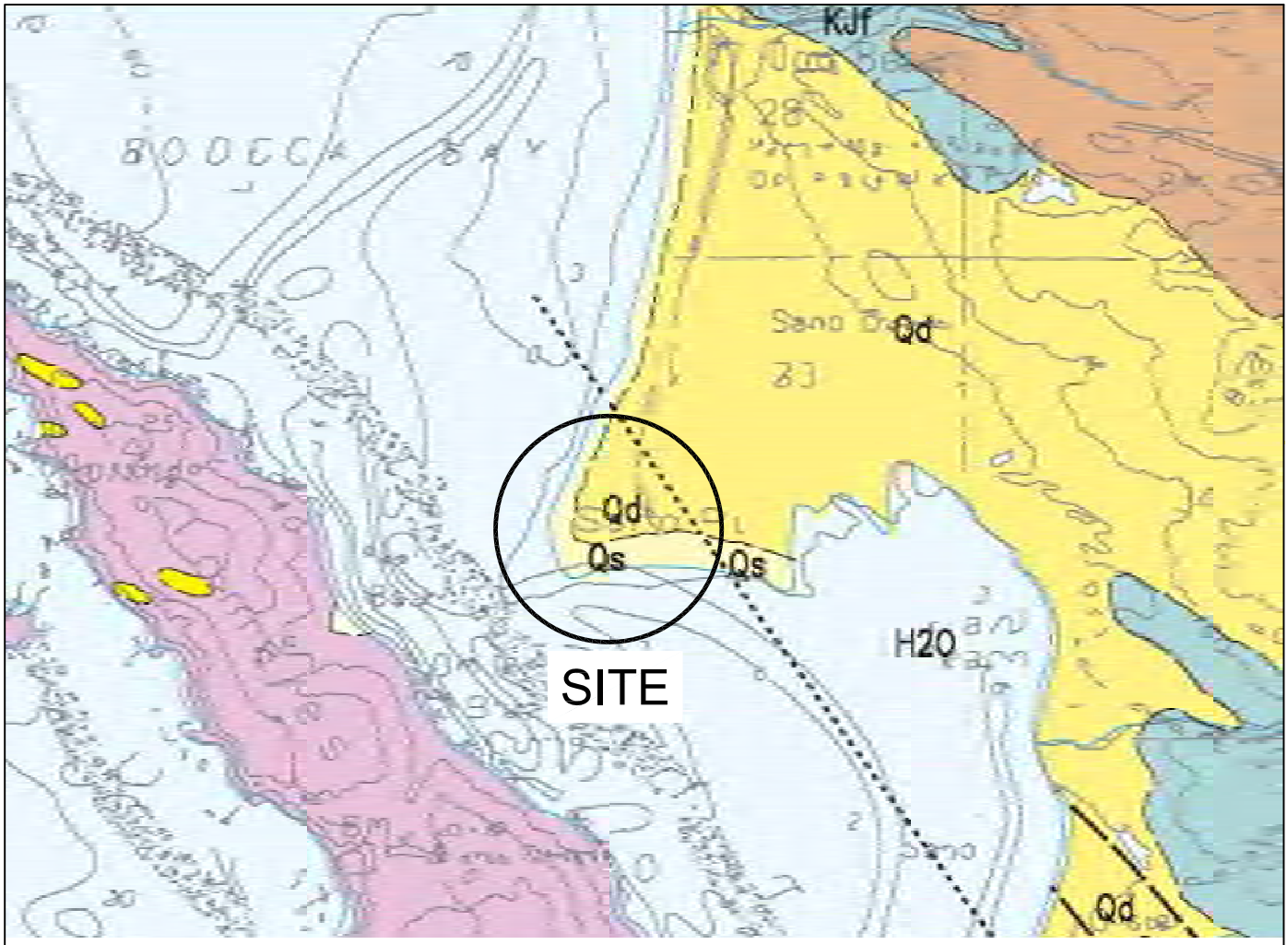
SITE PLAN

Lawsons Landing
Dillion Beach, California

Designed SAS
Drawn EDT
Checked

Project No. 1783.01 Date: 1/5/12

2
FIGURE



GEOLOGIC MAP

NOT TO SCALE

NORTH

LEGEND

Qs BEACH SANDS (HOLOCENE)
Unconsolidated well-sorted, fine to medium grained sand

Qd DUNE SANDS (HOLOCENE)
Discontinuous accumulations of well to moderately sorted, fine to coarse grained loose sand interspersed with pebble to boulder gravel

REFERENCE: Clark, Joseph C., and Brabb, Earl E. "Geology of the Point Reyes National Seashore and Vicinity, A Digital Database", U.S. Department of Interior United States Geological Survey, Map Scale 1:48,000.

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REGIONAL GEOLOGIC MAP

Lawsons Landing
Dillon Beach, California

Drawn EDT
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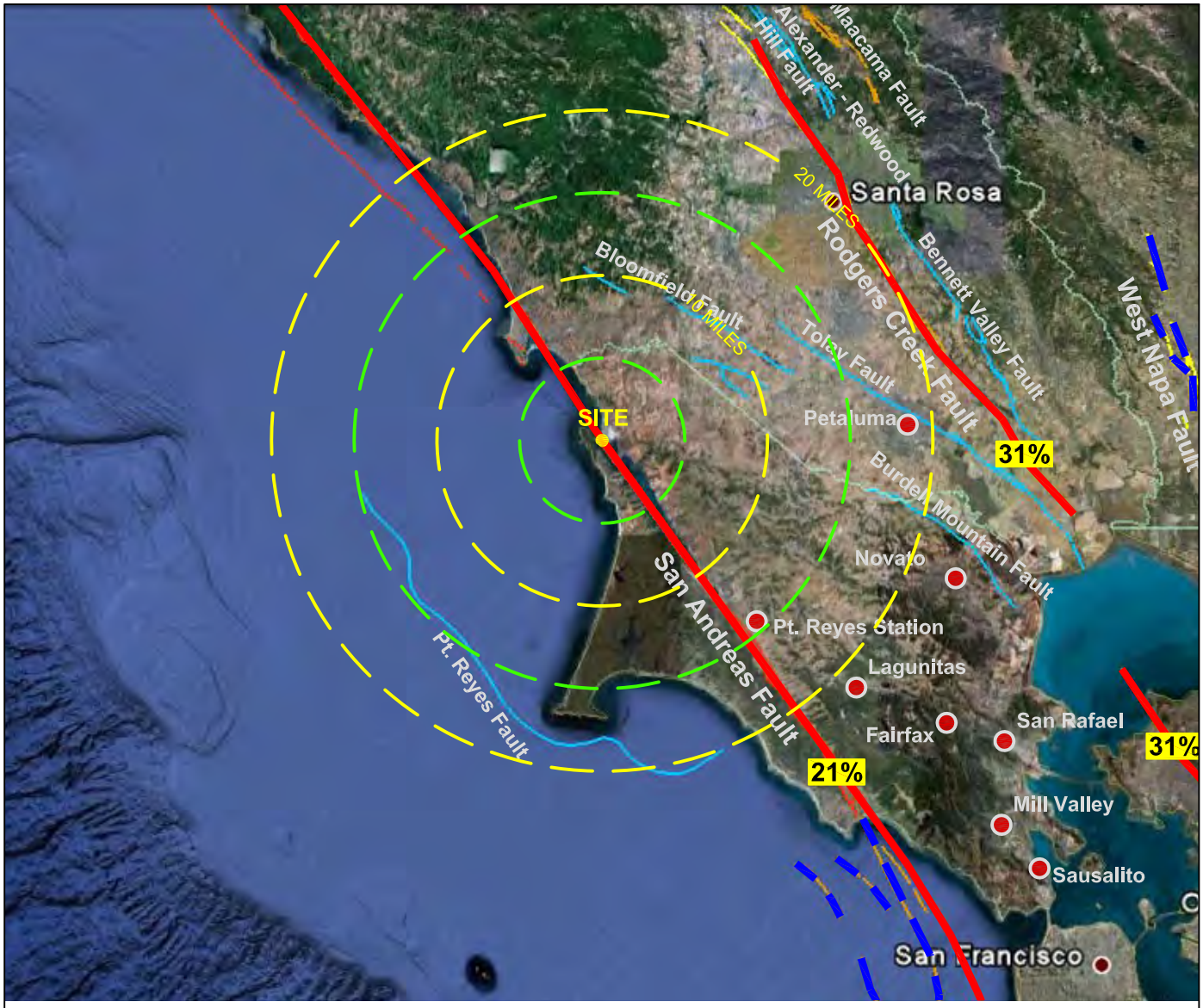
Project No. 1783.01 Date: 1/5/12

3
FIGURE



LEGEND

FAULT	TYPE	CBC DESCRIPTION
	"A"	CAPABLE OF LARGE MAGNITUDE EARTHQUAKES AND HIGH RATE OF SEISMIC ACTIVITY
	"B"	CAPABLE OF LARGE MAGNITUDE EARTHQUAKES OR HIGH RATE OF SEISMIC ACTIVITY

SITE: LATITUDE, 38.2325°
LONGITUDE, -122.9683°

NORTH

21% PROBABILITY OF M≥6.7 BETWEEN 2008-2038 FOR FAULTS SHOWN. OVERALL PROBABILITY OF 63% IN BAY AREA OF ONE OR MORE M≥6.7 EARTHQUAKES FROM 2008-2038.

REFERENCES:

1) ACTIVE FAULT MAP MODIFIED FROM SUMMARY OF EARTHQUAKE PROBABILITIES IN THE S.F. BAY REGION, 2008-2038, THE 2007 WORKING GROUP ON CALIFORNIA EARTHQUAKE PROBABILITIES, 2008.

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ACTIVE FAULT MAP

Lawson's Landing
Dillon Beach, California

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Project No. 1783.01 Date: 12-15-11

FIGURE 4

NORTH

Map Reference: ABAG Geographic Information System.

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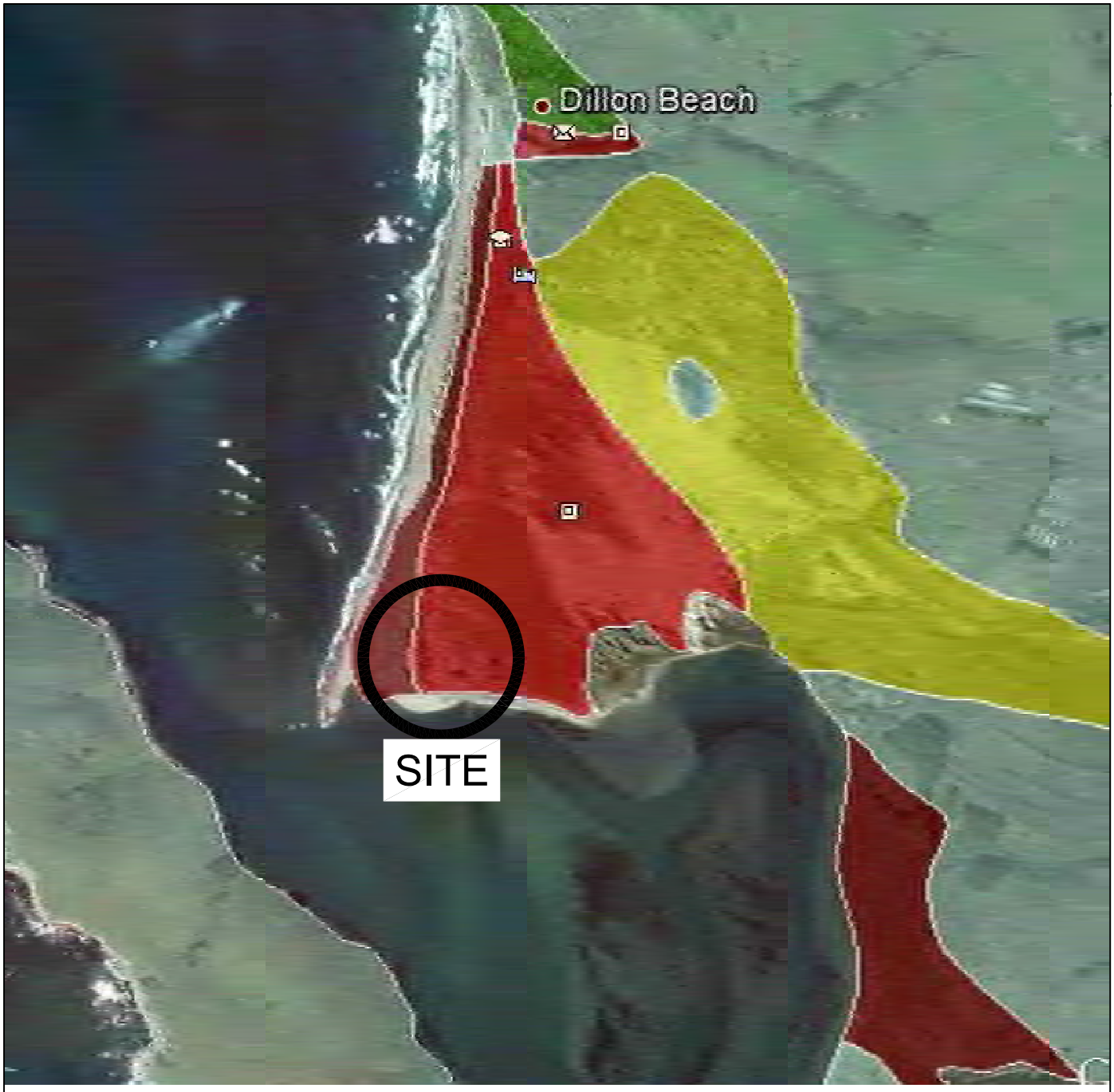
FILE: 1783.01 Alquist Fig 5.dwg



No Scale

Susceptibility Level:

Very High
High
Moderate
Low
Very Low
Major Road
Local Road

NORTH

Map Reference: ABAG Geographic Information System.

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LIQUEFACTION SUSCEPTIBILITY MAP

Lawsons Landing
Dillon Beach, California

Project No. 1783.01 Date: 1/6/12

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FIGURE 6

No Scale

Tsunami Inundation:

Tsunami Inundation Area

Urbanized Area

NORTH

Map Reference: ABAG Geographic Information System.

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FILE: 1783.01 Tsunami Fig 7.dwg

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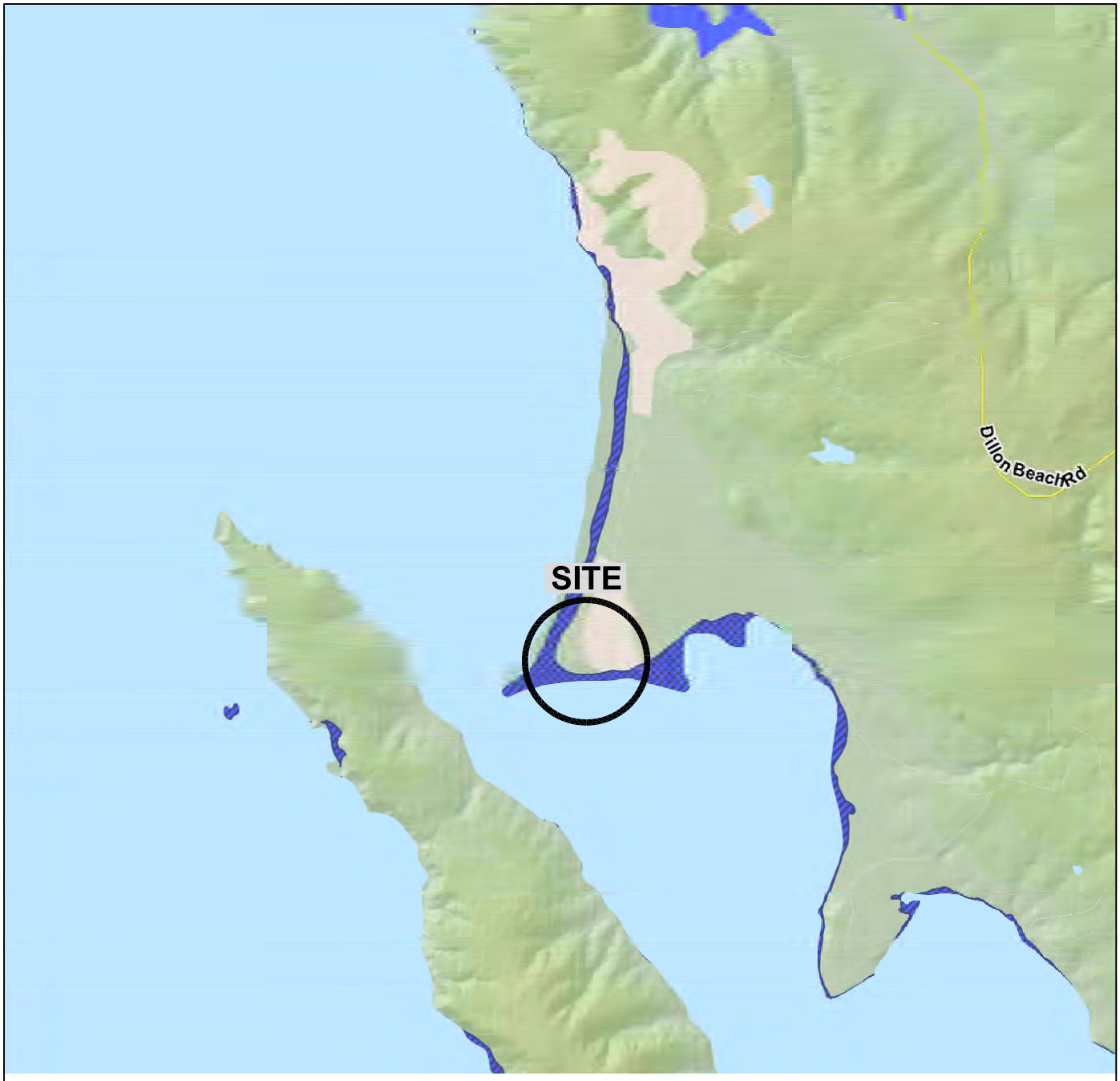
TSUNAMI INUNDATION MAP

Lawsons Landing
Dillon Beach, California

Project No. 1783.01 Date: 1/6/12

Drawn JTO
Checked

FIGURE 7



No Scale

Flood Hazard Area:

- Zone V- 100yr. — Zone V: This code identifies an area inundated by 1% annual chance flooding with velocity hazard (wave action).
- Zone A - 100yr. — Zone A: This code identifies an area inundated by 1% annual chance flooding.
- Zone X - 500yr. — Zone X 500yr: This code identifies an area inundated by .02% annual chance flooding and area inundated by 1% annual chance of flooding with average depth of less than 1 foot of with drainage areas less than 1 square mile or an area protected by levees form 1% annual chance flooding.
- Urbanized Area

NORTH

Map Reference: ABAG Geographic Information System.

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FILE: 1783.01 Flood Fig 8.dwg

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FLOOD HAZARD MAP

Lawsons Landing
Dillon Beach, California

Project No. 1783.01 Date: 1/6/12

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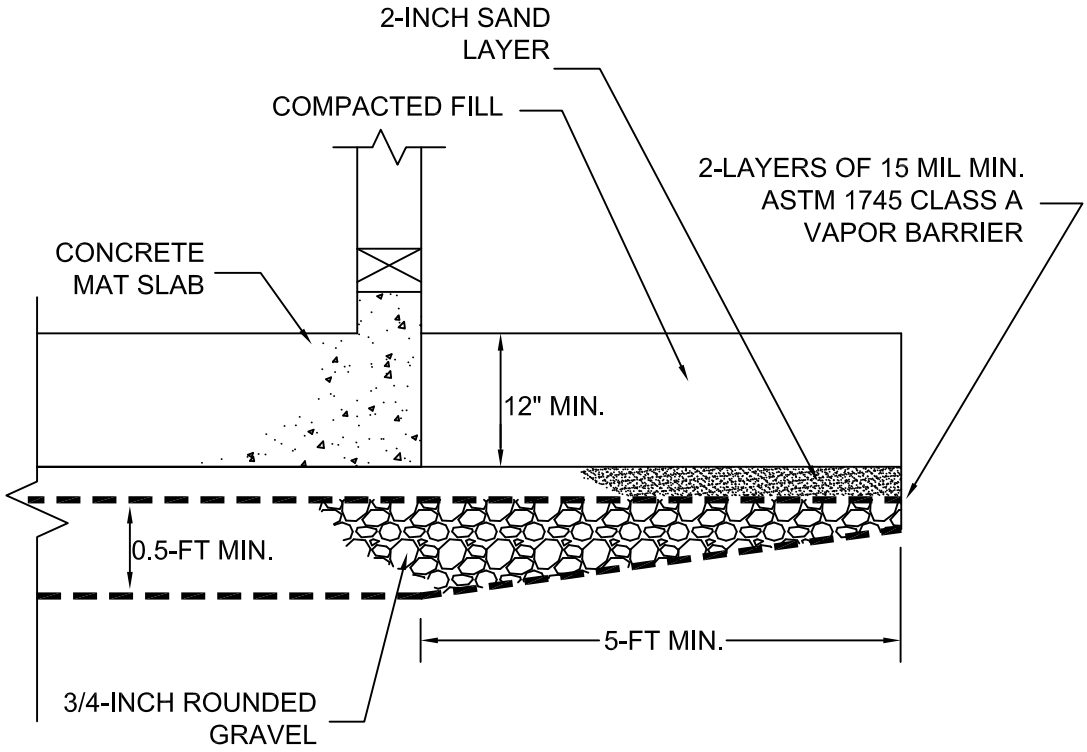
FIGURE 8



SCHEMATIC VAPOR BARRIER AND SOIL/STRUCTURE DECOUPLE DETAIL
(NOT TO SCALE)

NOTES:

1) 3/4-INCH ROUNDED GRAVEL SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER.

2) COMPACTED FILL SHOULD BE COMPACTED TO A MINIMUM OF 90% RELATIVE COMPACTION.

3) CONCRETE MAT SLAB SHOULD BE HEAVILY REINFORCED AND DESIGNED BY THE STRUCTURAL ENGINEER. SEE TABLE D OF REPORT.

Miller Pacific ENGINEERING GROUP	504 Redwood Blvd. Suite 220 Novato, CA 94947 T 415 / 382-3444 F 415 / 382-3450 www.millerpac.com	VAPOR BARRIER / DECOUPLE	Drawn JTO Checked	FIGURE 9
		Lawson Landing Dillon Beach, California		
		Project No. 1783.01 Date: 1/6/12		

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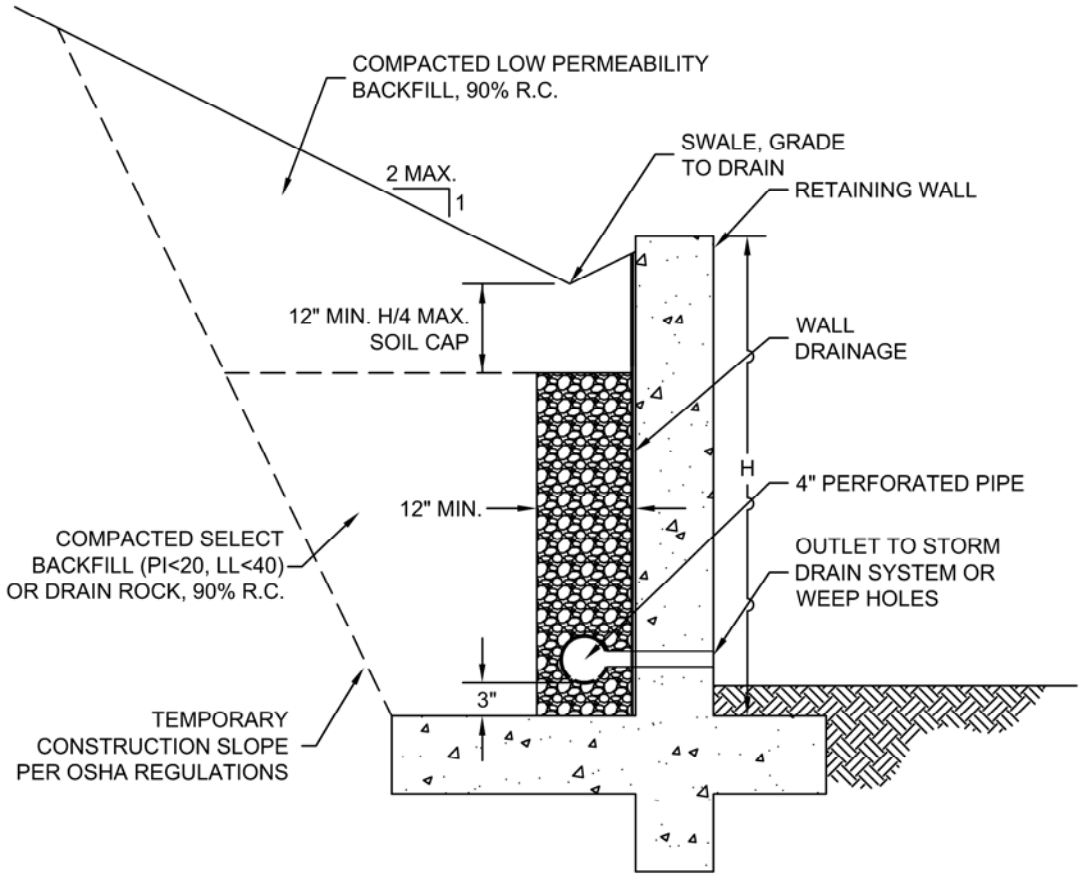
FILE: 1783.01 Fig 9.dwg



NOTES:

1. Wall drainage should consist of clean, free draining 3/4 inch crushed rock (Class 1B Permeable Material) wrapped in filter fabric (Mirafi 140N or equivalent) or Class 2 Permeable Material. Alternatively, a pre-fabricated drainage panels (Miradrain G100N or equivalent) installed per the manufactures recommendations, may be used in lieu of drain rock and fabric.

2. All retaining walls adjacent to interior living spaces shall be water/vapor proofed as specified by the project architect or structural engineer.

3. Perforated pipe shall be SCH 40 or SDR 35 for depths less than 20 feet. Use SCH 80 or SDR 23.5 perforated pipe for depths greater than 20 feet. Place pipe perforations down and sloped at 1% to a gravity outlet. Alternatively, drainage can be outlet through 3" diameter weep holes spaced approximately 20' apart.

4. Clean outs should be installed at the upslope end and at significant direction changes of the perforated pipe. Additionally, all angled connectors shall be long bend sweep connections.

5. During compaction, the contractor should use appropriate methods (such as temporary bracing and/or light compaction equipment) to avoid over stressing the walls. Walls shall be completely backfilled prior to construction in front of or above the retaining wall.

6. Refer to the geotechnical report for lateral soil pressures.

7. All work and materials shall conform with Section 68, of the latest edition of the State of California Standard Specifications (Caltrans).

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RETAINING WALL BACKDRAIN CRITERIA

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Dillon Beach

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10
FIGURE

APPENDIX A
SUBSURFACE EXPLORATION AND LABORATORY TESTING

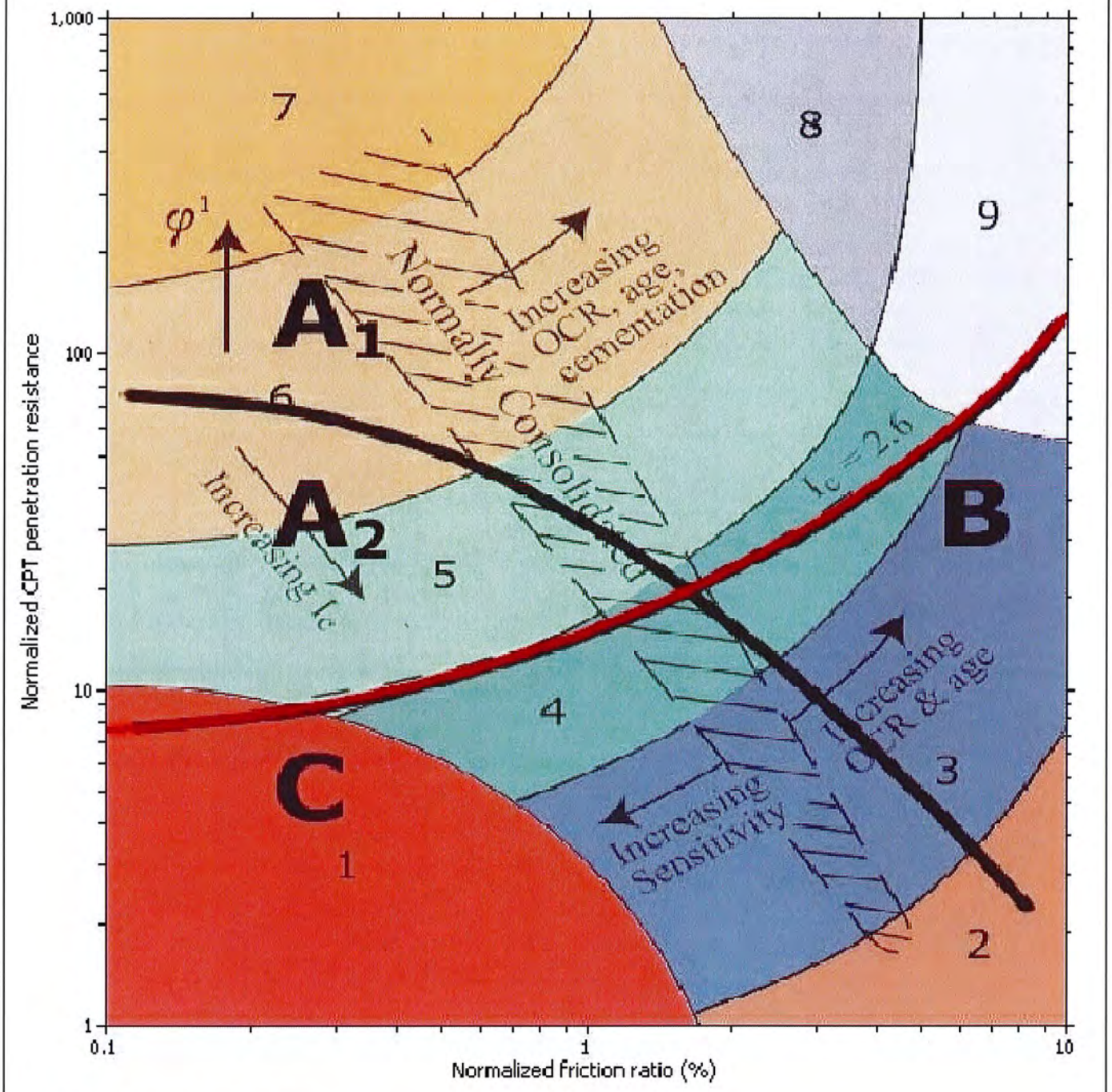
1.0 Subsurface Exploration – Cone Penetration Testing

The Cone Penetration Test (CPT) is a special exploration technique that provides a continuous profile of data throughout the depth of exploration. It is particularly useful in defining stratigraphy, relative soil strength and in assessing liquefaction potential. We performed 7 CPT's on November 9, 2011 at the locations shown on the Site Plan, Figure 2. The CPT equipment was mounted in a large rubber-tired truck.

The CPT is a cylindrical probe, 35 mm in diameter, which is pushed into the ground at a constant rate of 2 cm/sec. The device is illustrated on Figure A-2. It is instrumented to obtain continuous measurements of cone bearing (tip resistance) and sleeve friction. The data is sensed by strain gages and load cells inside the instrument. Electronic signals from the instrument are continuously recorded by an on-board computer at the surface, which permits an initial evaluation of subsurface conditions during the exploration.

The recorded data is transferred to an in-office computer for reduction and analysis. The analysis of cone bearing and sleeve friction (i.e. friction ratio) indicates the soil type, the cone bearing alone indicates soil density or strength, and the pore pressure indicates the presence of clay. Variations in the data profile indicate changes in stratigraphy. This test method has been standardized and is described in detail by the ASTM Standard Test Method D3441 "Deep, Quasi-Static Cone and Friction Cone Penetration Tests of Soil." The interpretation of CPT data is illustrated on Figure A-3, and the CPT data logs are presented on Figures A-4 through A-10.

The CPT logs description of soils encountered reflect conditions only at the location of the CPTs at the time they were advanced. Conditions may differ at other locations and may change with the passage of time due to a variety of causes including natural weathering, climate and changes in surface and subsurface drainage.



SOIL BEHAVIOR TYPE

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

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CPT CLASSIFICATION CHART

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A-1
FIGURE

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CPT 1 - SOIL INTERPRETATION

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A-2
FIGURE

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CPT 2 - SOIL INTERPRETATION

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A-3
FIGURE

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CPT 3 - SOIL INTERPRETATION

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A-4
FIGURE

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CPT 4 - SOIL INTERPRETATION

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A-5
FIGURE

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CPT 5 - SOIL INTERPRETATION

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A-6
FIGURE

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CPT 6 - SOIL INTERPRETATION

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A-7
FIGURE

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CPT 7 - SOIL INTERPRETATION

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A-8
FIGURE

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CPT 1 - LIQUEFACTION ANALYSIS

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A-9
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CPT 2 - LIQUEFACTION ANALYSIS

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A-10
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CPT 3 - LIQUEFACTION ANALYSIS

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A-11
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CPT 4 - LIQUEFACTION ANALYSIS

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A-12
FIGURE

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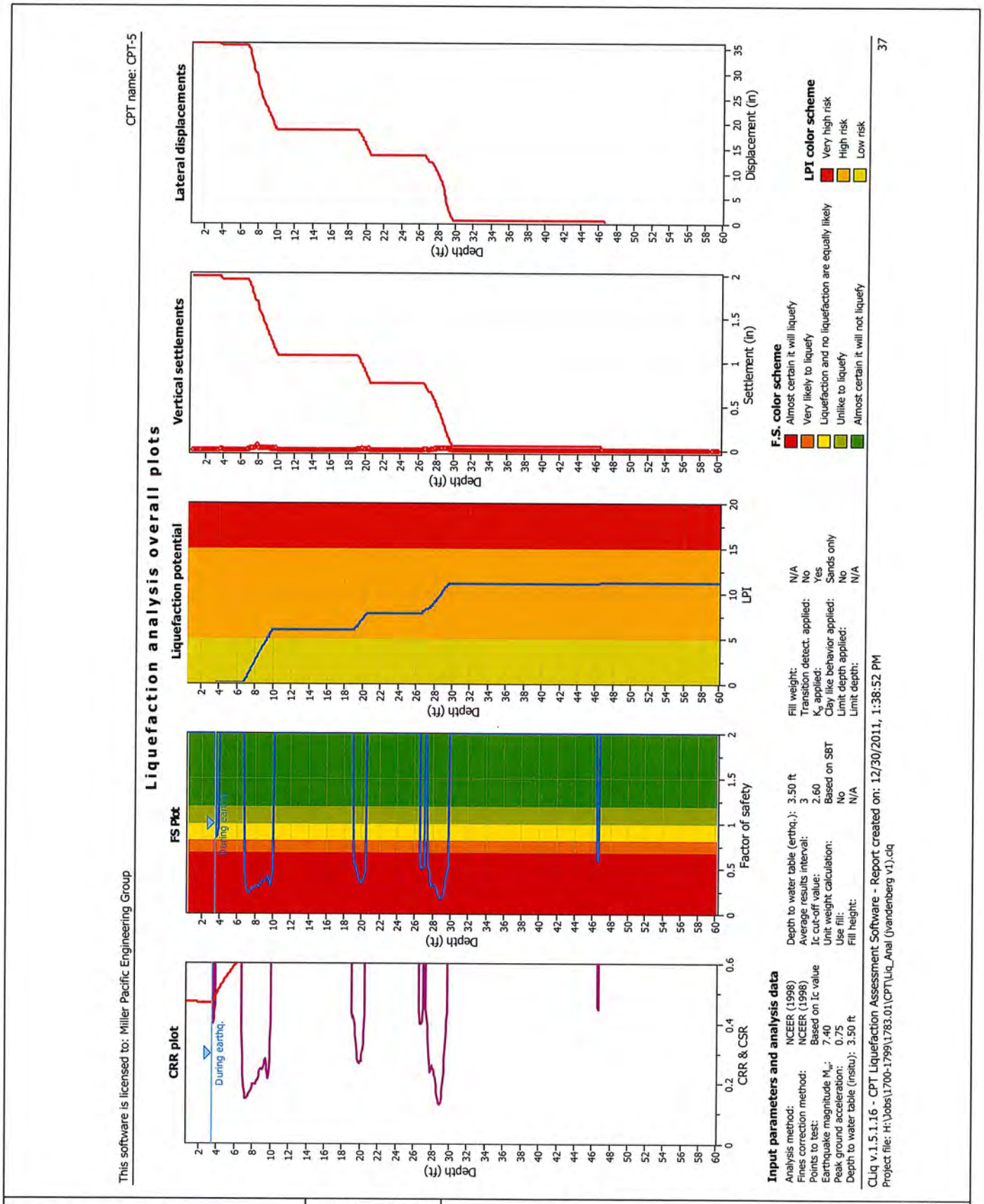

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CPT 5 - LIQUEFACTION ANALYSIS

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A-13
FIGURE

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CPT 6 - LIQUEFACTION ANALYSIS

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A-14
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CPT 7 - LIQUEFACTION ANALYSIS

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Dillon Beach, California

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A-15
FIGURE

CALIFORNIA COASTAL COMMISSION
NORTH CENTRAL COAST DISTRICT OFFICE
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105
PHONE: (415) 904-5260
FAX: (415) 904-5400
WEB: WWW.COASTAL.CA.GOV

January 29, 2016

Mike Lawson and Carl Vogler
137 Marine View Drive, P.O. Box 67
Dillon Beach, CA 94929

Subject: Coastal Development Permit Amendment (CDPA) Application Number A-2-MAR-08-028-A1 (Lawson's Landing)

Dear Mr. Lawson and Mr. Vogler:

We received the above-referenced coastal development permit (CDP) amendment application that you submitted on December 31, 2015. Within Area 6, the proposed development includes the construction of wastewater treatment facilities, including a 1,000 square-foot buried wastewater secondary treatment plant, a 100 square-foot aboveground control room, a lift station and underground leach field area, as well as improvements to the gate house, demolition of the existing truck and oil sheds, and construction of a new Lawson's Landing Center, including an administrative office, emergency services center, campground store, boat and equipment storage, boat repair facilities, covered canopy area for electric cart storage, electric vehicle charging station, and photovoltaic or solar thermal collectors. Uphill and to the northwest of Area 6 in an area currently used as pasture for grazing cattle, the proposed project includes the construction of a 6-acre underground leach field and seasonal spray irrigation. Pursuant to California Code of Regulations (CCR) Section 13166(a):

> *The executive director shall reject an application for an amendment to an approved permit if he or she determines that the proposed amendment would lessen or avoid the intended effect of an approved or conditionally approved permit unless the applicant presents newly discovered material information, which he could not, with reasonable diligence, have discovered and produced before the permit was granted.*

Please be advised that the Executive Director has determined that the proposed development would lessen or avoid the intended effect of CDP A-2-MAR-08-028, and that you have not provided newly discovered material information which you could not have with reasonable diligence discovered and produced at the time the CDP was approved.

Specifically, in its findings for CDP A-2-MAR-08-028, the Commission determined that Area 6 is considered an environmentally sensitive habitat area (ESHA), with the exception of those portions of the area that had been legally developed or permitted at that time. The CDP states that no development is authorized in Area 6 unless: 1) development is located in such legally developed areas; 2) the Permittee provides evidence that such previous development was authorized; and 3) an amendment to the CDP is approved.

As we have previously indicated to you (see our letter to you dated May 9, 2014), the western portion of Area 6 (i.e., the area developed with Mike Lawson's residence, the maintenance shed, the original mobile home, the gate house (or entrance kiosk), and the employee rest area was legally developed prior to coastal permitting requirements. In addition, the mobile home in Area 6 was replaced with a newer mobile home in 1996 and received the required CDP. Accordingly, and as previously indicated to you (see our letter to you dated May 11, 2015), the associated vehicle ingress/egress area is also considered legally developed. It is in these areas as described where the CDP allows development to be pursued. However, the remainder of Area 6 is ESHA and the proposed development in ESHA is not allowed based the Coastal Act, and on the terms and conditions of the CDP. Your proposed amendment application provides for development within ESHA (including the proposed 'middle' and 'upper' leach fields, and the additional dispersal area south of Sand Haul Road) which the CDP does not allow for, and thus CCR Section 13166 requires that your proposed amendment application be rejected.

At the same time, and as previously noted to you, some of your proposed developments do not raise this same issue, and could be considered by the Commission if you choose to develop and submit a revised amendment package. The portions of your proposed developments that would appropriately form the basis of a revised amendment application related to Area 6 are: the wastewater treatment control building; the buried waste water treatment tanks; the "lower" leach field; improvements to the gate house; demolition of the existing truck and oil sheds; and construction of a new Lawson's Landing Center (including an administrative office, emergency services center, campground store, boat and equipment storage, boat repair facilities, covered canopy area for electric cart storage, electric vehicle charging station, and photovoltaic or solar thermal collectors). Separate from the Area 6 issues, the additional portion of your amendment application covering the proposed construction of a 6-acre underground leach field and seasonal spray irrigation in the area uphill and to the northwest of Area 6 could also be part of such a revised amendment package. If you would like to pursue these developments, we would encourage you to submit a revised amendment application package, and it will be reviewed for completeness at that time.

Please note two things. First, because your amendment application is rejected pursuant to CCR Section 13166, we have not reviewed the application for completeness and it is not filed as complete. If you were to submit a revised amendment application, there may be information necessary to allow it to be filed as complete. If you choose this route, the revised amendment application would be reviewed and you would be informed if additional information was necessary to allow it to be filed.

Second, as described in CCR Section 13166(a)(1), you may appeal the Executive Director's determination rejecting your application to the Commission. Section 13166(a)(1) states:

> *An applicant may appeal the executive director's determination to the commission. The appeal must be submitted in writing and must set forth the basis for appeal. The appeal must be submitted within 10 working days after the executive director's rejection of the amendment application. If timely submitted, the executive director shall schedule the appeal for the next commission hearing or as soon thereafter as practicable and shall provide notice of the hearing to all persons the executive director has reason to know may be interested in the application.*

If you choose to pursue such an appeal, please note that it must be submitted in writing and must set forth the basis for appeal. Any such appeal must also be submitted within 10 working days of this letter, meaning you would need to submit any such appeal by 5pm on February 12, 2016. If timely submitted, we will schedule the appeal for a hearing in front of the Commission. If you don't appeal or an appeal is not timely received, then this issue will be deemed resolved.

In closing, we look forward to continuing to work with you as you propose to redevelop the site consistent with the terms and conditions of CDP A-2-MAR-08-028. We would be happy to help you develop a revised amendment application package that does not contain the elements requiring rejection of this amendment application at this time. Please do not hesitate to contact me at (415) 904-5266 if you have any questions regarding this letter or would like to discuss this matter further.

Sincerely,

Shannon Fiala
Coastal Planner
North Central District Office
California Coastal Commission

Enclosed:
Letter from Commission staff to Permittee, dated May 9, 2014
Letter from Commission staff to Permittee, dated May 11, 2015

CALIFORNIA COASTAL COMMISSION
CENTRAL COAST DISTRICT OFFICE
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SANTA CRUZ, CA 95060
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WEB: WWW.COASTAL.CA.GOV

May 9, 2014

Tom S. Flynn, M.S.
10 Willow Avenue
Larkspur, CA 94939

Subject: Lawson's Landing – Areas 6 and 8

Dear Tom:

In approving coastal development permit (CDP) 2-06-018/A-2-MAR-08-028, the Commission found that although there is some existing development in Areas 6 and 8, absent specific evidence that Areas 6 and 8 were legally developed, these areas must be considered as environmentally sensitive habitat areas (ESHA), i.e. dune ESHA. Special Condition 2 of the Commission's approval sets the parameters for development in Areas 6 and 8, and specifically states:

> 2(C)(6). **Area 6**
> *a. No development is authorized, including but not limited to relocation of boat and trailer storage, boat repairs and sales, fuel bunker, and fuel service, unless: (1) development is proposed in legally developed areas; (2) the Applicants provide evidence that such previous development was authorized; and (3) an Amendment to this coastal development permit is approved.*
> *b. No future development shall occur unless authorized consistent with the limitations on development identified in Special Condition 21* [Condition 21 adds an additional limitation confining proposed coastal development permit amendments involving development in areas 5-8 to agricultural development consistent with the LCP, or improvements to Sand Haul Road.].
>
> 2(C)8. **Area 8**
> *a. No development is authorized, including but not limited to staging and storage unless: (1) development is proposed in already legally developed areas; (2) the Applicants present evidence that such previous development was authorized; and (3) an Amendment to this coastal development permit is approved.*
> *b. No future development shall occur unless authorized consistent with the limitations on development identified in Special Condition 21.* [See above note regarding additional limitations contained in Special Condition 21.].

As described more fully below, this letter invites you to propose a coastal development permit amendment (CDPA) for development in the portions of Area 6 that meet the requirements of Special Condition 2 set forth above. This letter also identifies the portions of Areas 6 and 8 that, based on our review of the information submitted to date, still require evidence that they were legally developed before a CDPA can be proposed consistent with the requirements of Special Condition 2.

The Lawsons are proposing to use Areas 6 and 8 in a variety of ways. Specifically, they propose to use both Areas 6 and 8 as a construction staging area for equipment and materials. Area 8 would also be used for construction worker parking. Area 6 is also proposed to be used as a transportation hub on the site with a shuttle staging area and a visitor parking area, as well as a storage location for bike rentals and electric vehicles. Area 6 would also be used as a secondary camper-entry processing location on peak camping days. A camper's store is also proposed in Area 6.

Special Condition 2 does not authorize any new development in Areas 6 and 8 unless development is proposed in already legally developed areas, and approval of an amendment to CDP A-2-MAR-08-028/2-06-018 is obtained. Accordingly, areas that were developed prior to the effective date of the Coastal Act and its predecessor statute (February 1, 1973), as well as development that received a CDP from either the Commission or the County, can be considered legally developed areas for which a CDP amendment may be proposed consistent with the requirements of Special Condition 2.

You previously provided a Memorandum regarding "*Authorized Development, Areas 6 and 8 Lawson's Landing*" in which you state that authorizations pertaining to the following development demonstrate that development inside Areas 6 and 8 has been authorized, permitted and legally developed. Specifically, you state that: 1) the sand quarry and facilities related to the sand quarry were approved and permitted by the County in 1971 prior to the passage of the Coastal Act; 2) the sand quarry operations and facilities related thereto were permitted uses within an agricultural preserve in Marin County (i.e. a primary use of the sand that was quarried was for milk cow bedding at local dairy farms; 3) recreational use (i.e. camping) is a permitted use of a Marin County agricultural preserve, and; 4) Marin County's regulation and authorization of the quarry and the facilities related thereto clearly demonstrates that buildings and facilities in Areas 6 and 8 have been authorized, permitted, and developed legally. In addition to the evidence you provided, we reviewed aerial evidence already available to us. However, the evidence provided to date does not establish that all geographic portions of Areas 6 and 8 were legally developed. As discussed more specifically below, portions of Area 6 were legally developed areas. On the other hand, we found no evidence that coastal development permits specifically authorized development of certain structures in Areas 6 and 8, including the truck shed, equipment shed, and oil shed in Area 6 or the tractor shed in Area 8, though any new development on the Lawson's property that was constructed after the permitting requirements of the Coastal Act came into effect (i.e. February 1, 1973) required a coastal development permit from the Commission prior to certification of the LCP in 1982, or from the County after LCP certification.

To assist you in obtaining the evidence required by Special Condition 2, we have reviewed photographs from the Coastal Records Project web site,[1] which provides aerial photos dating from 1972 to 2013. The aerial photos from 1972[2] for Area 6 clearly show the entrance kiosk, Mike Lawson's home, and the maintenance shed. The aerial photos also show the employee rest area (located behind Mike Lawson's house) as well as a mobile home to the right of Area 6, and associated boat repair tents. The

[1] http://www.californiacoastline.org To open a large version (to show more detail) of a particular photo on the web site, first double click on a particular photo to open it; then double click on the photo again.

[2] Photos 7212048 and 7212049

developments seen in the 1972 photographs pre-date the permitting requirements of the Coastal Act and can be considered "pre-coastal." Therefore, we believe you can propose a permit amendment to redevelop these portions of Area 6 consistent with the requirements of Special Condition 2 set forth above.

On the other hand, the sheds in Area 6 other than the equipment shed, i.e. the truck shed, the adjacent equipment shed and the oil shed, as well as the associated unpaved roads that provide vehicular access to these structures, are not seen in either the 1972 photos or in an aerial photo from 1975 (full-size plan sheet).[3] Furthermore, an aerial photo from 1979[4] clearly shows the truck shed in Area 6, evidencing that the truck shed was constructed sometime between 1975 and 1979 when coastal permitting requirements were in effect; however, there is no evidence of a coastal development permit from the Commission for the truck shed during this time period. An aerial photo from 1986[5] does not show the existing tractor shed in Area 8.

The Memorandum and associated annotated aerial photos you submitted state that the 1990 coastal permit renewal (CDP 90-015) for quarrying activities on the site also authorized the following development: 1) In Area 6: Mike Lawson's home (a pre-coastal structure), the employee rest area (a pre-coastal structure), the maintenance shed (a pre-coastal structure), the truck shed, the equipment shed, the oil shed, the entrance gate/kiosk (which appears in the 1972 photos), and the vehicle ingress/egress area; 2) In Area 8: the tractor shed. However, as evidenced above, most of these developments were on the site prior to 1990 and in fact some were pre-coastal.

The County's letter (dated July 11, 2012) regarding this issue states: "... *there is ample evidence in the record documenting that the County of Marin over the years authorized the sand quarry operation and associated facilities in Areas 6 and 8.*" However, no quarrying activities occurred in Area 6. Further, while the County's 1990 quarry coastal permit acknowledges the existence of a truck shed and a tractor shed on the site, the County's 1990 findings (enclosed) state that "*No permanent or temporary buildings are proposed as part of this project*" and ..."*the quarrying operation is only temporary in nature, without construction of permanent structures...*" Further, condition #3 of CDP 90-015 states: "*The Reclamation Plan prepared by Western Ecological Services Company, Inc., in March 1990 and identified as "Exhibit B" on file in the Marin County Planning Department, is hereby approved as consistent with Section 2772 of the California Surface Mining and Reclamation Act.*" That reclamation plan states under "Subsequent Use:" "*It is proposed that land reclaimed from sand quarry operations at Lawson's Landing be returned to a natural state and subsequently used for wildlife habitat, open space, nonconsumptive recreation and livestock grazing.*" Therefore, we are aware of no evidence that the truck shed, the oil shed, the equipment shed, the vehicle ingress/egress (Area 6), or the tractor shed (Area 8) received the required coastal development permit(s), and Commission staff has not located any CDPs for these structures.

---

[3] With respect to Area 8, the tractor shed and associated roads, including Sand Haul Road, are not present in the 1972 photo; the tractor shed is not present in the 1975 photo, although Sand Haul Road is seen in the 1975 photo.

[4] Photo 7920092

[5] Photo 198650188

Taking into account all of the above and based on the 1972 photos, the portion of Area 6 developed with Mike Lawson's residence, the maintenance shed, the original mobile home, the entrance kiosk, and the employee rest area were developed prior to coastal permitting requirements. Also, the mobile home in Area 6 was replaced with a newer mobile home in 1996 and received the required CDP.[6] Given that these portions of Area 6 can be considered pre-coastal or permitted development, you may propose a permit amendment to redevelop the portions of Area 6 occupied by those structures if the development you propose is consistent with all otherwise applicable permit conditions, including the requirements of Special Condition 2. However, Area 8 contains only one structure, i.e. the tractor shed, which is neither permitted nor pre-coastal. The same is true of the ingress/egress leading off of Sand Haul Road to the tractor shed. In order to develop any portion of Area 8 and the other portion of Area 6 (i.e. the remaining portion of Area 6 occupied by the truck shed, the equipment shed, the oil shed, and the associated vehicle ingress/egress to these structures), we need evidence that such areas were legally developed.

If you have additional evidence establishing that any portion of Area 8 or the remaining portion of Area 6 were either developed pre-coastal or permitted by a CDP, please submit such evidence at your earliest convenience. In the interim, please feel free to apply to redevelop the portions of Area 6 occupied by the development we have specified above that either was developed pre-coastal or received the necessary CDP. Please do not hesitate to call me if you wish to discuss the above.

Sincerely,

Susan Craig

Susan Craig
Supervising Coastal Planner
Central Coast District Office

Enclosures: Photographs
Relevant Findings from County CDP 90-015

cc: Ben Berto, Marin County Planning Department
Environmental Action Committee

[6] CDP CP 96-468 UP/96-469

CALIFORNIA COASTAL COMMISSION
NORTH CENTRAL COAST DISTRICT OFFICE
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105
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May 11, 2015

Tom S. Flynn, M.S.
10 Willow Avenue
Larkspur, CA 94939

Subject: Lawson's Landing – Areas 6 and 8

Dear Tom:

In approving coastal development permit (CDP) 2-06-018/A-2-MAR-08-028, the Commission found that although there is some existing development in Areas 6 and 8, absent specific evidence that Areas 6 and 8 were legally developed, these areas must be considered environmentally sensitive habitat areas (ESHA), due the presence of sensitive dune habitat in those areas. Special Condition 2 of the Commission's approval sets the parameters for development in Areas 6 and 8, and specifically states:

> 2(C)(6). **Area 6**
> *a. No development is authorized, including but not limited to relocation of boat and trailer storage, boat repairs and sales, fuel bunker, and fuel service, unless: (1) development is proposed in legally developed areas; (2) the Applicants provide evidence that such previous development was authorized; and (3) an Amendment to this coastal development permit is approved.*
> *b. No future development shall occur unless authorized consistent with the limitations on development identified in Special Condition 21* [which restricts development in areas 5-8 to agricultural development consistent with the LCP or improvements to Sand Haul Road].
>
> 2(C)8. **Area 8**
> *a. No development is authorized, including but not limited to staging and storage unless: (1) development is proposed in already legally developed areas; (2) the Applicants present evidence that such previous development was authorized; and (3) an Amendment to this coastal development permit is approved.*
> *b. No future development shall occur unless authorized consistent with the limitations on development identified in Special Condition 21* [see above].

As described more fully below, Commission staff invites you to submit a coastal development permit amendment (CDPA) for development in Area 6 that meets the requirements of Special Condition 2 set forth above. This letter also updates the portions of Area 6 that were legally developed, based on our review of the information submitted to date, which could be included in the area's redevelopment, consistent with the requirements of Special Condition 2.

Regarding historic aerial photographs
To date, Commission staff have reviewed: Coastal Records Project photos from 1972 and 1979, the 1975 aerial photograph associated with the Grading and Drainage Plan and a United States Geological Survey (USGS) aerial photo from 1974. As previously discussed, the photographs from 1972 clearly show the entrance kiosk, Mike Lawson's home, the employee rest area (located behind Mike Lawson's house), the maintenance shed, a mobile home, and associated boat repair tents. The developments seen in the 1972 photographs pre-date the permitting requirements of the Coastal Act and can be considered "pre-coastal." The mobile home in Area 6 was replaced with a newer mobile home in 1996 and received the required CDP (CP 96-468 / UP 96-469).

In the recently submitted USGS aerial photo from 1974, the outline of the truck shed, as well as the unpaved roads that comprise the vehicular ingress and egress area, can be seen. However, the equipment shed and oil shed are first observed in the aerial photo from 1979. Although photos from 1976 and 1977 are not available at this time, we have established that these two sheds were constructed sometime between 1975 and 1979, when coastal permitting requirements were in effect at this site; yet, there is no evidence of a CDP from the Commission or the County for the equipment and oil sheds during this time period and no clear evidence that they pre-date the Coastal Act. Regarding Area 8, the existing tractor shed does not appear in aerial photographs until after 1986 and there is no evidence of a CDP from the Commission or the County for the tractor shed.

Regarding CDP 90-015 and 'facilities related thereto'
In your most recent submittal titled, 'New evidence and supporting information,' received on March 25, 2014, you conclude that: 1) the sand quarry and facilities related to the sand quarry were approved and permitted by the County in 1971 prior to the passage of the Coastal Act, supported further by the conclusion that Marin County did not require permits for agricultural buildings until June 21, 1974; and 2) Marin County's regulation and authorization of the quarry, and the facilities related thereto, clearly demonstrates that buildings and facilities in Areas 6 and 8 have been authorized, permitted, and developed legally. However, the County's 1990 coastal permit issued for the sand quarry operations included Visual Resources and Community Character findings stating that Local Coastal Program concerns would be met because "No permanent or temporary buildings are proposed as a part of this project." Therefore, as permanent structures, the truck shed, oil shed, equipment shed cannot be considered permitted under CP 90-015.

Further, condition #3 of CDP 90-015 references a Reclamation Plan, which states under "Subsequent Use" that "It is proposed that land reclaimed from sand quarry operations at Lawson's Landing be returned to a natural state and subsequently used for wildlife habitat, open space, non-consumptive recreation and livestock grazing" (emphasis added). In your submittal, you point out that the truck shed is specifically referenced in the 1990 CDP language as a part of the quarry operations. Therefore, as a part of the operations, the truck, equipment and oil sheds should have been removed when quarry operations ceased in 2005 and their footprints must be returned to a natural state, as described above. However, under "Schedule," the Reclamation Plan states that roads used during the quarry operation would not be reclaimed until ranching operations cease and road use is discontinued. Therefore, the vehicle ingress/egress area may remain because ranching operations continue.

Conclusion
As already established in Commission staff's 2014 memo, the western portion of Area 6 (including the entrance kiosk, Mike Lawson's home, the employee rest area (located behind Mike Lawson's house), the maintenance shed, mobile home, and associated boat repair tents) has been established as either pre-coastal or permitted development. Based on the aerial photographs and the findings in CDP 90-015 described above, the adjacent vehicle ingress/egress area can be considered permitted development. Further, staff agrees that the redevelopment of disturbed habitat in Area 6 will be beneficial in balancing environmental protection and sustaining affordable coastal accommodations, as a site for mitigating traffic impacts and improving the wastewater treatment system, among other uses. Therefore, a CDP amendment to redevelop these portions of Area 6 may be supported by Commission staff as long as it is consistent with all otherwise applicable permit terms and conditions, including the requirements of Special Condition 2

However, the truck, equipment, and oil sheds were not pre-coastal and were not permitted as permanent structures under CP 90-015. Area 8 contains only one structure, the tractor shed, which is neither permitted nor pre-coastal. Absent specific evidence that these four structures were legally developed or permitted, the buildings must be removed and their footprints must be restored as environmentally sensitive habitat area (ESHA), i.e. dune scrub habitat.

If you have additional evidence establishing that any portion of or structure located within Area 6 or 8 was legally developed, please submit such evidence at your earliest convenience. In the interim, please feel free to apply to redevelop portions of Area 6. Please do not hesitate to call me if you wish to discuss the above.

Sincerely,

Shannon Fiala
Coastal Planner
North Central Coast District Office

cc: Environmental Action Committee

Source: California Coastal Records Project, 2005.

Boat repair tents (unpermitted; to be removed)

Employee residence (CP 96-468)

Maintenance shed (built before coastal permitting requirements, i.e. pre-1972)

Oil shed (unpermitted; to be removed)

Entrance gate (built before coastal permitting requirements, i.e. pre-1972)

Vehicle ingress / egress (CP 90-015)

Truck shed (authorized as temporary structures under CP 90-015)

Employee rest area (built before coastal permitting requirements, i.e. pre-1972)

Equipment shed (authorized as temporary structures under CP 90-015)

Lawson's residence (built before coastal permitting requirements, i.e. pre-1972)

LAWSON'S LANDING

137 Marine View Drive • P.O. Box 67 • Dillon Beach, CA 94929 • 707-878-2443 • Fax: 707-878-2942

Nancy Cave, North Central District Manager
Shannon Fiala, Coastal Planner
Subject: Coastal Development Permit Amendment (CDPA)
Application Number A-2-MAR-08-028-A1 (Lawson's Landing)

Dear Ms. Cave, and Ms. Fiala,

Thank you for your letter of January 29, 2016 regarding our amendment application, which Lawsons Landing submitted on December 31, 2015. With due respect, we believe that your review of this amendment was well intentioned, but ultimately was incorrect in its' conclusions. Accordingly, the applicant finds it necessary to appeal the Executive Directors determination. In your assessment of the amendment you state that development of waste water improvements in Area 6 would lessen or avoid the intended effect of CDP A-2-MAR-08-028 and that we have not provided newly discovered material information, which we could not have with reasonable diligence discovered and produced before the permit was granted.

Newly discovered material information

First, the application does include newly discovered material information, which could not have with reasonable diligence been discovered and produced at the time the CDP was approved. Second, when carefully reviewed, the facts of the newly discovered material information are quite compelling and indisputably support the environmental protection standards intended in the original permit.

New material was presented to staff in writing December 31, 2015 in our draft Amendment Section II attachment, under Item D, and in the following item: Other consistency with CDP. In discussion with staff on two occasions including a meeting Dec. 17, with CCC and Regional Water Quality Control Board staff this new information provided the basis for a more appropriate alternative location for the new waste water system.

Examples of new material information:

- Miller Pacific's subsurface cone penetration tests (CPT) geotechnical finding December 15, 2011 (well after the CDP was granted) of deep soil in Area 6. This revealed potential for considerable depth to groundwater and a highly suitable alternative location for dispersal of treated wastewater.
- These soil samples ultimately led to a more thorough investigation.

- Susan Craig's letter of May 9, 2014 finally provided indication from CCC staff that there was potential to redevelop some of Area 6. The exact amount of Area 6 accepted for redevelopment was unclear.
- Following Susan Craig's May 9, 2014 letter, we discussed and met with Regional Water Quality Control Board (RWQCB), Norm Hantzsche, our wastewater system designer with Questa Engineering, and our civil engineer Rich Souza of CSW/ST2 regarding wastewater system options. By November 20, 2014 our meetings yielded the conclusion to further explore installation of the wastewater treatment facilities/pods and leach fields in Area 6.
- Installation and logging of twelve (12) ground water monitoring wells and following heavy rains of December 2014, monitoring these wells through the winter. This additional investigation provided strong validation that Area 6 was clearly the more appropriate location for treated wastewater dispersal, as compared to the remote uphill (nearly a mile away) drip dispersal system previously considered at the time of the July 2011 CDP. Depths to groundwater in Area 6 were found to be deeper than anywhere else at Lawsons Landing.
- The soils report and ground water monitoring following the granting of the CDP have revealed in Area 6 an anomaly as compared to the areas around it: Much of Area 6 is above an underground valley of sand and silty sand. As supported by Blair Allen of RWQCB, this sandy valley is a more appropriate location for wastewater dispersal than the uphill shallow soils previously considered for a drip dispersal system. Clearly these findings and RWQCB support for the use of Area 6 for leach fields over the previous approach is compelling new material information. As an aside for wastewater system laypersons: sand filters are one of the mostly widely used forms of waste water system treatment in the world.
- Prior wastewater related investigations in the immediate area surrounding Area 6 underscore why the above findings are "newly discovered material, which could not have been discovered and produced before the permit was granted." This is discussed in detail in the attached letter from Norm Hantzsche of Questa Engineering. (See attached.)
- 2015 Hydrological Assessment (HA) by Kamman Engineering (consultant referred by West Marin Environmental Action Committee) produced the recommendation to "Maintain, and if possible expand existing groundwater sources to the wetland areas. Potential sources to be evaluated include grey water returns to the wetland from campground facilities.".
- This recommendation was refined by Norm Hantzsche's expert knowledge of wastewater dispersal and of Lawsons Landing. Following the Hydrological Assessment, Mr. Hantzsche pointed out that the potential for grey water dispersal from shower facilities in to most areas of Lawsons Landing is severely limited by shallow depths to groundwater that do not meet minimum State grey water regulations (California Plumbing Code, Title 24). However, the secondary treated wastewater with ultraviolet light disinfection to be produced by the wastewater system planned for dispersal in Area 6 would be of equal or better quality water and an equally viable source of groundwater replenishment for wetlands. Also this highly treated wastewater can be dispersed in the deep sandy soil of Area 6 to more

effectively meet the HA recommendation to "expand existing groundwater sources to the wetland areas" and would be more consistent with the fundamental CDP Protection Restoration and Enhancement Plan prescription to "increase inundation and soil saturation within the Tomales wetlands/dune complex."

- 2015 Hydrological Assessment includes the following recommendation and further reinforcement to the points above: "Do not permit groundwater export." As we pointed out, the original plan would effectively "export" treated water to a distant location on the property, for drip dispersal where it would provide little if any groundwater replenishment benefit to the NRCS wetlands. Most of the treated water would be lost to plant uptake and evapotranspiration in the shallow soils of the drip dispersal field and spray field areas. In contrast, the appropriately updated wastewater plan with leach fields in Area 6 would again provide substantially greater consistency with the Hydrological Assessment (HA) recommendations. This updated approach would provide subsurface dispersal of treated water to deep sandy soils in areas located much closer to the NRCS wetlands, where the evaporative losses from the leach field would be nil, and the percolating water would contribute to wetland groundwater supply and saturation levels as encouraged by the HA Recommendations.
- Since July 2011, scientific findings and international leadership have become unanimous in recognizing that green house gas (GHG) emissions must be reduced to avoid climatic catastrophes. Energy efficiency is first in the loading order of GHG mitigation measures, which have increasingly become government mandates in California. Also since 2011, California has experienced its worst drought in recorded history, with likely linkage to GHG emissions and climate change. This has mandated a 25% reduction in consumption of water. All this is new information, which has compelled review of all development elements at Lawsons Landing, including the wastewater system. Returning treated wastewater to the wetlands at Lawsons Landing from Area 6 has become the clear energy and water conserving, environmentally preferable, and responsible alternative consistent with new California policies and standards as verified by the expert agency in the wastewater discipline, the RWQCB.
- Locating both the treatment system and leachfield in Area 6 rather than at the more remote Scale House area was recognized recently as having distinct advantages from an operation and maintenance standpoint, including more manageable routine oversight and attention, as well as faster response time in the event of any emergency or alarm condition. RWQCB staff have recently indicated in the case of Lawsons Landing that a compact wastewater treatment and dispersal system is more manageable and has fewer potential issues than the previously proposed system, which would have been spread out over long distances.
- Fortunately, moving to this preferred alternative is also consistent with key CDP Findings, which on page 104 state: "The final approved camping configuration would serve to concentrate development in areas that have been previously disturbed and have low ecological value." Area 6 has been a disturbed area for over six decades with truck, vehicle, boat and equipment management, repairs, and storage as part of both A) permitted sand quarry operation and B) water dependent

recreation and lower-cost over-night-stay operations. This should be added to the list of self evident reasons for locating wastewater dispersal in Area 6.

Local ecological value contrasted with ESHA

Field observations show Area 6 has been used over decades for a sand hauling operations and visitor coastal dependent recreation (with parking, storage, maintenance, of trucks, boats, trailers, and other equipment) and it is impacted or previously disturbed area. Areas, presently not having vehicles, equipment or other stored materials on top of them, are heavily infested with highly invasive non-native kikuyu grass.

The uphill area previously proposed for drip dispersal (and at this time the only other known feasible alternative) is a relatively undisturbed low impact cattle grazing area,, (a common preferred agriculture use for this location). Were a drip dispersal system to be installed in this area, it would require digging up the grasslands area and installing drip dispersal pipes and valves in the ground. Following installation, it will be necessary to fence this area off to prevent cattle from grazing and damaging the drip dispersal equipment. This area could be planted with other agriculture of some kind in the future should it be economically feasible, but at least in the foreseeable future this area would be excluded from its historical agricultural use.

Prior deliberations on this matter by CCC staff and some local environmental advocates may have been well intentioned, but they may have overlooked these facts.

An Oct. 28, 2015 email from CCC staff Shannon Fiala indicated that "locating all or a portion of the leachfield in a previously undeveloped portion of Area 6 that has been determined to be ESHA [would also] be rejected because it would lessen or avoid the intended effect of CDP 2-06-018/A-2-MAR-08-028". However, it is important to point out the designation of Environmentally Sensitive Habitat Area (ESHA) has also been applied in the CDP Findings to virtually all of Lawsons Landing. <u>It certainly would apply to the undisturbed previously proposed drip dispersal area.</u> In fact, as indicated on page 3 of the Adopted findings "the proposed camping areas also are located in an environmentally sensitive habitat area that includes both terrestrial dune habitats and wetlands." Conversely the findings also state "However, to not approve a campground in Areas 1 - 4 would result in a failure to provide needed lower cost access and recreational facilities, including coastal-dependent boating and fishing, that would be inconsistent with the mandates of Sections 30210, 30213, 30220, 30224, and 30234." Reuse of Area 6 for waste water improvements will facilitate environmental standards and best management practices specified in the purpose and intent of the current approved CDP.

Ultimately, the requirements to meet these mandates resulted in conflict resolution process, which struck a balance between ESHA protection and preservation of needed lower cost access and recreational facilities. More specifically, as stated in Findings page 77, "According to Dr. Dixon, (CCC staff ecologist) in its natural state, the entire nearshore dune complex at Lawson's Landing, consisting of foredunes, active unvegetated dunes, vegetated backdunes, dune swales and deflation plains, would clearly have met the definition of ESHA." The

findings again conclude on page 104 that "On balance, approving the development described above would adequately provide needed lower cost visitor serving facilities, **while minimizing impacts to ESHA and wetlands. The final approved camping configuration would serve to concentrate development in areas that have been previously disturbed and have low ecological value."**

For all these reasons locating leach fields in Area 6, (previously disturbed with relatively low ecological value) is the environmentally preferred alternative over disturbing a relatively pristine area of open pasture. Spray irrigation of pasture area with treated wastewater in dry season does not have same environmental conflicts as disturbing pasture soil to install drip dispersal and then fencing it off to exclude it from grazing.

Prior correspondence discussed in detail that since Area 6 is a previously disturbed area, it is also the appropriate location for essential coastal-dependent services needed to meet CDP requirements including Traffic Management Plan, Hazard Response Plan (including both Hazard Response and Emergency Services), and storage of equipment including hazardous material above a tsunami zone.

Also in the opinion of RWQCB staff, the appropriate location for the wastewater treatment facilities/pods is in an eastern section of Area 6, away from residences, office and emergency services center. These are shown in the attached Preliminary Wastewater System Layout, which we submitted with our Amendment documents Dec. 31, 2015. Previously it was considered that the wastewater treatment facilities could also located uphill in the area of the Scale House drip dispersal system. However, there is a consensus of expert opinion that it would be safer, more manageable and less problematic to have the treatment facilities in Area 6. This would also avoid pumping untreated wastewater in an uphill pipeline where breaks could occur with release of untreated waste water.

Evidence of prior authorized development and Pre-Coastal Permit Use

After considerable research, the applicant presented a first round of evidence of prior authorized development to Marin County and CCC staff in May of 2012. On July 11, 2012 a letter from Marin County Community Development Agency indicating that they agree "there is ample evidence in the record that the County of Marin over the years authorized prior sand quarry operation and associated facilities in Area 6."

Ultimately after 2 more years and submittal of additional evidence, CCC staff acknowledged evidence of prior authorized development of at least portions of Area 6. However the portions of Area 6, which could be excluded as not prior authorized development are difficult to demonstrate and perhaps endlessly debatable. This is because the original precoastal permits for the quarry operations and facilities related thereto and renewed repeatedly did not define exact locations of what was and wasn't permitted.

Footnote: Marin County Planning Commission approved the first Surface Mining and Quarrying Permit at Lawsons Landing in 1971 for a 5-year period. Subsequently the Quarry

Permits were repeatedly renewed to 2006, for "Mining and quarrying and production operations and **facilities related thereto;**".

However, aerial photography was submitted to the CCC showing that in June of 1974 ingress and egress around Area 6 was well developed. It logically follows that essentially all of Area 6 was far along at that point in providing parking and storage of trucks and equipment as "facilities related thereto" of the sand quarry operations. Notably, the language of CDP Condition 2(C)(6)a. indicates: " No development is authorized.....unless: (1) development is proposed **in** legally developed **areas**". The bolds are added above because of their broad application. This language can appropriately be interpreted as allowing redevelopment in broadly defined areas in contrast to redeveloping on specific building footprints.

Resolution based upon intent of the CDP

Use of Area 6 for waste water improvements is reasonable and consistent with the CCC purpose and intent of the CDP. The permit intends to keep open alternatives to A) avoid blocking implementation of the environmentally preferred alternative wastewater system and B) avoid blocking improvement of a previously disturbed and impacted area to provide return of highly treated recycled water to a wetland area and enhanced CRLF migration corridor, or to C) avoid compelling disturbance of pristine pasture area so that excessive energy (with GHG and other environmental impacts) can be consumed pumping to a remote, more problematic, and less manageable location.

It was the intent of the CDP to protect the California red legged frog (CRLF) and enhance its' habitat. In keeping with this intent, Lawsons Landing has done all of the following:

1) Agreed to put the CRLF pond into a permanent conservation easement to be managed in perpetuity by the Natural Resources Conservation Service (NRCS).
2) Permanently removed and eliminated all camping from nearby Area 5, one of the most popular and important revenue producing and affordable coastal access areas of Lawsons Landing from use.
3) Proposed and agreed to converting part of Area 5 into Restoration Area C to improve the CRLF's most important migration corridor to wetlands and ponds in the interior dune slack areas.
4) Initiated plans with NRCS to plant native plants in Area 5, which would provide cover for CRLF to protect them from predators.

NRCS staff has reviewed our wastewater system and leach field plans for Area 6 and indicated that they "don't see any issues as long as the system does not encroach into the easement."

Lawsons Landing is willing to go even further to enhance former Area 5 and Restoration Area C by extending restoration into Area 6 and having Area 6 contribute to the restoration of Area 5. This can be accomplished where noxious invasive vegetation can be removed during site preparation and leach field installation, followed by restoration with more desirable native dune species after installation. These native plants can provide CRLF cover

from predators and habitat enhancement. The proposed leach field design will include use of "infiltrator chambers" to preclude upward "wicking" and soil moisture and vegetation changes from percolating wastewater effluent in Area 6, while highly treated wastewater would be recycled underground, flowing through sand toward Area 5.

The RWQCB and NRCS also do not have issues with extending leach fields for returning highly treated recycled wastewater to the wetlands to the south under the road and a short distance beyond the road to the edge of NRCS easement. The area south of Sand Haul Rd. and immediately north of the NRCS easement and the former Area 5 presently has no specific designation other than being property of Lawsons Landing. Having additional leach field in this as yet undefined area would only add to the potential environmental benefits previously described. The boundary of Area 6 has been relatively arbitrary to date and hence there it is appropriate to extend the Area 6 boundary and treated wastewater recycling a short distance to the south as indicated on our submitted Area 6 Amendment drawings.

Clearly the measures we are proposing are reasonable and appropriately aligned with the intent of the CDP..

Conclusion

Unfortunately, taking this matter to appeal will further delay the CDP intent to have a new wastewater system installed at Lawsons Landing, a shared goal of all stakeholders in this process. This delay will also cause additional challenging expenses to Lawsons Landing, which will need to be fairly addressed.

There is also wide acknowledgement that delays in CCC process have prevented completion of the wastewater system design and installation. These delays include the above Area 6 resolution as well as Scientific Review Panel resolution of Area 2 drainage, grading and associated wastewater system design. The applicant's goal is to resolve the long standing delays and move forward with an alternative use of Area 6 for waste water improvements and ecological restoration and enhancements.

As a result of these delays, wastewater holding tanks will be necessary in the interim for new facilities in Area 2 until the wastewater system is completed. Hence for probably at least a year, Lawsons Landing will have to pay for the wastes in these holding tanks being trucked to an approved disposal location for treatment. This will be a huge expense and GHG producing impact. Each month of additional delay in resolving the design the wastewater system will result in more financial and environmental impact.

We recognize that a subsequent Amendment, (specifically addressing means of economic relief or compensation for economic impacts of delays at Lawsons Landing) may not be heard until the April Commission hearing. However, it is important to bring key matters such as Area 6 wastewater system to resolution so that economic impacts do not continue on--open ended, preventing their resolution.

Thank you for your consideration of our appeal and we look forward to continuing to work with staff to hopefully resolve the above matters so we can finally proceed with fulfilling the intent of the CDP as quickly as possible.

Best regards,

Michael Lawson and Carl Vogler Jr.

QUESTA ENGINEERING CORP.
Civil, Environmental & Water Resources

February 10, 2016

Mike Lawson
Lawson's Landing, Inc.
P.O. Box 47
Dillon Beach, CA 94929

Subject: Lawson's Landing – Coastal Development Permit Amendment (CDPA) Application No. A-2-MAR-08-028-A1 (Lawson's Landing)

Dear Mike:

This letter responds to information contained in the letter of January 29, 2016 from Charles Lester, Executive Officer of the California Coastal Commission, regarding the subject Coastal Development Permit Application for Lawson's Landing.

Having been involved with the study and planning of wastewater facilities for Lawson's Landing for many years, we contest the Executive Officer's determination that the new information developed regarding the highly favorable subsurface soil and groundwater conditions in Area 6 could have been discovered with reasonable diligence and presented prior to issuance of the permit in 2011. This is based on the following:

- Over the past 30 years, investigation and review of wastewater treatment and dispersal options at Lawson's Landing and neighboring lands in Dillon Beach has been conducted by numerous engineering and environmental professionals. Questa Engineering has been involved in several of the investigations and is familiar with the findings and recommendations of all of them. Until the results from Miller Pacific's recent exploration and follow-up by Questa Engineering, none of the investigators have ever provided information suggesting the reasonable likelihood of finding suitable subsurface conditions for wastewater dispersal in or around what is now designated Area 6.

- Areas previously explored adjacent to Area 6 have included the foredunes to the northwest (former University of Pacific property), and the large land-holding immediately bordering Area 6 on the north. These investigations along with extensive environmental studies of Lawson's Landing have shown evidence of ponded water, shallow groundwater, seepage and/or seasonal wetland conditions within 100 to 200+ feet uphill, downhill and lateral of Area 6. Shallow depth to bedrock was found to be associated with some of the wet areas on the north side of Area 6. This information combined with historical activities and development of structures in Area 6 removed it from serious consideration as a site to be explored for wastewater treatment and dispersal facilities during the many years of planning leading up to the 2011 CDP hearing for Lawson's Landing.

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- Priority areas explored for wastewater treatment and dispersal were also influenced by input and peer review conducted as part of the Master Plan EIR for Lawson's Landing (EDAW, Pacific Watershed Associates and PSOMAS), which identified several alternative locations for wastewater dispersal, all located in higher terrain, primarily farmland areas of Lawson's Landing. Area 6 was not identified as a potential alternative in any peer review.

- Regulations pertaining to onsite wastewater treatment systems (OWTS) in California have changed since 2011, most notably with the adoption of the State Water Board Policy for OWTS (commonly known as AB 885) in June 2012, followed by changes incorporating the Policy in all Regional Water Board Basin Plans in 2014. The California Coastal Commission was a participant in the OWTS Policy development. The relevance of the State OWTS Policy for Lawson's Landing is that, for the first time, it established numerical standards for advanced ("supplemental") onsite wastewater systems in areas near impaired water bodies (such as Tomales Bay) or other locations deemed necessary for "advanced protection management". The wastewater facilities planned for Area 6 meet the most restrictive standards contained in the new State OWTS Policy. Had the current plans for wastewater treatment and dispersal in Area 6 been brought forward prior to the 2011 CDP hearing, the level of required treatment needed for the sandy soil conditions would have been a subject of debate and uncertain outcome, due to the lack of any authoritative State standards at the time.

- Following the tentative findings of apparent deep sandy soils from Miller Pacific's December 2011 cone penetration tests, the information was reviewed at a preliminary level with RWQCB staff (Blair Allen), and subsequently Questa proceeded with an agreed-upon subsurface investigation to determine the soil and groundwater conditions needed for any further consideration of wastewater system options in Area 6. Logging of twelve boreholes and groundwater monitoring revealed the presence of an anomalous deep "wedge" of unsaturated sand deposits filling a small valley in the bedrock surface topography, which is covered and obscured by overlying dune sands. The subsurface information is new, very favorable, and highly relevant to finalizing the most effective and efficient wastewater treatment and dispersal system for Lawson's Landing.

Please call if there are any questions or if we can be of further assistance in responding to the Coastal Commission.

Sincerely,

Norman N. Hantzsche, PE
Principal/Managing Engineer

Ref.: 1100150_CDPA_Appeal_Lawson's Landing

CCC /Lawson Call 3/11/16

1. Lawsons Landing understands that CCC staff feel they do not have authority to make a clear determination about the use of Area 6 for waste water facilities and allow redevelopment of previously disturbed areas, even though considerable evidence has been presented (and accepted as sufficient by Marin County, the agency closest to this regulatory matter) to show that the areas are disturbed and have been used over the years in compliance with permitting policy and regulations. We are seeking to have a reasonable solution worked out by the Commission, rather than them considering only a simple up or down vote. To accomplish this, a balanced presentation to the Commission would include the following:

A. In fairness, it should be noted in the staff report that before the July 2011 hearing, CCC staff had a Condition for Area 6, which would have allowed redevelopment of the existing development. (See attached Appendix). Then without sufficient time to study either the basis for, or the implications of a change, the Commission (led by a Commissioner reading from a list of last minute changes provided by an advocate) pushed to require proof of prior authorized development for all of Area 6. Consequently, this along with a Scientific Review Panel and other commission and client process, has delayed resolving the future of Area 6, (which always had important multiuse redevelopment capacity), for over 4 years.

The absence of study of the basis and implications for blocking reuse of Area 6 led to the following sources of conflict:

1) Area 6 is the logical and appropriate place to meet the CDP requirement to provide a Hazard Response center (now to be located in Area 6 by the CDP required and approved Hazard Response Plan)
2) Area 6 is the logical and appropriate place to Transportation Hub to meet the CDP requirement of a Traffic Management Plan, which requires avoiding backups at the entrance and processing guests arriving in shuttles and other non single occupancy vehicles.
3) Area 6 is the logical and appropriate place to provide a store to meet the CDP requirement of a Traffic Management Plan, which requires a store to avoid off site trips.)
4) Area 6 is the logical and appropriate place for an office to manage all of the above as well as a wide range of coastal dependent recreational and overnight lower cost access.
5) Area 6 is the logical and appropriate place for at least some of the wastewater system since with summer time spray irrigation or even a drip dispersal a mile and 300 feet uphill, it would be necessary to have a lift station to get the wastewater pumped uphill. It also would also be logical and appropriate (in the opinion of Regional Water Quality Control Board and other experts) to have the wastewater treatment plant at the bottom

of the hill rather that allowing potential for untreated waste to be spilled down the hillside in the event of an earthquake or other mishap.

6) All of the above leads to a fair assessment that the language of the new Condition for Area 6 lacked clarity and as a result, the future of the wastewater system and Area 6 at Lawsons Landing were unresolved and left to determined by Amendments in the future. Once Lawsons Landing had some indication from CCC staff of whether any of Area 6 could be reused, Lawsons Landing has worked with Regional Water Quality Control Board to develop the most appropriate wastewater system design and location. The Commission can resolve this appropriate wastewater use.

B. There is uncertainty and debatable interpretation of the July 13, 2011 CDP Condition 2.C.6. regarding what was and wasn't authorized development, which makes the language of this Condition at least somewhat arbitrary. See discussion in Appendix.

C. Because there is uncertainty and debatable interpretation of what was and wasn't authorized development there is uncertainty and debatable interpretation of what is ESHA in Area 6. Please clarify, but it seems that staff is interpreting that what is not deemed authorized development (a standard which can be modified by the Commission) would be ESHA (a standard which can be modified by the Commission). In particular, there is a lack of clarity or conflict (or whatever it fairly described) between staff findings before the hearing and the staff interpretation regarding how Area 6 previously disturbed ESHA would be prioritized over other ESHA. See Appendix detail on this. It in any case should be noted that the area that was previously acceptable for a drip dispersal area a mile and 300 ft. uphill meets CCC staff ecologist's definition of a vegetated back dune and ESHA. It also would be fairly noted that this drip dispersal area (ESHA) would require about twice the area as that required for Area 6 leachfields in a previously disturbed area with a pest invasive plant. It would also be fairly noted that Dixon's staff findings recommends "**concentrate development in areas that have been previously disturbed and have low ecological value".**

2. Lawson's have preceded with an appeal and are, though the channels, asking CCC to consider the options of using Area 6 for waste water facilities and to consider redevelopment of the 15,000 sq ft. approved by Marin County.

3. CCC staff must report to the CCC their findings and evidence in the record submitted to-date by the Lawson's making their claim.

4. It would be fair if the CCC staff could present the information without a prejudicial bent and present the information objectively and factually. Staff should report their concerns about the data and the Area 6 use and provide a critical path for the CCC to make a fair and just decision based on the facts.

5. Accordingly, rather than staff making a strict recommendation for denial of the Lawson Vogler's request we are asking staff to provide the CCC with some reasonable options for them to consider, for example

* The evidence shows there are areas in Area 6 that have been previously disturbed, further evidence from State RWQCB shows that some of the area provides a waste water development opportunity that is "superior" to the one previously approved. (Note: the CCC could direct staff to allow the waste water facility planning to move ahead and use Area 6) Make this one option in the report.

* The record is replete with evidence to show that Area 6 has been disturbed (grade and built upon, used for storage and maintenance of vehicles and equipment, with oil and other particulates, some of which have broken down and rusted with salt air) over the years. (Note: CCC has the option to accept the evidence and determine that indeed these areas can be planned for "redevelopment" now and considered later in a CDP amendment.

6. What we are asking is for the staff to present the information objectively, provide the CCC with options, which can move the process forward at the CCC April hearing to avoid delays and to give the applicant and the CCC staff clear direction on moving forward. If the CCC wants to consider modifications to the options presented, staff should be encouraged to try to present at the meeting alternative language to move the CCC forward with clear direction to the Staff and the Applicant.

We want to avoid an "us and them" hearing where each party takes a hard line – the goal is to get clear direction from the CCC on the issue of the use of Area 6 so the planning and project implementation can move forward from the hearing date. Delaying a decision continues to violate the applicants rights to timely due process and it has been over 3 years that they have been waiting for clear direction on planning and plans for the CDP implementation. This only seems to be a fair approach given the way the CDP got approved with heavy emphasis on last minute advocate interests and Conditions of Approval that were vague and not well studied or thought out.

Appendix to CCC Call 3-11-16

Original CCC staff language immediately before the July 13, 2011 hearing:
6. Area 6
a. Relocation of boat and boat trailer storage, boat repairs and sales, fuel bunker, and fuel service to within existing buildings and developed areas only.
b. No additional development is authorized, including but not limited to paving and graveling, unless: (1) development is proposed in legally developed areas; (2) the Applicants provide evidence that such previous development was authorized; (3) an Amendment to this coastal development permit is approved.

Discussion of uncertainty and lack of clarity of CDP Condition language for Area 6:
It seems that the CDP requirement language is not completely clear.

For example, the language of CDP Condition 2(C)(6)a. indicates: " No development is authorized……unless: (1) development is proposed **in** legally developed areas". The word "in" is emphasized in bold because the language is actually somewhat broad. This could potentially allow redevelopment in more broadly defined areas in contrast to redeveloping on specific building footprints. It may be easier to establish that the vehicle egress areas and the areas used for the "facilities related thereto" that were originally permitted in 1971 and re-permitted again and again were clearly part of the quarry facilities area. The CDP language is not specifically requiring evidence of prior permitted development for each structure in the quarry facilities area, located within Area 6. Nevertheless, the truck shed in Area 6 is specifically referred to in the 1990 Coastal Permit language (See page 2, second paragraph of Exhibit J in the Memorandum submitted to the CCC providing evidence of prior authorized development). This 1990 Coastal Permit can be understood to indicate that the Truck Shed, other quarry "facilities related thereto" and even the Tractor Shed in Area 8 were previously authorized development and were validated as being so. From a reasonable review of these matters, they appear debatable, particularly since these "facilities related thereto" were agricultural buildings, much of which were built before June 24, 1974 when permits for such agriculture buildings were first required.

Room for debate

The debatable nature of this applies also to statements by Susan Craig on Page 3, paragraph 2 of her May 9, 2014 letter; for example: " the truck shed, the adjacent equipment shed and the oil shed, as well as the associated unpaved roads that provide vehicular access to these structures, are not seen in either the 1972 photos or in an aerial photo from 1975 (full-size plan sheet). Furthermore, an aerial photo from 1979 clearly shows the truck shed in Area 6, evidencing that the truck shed was constructed sometime between 1975 and 1979 when coastal permitting requirements were in effect."

However, it is clear that the associated unpaved roads, which provide vehicular access to these structures are present upon close examination of the 1975 CCC photo. They are also present in the June 6, 1974 USGS satellite photo. The attached Powerpoint figures allows the viewer to toggle back and forth between the above 1974 and 1975 photos with a 2012 Google image of Area 6 overlaid on them. In these two images two unpaved roads can be seen leading to the large unpaved turnaround area just east of where the truck shed is located. If one looks closely at the western edge of this large unpaved turnaround area, a straight line defining the east wall of the Truck Shed is evident. This same pattern of unpaved roads, large unpaved turnaround area and edge of the Truck shed is also evident, though with a bit less definition, in the June 6, 1974 satellite photo. The Truck Shed may have been missed by Susan Craig in the 1975 photo because of a darker color roof than on Mike Lawson's house or on the Employee Rest Area. This argues against Susan Craigs interpretation above of the 1975 photo, which she postulates is "evidencing that the truck shed was constructed sometime between 1975 and 1979."

Aside from the buildings, clearly the geographic area, shown developed in the June 6, 1974 satellite photo, is considerably larger than the developed area in the 1972 photos. This additional area was probably also developed by 1973. This stands to reason, since with the sand quarry permit issued in 1971, the sand hauling operations were quite well along by June 6, 1974--including having the sand hauled out on Sand Haul Road, evident in the 1974 photo. It should also be noted that the angle at which the 1972 photos are taken from (well west of Area 6), may be less representative than the overhead photos as applied to unpaved roads.

2. Another point that is debatable in Susan's May 9 letter follows her reference to the County's letter as her underlined statement: 'The County's letter (dated July 11, 2012) regarding this issue states "…*there is ample evidence in the record documenting that the County of Marin over the years authorized the sand quarry operation and associated facilities in Areas 6 and 8."* However no quarrying activities occurred in Area 6." The fact that quarrying activities did not occur in Area 6 does not negate the permitted nature of the quarry "facilities related thereto", which are both referred to verbally and in map exhibits through permitting in 1971 and repeatedly thereafter. It was actually quite appropriate that the quarry support facilities be located in an area with stable soil---outside of the sand quarry area with its unstable soils. This is reinforced by the County's findings, which as Susan cites state that: "*No permanent or temporary buildings are proposed as part of this project*" and "…*the quarrying operation is only temporary in nature, without construction of permanent structures…"* .
Susan subsequently sent me the complete page of the County's 1990 findings from which she quoted. (See attached) It is important to note the full context of her quotation. This quote was from the Geologic Hazards section of the findings. This section also includes the following: " The major geologic hazard within the Dillon Beach area would be a potential earthquake along the San Andreas fault. The dune sand deposits in Lawson's Landing would have low stability during a seismic event and their unconsolidated nature could lead to slope failure. Ground shaking could

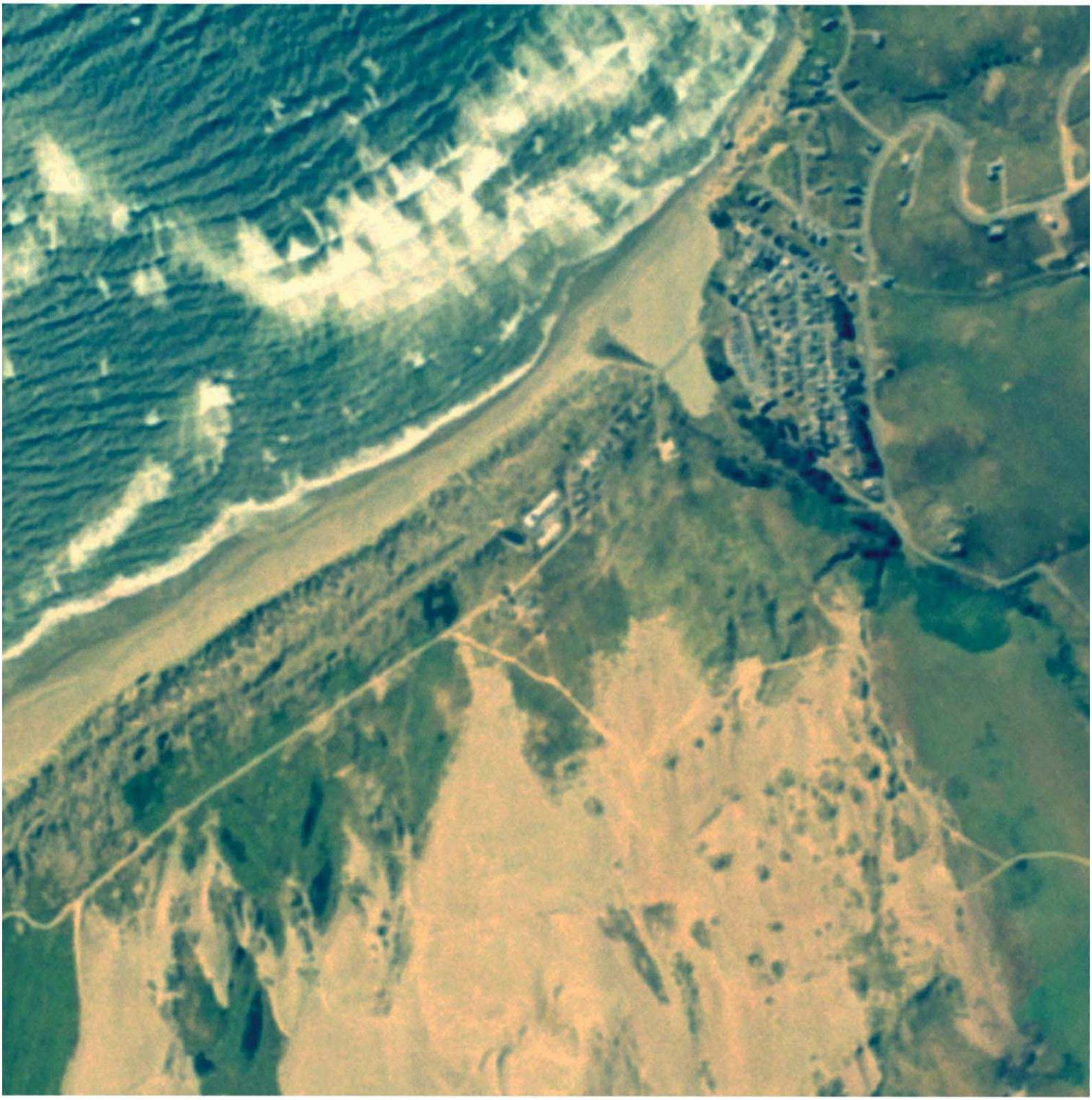
destroy the holding ability of vegetation cover on the dunes or cause loose sand to slide. However, this impact is not deemed significant since *the quarrying operation is only temporary in nature, without construction of permanent structures* which would fail in a seismic event, and since quarrying blow sand is an open air mining process of already unvegetated, unstable dunes which naturally slump and retreat as sand is extracted."

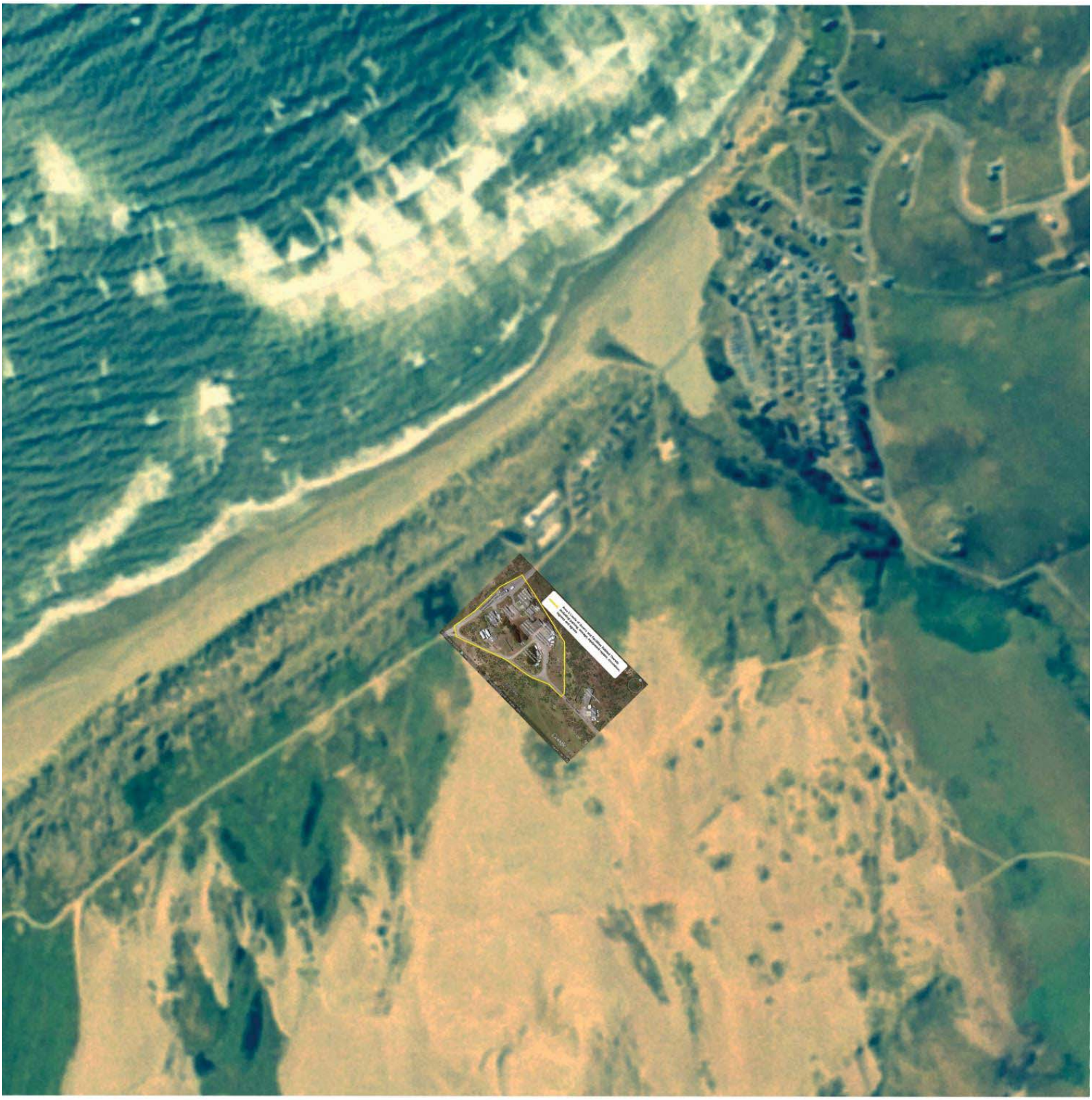
Clearly the County findings above are referring to the unstable dune areas where as also stated, "*No permanent or temporary buildings are proposed as part of this project".* Not proposing buildings in the unstable dune area where quarry operations went on is entirely reasonable. Conversely the locations of the buildings referred to both verbally and in maps in the 1990 permit, such as the Truck Shed, were in stable soil areas, i.e. in Area 6. In fact this reinforces why Area 6 is one of the most suitable locations on the property for a Command and Care Center. It has stable soil and is above the Tsunami runup area.

3. This distinction of quarry operation in dune areas and "facilities related thereto" in stable, non quarried area also applies to the next point, which Susan presents in her May 9 letter: "That reclamation plan states under "Subsequent Use:" *"It is proposed that land reclaimed from sand quarry operations at Lawson's Landing be returned to a natural state an subsequently used for wildlife habitat, open space, nonconsumptive recreation and livestock grazing."* As Susan states in her letter earlier, no quarrying activities occurred in Area 6. Hence there was no requirement for reclamation in this area, and accordingly Area 6 was never included in the extensive reclamation process, which was completed in the quarry operations area and approved by the County and California Dept. of Conservation, Office of Reclamation April, 8, 2011.

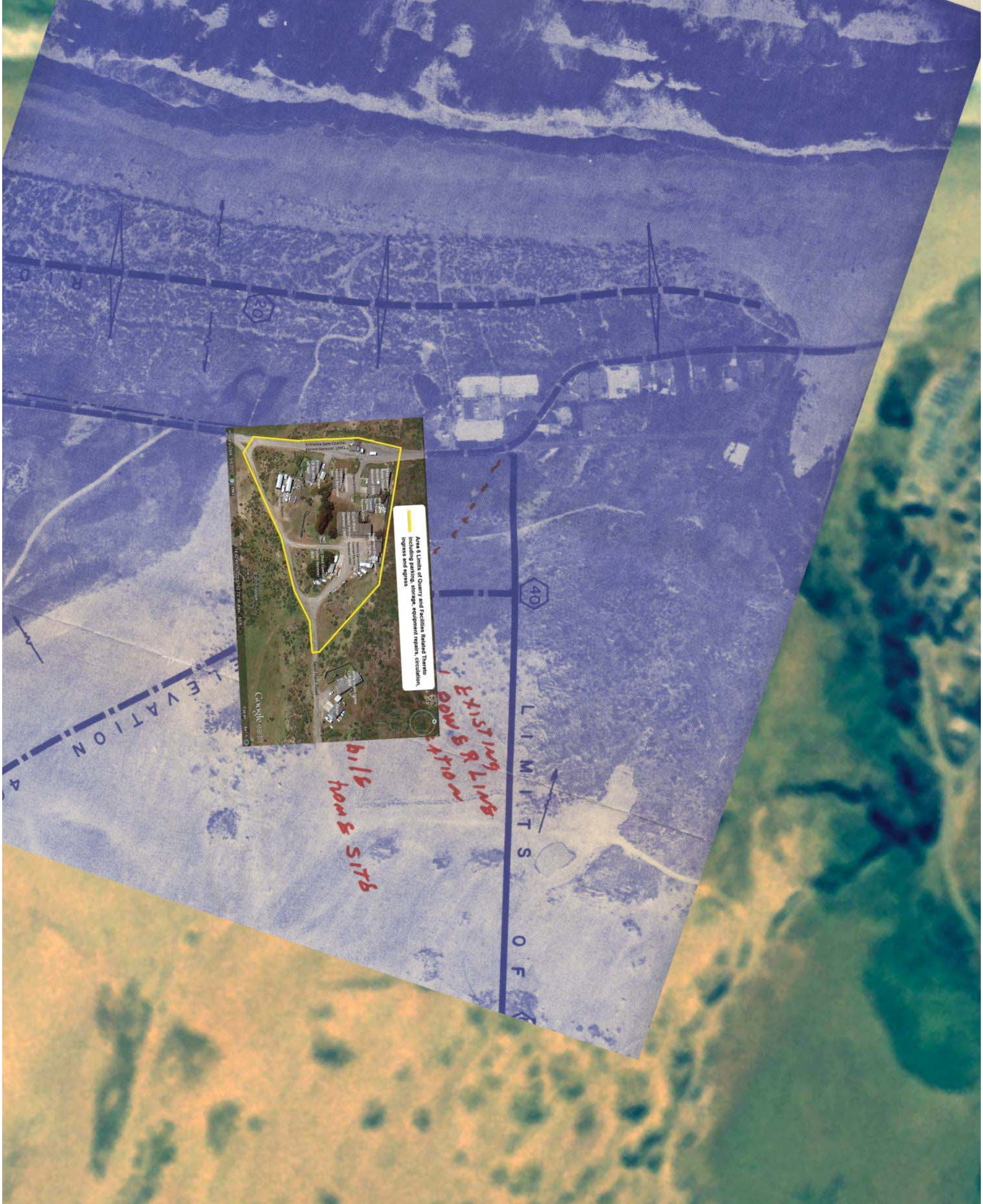
ESHA Discussion

"According to Dr. Dixon, (CCC staff ecologist) in its natural state, the entire nearshore dune complex at Lawson's Landing, consisting of foredunes, active unvegetated dunes, vegetated backdunes, dune swales and deflation plains, would clearly have met the definition of ESHA." The findings again conclude on page 104 that "On balance, approving the development described above would adequately provide needed lower cost visitor serving facilities, **while minimizing impacts to ESHA and wetlands. The final approved camping configuration would serve to concentrate development in areas that have been previously disturbed and have low ecological value."**






Area 6 Limits of Quarry and Facilities Related Thereto
Including parking, storage, equipment repairs, circulation, ingress and egress.
Google earth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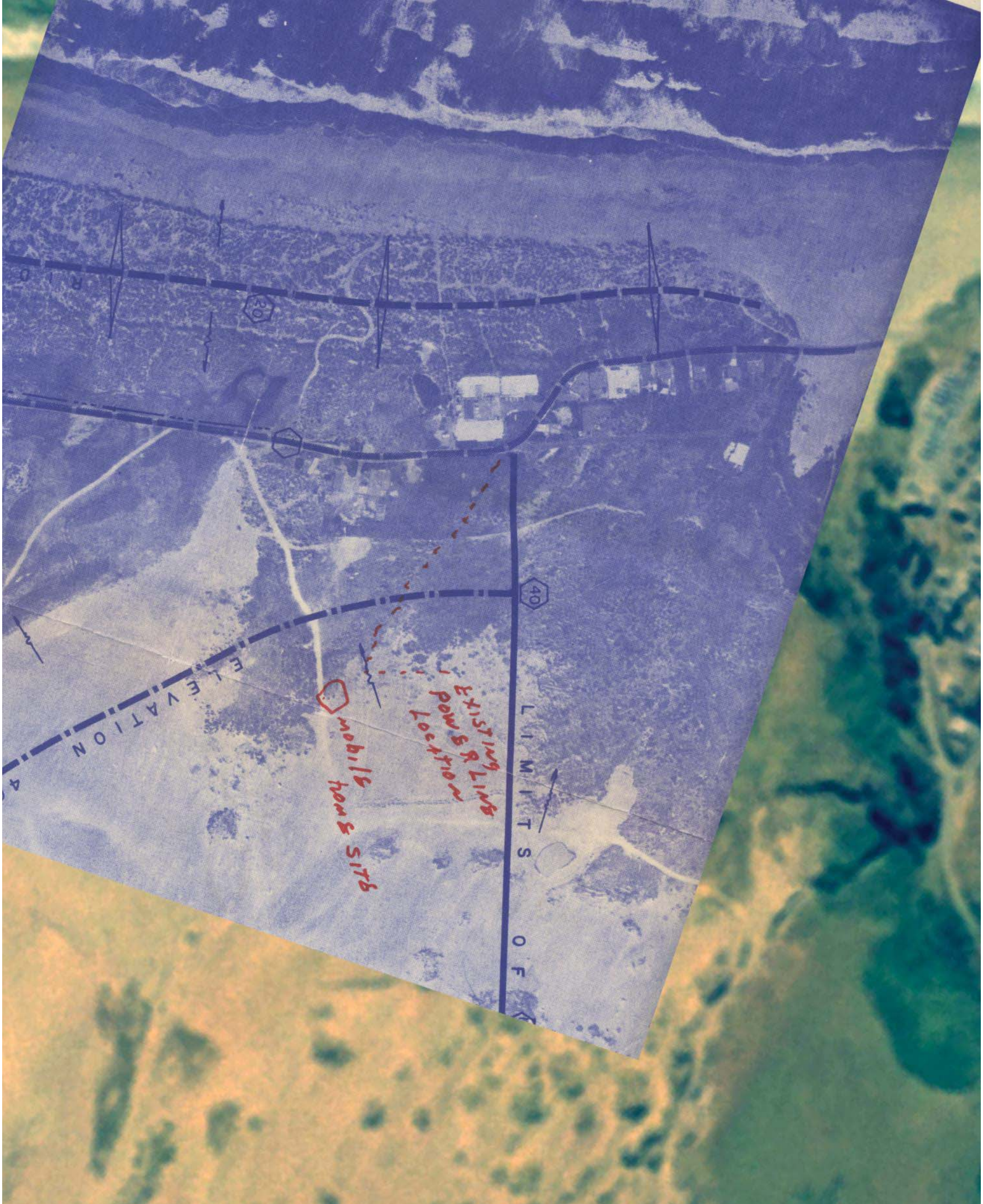
ELEVATION
LIMITS OF
30
40
Existing Power Line Location
mobile home site

K. Shoreline Protection

This factor is not applicable because the project site neither abuts nor is immediately adjacent to the shoreline.

L. Geologic Hazards

Based upon review of resource map material by Planning Department staff, the proposed project would experience little, if any, hazard from prevailing geologic conditions. Coastal Program concerns will be met because of the following:

1. The major geologic hazard within the Dillon Beach area would be a potential earthquake along the San Andreas fault. The dune sand deposits in Lawson's Landing would have low stability during a seismic event and their unconsolidated nature could lead to slope failure. Ground shaking could destroy the holding ability of vegetation cover on the dunes or cause loose sand to slide. However, this impact is not deemed significant since the quarrying operation is only temporary in nature, without construction of permanent structures which would fail in a seismic event, and since quarrying blow sand is an open air mining process of already unvegetated, unstable dunes which naturally slump and retreat as sand is extracted.

2. The quarry permit areas are not subject to seismic-related hazards such as tsunami run-up and coastal flooding because elevations throughout the project site range from 40 to 240 feet above sea level.

M. Public Works Projects

This factor is not applicable because the proposed project will not involve any expansion of public roads, flood control projects, or utility services.

N. Land Division Standards

This factor is not applicable because the proposed project does not involve the division of land.

O. Visual Resources and Community Character

Coastal Program concerns will be met because of the following:

1. The quarry site is not visible from off-site locations, including the community of Dillon Beach, Point Reyes, and State Route Highway 1 (Shoreline Highway). The quarry site is barely visible, if at all, from only on-site locations because of the existing dune scrub vegetation, northwest-southeast trending blow sand dunes, and a prominent hill at the project site known as Little Sugarloaf Peak (elevation 230 feet).

2. No permanent or temporary buildings are proposed as part of this project.

3. No signs or overhead distribution utility lines exist or are proposed as part of this project which would detract from scenic areas or views from public roads and other viewing points.

COUNTY'S FINDINGS CDP 90-015

Sources: Wesco 1992, Image taken in 2000, EDAW 2005

Alternate Wastewater Treatment System Locations

EXHIBIT 4.6-10

Lawson's Landing Master Plan Draft EIR

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FEET

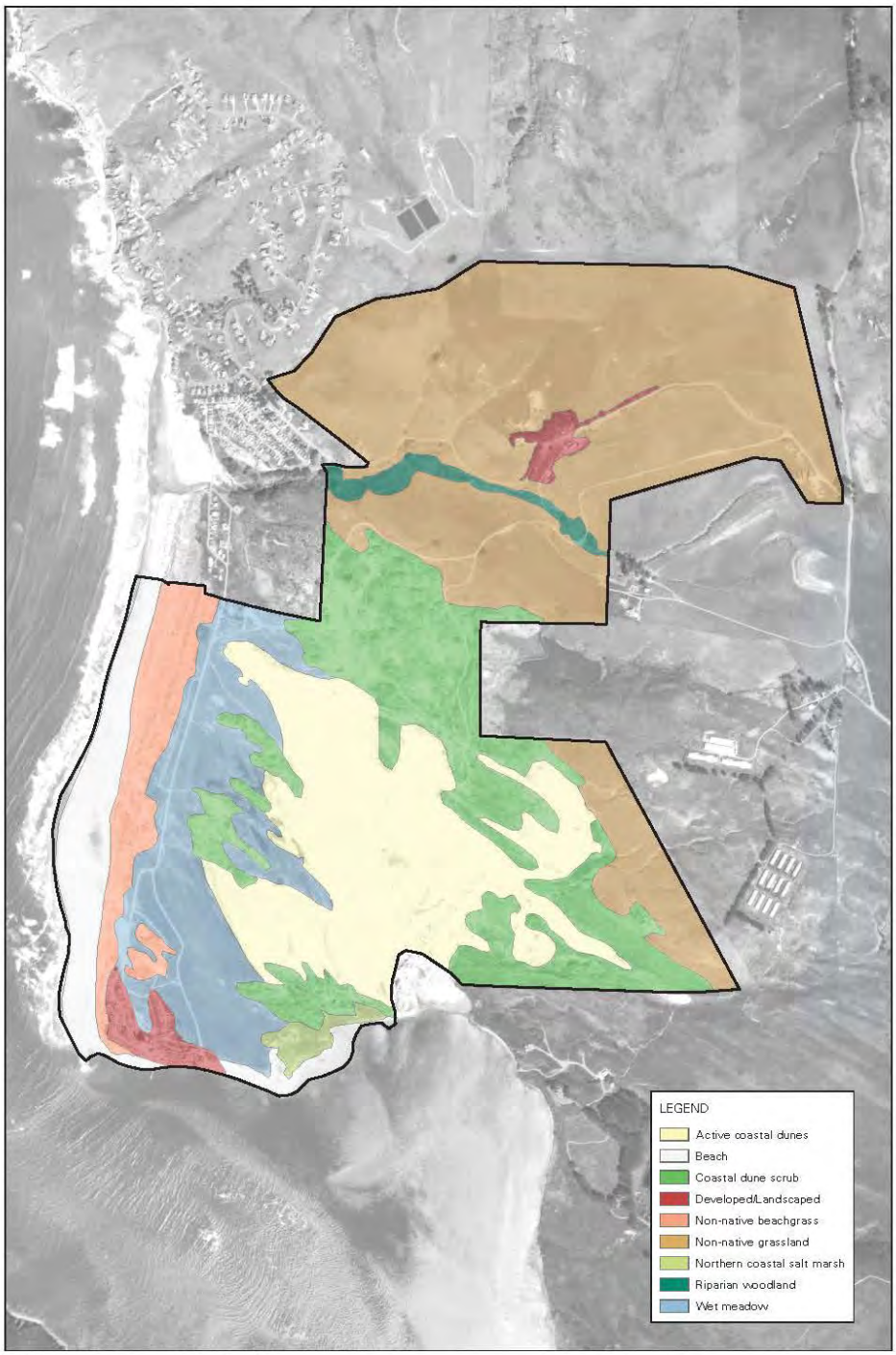
NORTH

EDAW

Exhibit 9
A-2-MAR-08-028-A1-EDD
Lawson's Landing Master Plan Draft EIR - Selected Figures
Page 1 of 3

4.13.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The applicant's agreement to relocate the wastewater treatment facility to the northern portion of the project site outside of on-site sand dunes would reduce all potentially significant impacts to sensitive habitats (see Impact 4.13-1). ~~Implementation of Mitigation Measure 4.13-1(a), relocation of the wastewater treatment system to a less sensitive site, and compliance~~ Compliance with Mitigation Measures 4.13-2 and 4.13-4 would reduce project-related impacts on sensitive habitats to a less-than-significant level. However, no additional feasible mitigation is available to reduce cumulative adverse baseline wetlands impacts to a less-than-significant level. Therefore, cumulative wetland impacts (Cumulative Impact 4.13-5) would remain significant and unavoidable. Implementation of Mitigation Measures 4.13-2 and 4.13-4 would reduce impacts on special-status plants and wildlife to less-than-significant levels.



Sources: Pacific Watershed Associates 2000, EDAW 2004

Habitat Types

EXHIBIT 4.13-1

Lawson's Landing Master Plan Draft EIR

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