



COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION

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Phone: (707)445-7541 Fax: (707) 268-3792

Hearing Date: April 15,2021

To: Humboldt County Planning Commission

From: John H. Ford, Director of Planning and Building Department

Subject: **Salty Dawg, LLC Conditional Use Permit and Special Permit**
Record Number: PLN-12129-CUP
Assessor's Parcel Number (APN:) 210-221-013
2910 Burr Valley Road. Dinsmore, CA

Table of Contents	Page
Agenda Item Transmittal	2
Recommended Action and Executive Summary	3
Draft Resolution	6
Maps	
Topo Map	11
Zoning Map	12
Aerial Map	13
Site Plans	14
Attachments	
Attachment 1: Recommended Conditions of Approval	15
Attachment 2: CEQA Addendum	22
Attachment 3: Applicant's Evidence in Support of the Required Findings	28
Attachment 4: Referral Agency Comments and Recommendations	88

Please contact Elizabeth Moreno Planner, at 707-445-7541 or by email at emoreno@co.humboldt.ca.us, if you have any questions about the scheduled public hearing item.

AGENDA ITEM TRANSMITTAL

Hearing Date	Subject	Contact
April 1, 2021	Conditional Use Permit and Special Permit	Elizabeth Moreno

Project Description: A Conditional Use Permit for 10,000 square feet of existing outdoor and 10,000 square feet of existing mixed light commercial cannabis cultivation, as well as a 2,000 square feet of nursery propagation space. Irrigation water is sourced from Pond #5 and Pond #4 as shown on the Site Plan. These ponds were determined to be non-jurisdictional as they are not fed by any watercourses. Pond #5 encroaches the 50 foot setback of a Class III Streamside Management Area, therefore a Special Permit is also being requested for an encroachment and corrective actions within the Streamside Management Area. These ponds represent approximately 915,000 gallons of available water storage. The applicant also has 40,000 gallons of water storage in hard plastic tanks. The projected water usage is roughly about 450,000 gallons a year for two mixed light cycles and one outdoor harvest a year (15 gallons per square foot). The applicant estimates a maximum of four individuals are needed during peak operations. Processing will occur offsite, at a licensed processing facility. Power is provided by P.G. & E. and solar array, as well as a backup generator for emergencies only. The applicant has relocated portions of the historic cultivation to an environmentally superior location on the property.

Project Location: The project is located in the Dinsmore area, on the north side of Burr Valley Road, approximately 2.2 miles east from the intersection of State Highway 36 and Burr Valley Road, on the property known as 2910 Burr Valley Road.

Present Plan Land Use Designations: Residential Agriculture (RA), 2017 General Plan, Density: 40 acres per unit, Slope Stability: High Instability (3).

Present Zoning: Forestry Recreation (FR), Minimum building site area 40 acres (B-5(40))

Record Number: PLN-12129-CUP/SP

Assessor's Parcel Number: 210-221-013

Applicant

Salty Dawg, LLC
Morgan B, Oliver
3090 Patricks Point Dr
Trinidad, CA 95570

Owner

Morgan B, Oliver
3090 Patricks Point Dr
Trinidad, CA 95570

Agents

Same as Owner/ Applicant

Environmental Review: An Addendum to a previously adopted Mitigated Negative Declaration has been prepared for consideration per § 15164 of the State CEQA Guidelines.

State Appeal Status: Project is NOT appealable to the California Coastal Commission.

Major Issues: None.

Salty Dawg, LLC

Record Number: PLN-12129-CUP/SP
Assessor's Parcel Number: 210-221-013

Recommended Planning Commission Action:

1. Describe the application as part of the Consent Agenda.
2. Survey the audience for any person who would like to discuss the application.
3. If no one requests discussion, make the following motion to approve the application as a part of the consent agenda:

Find that the Planning Commission has considered the Addendum to the adopted Mitigated Negative Declaration for the Commercial Medical Land Use Ordinance (CCMLUO) as described by Section §15164 of the State CEQA Guidelines, make all of the required findings for approval of the Conditional Use Permit and Special Permit and adopt the Resolution approving the Salty Dawg, LLC project as recommended by staff subject to the recommended conditions.

Executive Summary: A Conditional Use Permit for 10,000 square feet of existing outdoor and 10,000 square feet of existing mixed light commercial cannabis cultivation, as well as 2,000 square feet (SF) of nursery space.

Greenhouse #6, as notated in the Site Plan will be used as nursery space. The greenhouse #6 is 2,880 SF, however, the applicant will only use 1,880 SF as nursery space. The remaining 1,000 SF will be used as storage. The applicant shall partition off the two ends (500 SF on each side) and clearly show that only using 1,880 SF of the greenhouse for nursery. County staff will sign off upon annual inspection. The applicant also uses a shop with 120 SF of nursery space, which totals 2,000 SF nursery space.

Presently, drying is carried out in the shop. As depicted on the map, a 3,000 SF building is proposed to be constructed to dry cannabis and for storage. Further processing will occur offsite at a licensed processing facility. The applicant estimates a maximum of four individuals are needed during peak operations. The applicant has submitted a *Soils Report*, prepared by Whitchurch Engineering, dated October 2020. The soils report concludes that the soils on the site of where the building is being proposed is capable of providing adequate support for the building. Nonetheless, the applicant is to obtain the proper building permits from the Building Department prior constructing a new building.

Timber Conversion

The applicant has submitted a *Registered Professional Forester Report (RPF)* prepared by Blair Forestry Consulting, dated August 2020. The report focused on unauthorized conversion activities that occurred between 2009 and 2018. According to the report, two areas on site have previously been converted from timberland with a total of 3.1 acres of timberland conversion. The report describes three point of observations that need to be addressed and remediated. The report recommends that the Water Resource Protection Plan or the Site Management Plan address erosion control and sediment delivery to a Class III stream. Additionally, the report recommends that the applicant treat slash debris resulting from conversion activities and cut sawlogs to a minimum of 2 feet in length or to obtain a proper county burn permits and burn the remaining slash during the rainy season. The project is conditioned as such. The RPF report concludes that a Less Than 3 Acre Conversion would have likely been approved and if the applicant would have properly obtained one. No additional recommendations were suggested. The report was forwarded to CAL FIRE for review on February 2021, who provided no additional comments.

Water Resources

Irrigation water is sourced from two rainwater catchment ponds, from Pond #5 and Pond #4 as shown on the Site Plan. These ponds were determined to be non-jurisdictional as they are not fed by any watercourses but, encroach a Class III Streamside Management Area setback. Special Permit is also being requested for the encroachment within the Streamside Management Area and for corrective actions within the Streamside Management Areas. These ponds represent approximately 915,000 gallons of available water storage. The applicant also has 40,000 gallons of water storage in hard plastic tanks. The projected water usage is roughly about 450,000 gallons a year for two mixed light cycles and one outdoor harvest a year (15 gallons per square foot). The applicant shall install water meters to accurately record water use from the rainwater catchment ponds (Pond #4 and Pond #5) for cannabis irrigation. The applicant shall provide a log of water usage to the Planning Department upon annual inspection.

The applicant submitted a *Preliminary Biological Resource Assessment* prepared by TransTerra Consulting, dated January 2021. The report indicates that there are three other ponds (Pond #3 Pond #2, and Pond #1) onsite and at least one of them is considered a wetland, Pond #3 as notated on the project's Site Plan. These ponds will not be used for cannabis irrigation. The report recommends restoration of the wetland/ pond complex. As a condition of approval, the applicant is to prepare a Remediation Plan for the wetland prepared by a qualified individual. The report also recommends that the roads onsite be treated to avoid erosion to the ponds or watercourses.

Additionally, the applicant has obtained a final *Streambed Alteration Agreement* issued from the Department of Fish and Wildlife, dated December 2020. The agreement includes nine encroachments, two encroachments are for removal for water diversion infrastructure, three encroachments are for the onstream ponds, and finally four encroachments are for replacing stream crossings. The agreement also confirms that Pond #5 and Pond #4 are not hydrologically connected or wetlands. Further, the applicant is conditioned to adhere to the recommendations made in the *Streambed Alteration Agreement* which includes preparing an Invasive Species Bull Frog Management Plan for the reservoirs. The applicant also submitted an *Engineering Geologic Evaluation Existing Pond Embankment*, prepared by LACO Associates, dated 2020. The report evaluates the geologic of the site and the stability of the embankment of pond #5. The report recommends that the berm slope should be inspected annually for signs of erosion and seepage and if seepage is absorbed the applicant is to contact a qualified individual to investigate the source. The project is conditioned as such.

The applicant submitted a *Water Resource Protection Plan* (WRPP) prepared by the Pacific Watershed Associates, dated June 2020. The applicant submitted a Water Resource Protection Plan (WRPP), which was originally prepared by the Pacific Watershed Associates in May 2017. Some of the non-compliance issues have been fixed but the document is out of date. Most, if not all of the remaining issues will be resolved once the work detailed in the LSAA is implemented. As a condition of approval, the applicant shall submit evidence of enrollment into the State Cannabis Cultivation Discharge program by submitting copies of all documents with the State Water Resources Control Board, including, but not limited to a Notice of Applicability and an updated Site Management Plan. Any issues that the updated Site Management Plan identifies as non-compliant must be remediated and this project is conditioned as such.

Onsite Relocation

The applicant has relocated a portion of the legacy cultivation, previously located at northeast of the parcel. The applicant is to submit a Remediation Plan and Monitoring Plan prepared by a qualified professional.

Biological Resources

According to the California Data Base there are no sensitive or rare species onsite. There are two Northern Spotted Owl activity centers (NSO) located approximately 1.05 mile to the northeast and one to the 1.21 miles southwest. The project is supported by on grid power, sourced by P. G. & E., therefore, noise is not expected to have an adverse impact to NSO. Nonetheless, ongoing conditions of approval require the maximum allowable backup generator noise exposure level is 50 dB when measured from the generator at a distance of 100 feet or at the edge of habitat, whichever is closer. Additionally, ongoing condition of approval require the applicant to comply with International Dark-Sky Association standards.

Access

The property is accessed State Highway 36 onto Burr Valley Road and then onto Tree Farm Road. The applicant has submitted a self-certifying Road Evaluation Form that the entire road is equivalent to a Category 4 Road. The applicant is conditioned obtain an encroachment permit from the Department from California Transportation, or letter indicating that one is not needed and submit a copy to the Planning Department .

Tribal Consultation

The project has prepared a *Cultural Resource and Investigation* (CRS) prepared by DZC Consulting Archeology and Cultural Resources Management, dated April 2018. The CRS was forwarded to the Bear River Band of the Rohnerville Rancheria, who recommended inadvertent archaeological discovery language as a condition of approval. The project is conditioned as such.

Environmental review for this project was conducted and based on the results of that analysis, staff finds that all aspects of the project have been considered in a previously adopted Mitigated Negative Declaration that was adopted for the Commercial Medical Marijuana Land Use Ordinance and has prepared an addendum to this document for consideration by the Planning Commission.

RECCOMENDATION: Based on a review of Planning Division reference sources and comments from all involved referral agencies, Planning staff believes that the applicant has submitted evidence in support of making all of the required findings for approval of the Conditional Use Permit and Special Permit.

ALTERNATIVES: The Planning Commission could elect not to approve the project, or to require the applicant to submit further evidence, or modify the project. If modifications may cause potentially significant impacts, additional CEQA analysis and findings may be required. These alternatives could be implemented if the Commission is unable to make all of the required findings. Planning staff has stated that the required findings in support of the proposal have been made. Consequently, Planning staff does not recommend further consideration of any alternative.

The Planning Commission could also decide the project may have environmental impacts that would require further environmental review pursuant to CEQA. Staff did not identify any potential impacts. As the lead agency, the Department has determined that the project is consistent with the MND for the CMMLUO as stated above. However, the Commission may reach a different conclusion. In that case, the Commission should continue the item to a future date at least two months later to give staff the time to complete further environmental review.

**RESOLUTION OF THE PLANNING COMMISSION
OF THE COUNTY OF HUMBOLDT**

Resolution Number 21-

Record Number: PLN-12129-CUP/SP

Assessor's Parcel Number: 210-221-013

Resolution by the Planning Commission of the County of Humboldt certifying compliance with the California Environmental Quality Act and conditionally approves the Salty Dawg, LLC., Conditional Use Permit and Special Permit request

WHEREAS, Salty Dawg, LLC, submitted an application and evidence in support of approving a Conditional Use Permit for the continued operation of an existing 10,000 square foot (SF) of mixed light cannabis cultivation and 10,000 SF of outdoor cannabis cultivation with appurtenant propagation and drying activities and.

WHEREAS, Salty Dawg, LLC, submitted an application and evidence in support of approving the Conditional Use Permit and Special Permit

WHEREAS, the County Planning Division, the lead agency, prepared an Addendum to the Final Mitigated Negative Declaration (MND) prepared for the Commercial Medical Land Use Ordinance (CMMLUO) adopted by the Humboldt County Board of Supervisors on January 26, 2016. The proposed project does not present substantial changes that would require major revisions to the previous Mitigated Negative Declaration. No new information of substantial importance that was not known and could not be known at the time was presented as described by §15162(c) of CEQA Guidelines; and

WHEREAS, the Humboldt County Planning Commission held a duly-noticed public hearing on April 15, 2021 and reviewed, considered, and discussed the application for a Conditional Use Permit and Special Permit reviewed and considered all evidence and testimony presented at the hearing.

Now, THEREFORE BE IT RESOLVED, that the Planning Commission makes all the following findings:

1. FINDING:

A Conditional Use Permit for 10,000 square feet of existing outdoor and 10,000 square feet of existing mixed light commercial cannabis cultivation, as well as a 2,000 square feet of nursery propagation space. Irrigation water is sourced from two rainwater catchment, Pond #5 and Pond #4 as shown on the Site Plan. These ponds were determined to be non-jurisdictional as they are not fed by any watercourses. Pond #5 encroaches a 50 foot setback of a Class III Streamside Management Area, therefore a Special Permit is also being requested for an encroachment and corrective actions within the Streamside Management Area. These ponds represent approximately 915,000 gallons of available water storage. The applicant also has 40,000 gallons of water storage in hard plastic tanks. The projected water usage is roughly about 450,000 gallons a year for two mixed light cycles and one outdoor harvest a year (15 gallons per square foot). The applicant estimates a maximum of four individuals are needed during peak operations. Processing will occur offsite, at a licensed processing facility. Power is provided by P.G.& E. and solar array, as well as a backup generator for emergencies only. The applicant has relocated portions of the historic cultivation to an environmentally

EVIDENCE: superior location on the property.
Project File: PLN-12129-CUP/ SP

- 2. FINDING:** **CEQA.** The requirements of the California Environmental Quality Act have been complied with. The Humboldt County Planning Commission has considered the Addendum to and the Mitigated Negative Declaration (MND) prepared for the Commercial Medical Marijuana Land Use Ordinance (CMMLUO) adopted by the Humboldt County Board of Supervisors on January 26, 2016.

EVIDENCE:

- a) Addendum Prepared for the proposed project.
- b) The proposed project does not present substantial changes that would require major revisions to the previous MND. No new information of substantial importance that was not known and could not be known at the time was presented as described by § 15162(c) of CEQA Guidelines.
- c) A *Water Resources Protection Plan* was prepared by the applicant to show compliance with the North Coast Regional Water Quality Control Board Order No. 2015-0023. Additionally, the applicant shall submit evidence of enrollment into the State Cannabis Cultivation Discharge program by submitting copies of all documents with the State Water Resources Control Board, including, but not limited to a Notice of Applicability and Site Management Plan.
- d) There are two Northern Spotted Owl activity centers (NSO) located approximately 1.05 mile to the northeast and one to the 1.21 miles southwest. The project is supported by on grid power, sourced by P. G. & E. Therefore, noise is not expected to have adverse impact to NSO. Nonetheless, ongoing conditions of approval require the maximum allowable backup generator noise exposure level is 50 dB when measured from the generator at a distance of 100 feet or at the edge of habitat, whichever is closer. Additionally, a condition of approval the applicant must demonstrate that no light will escape from the propagation and mixed light structures, the applicant shall submit a lighting plan to the Planning Department.
- e) The applicant has submitted a *Registered Professional Forester Report* prepared by Blair Forestry Consulting, dated August 2020. The report focused on unauthorized conversion activities that occurred between 2009 and 2018. The report recommends additional actions to rectify the timberland conversion and to be consistent with the California Forest Practice Rules, the project is condition as such.
- f) The property is accessed State Highway 36 onto Burr Valley Road and then onto Tree Farm Road. The applicant has submitted a self-certifying Road Evaluation Form that the entire road is equivalent to a Category 4 Road. The applicant is conditioned to obtain an encroachment permit from the Department from California Transportation (CAL TRANS), or letter indicating that one is not needed and submit a copy to the Planning Department.

- 3. FINDING** The proposed development is in conformance with the County General Plan, Open Space Plan, and the Open Space Action Program.

EVIDENCE

- a) General agriculture is an allowable land use permitted in the Residential Agriculture land use designation. The proposed cannabis cultivation, an agricultural product, is within a land planned and zoned for general agricultural purposes, consistent with the use of Open Space land for managed production of resources. The use of an agricultural parcel for commercial agriculture is consistent with the Open Space Plan and Open Space Action Program. Therefore, the project is consistent with and complimentary to the Open Space Plan and its Open Space Action Program.

4. FINDING

The proposed development is consistent with the purposes of the existing Forestry Recreation zone in which the site is located.

EVIDENCE

- a) The Forestry Recreation or FR Zone is intended to be applied to areas of the County in which general agriculture is an allowable use in FR zones.
- b) All general agricultural uses are conditionally permitted in the FR zone.
- c) Humboldt County Code section 314-55.4.8.2.2 allows cultivation of up to 22,000 square feet of cannabis cultivation on a 40-acre parcel subject to approval of a Conditional Use Permit and a determination that the cultivation was in existence prior to January 1, 2016 and is consistent with this and with the cultivation area verification prepared by the County.

5. FINDING

The proposed development is consistent with the requirements of the CMMLUO Provisions of the Zoning Ordinance.

EVIDENCE

- a) The CMMLUO allows existing cannabis cultivation to be permitted in areas zoned FR (HCC 314-55.4.8.2.2).
- b) The parcel was created in compliance with all applicable state and local subdivision regulations, as it was created in its current configuration, as described by Lot 13 of the Deerfield Subdivision as shown on survey recorded on book 23 of surveys on page 113.
- c) The project will obtain water from a non-diversionary water source, two rainwater catchment ponds.
- d) The property is accessed State Highway 36 onto Burr Valley Road and then onto Tree Farm Road. The applicant has submitted a self-certifying Road Evaluation Form that the entire road is equivalent to a Category 4 Road. The applicant is conditioned obtain an encroachment permit from the Department from California Transportation, or letter indicating that one is not needed.
- e) The slopes of the land where cannabis is being cultivated is 15% to 30%.
- f) The applicant has submitted a *Registered Professional Forester Report* prepared by Blair Forestry Consulting, dated August 2020. The report focused on unauthorized conversion activities that occurred between 2009 and 2018. The report recommends additional actions to rectify the

timberland conversion and to be consistent with the California Forest Practice Rules, the project is condition as such.

- g) The location of the cultivation complies with all setbacks required in Section 314-55.4.11.d. It is more than 30 feet from any property line, more than 300 feet from any off-site residence, more than 600 feet from any school, church, or Tribal Cultural Resource.

6. FINDING

The 10,000 square feet (SF) of mixed light cannabis cultivation and 10,000 SF of outdoor cultivation and the conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare or materially injurious to properties or improvements in the vicinity.

EVIDENCE

- a) The property is accessed State Highway 36 onto Burr Valley Road and then onto Tree Farm Road. The applicant has submitted a self-certifying Road Evaluation Form that the entire road is equivalent to a Category 4 Road. The applicant is conditioned to obtain an encroachment permit from the Department from California Transportation, or letter indicating that one is not needed.
- b) The site is in a rural part of the County where the typical parcel size is 40 acres and many of the land holdings are very large. The proposed cannabis will not be in a location where there is an established neighborhood or other sensitive receptor such as a school, church, park or other use which may be sensitive to cannabis cultivation. Approving cultivation on this site and the other sites which have been approved or are in the application process will not change the character of the area due to the large parcel sized in the area.
- c) The location of the proposed cannabis cultivation is more than 300 feet from the nearest off-site residence.
- d) Irrigation water will be sourced from a two rainwater catchment ponds.

7. FINDING

The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.

EVIDENCE

- a) The parcel was not included in the housing inventory of Humboldt County's 2019 Housing Element but does have the potential to support one housing unit. The approval of cannabis cultivation on this parcel will not conflict with the ability for a residence to be constructed on this parcel.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Humboldt County Planning Commission does hereby:

- Adopt the findings set forth in this resolution; and
- Approve the Salty Dawg, LLC Conditional Use Permit, Case No. CUP16-541 Record Number, Number PLN-12129-CUP/SP subject to the conditions in Attachment 1.

Adopted after review and consideration of all the evidence on April 15, 2021.

The motion was made by COMMISSIONER:

AYES:

COMMISSIONER:

COMMISSIONER:

DECISION:

COMMISSIONER:

COMMISSIONER:

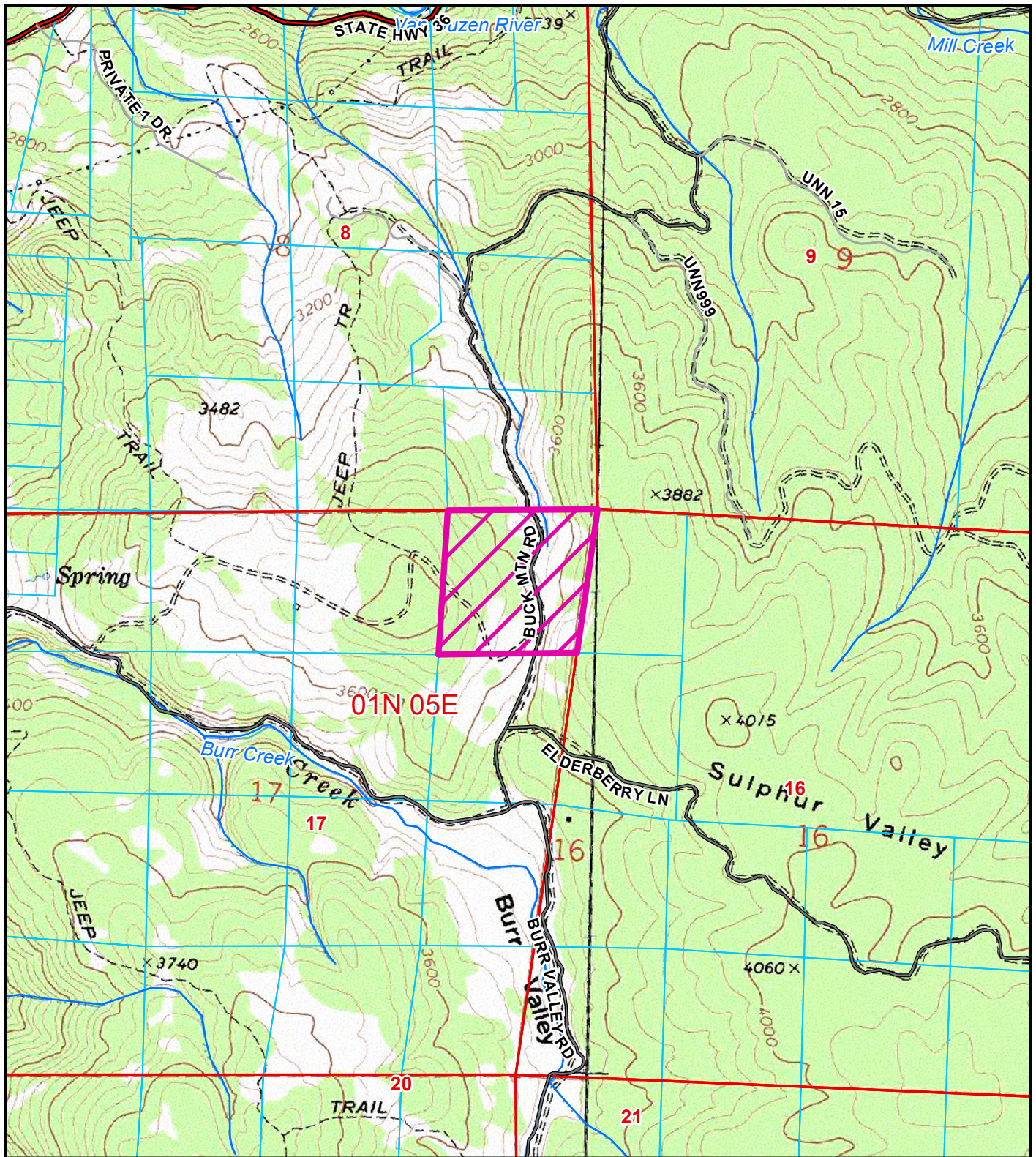
COMMISSIONER:

COMMISSIONER:

COMMISSIONER:

I, John Ford, Secretary to the Planning Commission of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above entitled matter by said Commission at a meeting held on the date noted above.

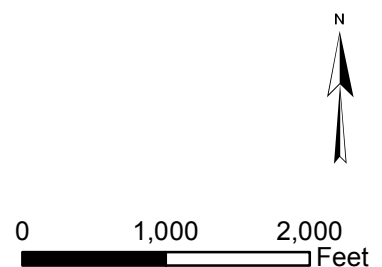
John H. Ford, Director,
Planning and Building Department

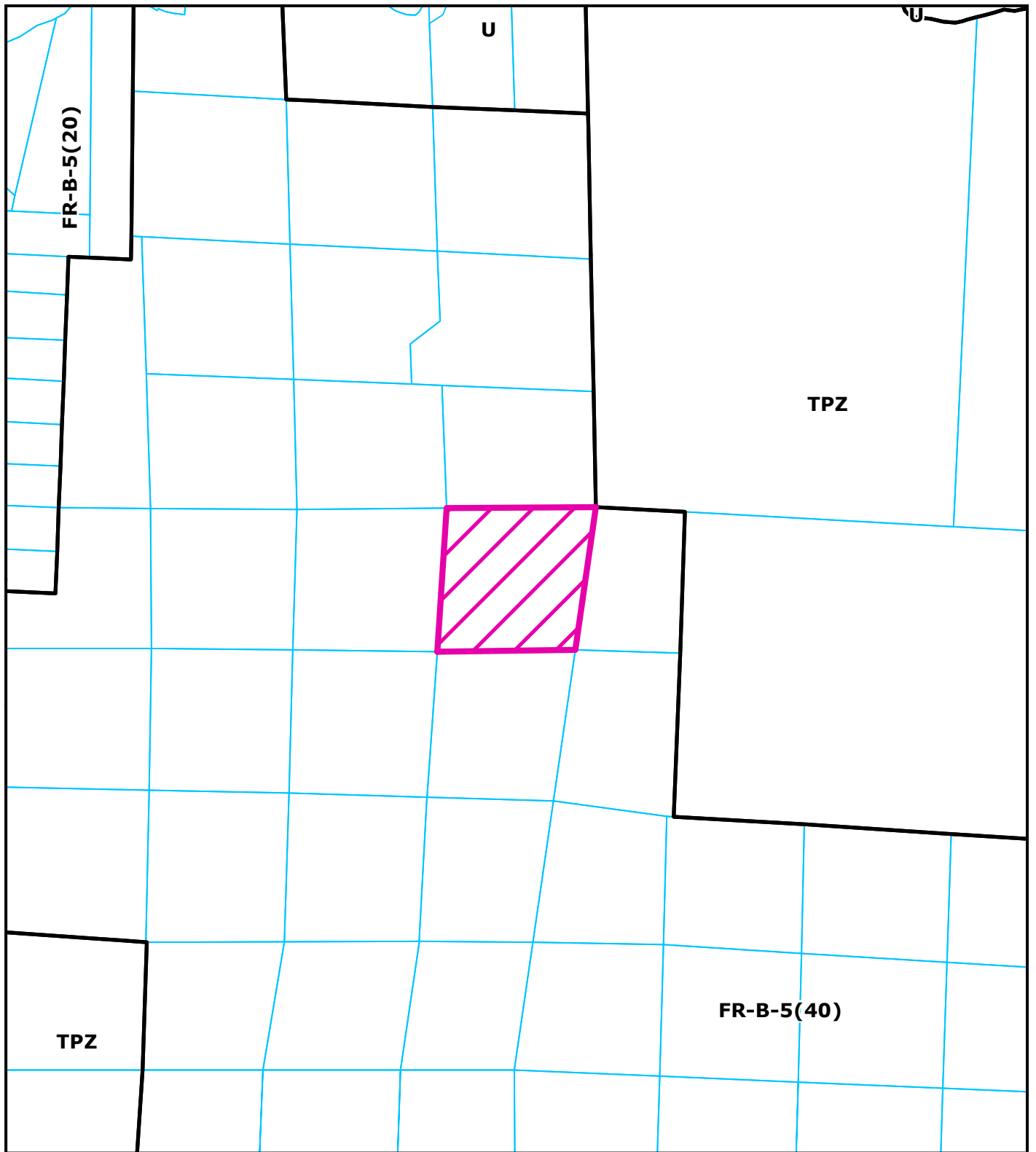


Project Area = 

**TOPO MAP
PROPOSED SALTY DAWG
DINSMORE AREA
CUP-16-541
APN: 210-221-013
T01N R05E S17 HB&M (DINSMORE)**

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

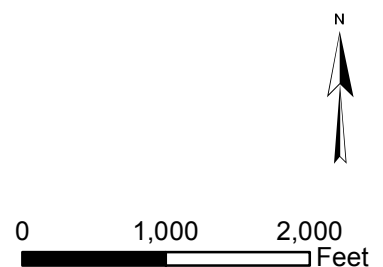


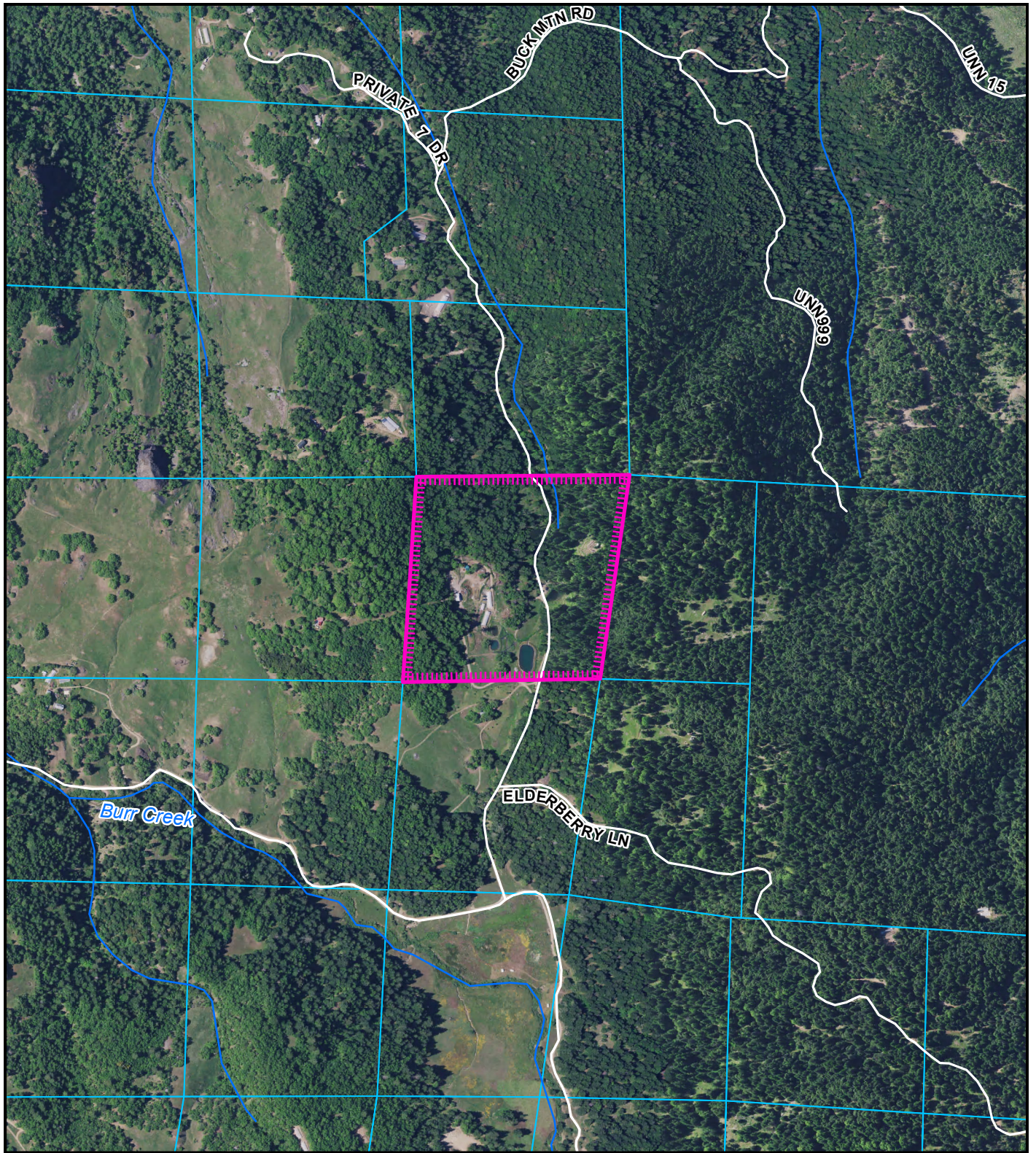


Project Area = 

**ZONING MAP
PROPOSED SALTY DAWG
DINSMORE AREA
CUP-16-541
APN: 210-221-013
T01N R05E S17 HB&M (DINSMORE)**

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.





Project Area = 

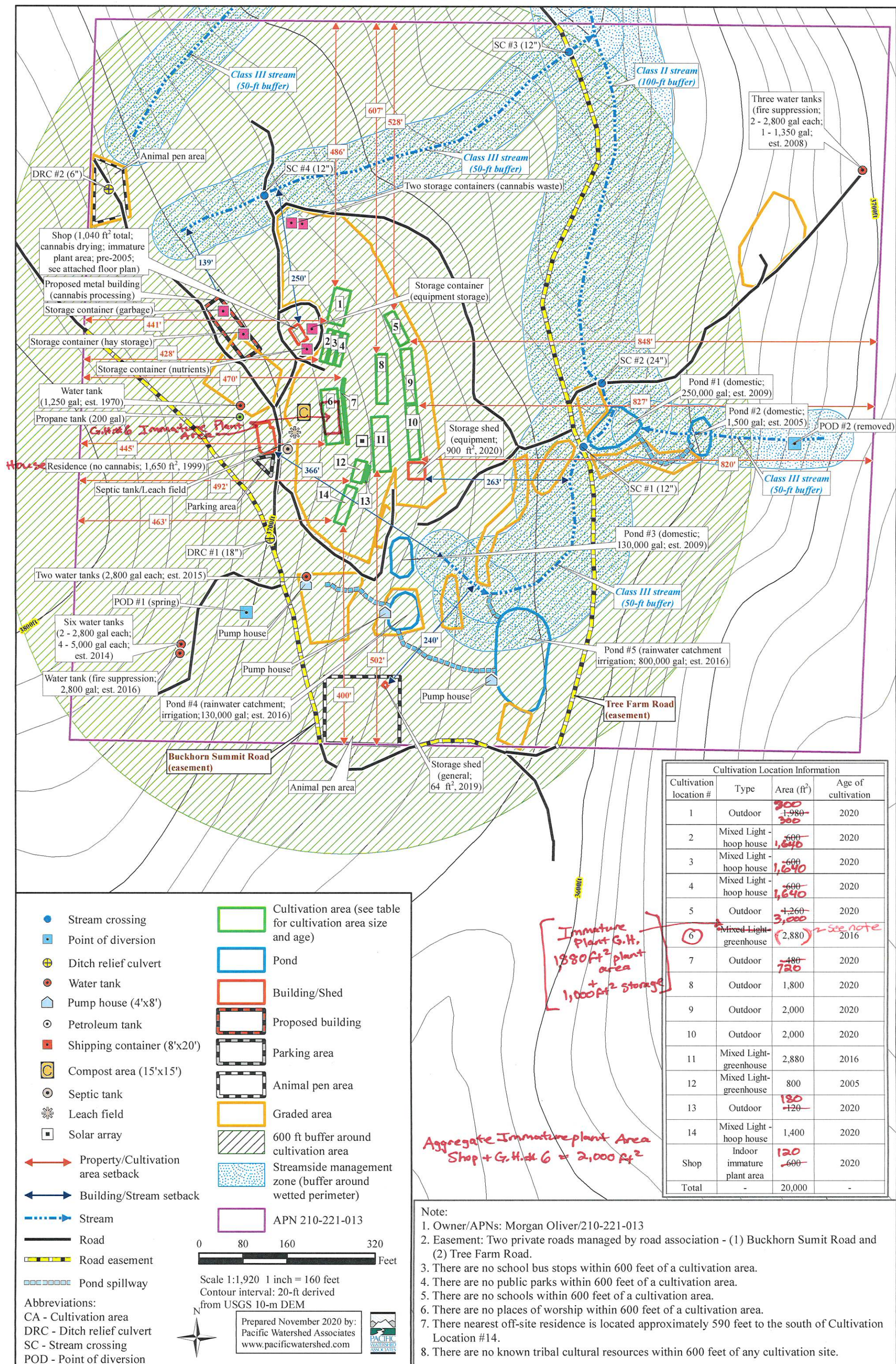
**AERIAL MAP
PROPOSED SALTY DAWG
DINSMORE AREA
CUP-16-541
APN: 210-221-013
T01N R05E S17 HB&M (DINSMORE)**

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 1,000 2,000 Feet



Revised 3/17/21



ATTACHMENT 1

RECOMMENDED CONDITIONS OF APPROVAL

APPROVAL OF THE CONDITIONAL USE PERMIT IS CONDITIONED ON THE FOLLOWING TERMS AND REQUIREMENTS WHICH MUST BE SATISFIED BEFORE THE PROVISIONAL CANNABIS CULTIVATION PERMIT CAN BE FINALIZED.

A. General Conditions

1. The applicant is responsible for obtaining all necessary County and State permits and licenses, and for meeting all requirements set forth by other regulatory agencies.
2. The Applicant is responsible for costs for post-approval review for determining project conformance with conditions. A deposit is collected to cover this staff review. Permit conformance with conditions must be demonstrated prior to release of building permit or initiation of use and at time of annual inspection. A conformance review deposit as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors (currently \$750) shall be paid within sixty (60) days of the effective date of the permit or upon filing of the Compliance Agreement (where applicable), whichever occurs first. Payment shall be made to the Humboldt County Planning Division, 3015 "H" Street, Eureka.
3. A Notice of Determination (NOD) will be prepared and filed with the County Clerk for this project in accordance with the State CEQA Guidelines. **Within three days of the effective date of permit approval**, the Department will file the NOD and will charge this cost to the project.
4. Within 60 days of the effective date of permit approval, the applicant shall execute a Compliance Agreement with the Humboldt County Planning and Building Department detailing all necessary permits and infrastructure improvements described under Conditions of Approval #5 through #14. The agreement shall provide a timeline for completing all outstanding items. All activities detailed under the agreement must be completed to the satisfaction of the Planning and Building Department before the permit may be finalized and no longer considered provisional.
5. The applicant shall submit evidence of enrollment into the State Cannabis Cultivation Discharge program by submitting copies of all documents filed with the State Water Resources Control Board, including, but not limited to, a Notice of Applicability and a Site Management Plan. The applicant is required to adhere to and implement the requirements contained in the SWRCB's Cannabis Cultivation Policy, the General Order and the Notice of Applicability. A copy of the reporting form portion of the Mitigation and Reporting Program (MRP) shall be submitted annually to the Planning and Building Department concurrent with the submittal to the SWRCB. Should the site qualify for an exemption, the applicant shall provide proof of a SWRCB exemption status.
6. The applicant shall secure permits for all structures and grading related to the cannabis cultivation and other commercial cannabis activity, including but not limited to, existing and proposed greenhouses, water tanks over 5,000 gallons existing and proposed structures associated with drying and storage or any activity with a nexus to cannabis, and any noise containment structures as necessary. The plans submitted for building permit approval shall be consistent with the project description and the approved project site plan. A letter or similar communication from the Building Division verifying that all structures related to the cannabis cultivation are permitted will satisfy this condition.

7. Upon annual inspection, the applicant shall provide evidence that 2,880 greenhouse #6 has partition the two ends (500 SF on each side) and clearly show that only using 1,880 SF of the greenhouse for nursery.
8. The applicant shall install water monitoring device on each source, the rainwater catchment ponds (Pond #4 and Pond #5) to monitor water used for cannabis irrigation sperate from domestic use. The applicant shall provide a waterlog to the Planning Department upon annual inspection.
9. The applicant to adhere to the recommendations made in the *Registered Professional Forester Report* prepared by Blair Forestry Consulting, dated August 2021. The applicant is to treat slash debris resulting from conversion activities and cut sawlogs to a minimum of 2 feet in length or to obtain a proper county burn permits and burn the remaining slash during the rainy season. The applicant may provide photographic evidence or provide a copy of the burn permit indicating this has been completed.
10. The applicant is to prepare a Remediation/ protection Plan for the wetland/ pond complex and for the onsite relocation of historic cultivation the plan shall include treating the roads to avoid erosion to the ponds. The plan shall be prepared by a qualified individual, as indicated in *Preliminary Biological Resource Assessment* prepared by TransTerra Consulting, dated January 2021.
11. The applicant is to adhere to the final *Streambed Alteration Agreement* issued from the Department of Fish and Wildlife, dated December 2020.
12. The applicant is to obtain an encroachment permit from the Department from California Transportation, or letter indicating that one is not needed.
13. The applicant shall be compliant with the County of Humboldt's Certified Unified Program Agency (CUPA) requirements regarding hazardous materials. A written verification of compliance shall be required before any provisional permits may be finalized. Ongoing proof of compliance with this condition shall be required at each annual inspection in order to keep the permit valid.
14. The applicant shall execute and file with the Planning Division the statement titled, "Notice and Acknowledgment regarding Agricultural Activities in Humboldt County," ("Right to Farm" ordinance) as required by the HCC and available at the Planning Division.

B. Ongoing Requirements/Development Restrictions Which Must be Satisfied for the Life of the Project:

1. The combination of background, generator and greenhouse fan or other operational equipment created noise must not result in the harassment of Northern Spotted Owl species as required to meet the performance standards for noise set by Department Policy Statement No. 16-005 clarifying CMMLUO Section 55.4.11 (o) requirements. The combined noise levels measured at 100 feet or the edge of habitat, whichever is closer, shall be at or below 50 decibels. Conformance will be evaluated using current auditory disturbance guidance prepared by the United State Fish and Wildlife Service, and further consultation where necessary. A building permit shall be obtained should any structures be necessary for noise attenuation.
2. All artificial lighting shall be fully contained within structures such that no light escapes (e.g.,

through blackout curtains). Structures shall be enclosed between 30 minutes prior to sunset and 30 minutes after sunrise to prevent disruption to crepuscular wildlife. Security lighting shall be motion activated and comply with the International Dark-Sky Association standards and Fixture Seal of Approval Program; see: <https://www.darksky.org/our-work/lighting/lighting-for-citizens/lighting-basics/>. Standards include but are not limited to the following, 1) light shall be shielded and downward facing, 2) shall consist of Low Pressure Sodium (LPS) light or low spectrum Light Emitting Diodes (LED) with a color temperature of 3000 kelvins or less and 3) only placed where needed.

3. Should the Humboldt County Planning Division receive complaints that the lighting or noise is not complying with the standards listed above in items B1. and B.2., within ten (10) working days of receiving written notification that a complaint has been filed, the applicant shall submit written verification that the lights' shielding and alignment, and noise levels have been repaired, inspected, and corrected as necessary.
4. The berm slope of pond # 5 should be inspected annually for signs of erosion and seepage and if seepage is absorbed the applicant is to contact a qualified individual to investigate the source as described in the *Engineering Geologic Evaluation Existing Pond Embankment*, prepared by LACO Associates, dated 2020
5. Prohibition on use of synthetic netting. To minimize the risk of wildlife entrapment, Permittee shall not use any erosion control and/or cultivation materials that contain synthetic (e.g., plastic or nylon) netting, including photo- or biodegradable plastic netting. Geotextiles, fiber rolls, and other erosion control measures shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves.
6. All refuse shall be contained in wildlife proof storage containers, at all times, and disposed of at an authorized waste management facility.
7. Should any wildlife be encountered during work activities, the wildlife shall not be disturbed and be allowed to leave the work site unharmed.
8. The use of anticoagulant rodenticide is prohibited.
9. The operator shall provide information to all employees about the potential health impacts of cannabis use on children. Information shall be provided by posting the brochures from the Department of Health and Human Services titled "Cannabis Palm Card" and "Cannabis Rack Card." This information shall also be provided to all employees as part of the employee orientation.
10. All components of project shall be developed, operated, and maintained in conformance with the Project Description, the approved Site Plan, the Plan of Operations, and these conditions of approval. Changes shall require modification of this permit except where consistent with Humboldt County Code Section 312-11.1, Minor Deviations to Approved Plot Plan. If offsite processing is chosen to be the preferred method of processing, this permit shall be modified to identify the offsite licensed facility.
11. Cannabis cultivation and other commercial cannabis activity shall be conducted in compliance with all laws and regulations as set forth in the CMMLUO and MAUCRSA, as applicable to the permit type.
12. If operating pursuant to a written approved compliance agreement, permittee shall abate or cure violations at the earliest feasible date, but in no event no more than two (2) years from

the date of issuance of a provisional clearance or permit. Permittee shall provide plans for curing such violations to the Planning and Building Department within one (1) year of issuance of the provisional clearance or permit. If good faith effort toward compliance can be shown within the two years following the issuance of the provisional clearance or permit, the Department may, at the discretion of the Director, provide for extensions of the provisional permit to allow additional time to meet the outstanding requirements.

13. Possession of a current, valid required license, or licenses, issued by any agency of the State of California in accordance with the MAUCRSA, and regulations promulgated thereunder, as soon as such licenses become available.
14. Compliance with all statutes, regulations, and requirements of the California State Water Resources Control Board and the Division of Water Rights, at a minimum to include a statement of diversion of surface water from a stream, river, underground stream, or other watercourse required by Water Code Section 5101, or other applicable permit, license, or registration, as applicable.
15. Confinement of the area of cannabis cultivation, processing, manufacture, or distribution to the locations depicted on the approved site plan. The commercial cannabis activity shall be set back at least 30 feet from any property line, and 600 feet from any school, school bus stop, church or other place of religious worship, or tribal cultural resources, except where a reduction to this setback has been approved pursuant to Section 55.4.11(d).
16. Maintain enrollment in Tier 1, 2, or 3, certification with North Coast Regional Water Quality Control Board (RWQCB) Order No. R1-2015-0023, if applicable, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency.
17. Comply with the terms of any applicable Lake and Stream Alteration (1600 or 1602) Permit obtained from the California Department of Fish and Wildlife (CDFW).
18. Comply with the terms of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (Cal Fire), if applicable.
19. Consent to an annual on-site compliance inspection, with at least 24 hours prior notice, to be conducted by appropriate County officials during regular business hours (Monday through Friday, 9:00 a.m. to 5:00 p.m., excluding holidays).
20. Refrain from the improper storage or use of any fuels, fertilizer, pesticide, fungicide, rodenticide, or herbicide.
21. Pay all applicable application, review for conformance with conditions and annual inspection fees.
22. Fuel shall be stored and handled in compliance with applicable state and local laws and regulations, including the County of Humboldt's Certified Unified Program Agency (CUPA) program, and in such a way that no spillage occurs.
23. The master logbooks maintained by the applicant to track production and sales shall be maintained for inspection by the County.
24. Pay all applicable taxes as required by the Humboldt County Commercial Marijuana

Performance Standards for Cultivation and Processing Operations

25. Pursuant to the MCRSA, Health and Safety Code Section 19322(a)(9), an applicant seeking a cultivation license shall “provide a statement declaring the applicant is an ‘agricultural employer,’ as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (Part 3.5 commencing with Section 1140) of Division 2 of the Labor Code), to the extent not prohibited by law.”
26. Cultivators shall comply with all applicable federal, state, and local laws and regulations governing California Agricultural Employers, which may include federal and state wage and hour laws, Cal/OSHA, OSHA, the California Agricultural Labor Relations Act, and the Humboldt County Code (including the Building Code).
27. Cultivators engaged in processing shall comply with the following Processing Practices:
 - a. Processing operations must be maintained in a clean and sanitary condition including all work surfaces and equipment.
 - b. Processing operations must implement protocols which prevent processing contamination and mold and mildew growth on cannabis.
 - c. Employees handling cannabis in processing operations must have access to facemasks and gloves in good operable condition as applicable to their job function.
 - d. Employees must wash hands sufficiently when handling cannabis or use gloves.
28. All persons hiring employees to engage in commercial cannabis cultivation and processing shall comply with the following Employee Safety Practices:
 - a. Cultivation operations and processing operations must implement safety protocols and provide all employees with adequate safety training relevant to their specific job functions, which may include:
 - (1) Emergency action response planning as necessary;
 - (2) Employee accident reporting and investigation policies;
 - (3) Fire prevention;
 - (4) Hazard communication policies, including maintenance of material safety data sheets (MSDS);
 - (5) Materials handling policies;
 - (6) Job hazard analyses; and
 - (7) Personal protective equipment policies, including respiratory protection.
 - b. Cultivation operations and processing operations must visibly post and maintain an emergency contact list which includes at a minimum:
 - (1) Operation manager contacts;
 - (2) Emergency responder contacts; and
 - (3) Poison control contacts.
 - c. At all times, employees shall have access to safe drinking water and toilets and handwashing facilities that comply with applicable federal, state, and local laws and regulations. Plumbing facilities and water source must be capable of handling increased usage without adverse consequences to neighboring properties or the environment.
 - d. On site-housing provided to employees shall comply with all applicable federal, state, and local laws and regulations.
29. All cultivators shall comply with the approved processing plan as to the following:
 - a. Processing practices
 - b. Location where processing will occur

- c. Number of employees, if any
 - d. Employee Safety Practices
 - e. Toilet and handwashing facilities
 - f. Plumbing and/or septic system and whether or not the system is capable of handling increased usage
 - g. Drinking water for employees
 - h. Plan to minimize impact from increased road use resulting from processing
 - i. On-site housing, if any
30. Term of Commercial Cannabis Activity Special Permit. Any Commercial Cannabis Cultivation SP issued pursuant to the CMMLUO shall expire one (1) year after date of issuance, and on the anniversary date of such issuance each year thereafter, unless an annual compliance inspection has been conducted and the permittees and the permitted site have been found to comply with all conditions of approval.
31. If the inspector or other County official determines that the permittees or site do not comply with the conditions of approval, the inspector shall serve the permit holder with a written statement identifying the items not in compliance, and the action that the permit holder may take to cure the noncompliance, or file an appeal within ten (10) days of the date that the written statement is delivered to the permit holder. Personal delivery or mailing the written statement to the mailing address listed on the application by regular mail, plus three (3) days after date of mailing, shall constitute delivery. The permit holder may request a reinspection to determine whether or not the permit holder has cured all issues of noncompliance. Failure to request reinspection or to cure any items of noncompliance shall terminate the Special Permit, immediately upon the expiration of any appeal period, or final determination of the appeal if an appeal has been timely filed pursuant to Section 55.4.13.
32. Permit Renewals to Comply with Updated Laws and Regulations. Permit renewal is subject to the laws and regulations effective at the time of renewal, which may be substantially different than the regulations currently in place and may require the submittal of additional information to ensure that new standards are met.
33. Acknowledgements to Remain in Full Force and Effect. Permittee acknowledges that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this section in the event that environmental conditions, such as a sustained drought or low flows in the watershed in which the cultivation area is located, will not support diversions for irrigation.
34. Transfers. Transfer of any leases or permits approved by this project is subject to the review and approval of the Planning Director for conformance with CMMLUO eligibility requirements and agreement to permit terms and acknowledgments. The fee for required permit transfer review shall accompany the request. The request shall include the following information:
- a. Identifying information for the new owner(s) and management as required in an initial permit application;
 - b. A written acknowledgment by the new owner in accordance as required for the initial permit application;
 - c. The specific date on which the transfer is to occur;
 - d. Acknowledgement of full responsibility for complying with the existing permit; and
 - e. Execution of an Affidavit of Non-diversion of Medical Cannabis.
35. Inspections. The permit holder and subject property owner are to permit the County or representative(s) or designee(s) to make inspections at any reasonable time deemed necessary to assure that the activities being performed under the authority of this permit are

in accordance with the terms and conditions prescribed herein.

Informational Notes:

1. Pursuant to Section 314-55.4.11(a) of the CMMLUO, if upon inspection for the initial application, violations of any building or other health, safety, or other state or county statute, ordinance, or regulation are discovered, the Planning and Building Department may issue a provisional clearance or permit with a written approved Compliance Agreement. By signing the agreement, the permittee agrees to abate or cure the violations at the earliest opportunity but in no event more than two (2) years after the date of issuance of the provisional clearance or permit. Plans for curing the violations shall be submitted to the Planning and Building Department by the permittee within one (1) year of the issuance of the provisional certificate or permit. The terms of the compliance agreement may be appealed pursuant to Section 314-55.4.13 of the CMMLUO.
2. This provisional permit approval shall expire and become null and void at the expiration of one (1) year after all appeal periods have lapsed (see "Effective Date"), except where the Compliance Agreement per Condition of Approval #6 has been executed and the corrective actions pursuant to the agreement are being undertaken. Once building permits have been secured and/or the use initiated pursuant to the terms of the agreement, the use is subject to the Permit Duration and Renewal provisions set forth in Conditions of Approval #26 and 27 of the Ongoing Requirements/Development Restrictions, above.
3. If cultural resources are encountered during construction activities, the contractor on-site shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist and the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and the lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the Native American Heritage Commission will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to Public Resources Code (PRC) Section 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99.

4. The applicant shall be aware that the Federal Government considers the cultivation of cannabis to be an illegal activity. This project is accessed by using roads that pass-through lands owned by the Federal Government. The Federal Government may not allow the applicant to use these roads to transport cannabis. In such case, Humboldt County will not provide relief to the applicant. Approval of this permit does not authorize transportation of cannabis across Federal lands.

ATTACHMENT 2

**CEQA ADDENDUM TO THE
MITIGATED NEGATIVE DECLARATION FOR THE COMMERCIAL MEDICINAL MARIJUANA LAND USE
ORDINANCE**

**Commercial Medical Marijuana Land Use Ordinance Mitigated Negative Declaration (MND)
(State Clearinghouse # 2015102005), January 2016**

APN: 210-221-013; 2910 Burr Valley Road , Bridgeville, County of Humboldt

**Prepared By
Humboldt County Planning and Building Department
3015 H Street, Eureka, CA 95501**

April 2021

Background

Modified Project Description and Project History –

The Commercial Medical Marijuana Land Use Ordinance (CMMLUO) established specific regulations for commercial cannabis operations in Humboldt County. These regulations were developed in concert with the Mitigated Negative Declaration (MND) that was adopted for the ordinance in order to implement the mitigation measures of the MND. The MND addressed the broad environmental impacts that could be expected to occur from the adoption and implementation of the ordinance. The MND specified that the regulations established in the CMMLUO would mitigate the impacts of existing cannabis operations by establishing regulations for an existing unregulated land use to help prevent and reduce environmental impacts that are known to result from unpermitted baseline cultivation operations. Commercial cannabis cultivation in existence as of December 31, 2015 was included in the environmental baseline for the MND and the MND states that "Bringing existing operations into compliance will help to attenuate potential environmental effects from existing cultivation activities, including aesthetic impacts resulting from improper operation or poor siting." The current project was contemplated by the MND and compliance with the provisions of the CMMLUO will fully mitigate all environmental impacts of the project to a less than significant level.

The modified project involves a Conditional Use Permit for 10,000 square feet of existing outdoor A Conditional Use Permit for 10,000 square feet of existing outdoor and 10,000 square feet of existing mixed light commercial cannabis cultivation, as well as 2,000 square feet (SF) of nursery space.

Greenhouse #6, as notated in the Site Plan will be used as nursery space. The greenhouse #6 is 2,880 SF, however, the applicant will only use 1,880 SF as nursery space. The remaining 1,000 SF will be used as storage. The applicant shall partition off the two ends (500 SF on each side) and clearly show that only using 1,880 SF of the greenhouse for nursery. County staff will sign off upon annual inspection. The applicant also uses a shop with 120 SF of nursery space, which totals 2,000 SF nursery space.

Presently, drying is carried out in the shop. As depicted on the map, a 3,000 SF building is proposed to be constructed to dry cannabis and for storage. Further processing will occur offsite at a licensed processing facility. The applicant estimates a maximum of four individuals are needed during peak operations. The applicant has submitted a Soils Report, prepared by Whitchurch Engineering, dated October 2020. The soils report concludes that the soils on the site of where the building is being proposed is capable of providing adequate support for the building. Nonetheless, the applicant is to obtain the proper building permits from the Building Department prior constructing a new building.

The applicant has submitted a Registered Professional Forester Report (RPF) prepared by Blair Forestry Consulting, dated August 2020. The report focused on unauthorized conversion activities that occurred between 2009 and 2018. According to the report, two areas on site have previously been converted from timberland with a total of 3.1 acres of timberland conversion. The report describes three point of observations that need to be addressed and remediated. The report recommends that the Water Resource Protection Plan or the Site Management Plan address erosion control and sediment delivery to a Class III stream. Additionally, the report recommends that the applicant treat slash debris resulting from conversion activities and cut sawlogs to a minimum of 2 feet in length or to obtain a proper county burn permits and burn the remaining slash during the rainy season. The project is conditioned as such. The RPF report concludes that a Less Than 3 Acre Conversion would have likely been approved and if the applicant would have

properly obtained one. No additional recommendations were suggested. The report was forwarded to CAL FIRE for review on February 2021, who provided no additional comments.

Irrigation water is sourced from two rainwater catchment ponds, from Pond #5 and Pond #4 as shown on the Site Plan. These ponds were determined to be non-jurisdictional as they are not fed by any watercourses but, encroach a Class III Streamside Management Area setback. Special Permit is also being requested for the encroachment within the Streamside Management Area and for corrective actions within the Streamside Management Areas. These ponds represent approximately 915,000 gallons of available water storage. The applicant also has 40,000 gallons of water storage in hard plastic tanks. The projected water usage is roughly about 450,000 gallons a year for two mixed light cycles and one outdoor harvest a year (15 gallons per square foot). The applicant shall install water meters to accurately record water use from the rainwater catchment ponds (Pond #4 and Pond #5) for cannabis irrigation. The applicant shall provide a log of water usage to the Planning Department upon annual inspection.

The applicant submitted a Preliminary Biological Resource Assessment prepared by TransTerra Consulting, dated January 2021. The report indicates that there are three other ponds (Pond #3, Pond #2, and Pond #1) onsite and at least one of them is considered a wetland, Pond #3 as notated on the project's Site Plan. These ponds will not be used for cannabis irrigation. The report recommends restoration of the wetland/pond complex. As a condition of approval, the applicant is to prepare a Remediation Plan for the wetland prepared by a qualified individual. The report also recommends that the roads onsite be treated to avoid erosion to the ponds or watercourses.

Additionally, the applicant has obtained a final Streambed Alteration Agreement issued from the Department of Fish and Wildlife, dated December 2020. The agreement includes nine encroachments, two encroachments are for removal for water diversion infrastructure, three encroachments are for the onstream ponds, and finally four encroachments are for replacing stream crossings. The agreement also confirms that Pond #5 and Pond #4 are not hydrologically connected or wetlands. Further, the applicant is conditioned to adhere to the recommendations made in the Streambed Alteration Agreement which includes preparing an Invasive Species Bull Frog Management Plan for the reservoirs. The applicant also submitted an Engineering Geologic Evaluation Existing Pond Embankment, prepared by LACO Associates, dated 2020. The report evaluates the geologic of the site and the stability of the embankment of pond #5. The report recommends that the berm slope should be inspected annually for signs of erosion and seepage and if seepage is absorbed the applicant is to contact a qualified individual to investigate the source. The project is conditioned as such.

The applicant submitted a Water Resource Protection Plan (WRPP) prepared by the Pacific Watershed Associates, dated June 2020. The applicant submitted a Water Resource Protection Plan (WRPP), which was originally prepared by the Pacific Watershed Associates in May 2017. Some of the non-compliance issues have been fixed but the document is out of date. Most, if not all of the remaining issues will be resolved once the work detailed in the LSAA is implemented. As a condition of approval, the applicant shall submit evidence of enrollment into the State Cannabis Cultivation Discharge program by submitting copies of all documents with the State Water Resources Control Board, including, but not limited to a Notice of Applicability and an updated Site Management Plan. Any issues that the updated Site Management Plan identifies as non-compliant must be remediated and this project is conditioned as such.

Onsite Relocation

The applicant has relocated apportion of the legacy cultivation, previously located at northeast of the parcel. The applicant is to submit a Remediation Plan and Monitoring Plan prepared by a qualified professional.

According to the California Data Base there are no sensitive or rare species onsite. There are two Northern Spotted Owl activity centers (NSO) located approximately 1.05 mile to the northeast and one to the 1.21 miles southwest. The project is supported by on grid power, sourced by P. G. & E., therefore, noise is not expected to have an adverse impact to NSO. Nonetheless, ongoing conditions of approval require the maximum allowable backup generator noise exposure level is 50 dB when measured from the generator at a distance of 100 feet or at the edge of habitat, whichever is closer. Additionally, ongoing condition of approval require the applicant to comply with International Dark-Sky Association standards.

The property is accessed State Highway 36 onto Burr Valley Road and then onto Tree Farm Road. The applicant has submitted a self-certifying Road Evaluation Form that the entire road is equivalent to a Category 4 Road. The applicant is conditioned obtain an encroachment permit from the Department from California Transportation, or letter indicating that one is not needed and submit a copy to the Planning Department .

The project has prepared a Cultural Resource and Investigation (CRS) prepared by DZC Consulting Archeology and Cultural Resources Management, dated April 2018. The CRS was forwarded to the Bear River Band of the Rohnerville Rancheria, who recommended inadvertent archaeological discovery language as a condition of approval. The project is conditioned as such.

The modified project is consistent with the adopted MND for the CMMLUO because it complies with all standards of the CMMLUO which were intended to mitigate impacts of existing cultivation.

Purpose - Section 15164 of the California Environmental Quality Act (CEQA) provides that the lead agency shall prepare an addendum to a previously certified Mitigated Negative Declaration (MND) if some changes or additions are necessary but none of the conditions described in Section 15162 calling for a subsequent EIR or Negative Declaration have occurred. Section 15162 states that when an EIR has been certified for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous MND was certified as complete, shows any of the following: A) the project will have one or more significant effects not discussed in the previous MND; B) significant effect previously examined will be substantially more severe than shown in the previous MND; C) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or D) mitigation measures or alternatives which are considerably different from those analyzed in the previous MND would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Summary of Significant Project Effects and Mitigation Recommended

No changes are proposed for the original MND recommended mitigations. The proposal to authorize the continued operation of an existing cannabis cultivation site consisting of 20,000 square feet of cultivation with ancillary drying and propagation space activities is fully consistent with the impacts identified and adequately mitigated in the original MND. The project as conditioned to implement responsible agency recommendations, results in no significantly adverse environmental effects beyond those identified in the MND. Compliance with the CMMLUO ensures consistency with the adopted MND and provides for mitigation of all project related impacts to a less than significant level.

In reviewing the application for consistency with the adopted MND, the County considered the following information and studies, among other documents:

- Registered Professional Forester Report prepared by Blair Forestry Consulting, dated August 2020.
- Preliminary Biological Resource Assessment prepared by TransTerra Consulting, dated January 2021.
- Streambed Alteration Agreement from the Department of Fish and Wildlife, dated December 2020.
- Engineering Geologic Evaluation Existing Pond Embankment, prepared by LACO Associates, dated 2020.
- Water Resource Protection Plan (WRPP) prepared by the Pacific Watershed Associates, dated June 2020.
- Soils Report, prepared by Whitchurch Engineering, dated October 2020.
- Cultural Resource and Investigation Prepared by DZC Consulting Archeology and Cultural Resources Management, dated April 2018.

Other CEQA Considerations

Staff suggests no changes for the revised project.

EXPLANATION OF DECISION NOT TO PREPARE A SUPPLEMENTAL MITIGATED NEGATIVE DECLARATION OR ENVIRONMENTAL IMPACT REPORT

See **Purpose** statement above.

In every impact category analyzed in this review, the projected consequences of the current project proposal are either the same or less than significantly increased than the initial project for which the MND was adopted. Based upon this review, the following findings are supported:

FINDINGS

1. The proposed project will permit an existing cannabis operation and bring the operation into compliance with county and state requirements intended to adequately mitigate environmental impacts.
2. The circumstances under which the project was approved have not changed substantially. There are no new significant environmental effects and no substantial increases in the severity of previously identified effects.
3. For the current proposed project, there has been no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous MND was adopted as complete.

CONCLUSION

Based on these findings it is concluded that an Addendum to the certified MND is appropriate to address the requirements under CEQA for the current project proposal. All of the findings, mitigation requirements, and mitigation and monitoring program of the MND, remain in full force and effect on the original project.

ATTACHMENT 3

Applicant's Evidence in Support of the Required Findings

Attachment 3 includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning Division:

1. The name, contact address, and phone number(s) of the applicant. (Application form on file)
2. If the applicant is not the record title owner of parcel, written consent of the owner for the application with original signature and notary acknowledgement. (On file)
3. Site plan showing the entire parcel, including easements, streams, springs, ponds and other surface water features, and the location and area for cultivation on the parcel with dimensions of the area for cultivation and setbacks from property lines. The site plan shall also include all areas of ground disturbance or surface water disturbance associated with cultivation activities, including access roads, water diversions, culverts, ponds, dams, graded flats, and other related features. If the area for cultivation is within one-quarter mile (1,320 feet) of a school, school bus stop, church or other place of religious worship, public park, or tribal cultural resource, the site plan shall include dimensions showing that the distance from the location of such features to the nearest point of the cultivation area is at least 600 feet. (Attached)
4. A cultivation and operations plan that meets or exceeds minimum legal standards for water storage, conservation and use; drainage, runoff and erosion control; watershed and habitat protection; proper storage of fertilizers, pesticides, and other regulated products to be used on the parcel; and a description of cultivation activities (outdoor, indoor, mixed light), the approximate date(s) cannabis cultivation activities have been conducted on the parcel prior to the effective date of this ordinance, if applicable, and schedule of activities during each month of the growing and harvesting season. (Attached)
5. Description of water source, storage, irrigation plan, and projected water usage. (Included in Cultivation Operations Plan (item 4. above)
6. Copy of Notice of Intent and Monitoring Self-Certification and other documents filed with the North Coast Regional Water Quality Control Board demonstrating enrollment in Tier 1, 2 or 3, North Coast Regional Water Quality Control Board Order No. 2015-0023, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency. (NOI and reporting, and Water Resources Protection Plan (WRPP) prepared by the applicant – Attached)
7. If any on-site or off-site component of the cultivation facility, including access roads, water supply, grading or terracing, impacts the bed or bank of any stream or other watercourse, a copy of the Streambed Alteration Permit obtained from the California Department of Fish and Wildlife. (Attached)
8. If the source of water is a well, a copy of the County well permit, if available. (Not Applicable)
9. If the parcel is zoned FR, U or TPZ, or involves the conversion of timberland as defined under Section 4526 of the Public Resources Code, a copy of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (Cal Fire). Alternately, for existing operations occupying sites

created through prior unauthorized conversion of timberland, evidence may be provided showing that the landowner has completed a civil or criminal process and/or entered into a negotiated settlement with Cal Fire. (Attached)

10. Consent for on-site inspection of the parcel by County officials at prearranged date and time in consultation with the applicant prior to issuance of any clearance or permit, and once annually thereafter. (On file)
11. For indoor cultivation facilities, identify the source of electrical power and how it will meet with the energy requirements in Section 55.4.8.2.3, and plan for compliance with applicable building codes. (Not Applicable)
12. Acknowledge that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as a sustained drought or low flows in the watershed, will not support diversions for irrigation. (On file)
13. Acknowledge that the County reserves the right to engage with local tribes before consenting to the issuance of any clearance or permit, if cultivation operations occur within an Area of Traditional Tribal Cultural Affiliation, as defined herein. This process will follow current departmental referral protocol, including engagement with the tribe(s) through coordination with their Tribal Historic Preservation Officer (THPO) or other tribal representatives. This procedure shall be conducted similar to the protocols outlined under SB 18 (Burton) and AB 52 (Gatto), which describe "government to government" consultation, through tribal and local government officials and their designees. During this process, the tribe may request that operations associated with the clearance or permit be designed to avoid, minimize, or mitigate impacts to tribal cultural resources, as defined herein. Examples include, but are not limited to, conducting a site visit with the THPO or their designee to the existing or proposed cultivation site, requiring that a professional cultural resources survey be performed, or requiring that a tribal cultural monitor be retained during project-related ground disturbance within areas of sensitivity or concern. The County shall request that a records search be performed through the California Historical Resources Information System (CHRIS). (On file)
14. Registered Professional Forester Report prepared by Blair Forestry Consulting, dated August 2020. (Attached)
15. Preliminary Biological Resource Assessment prepared by TransTerra Consulting, dated January 2021. (Attached)
16. Streambed Alteration Agreement from the Department of Fish and Wildlife, dated December 2020. (Attached)
17. Engineering Geologic Evaluation Existing Pond Embankment, prepared by LACO Associates, dated 2020. (Attached)
18. Water Resource Protection Plan (WRPP) prepared by the Pacific Watershed Associates, dated June 2020. (Attached)
19. Soils Report, prepared by Whitchurch Engineering, dated October 2020. Cultural Resource and Investigation Prepared by DZC Consulting Archeology and Cultural Resources Management, dated April 2018. (Attached)



Providing Professional Forestry Services

PO Box 2517
McKinleyville, CA 95519

CELL 707.834.2990
EMAIL blairforestry@gmail.com

August 20, 2020

County of Humboldt
Planning and Building Department
3015 H Street
Eureka, CA 95501

Dear Humboldt County Planning Department:

The following attached document is an evaluation of an existing, unauthorized timberland conversion which was inspected by Blair Forestry LLC within APN 210-221-013. Please accept this letter as the Registered Professional Forester's (RPF) written report showing sufficient evidence that the converted area was inspected as required by Humboldt County Code, Ordinance No. 2559 (Commercial Cannabis Land Use Ordinance), Section 55.4.12.2.4, cited below:

"All terms of any permit or exemption approved by the California Department of Forestry and Fire Protection (CAL-FIRE), including a less-than-3-acre conversion exemption or timberland conversion permit.

Where existing or proposed operations occupy sites created through prior unauthorized conversion of timberland, if the landowner has not completed a civil or criminal process and/or entered into a negotiated settlement with CAL-FIRE, the applicant shall secure the services of a registered professional forester (RPF) to evaluate site conditions and conversion history for the property and provide a written report to the Planning Division containing the RPF's recommendation as to remedial actions necessary to bring the conversion area into compliance with provisions of the Forest Practices Act. The Planning Division shall circulate the report to CAL-FIRE for review and comment."

The RPF has exercised due diligence in inspecting and evaluating the past timber conversion and in making recommendations so that the past conversion falls into compliance with the California Forest Practice Rules (CFPRs).

Sincerely,

Thomas Blair RPF#2607

Enclosed: Conversion Evaluation Report, Photos, General Location Map, Timberland Conversion Evaluation Map, CNDDDB Map

Timberland Conversion Evaluation Report

August 20, 2020

As mandated by:

Humboldt County Code, Ordinance No. 2599 (Commercial Cannabis Land Use Ordinance for areas outside the Coastal Zone), Section 55.4.12.2.4:

"All terms of any permit or exemption approved by the California Department of Forestry and Fire Protection (CAL-FIRE), including a less-than-3-acre conversion exemption or timberland conversion permit.

Where existing or proposed operations occupy sites created through prior unauthorized conversion of timberland, if the landowner has not completed a civil or criminal process and/or entered into a negotiated settlement with CAL-FIRE, the applicant shall secure the services of a registered professional forester (RPF) to evaluate site conditions and conversion history for the property and provide a written report to the Planning Division containing the RPF's recommendation as to remedial actions necessary to bring the conversion area into compliance with provisions of the Forest Practices Act. The Planning Division shall circulate the report to CAL-FIRE for review and comment."

Contact Information

1. Timberland Owners(s): **Morgan Oliver**
2. Timber Owner(s): **Morgan Oliver**
3. Registered Professional Forester (preparing report): **Thomas Blair**
RPF Number: **2607**
Address: **Blair Forestry LLC**
PO Box 2517
McKinleyville, CA 95519
Phone: **(707) 834-2990**

Location of Project

Address: **2910 Burr Valley Rd.**
Dinsmore, CA 95526

Legal Description: **Section 17; T1N; R5E; HB&M; Humboldt County**

Assessor's Parcel Number (APN): **210-221-013**

Parcel Size (Assessed): **40 acres**

Acres Converted: **Approximately 3.19 acres**

Project Description

Property and Timberland Conversion History

Note: Property boundaries are based on the Humboldt County Assessor's APN parcel maps and may vary geographically. Assessor's Parcel data in the GIS mapping program differed slightly geographically. The property background has been summarized using personal accounts of current landowners, historic orthographic photography, Humboldt County Web GIS, and CAL FIRE Watershed Mapper v2.

This conversion evaluation report will focus primarily on unauthorized conversion activities from 2009 through the present (last 11 years).

The subject parcel is located approximately 1.7 miles southwest of the community of Dinsmore California about miles up Burr Valley Rd. from Hwy 36. There are no publicly available Timber Harvest documents associated with the parcel, but timber harvesting is a common practice in the areas surrounding the parcel. Historic imagery dating back to 1995 shows the Conversion Sites discussed in this report (Conversion Sites 1 and 2) to have been oak woodland mixed with Douglas-fir. The parcel and adjacent landscape also have open grassland prairie as a major habitat component. Historic imagery shows cannabis cultivation on the parcel began sometime around 2009 at Conversion Site 1 which expanded slightly from 2012 to 2014. It appears that Conversion Site 1 was a partial meadow with scattered trees and minor tree removal was involved. There is currently a graded flat with a trailer on it and no cultivation is taking place.

Sometime prior to 2016, approximately 2.0 acres of timberland conversion occurred at Conversion Site 2 which was expanded on prior to 2018 to about 2.6 acres. Tree species cut include primarily white oak, black oak, and Douglas-fir. Grading has occurred on the parcel following tree removal associated with various activities such as cultivation flats, access roads and house/shop sites. There are several man-made ponds on the parcel but they are generally not associated with areas of tree removal.

Timber Stand Description

Forest adjacent to the Conversion Sites shows the stand to have been a large Douglas-fir dominant overstory with trees ranging from 40 to 80+ years old. The secondary canopy was dominated with true oaks interspersed with grassy openings. The general region consists of a heavily forested conifer stands dissected by large swaths of grassland.

The property is located within Humboldt County, which is in the Zone of Infestation for Sudden Oak Death (SOD). No symptoms or signs of SOD were observed during evaluation.

Project Description

There are two unauthorized timberland Conversion Sites within the subject parcel. **Timberland** is defined in the California Forest Practice Rules (CFPRs) and pursuant to PRC 4526 as land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing crop trees of a commercial species used to produce lumber and other forest products, including Christmas trees.

The landowner seeks a Registered Professional Forester's (RPF's) recommendations as to remedial actions necessary to bring the conversion areas into compliance with provisions of the Forest Practices Act, specifically

14 CCR 1104.1. The landowner currently has an application with the County of Humboldt to grow cannabis and intends on maintaining the converted use for this purpose.

This Timberland Conversion Evaluation focused on unauthorized timberland conversion activities and inconsistencies with the requirements of the California Forest Practice Rules (CFPRs). The parcel and timberland Conversion Sites are situated around a saddle at the headwaters of an unnamed Class II watercourse that flows north to the Van Duzen River. The cumulative acreage of the two Conversion Sites inspected during this evaluation is approximately 3.1 acres.

Humboldt County has zoned this parcel **Forestry Recreation (FR)** – The *Humboldt County Zoning Regulations Section 314 – 7.3* describes FR as “intended to be applied to forested areas of the County in which timber production and recreation are the desirable prominent uses and agriculture is the secondary use, and in which protection of timber and recreational lands is essential to the general welfare” (More specific information can be found in Chapter 4, Page 31 of the Humboldt County Zoning Regulations).

A field inspection of the property and conversion area was conducted on Friday, July 10, 2020 by representatives of Blair Forestry Consulting LLC. All relevant sites concerning the past conversion areas were examined. Findings from this evaluation are summarized below.

Analysis of Consistency Between Unauthorized Conversion and Applicable California Forest Practice Rules (CFPRs)

Conversion Site, Timber Harvesting and Operations Descriptions

14 CCR 914.1 Felling Practices

14 CCR 914.2 Tractor Operations

14 CCR 914.7 Timber Operations, Winter Period

Although no records of timber harvesting are available for the punctuated occurrences of conversion activities on this property, operations presumably involved hand felling with chainsaws and tractor skidding or piling. There are no records of a winter operation plan for the Conversion Sites. There was no indication that conversion activities at any site were in violation of 14 CCR 914.7. The Site is suitable for the converted uses and operations appear to be consistent with the CFPRs concerning 14CCR 914.1, 914.2 and 914.7. The RPF has no recommendations concerning timber harvesting and operations.

Roads, Soil Stabilization and Erosion Control

14 CCR Article 12 Logging Roads, Landings, and Logging Road Watercourse Crossings

14 CCR 914.6 Waterbreaks

While there are historic logging roads and skid trails throughout the parcel, many likely associated with current placement of roads, the landowner has re-opened and created multiple access roads for both vehicle and ATV use. There are several watercourse crossings and multiple sites did exhibit soil instability and connectivity to streams.

The property owner, with Pacific Watershed Associates, is in the process of drafting a Water Resource Protection Plan (pers. comm. with property owner). **Table 1** below outlines areas specifically associated with conversion activities and subsequent grading at Conversion Site 2 (See Conversion Evaluation Map for location information).

Table 1.

Site	Site Description
Observation Point 2(a)	Cutbank failure and subsequent delivery to Class III watercourse.
Observation Point 2(b)	Fillslope failure and subsequent delivery to access road and Class III watercourse.
Observation Point 2(c)	Access road with no erosion control structures.

Within Conversion Site 2, the RPF recommends that Observation Points 2(a-c) be addressed as part of the WRPP or create an Erosion Sediment Control Plan that addresses the instabilities associated with tree removal and subsequent grading at these sites. Minimally, a Disturbed Area Stabilization Plan should be implemented prior to winter weather. Proposed prescriptions in the WRPP should adhere minimally to all erosion control requirements in 14 CCR Article 12 (923.5 specifically). The RPF did not conduct a road or erosion control assessment throughout the remainder of the parcel for areas not associated with timberland conversion.

Watercourses and Water Resources

14CCR 1104.1(a)(2)(F): "No timber operations are allowed within a watercourse and lake protection zone unless specifically approved by local permit (e.g., county, city)."

The property has northeastern and northwestern facing slopes and contains Class II, III and IV watercourses and ponds. Additionally, historic imagery shows likely wetland areas just south of the east side of Conversion Site 2. Several cutbank seeps were observed on an ATV road upslope from this area. A series of man-made ponds (Class IV) was constructed starting sometime prior to 2009 and prior to any tree removal. Currently, the uppermost pond on the parcel is approximately 30 feet from Conversion Site 2. The parcel drains to the Van Duzen River. Timber operations did not otherwise occur within Watercourse and Lake Protection Zone requirements of 14CCR 1104.1(a)(2)(F) (Less Than 3 Acre Conversion Exemption). Conversion activities appear to comply with 14CCR 1104.1(a)(2)(F) concerning Watercourses and Water Resources.

Hazard Reduction

14 CCR 1104.1(a)(2)(D)(6): "Full slash and woody debris treatment may include any of the following: a. burying; b. chipping and spreading; c. piling and burning; or d. removing slash and woody debris from the site for treatment in compliance with (a)-(b). Slash and woody debris may not be burned by open outdoor fires except under permit from the appropriate fire protection agency, if required, the local air pollution control district or air quality management district. The burning must occur on the property where the slash and woody debris originated."

The conversion sites and the surrounding timber stand were walked and assessed for debris resulting from timberland conversion activities. Woody slash and debris associated with conversion activities was observed in multiple locations. Burn areas with ash are present indicating the landowner has made some progress at reducing slash however, there is still slash in abundance in some areas associated with Conversion Site 2 (locations are shown on the Conversion Evaluation Map).

The RPF recommends that slash in these areas be treated - Cut sawlogs to a minimum of 2 feet in length as per 14 CCR 1104.1(a)(2)(D)(1) and/or, obtain proper county burn permits and burn remaining slash during rainy period.

Biological Resources

14 CCR 1104.1 (2)(H): "No sites of rare, threatened or endangered plants or animals shall be disturbed, threatened or damaged and no timber operations shall occur within the buffer zone of a sensitive species as defined in 14 CCR 895.1"

The search of the parcel and surrounding area was conducted on the California Natural Diversity Database (CNDDDB) on July 8, 2020 prior to the site visit to see if there are any recorded special status plants or animals associated with the parcel or Conversion Sites. While the CNDDDB didn't report any special status plants or animals on or adjacent to the Conversion Sites, it only reports positive findings and doesn't necessarily indicate that a particular species or Sensitive Natural Community isn't present within a given area.

Northern spotted owls (NSO) are listed as Federally Threatened Species, State Candidate for Threatened Status, CDF Sensitive Species and CDFW Species of Special Concern. In this region of California, alteration of NSO habitat from logging in Douglas-fir dominated timber stands is typically assessed for known NSO Activity Centers (AC) within 1.3 miles of the project area under Attachment B NSO protection measures per Fish and Wildlife 2011 NSO Survey Protocol. A query of the California Natural Diversity Database (CNDDDB) on July 8, 2020 shows three (3) known NSO ACs within 1.3 miles of the Conversion Sites; HUM0047, HUM0983, and HUM0155.

To the knowledge of the RPF, no surveys have been conducted on this parcel for NSOs or other special status species associated with the timberland conversion operations. Without survey information prior to conversion activities, it is impossible to know whether special status species were historically present or that the conversion activities negatively affected known or unknown occurrences of these species.

Less Than 3 Acre Conversion Exemptions under 14 CCR 1104.1 are generally exempt from biological surveys but require that disturbance to any known special status species be avoided. Although these were unauthorized timberland conversion activities, the Conversion Sites appear to meet the requirements of 14CCR 1104.1 and would have likely been approved if the previous landowners had applied for a Less Than 3 Acre Conversion Exemption.

The Conversion Sites do not appear to conflict with 14 CCR 1104.1 (2)(H). No recommendation is suggested regarding biological resources.

Cultural Resources

14 CCR 1104.1 (2)(1): "No timber operations are allowed on significant historical or archeological sites."

This area was historically occupied by Nongatl Native American entities and settled by European Americans in the mid-1800s. The Conversion Areas were inspected for the presence of pre-historic, proto-historic and historic artifacts. No archeological evidence was observed during the conversion evaluation site visit. Native American entities associated with this region and identified by CAL FIRE's Native American Contact List in consultation with Native American Heritage Commission (NAHC) have been notified of the conversion activities.

The conversion area appears to comply with 14 CCR 1104.1 (2)(1). No recommendation is suggested regarding cultural resources.

Overall, it is the opinion of the RPF that the unauthorized Conversion Sites do not entirely meet the standards set forth in the CFPRs and require mitigation to be in conformance with 14CCR 1104.1

Summary of Recommendations

Roads, Soil Stabilization and Erosion Control:

- Address Observation Points 2(a-c) as part of a larger WRPP (developed through consultation with qualified entities) or stabilize prior to winter period.

Hazard Reduction:

- Treat slash resulting from conversion activities - Cut sawlogs to a minimum of 2 feet in length as per 14 CCR 1104.1(a)(2)(D)(1) and/or, obtain proper county burn permits and burn remaining slash during rainy period.

Site Maps

General Location Map: Shows parcel boundary in proximity to recognizable landmarks and general location of property boundary.

Timberland Conversion Evaluation Map: Location of timber conversion operations, boundary of the conversion areas, location and classification of watercourses, roads and watercourse crossings and other details.

California Natural Diversity Database (CNDDDB) Project Location Map: Location of timber conversion in relation to biological resources.

Resources

California Forest Practice Rules 2020. Sacramento: CAL FIRE, 2019. Print.

California Natural Diversity Database. California Department of Fish and Wildlife. Web. <https://www.wildlife.ca.gov/Data/CNDDDB>. Version 5.89.14c. Accessed July 8, 2020.

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed July 8, 2020].

Forest Practice Watershed Mapper v2. CAL FIRE. Web. http://egis.fire.ca.gov/watershed_mapper/. Accessed July 17, 2020.

Handbook of North American Indians: volume 8 – California, Robert Heizer - 1978

Humboldt County Web GIS. County of Humboldt. Web. <http://webgis.co.humboldt.ca.us/HCEGIS2.0/>. Accessed July 8, 2020.

Google Earth Pro

Weaver, W.E., Weppner, E.M. and Hagans, D.K., 2015, Handbook for Forest, Ranch and Rural Roads: A Guide for Planning, Designing, Constructing, Reconstructing, Upgrading, Maintaining and Closing Wildland Roads (Rev. 1st ed.), Mendocino County Resource Conservation District, Ukiah, California.

PHOTOS

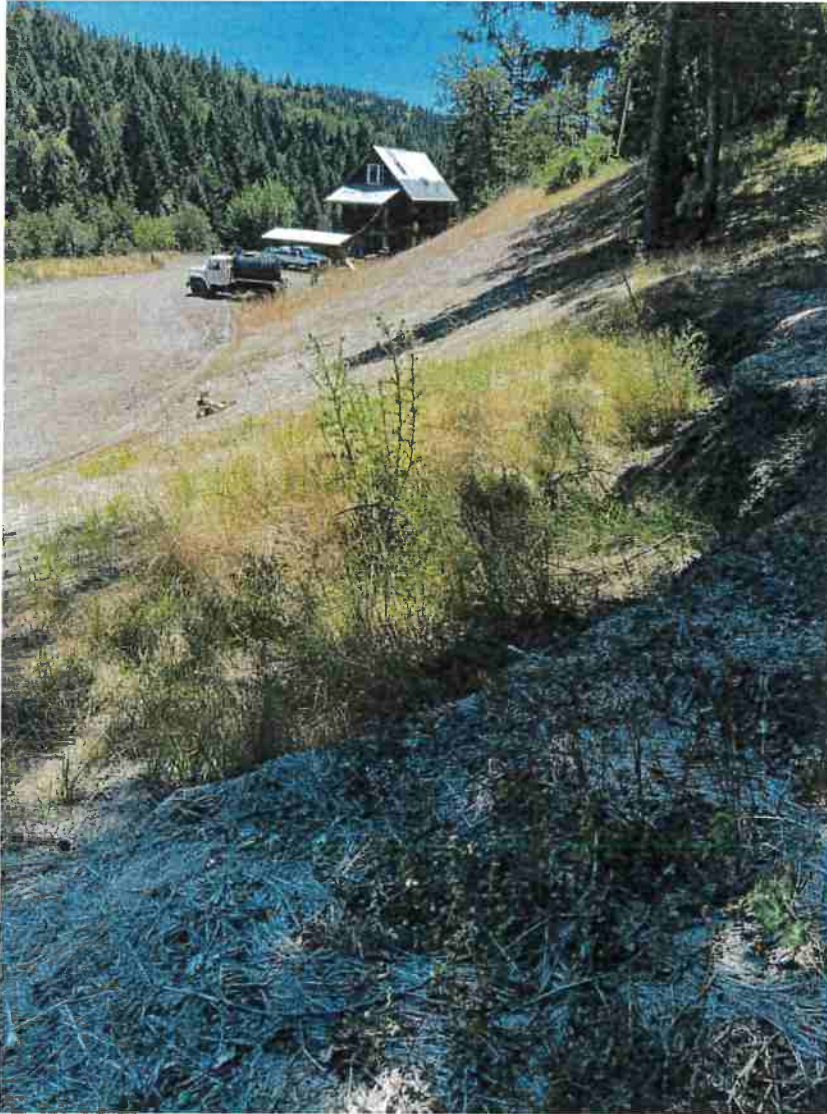


Photo 1. Observation Point 2(a) - Cutbank failure above graded flat.

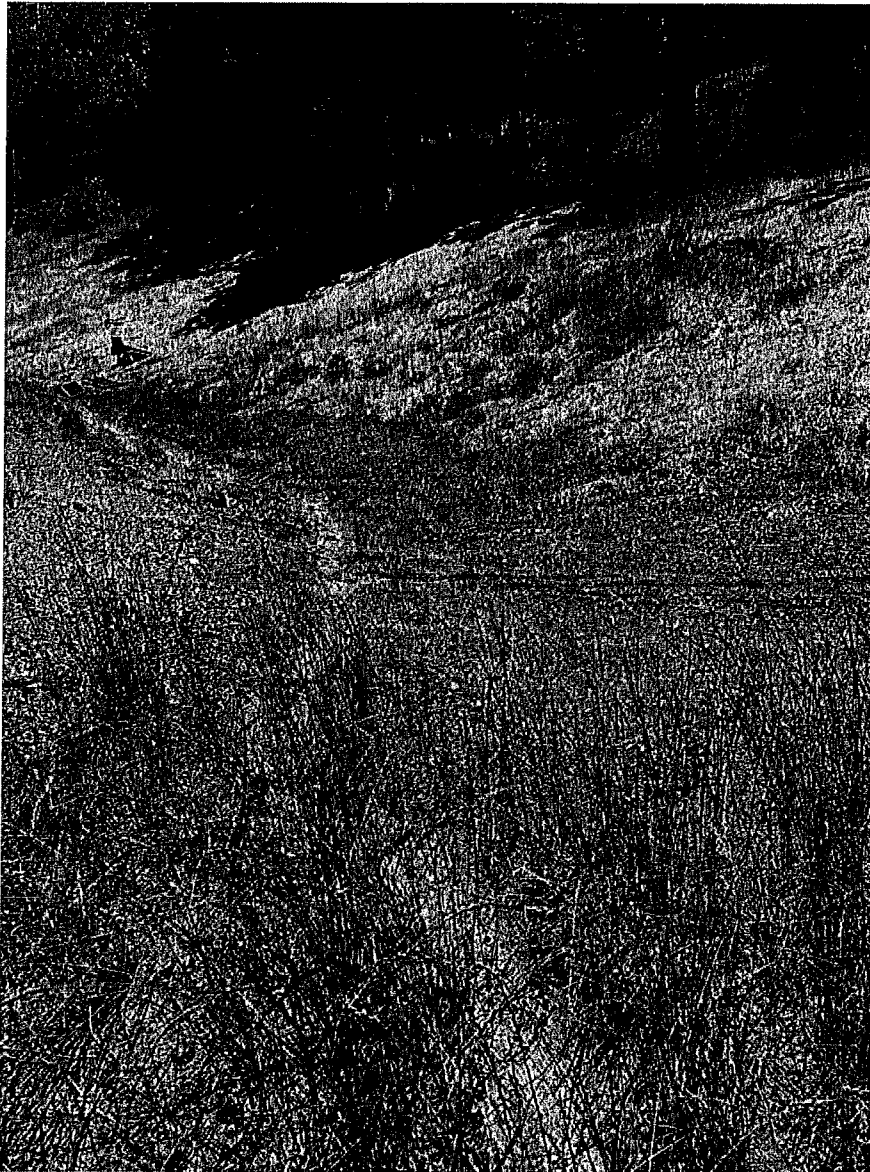


Photo 2. Below cutbank failure at Observation Point 2(a) – delivery to Class III watercourse.



Photo 3. Hazard Reduction area below access road northwest of Observation Point 2(a).

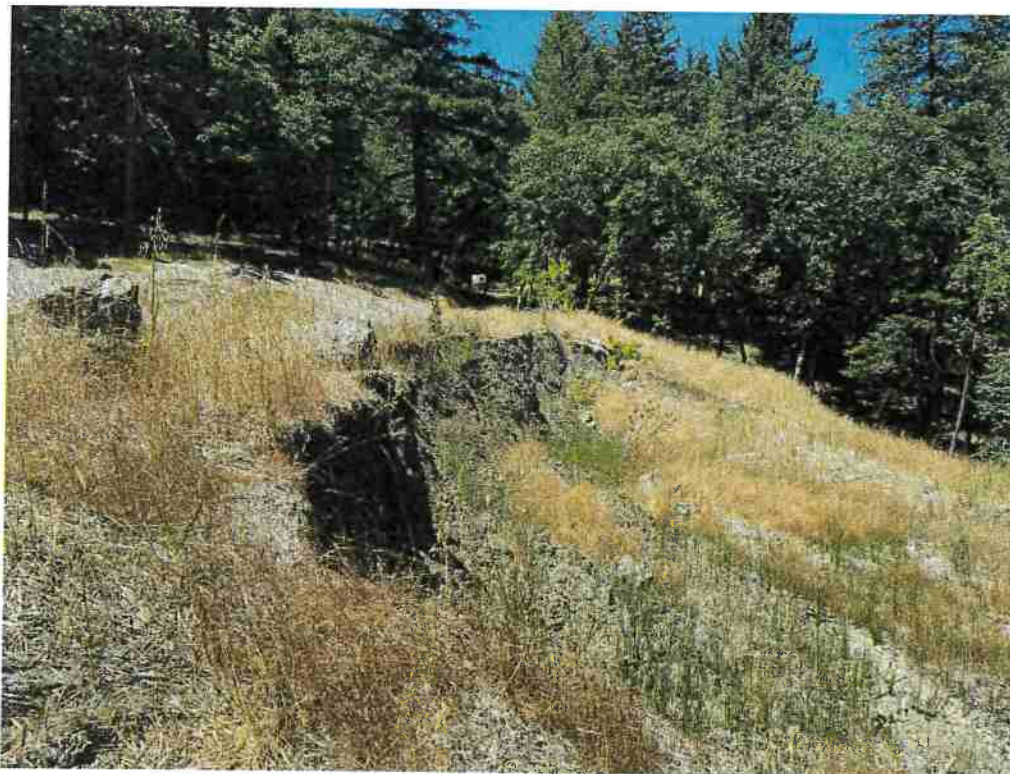


Photo 4. Observation Point 2(b) – Fillslope failure below graded flat.

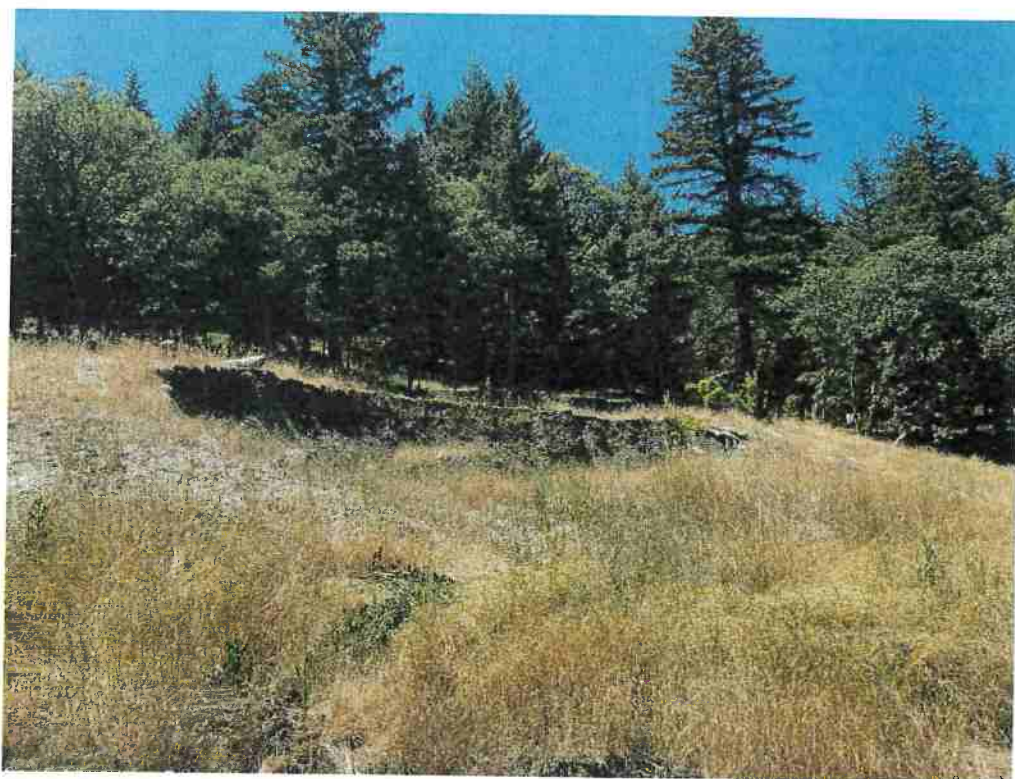


Photo 5. Observation Point 2(b) – Fillslope failure delivering downslope to Observation Point 2(c).

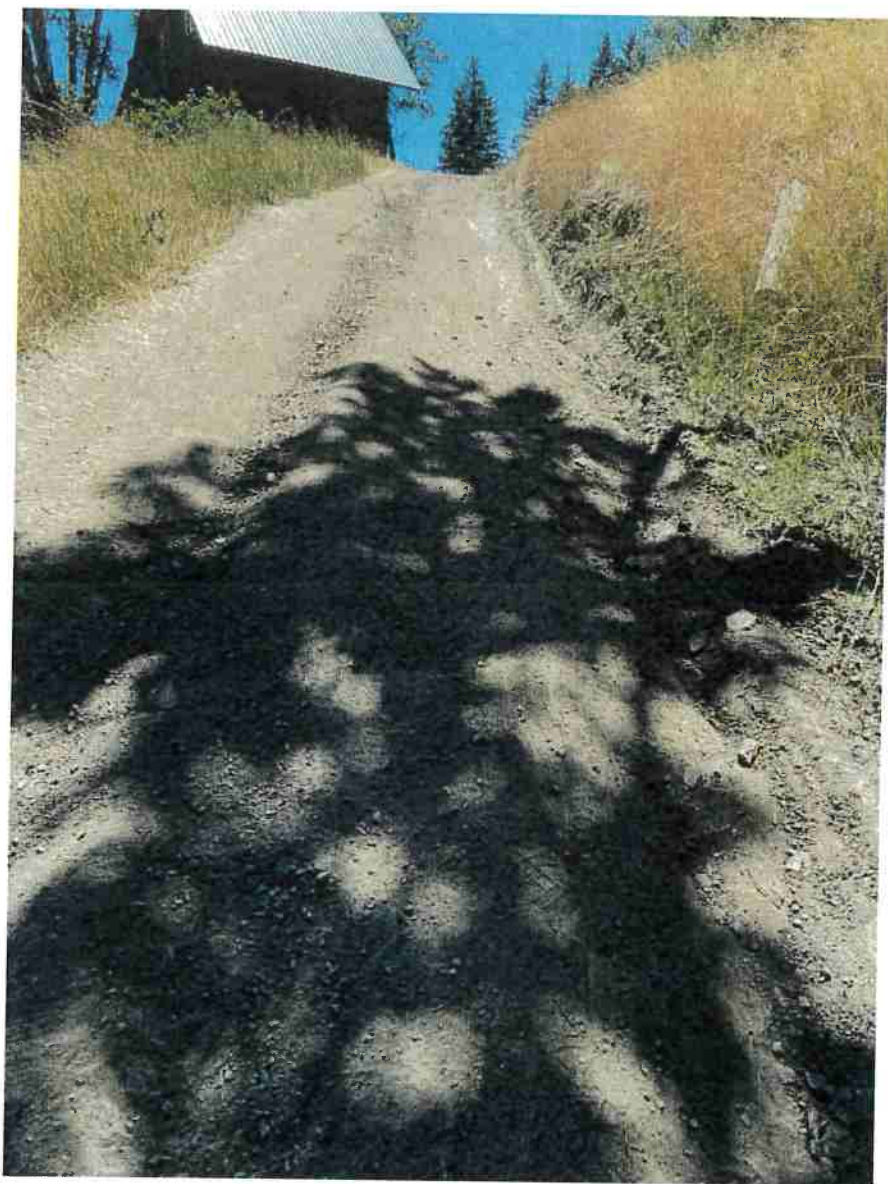


Photo 6. Observation Point 2(c) – seasonal access road below Observation Point 2(b) with no erosion control structures.

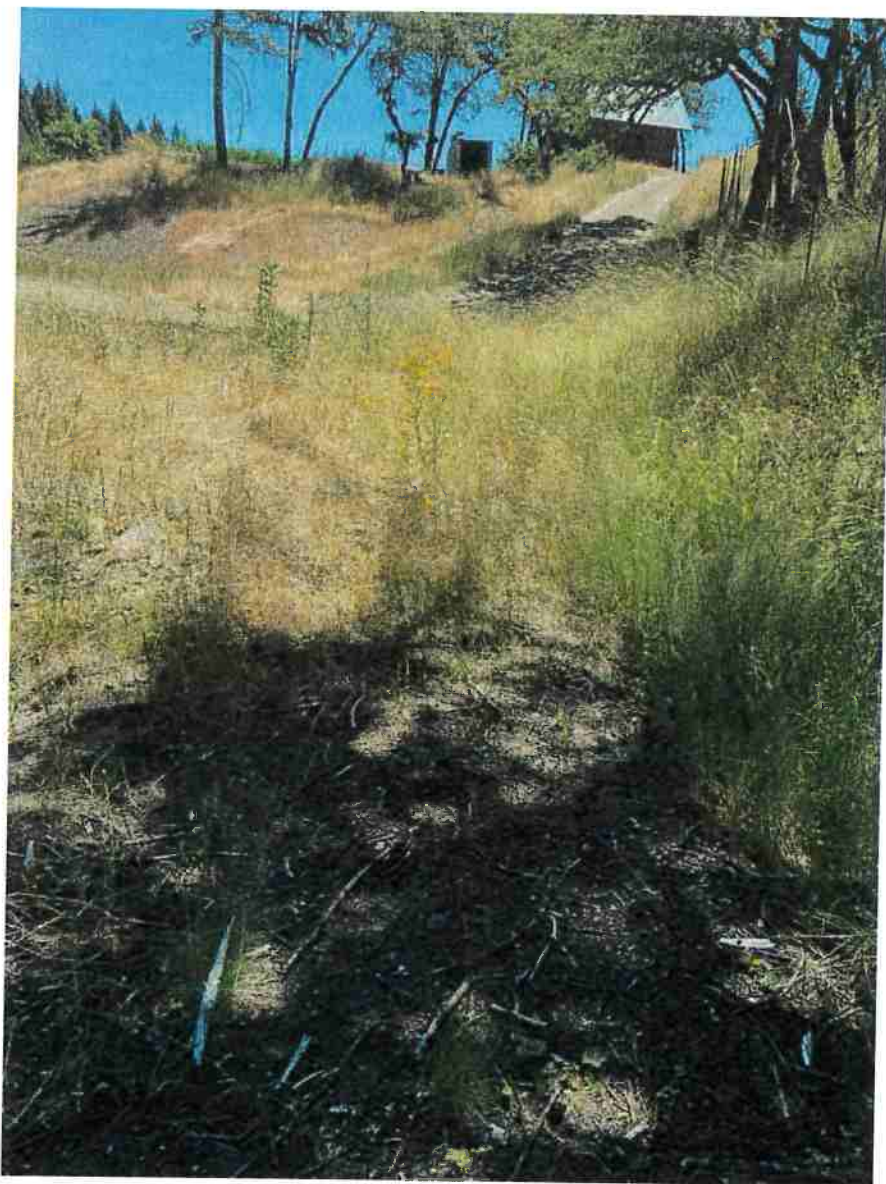


Photo 7. Class III watercourse delivery from Observation Point 2(c).

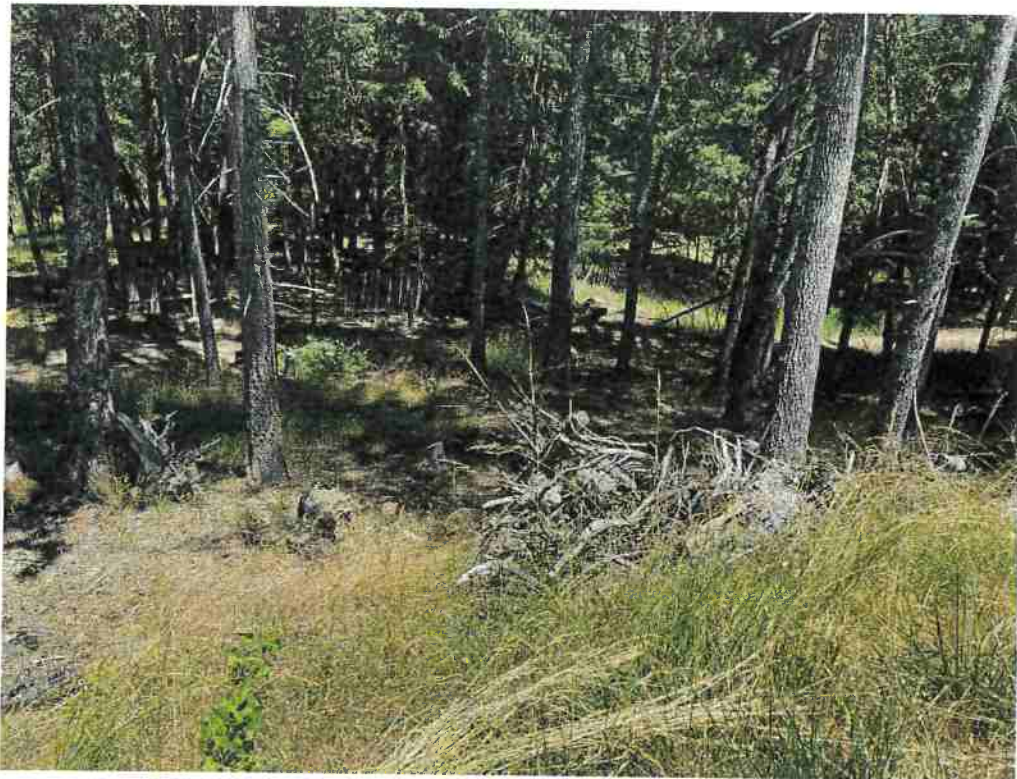


Photo 8. Hazard reduction along east side of Conversion Site 2.

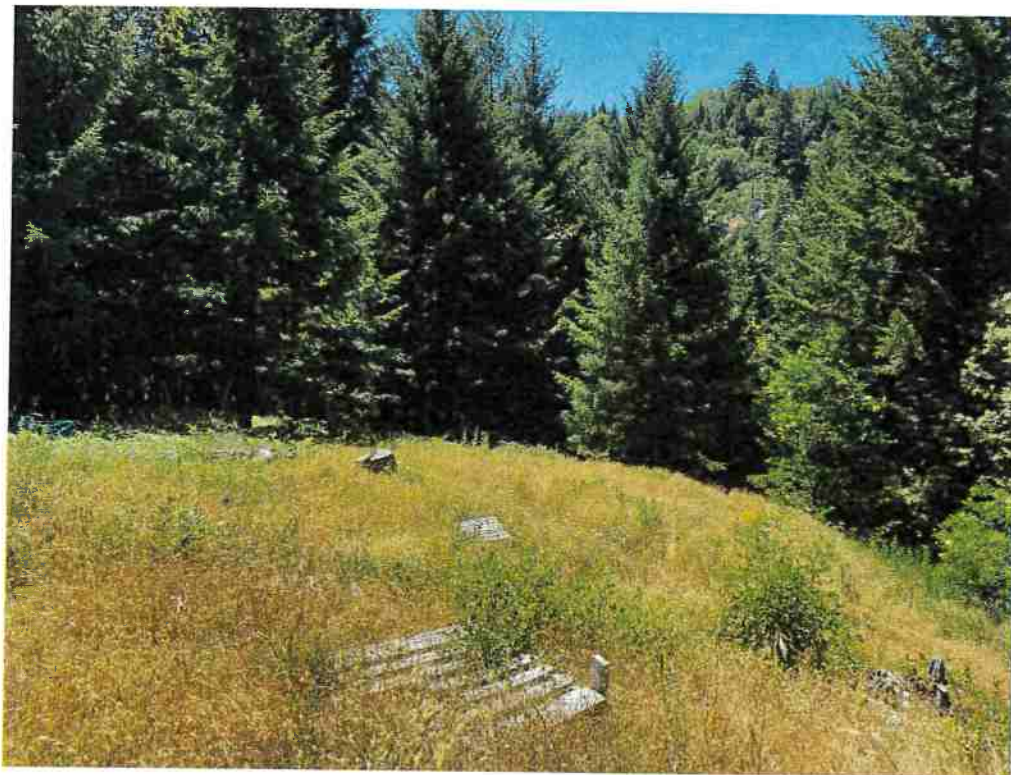


Photo 9. Conversion Site 1.

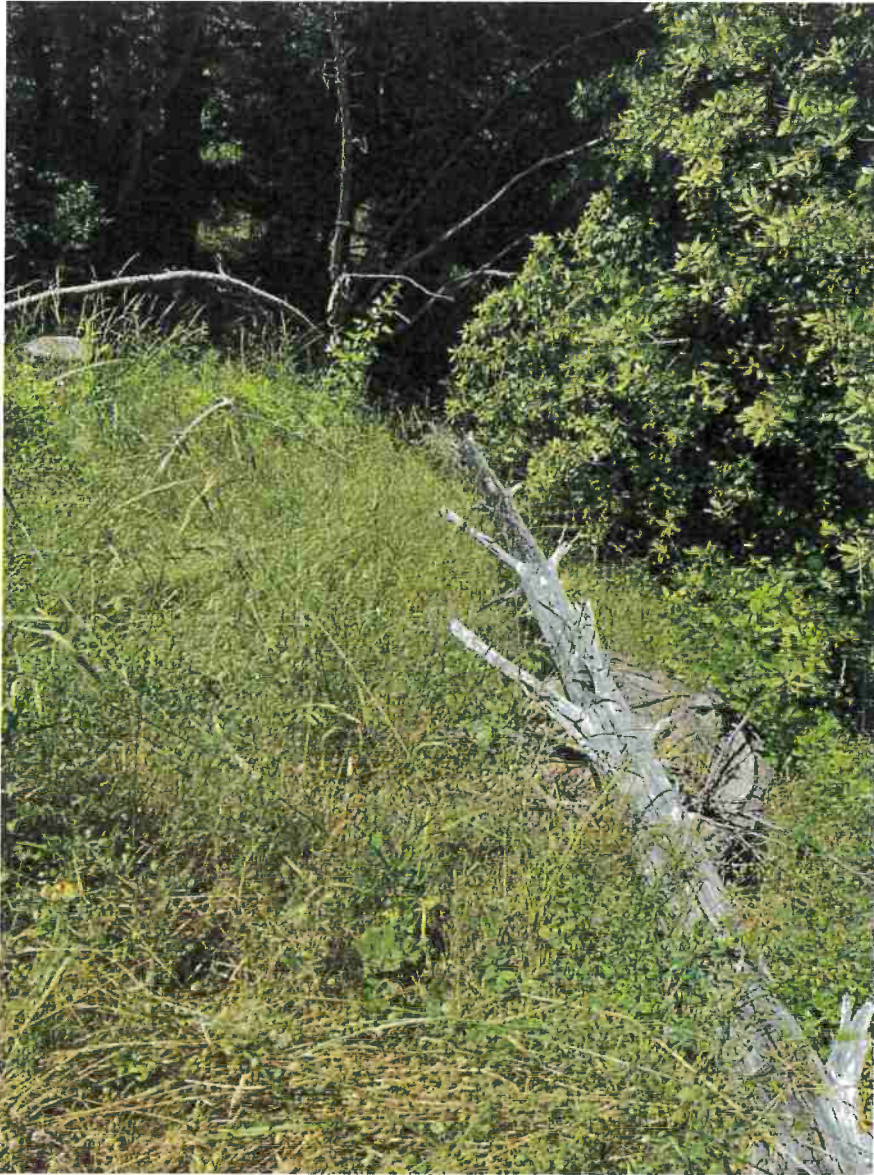
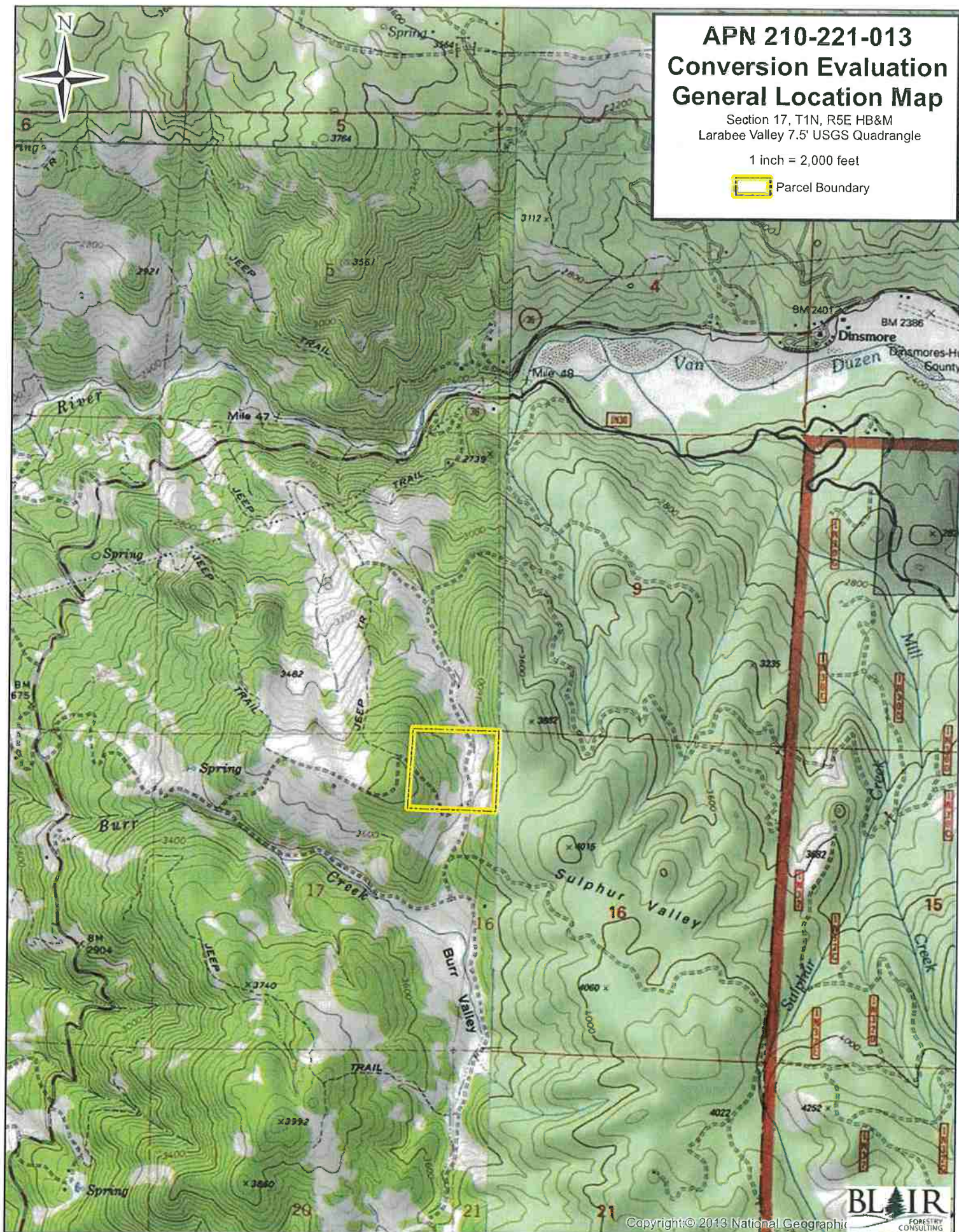
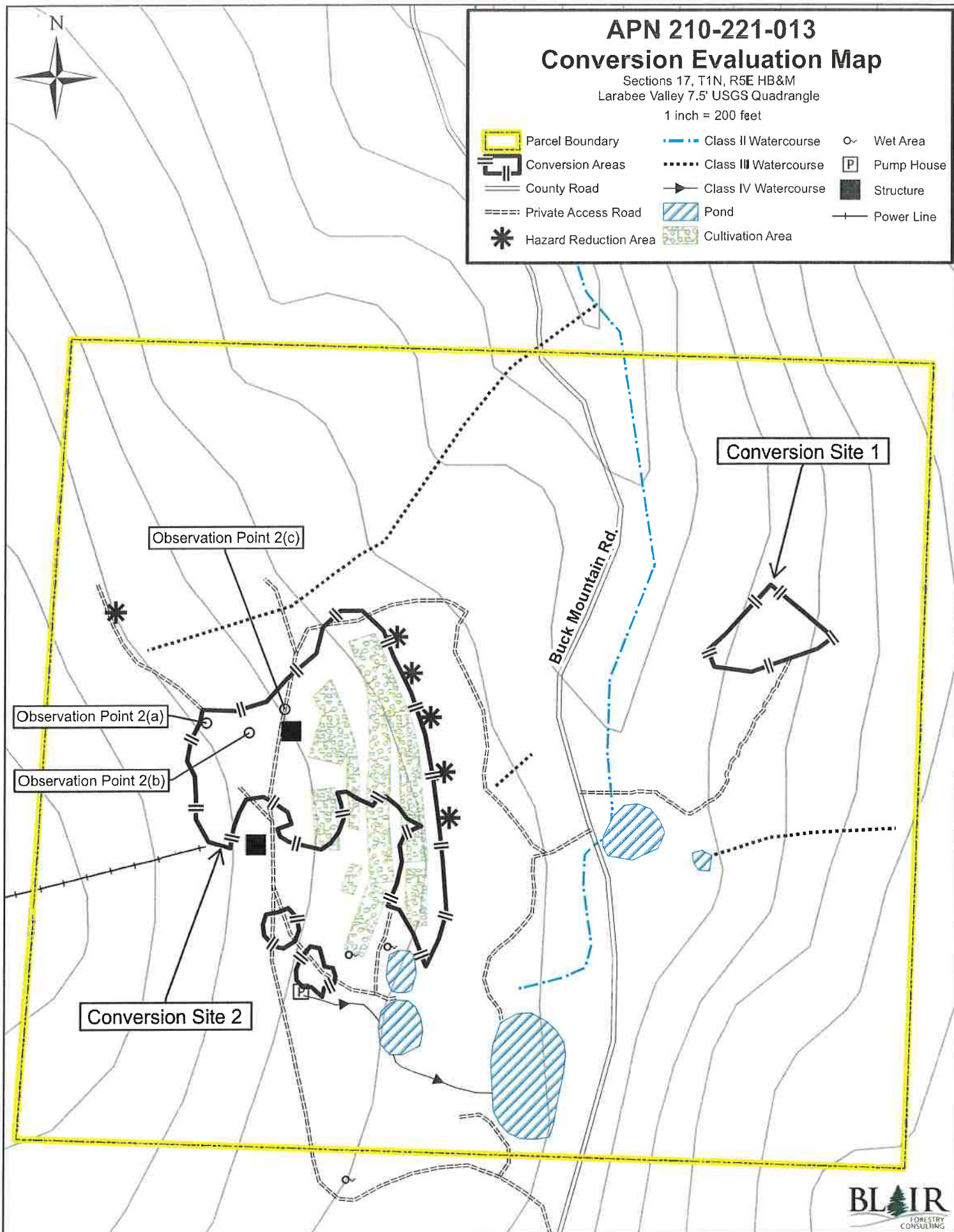


Photo 10. Conversion Site 1.





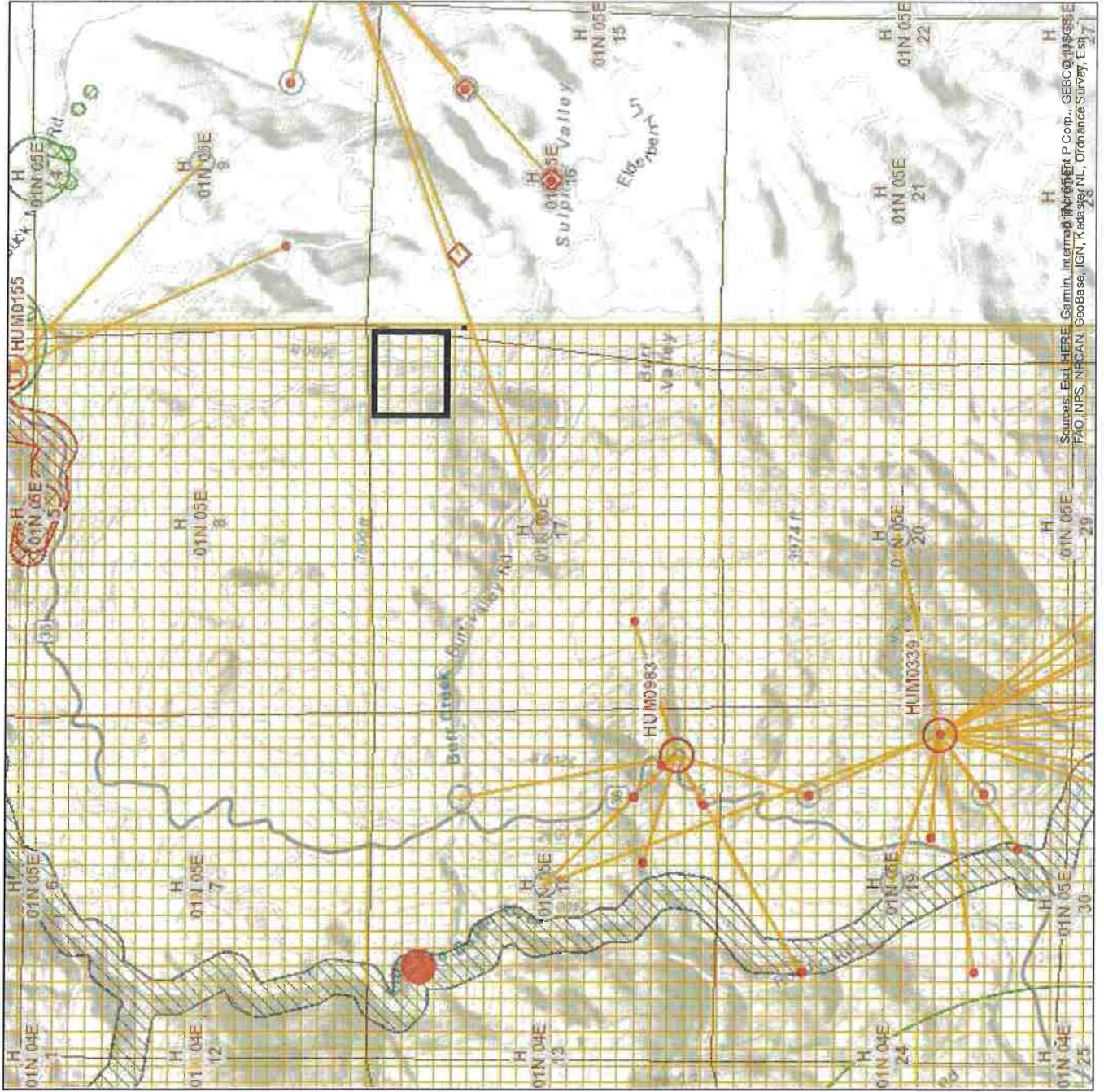
APN 210-221-013 CNDDDB

Spotted Owl Observations [ds704]

- Nest
- Young
- Pair
- Other Positive Observation
- Negative Observation
- Activity Center
- Abandoned Activity Center
- Not Valid Activity Center
- Spotted Owl Observations Spider Diagram [ds705]

California Natural Diversity Database (CNDDDB) Commercial [ds85]

- Plant (80m)
- Plant (specific)
- Plant (non-specific)
- Plant (circular)
- Animal (80m)
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Terrestrial Comm. (80m)
- Terrestrial Comm. (specific) 1:36,112
- Terrestrial Comm. (non-specific)
- Terrestrial Comm. (circular)
- Aquatic Comm. (80m)



October 22nd, 2020Morgan Oliver
3090 Patricks Point Drive
Trinidad, CA 95570Re: Soils Report
2910 Burr Valley Road
Dinsmore, CA
APN: 210-221-13

Dear Mr. Oliver,

JN: OVR2001

Per your request, on August 12th, 2020, I visited the above referenced site in order to perform a site soils investigation for a proposed approximately 30' x 100' agricultural structure to be constructed north of the existing residence on the parcel. I have not performed a structural inspection/review of any existing structures on this site. Although this parcel is approximately 40 acres in size, the building site where I performed my site specific soils investigation was approximately 1 acre in size total.

The scope of this report is limited to recommendations for the construction of proposed structure only. I have not investigated the construction of any existing structures on this site. I have not investigated the stability or construction of any earth work grading that has been performed on this site, or any road ways/driveways leading to this site or on this site. I have not performed an in-depth geologic stability study or overall geologic stability study of the property or the immediate surrounding area. At the time of my site visit, a visual review of the building sites was conducted in order to identify any obvious signs of geologic instability.

The building site that I investigated consists of a leveled bench area approximately 200' x 70' in size, located just north of the existing main residence location. In this area I observed the excavation of test holes TH-1 and TH-2 with an excavator. A cut bank (approximately 50 feet slope distance, 50% slope) has been excavated at the west side of the benched area; ground surface above this slopes down toward the east at approximately a 25% slope. A slight fill bank has been created at the east side of the bench; ground surface east of that slopes down toward the east at slopes averaging 35% - 45%, down to additionally graded areas (beyond the scope of this investigation).

There are various access driveways created on this site. Access to this building site is off of a private driveway (Tree Farm/Buckhorn Summit Road, which is off of Burr Valley Road) between Burr Valley and Hwy 36. Elevation at this building site is approximately 3500 ft. above mean sea level.

During my site investigation, I observed the excavation of three test holes dug with an excavator in the vicinity of the building site area.

Test hole #1 (TH1) consisted of a silty pea gravel fill soil, gray/red loose to 17" below grade. From 17" to 29" was a silty clay/clayey silt, black, moist, and dense. From 29" to 76" was fine sandy clayey silt, greenish black, moist, medium density. From 76" to 88" was a silty clay/clayey silt, yellowish brown,

mottled gray, moist, wet, and dense. The bottom of the test hole was at 88" below grade; no ground water was observed.

TH-2 consisted of a silty clay, black/green, dry/moist, very dense. The soil is serpentine like, and appears to be fill soil, to 28" below grade. From 28" to 40" was clayey silt/silty clay, greenish yellow, moist, very dense. From 40" to 46" was a silty clay, black, moist, soft/med. From 46" to 80" was a silty clay/clayey silt, brownish green, moist, dense, with few serpentine rocks. The soil has a 'soapy' feel. The bottom of the test hole was at 80" below grade; no groundwater was encountered.

TH-3 consisted of a fine sandy silty clay/clayey silt, black, dry, dense to 28" below grade. From 28" to 50" was a silty clay/clayey silt, black, moist, dense. There were few rocks to 1 ½" diameter, with few pockets of red/yellow clay. The soil has a "soapy" feel. The bottom of the test hole was at 50" below grade; no groundwater was encountered.

The following information pertains to the seismic design loading for structural design:

1. Seismic importance factor $I=1.0$, occupancy category = II
2. Mapped spectral response acceleration $S_s= 2.055$, $S_1= 0.922$
3. Site Class= D
4. $SD_s= 1.644$
5. Seismic design category = D
6. Site Latitude: 40.4712° N, Site Longitude: -123.6305° W

A peak ground acceleration of $S_s/2.5$ shall be used for seismic design.

Although we have not performed an in depth geologic study of this parcel or the surrounding area, the geologic nature of the property appears to be stable. There is no indication in the immediate surrounding area of any geologic instability, earthquake faults, or ground water that would be detrimental to the building site. According to the Humboldt County General Plan geologic maps, this parcel is classified as Zone 3, high instability.

This site is located in the vicinity of several earthquake fault zones as defined by the Alquist-Priolo Earthquake Fault Zoning Act. Faults within these zones are considered to have been active during quaternary time. It should be noted that the attached maps may not show all potentially active faults, either within the special studies zones or outside their boundaries. However, the identification of these potentially active faults and the location of such fault traces are based upon the best available data to date.

The north coast area of California where this site is located is seismically very active and possibly subject to earthquakes of large magnitude which can produce significant ground shaking. This high to very high level of seismic hazards is typical for Northern California; residence and business owners routinely assume this risk. In general there are 5 sources of large magnitude earthquakes which could affect the project area. These sources include the Mendocino Fault Zone located some 20 miles northeast of Shelter Cove, the San Andreas Fault which leads out to the sea at Point Delgada, the subducted Gorda Oceanic Crustal Plate North of Shelter Cove, the complex northwesterly oriented systems surrounding the Humboldt Bay area (including the Little Salmon, Mad River and Gorda Fault Zones), and the Cascadia Subduction Zone, located off shore approximately 46 miles west of the site.

The Coastal Range Thrust Fault is located approximately 14 miles northeast of this site. The San Andreas Fault zone is approximately 40 miles southwest of the site. The Little Salmon Fault zone is

located approximately 17 miles northwest of this site. The Lake Mountain Fault Zone is located approximately 17 miles southeast of the site. The Garberville Fault Zone is located approximately 28 miles southwest of this site. There is an un-named thrust-fault zone located approximately 5 miles west of this site. These fault systems are considered to have been active during assumed Historic, Holocene, and Pleistocene times, and are expected to have a relatively high potential for surface rupture.

According to the state of California Department of Conservation Division of Mines and Geology Special Publication 115 (1995) planning scenario, this parcel is not located in an area of known landslides or liquefaction potential.

CONCLUSIONS AND RECOMMENDATIONS

In my opinion, soils at this site are capable of providing adequate support for the proposed 30' x 100' shop building. However, you are still responsible for ensuring that this development conforms to all County, State, and local requirements.

The following construction considerations are presented to aid in project planning. They may not be comprehensive; other issues may arise which will require coordination of the owner's goals, the consultant's design assumptions, and the contractor's construction method and capabilities. The proposed structure can be safely constructed at this site; provided the construction conforms to the 2019 California Building Code (CBC) and the following recommendations are complied with:

1. All foundations and footings should extend downwards through upper disturbed soils/fill/soft. organic top soils, if any, to bear upon/into lower native undisturbed, competent native silty clayey sub-soils. The horizontal distance from the bottom of any footing to daylight of adjacent native soil/undisturbed banks (below any fill soil) or cut banks shall not be less than 10 feet. Spread footings and any foundation walls should be reinforced, and constructed per chapter 18 of the CBC. The bottom of all foundation excavations shall be level. All footings should extend a minimum of 12" below grade. All foundation excavations shall be inspected and approved by the building official or engineer prior to placement of rebar or concrete, to assure that foundations are set in competent sub-soils.

Any concrete slabs that are proposed should be a minimum of 4 inches thick (nominal) with #4 reinforcing bar placed 18 inches on center each way in the center of the slab. Conventional floor section concrete slabs should bear upon a minimum of 2 inches of sand, over a 6 mil vapor barrier over a minimum 4 inch thick free draining capillary rock layer which bears on competent subgrade fill soil (see recommendation #2) and serves as a capillary break between the slab and the subgrade. Capillary rock gradation shall require 100% passage of a 1" sieve and no passage of a #4 sieve. If gravels exceed 1 foot, they should be placed and compacted as engineered fill described in recommendation #2 below. The 6 mil vapor barrier should be lapped and sealed at the ends of the sheet per manufacturer specifications. No unsealed penetrations shall extend through the vapor barrier.

According to table 1806.2 of the CBC, the silty clayey sub-soils at this site are assigned an allowable soils bearing pressure of 1500 psf. (pounds per square foot). These values may be increased by 1/3 for a combination of loading which included wind and seismic loads.

2. If any fill banks or cut banks are to be installed, they should be in conformance with appendix J and chapter 18 of the CBC. Cut banks should not exceed a 2:1 slope. Based on visual observations of existing cut banks in the vicinity of this project, a 2:1 cut slope is expected to be practical in regards

to slope stability. There may be a slight chance of localized slope failure for slopes that are cut this steep; if this occurs, additional engineering investigation/design may be required. Alternatively, slopes may be cut less steep than 2:1 so as to minimize the risk of localized slope failure.

All areas to receive fill, including areas beneath proposed concrete slabs, should be cleared of all organic top soil, trash material and soils which are not native soils as described above. The areas to receive fill should be "benched". This area should not slope more than 2%. Exposed soils should be scarified a minimum of 4 inches both ways prior to placement of first fill lift.. All areas to receive fill should be observed by a registered civil engineer prior to placement of fill. Imported well graded river-run gravel should be used as a fill material. Engineered fill should be placed in thin lifts ($\pm 6"$) and compacted to a minimum relative compaction rate ninety percent as per ASTM Test Method D 1557. Any fill which is to be placed under driveways or sidewalk areas should be compacted to 95% relative compaction. Compaction testing should occur a minimum of every three vertical feet. An equal bearing value is assigned to engineered fill as was given to native undisturbed soils as designed above. Finished fill banks should not exceed a 2:1 slope.

3. Cantilevered retaining walls are to be designed in accordance with chapter 18 of the CBC. A value of 0.25 times the dead load should be used to resist sliding forces. This value may be increased to 0.35 times the dead load if the bottom of the retaining wall is supported with concrete slab. Allowable bearing values should conform to the above recommendations. All retaining walls should be provided with adequate drainage including a continuous 4" diameter perforated drain pipe behind all retaining walls.

A minimum of two square feet of uncrushed drain rock encased in filter fabric should surround the perforated drain pipe. The drain should be directed away from the building into an approved drainage control facility by solid pipe once it is away from the retaining wall. Retaining walls which are horizontally braced at the top of the wall are to be designed to resist at-rest soil pressures as specified in table 1610.1 of the CBC.

4. There may be a potential for foundation excavations to encounter disturbed fill soils, root wads, or similar disturbances. Any disturbed or soft low density soils which are located in an area of proposed foundation placement should be removed, and excavations extended downwards to bear upon firm, undisturbed native soils. All areas to receive fill should be observed by a civil engineer prior to placement of fill.
5. Rain gutters are to extend along roof lines and leads to down spouts; these down spouts should lead to pipes or well established drainage ways, which carry drainage away from the building site and away from any areas of fill or foundations. All proposed retaining wall structures should be well drained to prevent the buildup of water pressure and to lower the up-hill water table level. Roof and/or surface drains should not empty into retaining wall drains. All drainage must be controlled to flow away from the building site in a non-erosive manner, toward established drainage ways.

In accordance with CBC section 1804.3, I recommend that a minimum positive drainage gradient of 5% be established away from all foundations and footings for a minimum horizontal distance of 10 feet, with the remainder of the building pad grading establishing a minimum horizontal positive drainage of 1% from foundations and footings approved drainage control/facilities.

6. All existing and proposed cut slopes and fill slopes should be re-vegetated to prevent erosion from rainfall. Protection of slopes should be installed immediately after slopes are disturbed.
7. Surface water uphill of the building site should be controlled to flow around and away from the building site toward established drainage ways. Under no circumstances should uncontrolled


surface water drainage be allowed to flow across the building site or over any cut or fill banks. Drainage improvements will need to be continually maintained and regularly inspected to assure their effectiveness in directing the surface water away from the building site.

Provided footing design and dimensions are based upon given soil bearing values and recommendations given above, and if live loads are distributed uniformly across floor areas, differential settlement is not expected to exceed ½ inch for any 25 foot span for an assumed economic life of 50 years. Total uniform settlement is not expected to exceed 1 inch over the same economic life span under the same loading conditions. Initial construction settlement is not expected to exceed ¼ inch. Based upon site soils conditions observed during our site visit, as well as review of the State of California Department of Conservation Division of Mines and Geology Planning Scenario Special Publication 115 (1995) the potential for liquefaction at this site is considered to be negligible. Based upon the State of California Special Studies Zone (Alquist-Priolo Special Studies Zones Act) official map for this area, the potential for ground surface displacement due to faulting or lateral spreading at this building site is considered to be negligible. It is assumed that the test holes that have been observed at the site are representative of subsurface conditions throughout the site. If it is found that subsoil conditions differ from those described, the conclusions and recommendations of this investigation shall be considered invalid until the project is again reviewed by this office. Further discussion is possible at that time. Based on my visual review of the site and the surrounding terrain, in my opinion no further geologic evaluation or geologic consultation is warranted.

Determination of any potential environmental hazards due to the possible presence of hazardous and/or toxic waste is not part of this report.

If you have any questions or comments regarding this soils report, feel free to contact me at your earliest convenience.

Sincerely,



10-23-20

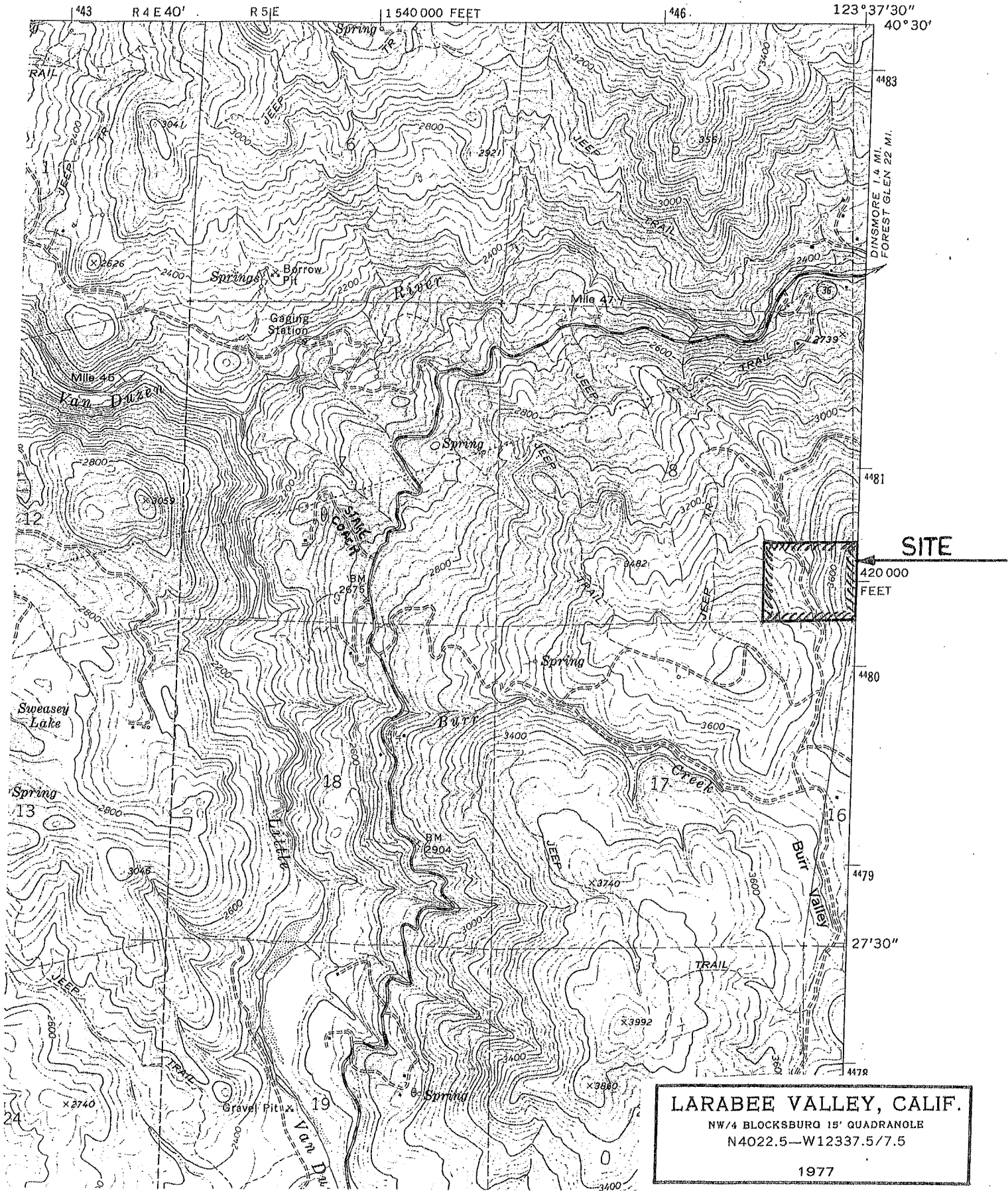


Mr. Terry O'Reilly, P.E.
Senior Civil Engineer
RCE # 49506

TOR/cem

LARABEE VALLEY QUADRANGLE
 CALIFORNIA—HUMBOLDT CO.
 7.5 MINUTE SERIES (TOPOGRAPHIC)
 NW/4 BLOCKSBURG 15' QUADRANGLE

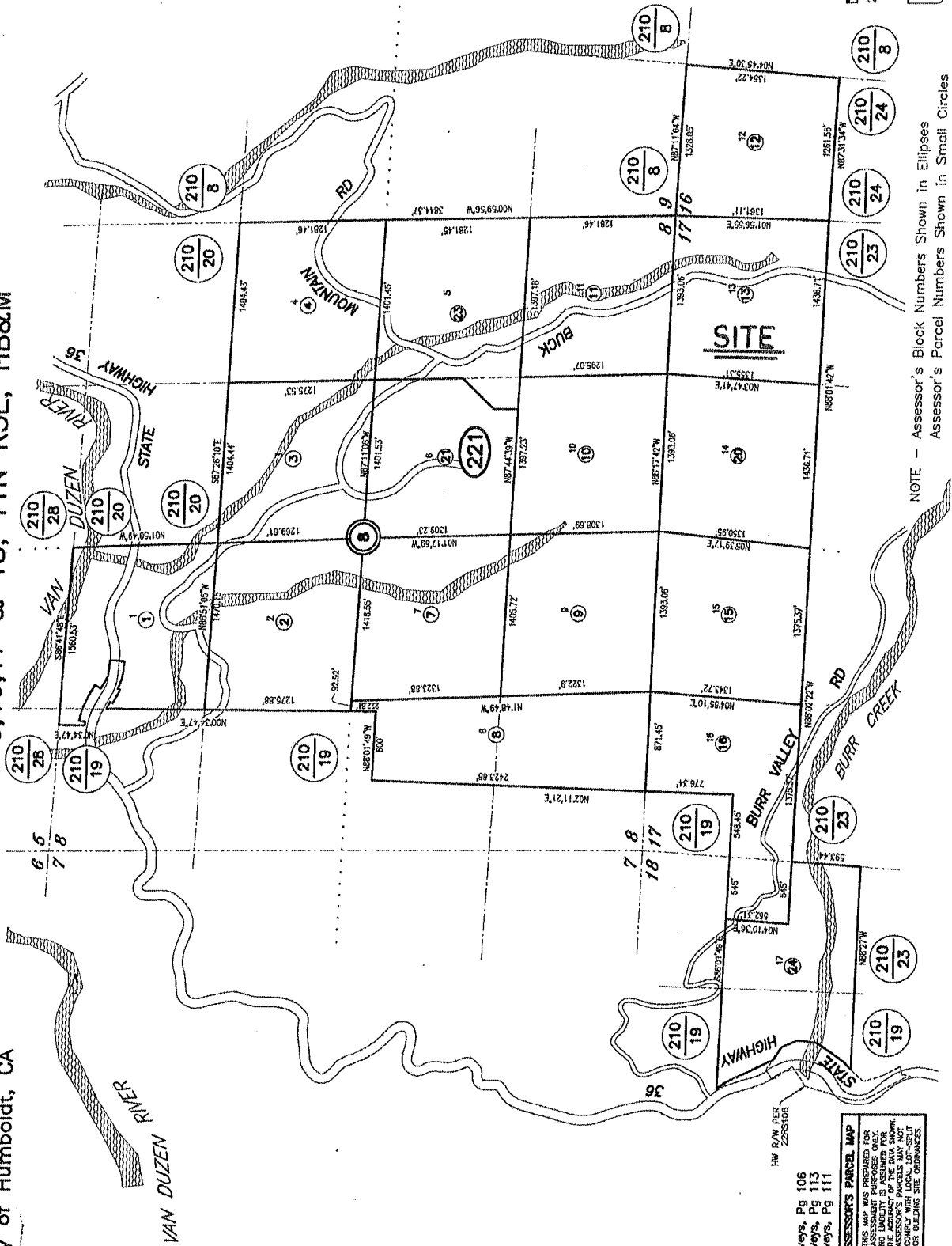
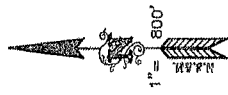
1265' ESE
 (BLAKE MOUNTAIN)



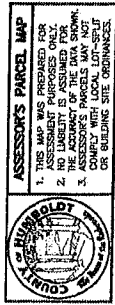
Assessor's Map Bk. 210, Pg. 22
County of Humboldt, CA

PTN SECS 8,16,17 & 18, T1N R5E, HB&M

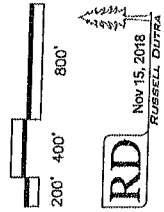
210-22



HW R/W PER 2265106
RS, Bk 22 of Surveys, Pg 106
RS, Bk 23 of Surveys, Pg 113
RS, Bk 54 of Surveys, Pg 111



NOTE - Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Small Circles



RD

Nov 15, 2018
RUSSELL DUTTA

WHITCHURCH ENGINEERING

Building Design • Civil & Structural Engineering

610 9th STREET
FORTUNA, CA 95540
(707) 725-6926

716 HARRIS STREET
EUREKA, CA 95501
(707) 444-1420

JOB OLIVER

ELEMENT _____

SHEET NO. 1

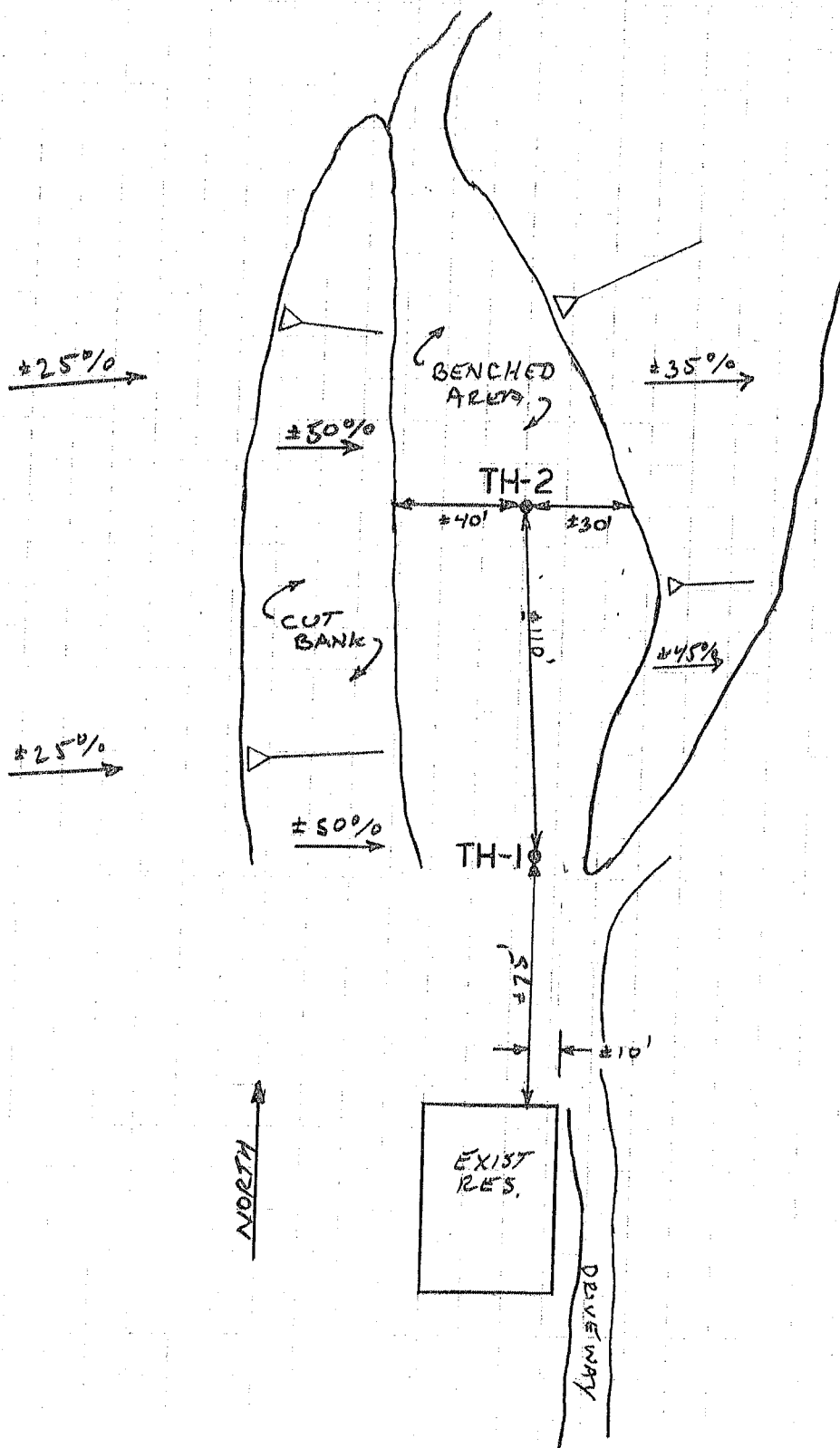
OF 1

CALCULATED BY SOR

DATE 8-12-20

CHECKED BY JTL

JN 0VR2001



Test Hole
Plot Plan
1" = ±/-50'

GENERAL PLAN GEOLOGIC MAP

MAP 3 OF 5

SLOPE STABILITY

- 3 HIGH INSTABILITY
- 2 MODERATE INSTABILITY
- 1 LOW INSTABILITY

STABILITY BOUNDARIES

- KNOWN
- - - - DASHED WHERE INFERRED
- DOTTED WHERE CONCEALED
- ?-?-? QUESTIONED WHERE UNCERTAIN

FAULT

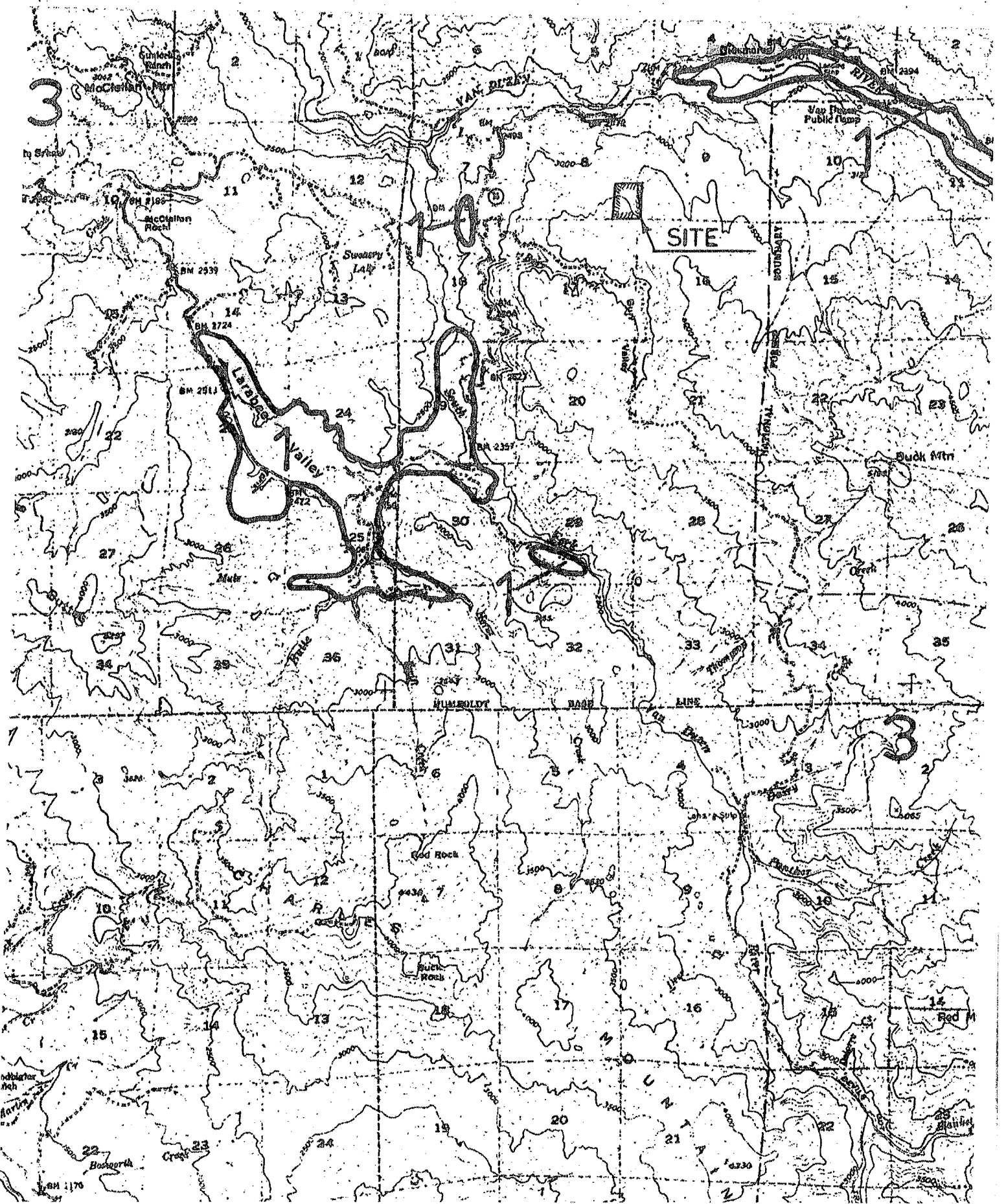
- KNOWN
- - - - DASHED WHERE INFERRED
- DOTTED WHERE CONCEALED
- ?-?-? QUESTIONED WHERE UNCERTAIN
- THRUST FAULT
- ==> SHEAR ZONE
- *ALQUIST-PRIOLO SPECIAL STUDY
ZONE BOUNDARY

*FOR SCHEMATIC PL
SEE OFFICIAL MAP

PLANNING COMM
Approved on 11-1
BOARD of SUPE
Adopted on 12-10

Humboldt County
Planning Department

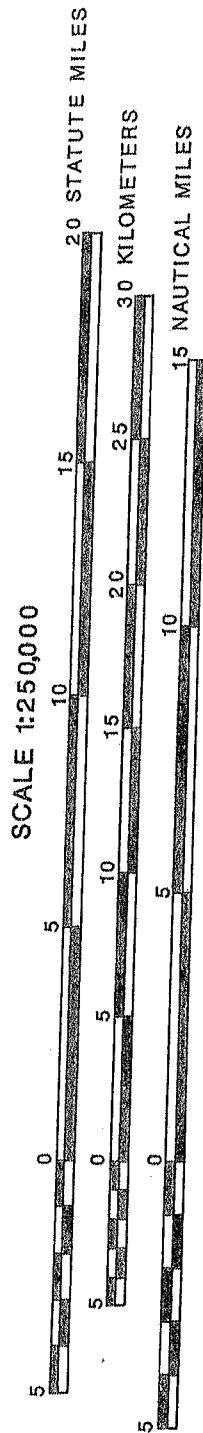
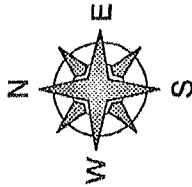
0 inch 1
0 mile 1





PLANNING SCENARIO

IN HUMBOLDT AND DEL NORTE COUNTIES, CALIFORNIA
FOR A GREAT EARTHQUAKE ON THE
THE CASCADIA SUBDUCTION ZONE



SEISMIC INTENSITY DISTRIBUTION

EXPLANATION

SHAKING INTENSITY (Modified Mercalli Scale - Abridged)

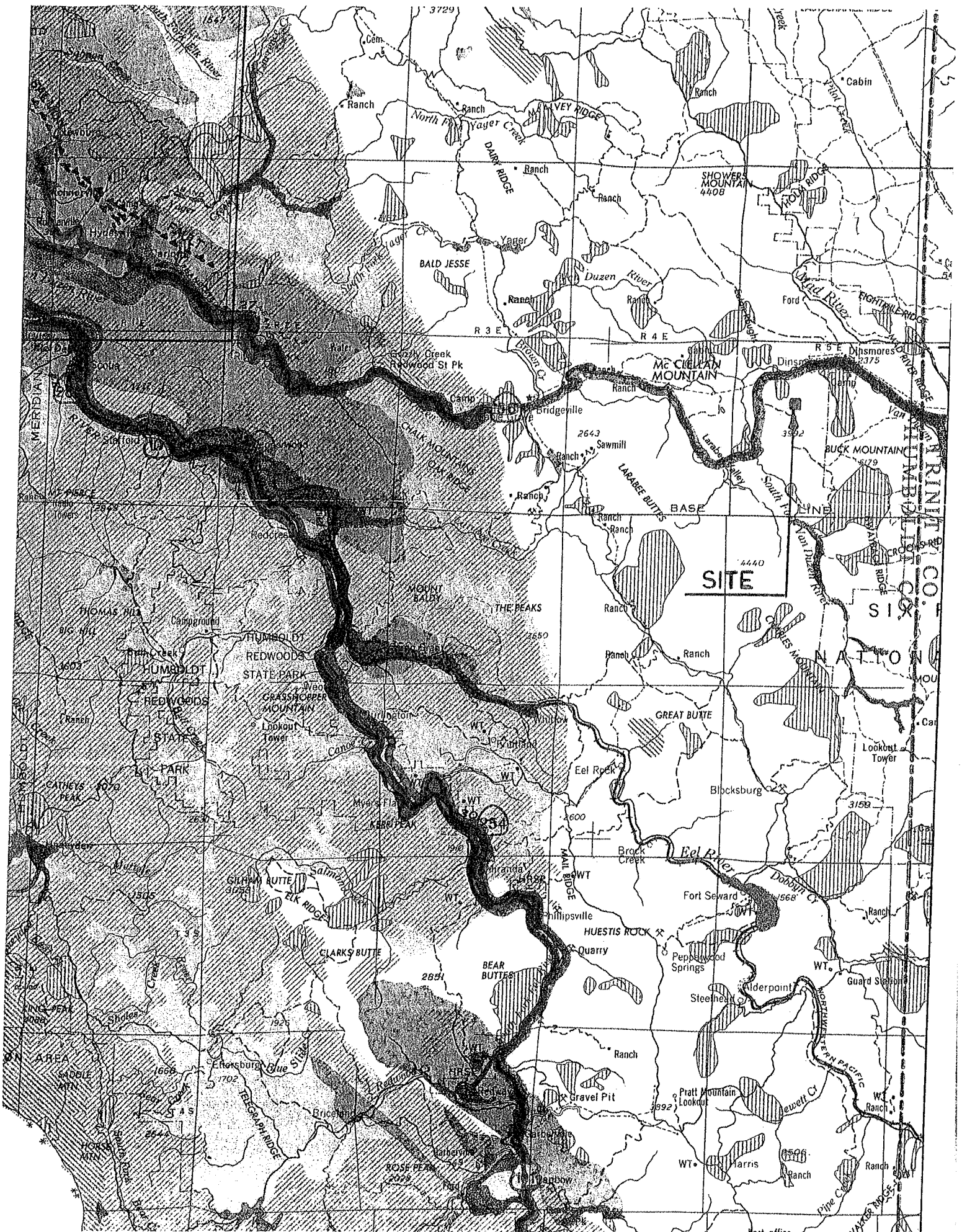
- | | |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VI | No significant damage to structures. |
| VII | Damage negligible in buildings of good design and construction, slight to moderate in well-built ordinary buildings, considerable in poorly built or badly designed buildings. Fall of plaster in considerable to large amount, also some stucco. Broke numerous windows, furniture to some extent. Broke weak chimneys at roof-line (sometimes damaging roofs). Fall of cornices from towers and buildings. |
| VIII- | Damage slight in structures (brick) built especially to withstand earthquakes. Considerable in ordinary substantial buildings, partial collapse, racked, tumbled down wooden houses in some cases, threw off panel walls in frame structures. Fall of walls, twisting, fall of chimneys, columns, monuments, also factory stacks, towers. |
| VIII+ | + indicates values near the top of this range, - , values near the bottom. |
| IX | Damage considerable in some structures built especially to withstand earthquakes; threw out of plumb some wood-frame houses built especially to withstand earthquakes; great in substantial (masonry) buildings, some collapse in large part; or wholly shifted |

LANDSLIDES

- Known landslides of various types
- Areas susceptible to rock falls
- Areas susceptible to coherent landslides

LIQUEFACTION POTENTIAL

- Moderate to low
- High

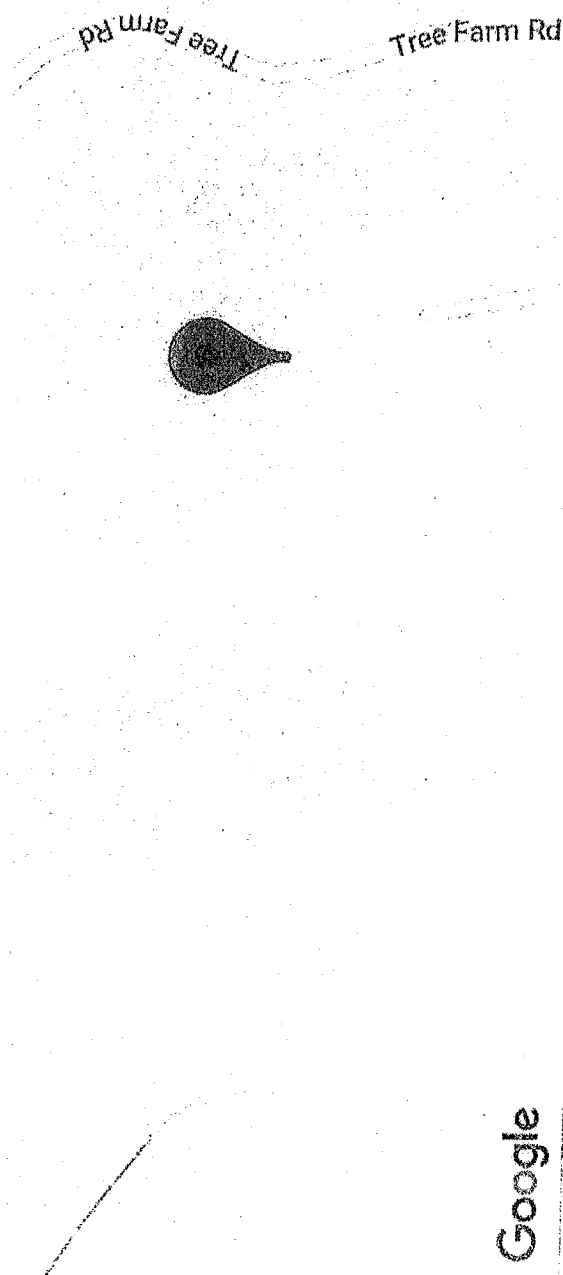




OSHPD

Oliver - Burr Valley

Latitude, Longitude: 40.4712, -123.6305



Google

Map data ©2020

10/13/2020, 3:29:23 PM
ASCE7-16

II

D - Default (See Section 11.4.3)

Design Code Reference Document

Risk Category

Site Class

Type	Value	Description
------	-------	-------------

S_S 2.055 MCE_R ground motion. (for 0.2 second period)

S₁ 0.922 MCE_R ground motion. (for 1.0s period)

S_{MS} 2.466 Site-modified spectral acceleration value

S_{M1} null -See Section 11.4.8

S_{DS} 1.644 Site-modified spectral acceleration value

S_{D1} null -See Section 11.4.8 Numeric seismic design value at 0.2 second SA

Numeric seismic design value at 1.0 second SA

Type	Value	Description
------	-------	-------------

SDC null -See Section 11.4.8 Seismic design category

<https://seismicmaps.org>

Whitchurch Engineering, Inc. 610 9th Street Fortuna, CA 95540 (707) 725-6926										SHEET <u>1</u> OF <u>3</u> EXPLORATION TEST LOG APN: <u>210-221-13</u>	
PROJECT NAME: <u>OLIVER</u>								JOB NO: <u>OVR2001</u>			
HOLE #: <u>TH-1</u>			HOLE TYPE: <u>BACK HOE</u>			LOGGED BY: <u>TOR</u>		SAMPLE DATE: <u>8-12-20</u>			
LAB DATA								SOIL DESCRIPTION			
MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (TONS/SF)	LIQUID LIMIT	PLASTICITY INDEX	RELATIVE COMPACTION	SAMPLE	SOIL TYPE	DEPTH (FEET)	SOIL, COLOR, MOISTURE, CONSISTENCY, REMARKS, WATER LEVEL(S) AND DATE(S) (UNIFIED SOILS CLASSIFICATION SYSTEM)		
								-- --	SILTY PEA GRAVEL FILL SOIL, GRAY/RED LOOSE		
								--1--	17" SILTY CLAY/CLAYED SILT, BLACK, MOIST, DENSE		
								--2--	29" FINE SANDY CLAYED SILT, GREENISH BLACK, MOIST, MEDIUM DENSITY		
								--3--			
								--4--			
								--5--			
								--6--	76" SILTY CLAY/CLAYED SILT, YELLOWISH BROWN, MOTTLED GRAY, MOIST/WET 88" DENSE		
								--7--			
								--8--	BOTTOM OF HOLE @ 88" NO GROUND WATER		
								--9--			
								--10--			
								--11--			

Whitchurch Engineering, Inc. 610 9th Street Fortuna, CA 95540 (707) 725-6926								SHEET <u>2</u> OF <u>3</u> EXPLORATION TEST LOG APN: 210-221-13	
PROJECT NAME: <u>OLIVER</u>						JOB NO: <u>OVR2001</u>			
HOLE #: <u>TH-2</u>		HOLE TYPE: <u>BACK HOE</u>		LOGGED BY: <u>TOR</u>		SAMPLE DATE: <u>8-12-20</u>			
LAB DATA						SOIL DESCRIPTION			
MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (TONS/SF)	LIQUID LIMIT	PLASTICITY INDEX	RELATIVE COMPACTION	SAMPLE	SOIL TYPE	DEPTH (FEET)	SOIL, COLOR, MOISTURE, CONSISTENCY, REMARKS, WATER LEVEL(S) AND DATE(S) (UNIFIED SOILS CLASSIFICATION SYSTEM)
		4+						-- --	SILTY CLAY, BLACK / GREEN, DRY / MOIST, VERY DENSE
								--1--	SOIL IS SERPANTINE LIKE, APPEARS TO BE FILL SOIL
								--2--	28"
								-- --	CLAYEY SILT / SILTY CLAY, GREENISH YELLOW, MOIST, VERY DENSE
								--3--	40"
								-- --	46" SILTY CLAY, BLACK, MOIST, SOFT / MED.
								--4--	SILTY CLAY / CLAYEY SILT, BROWNISH GREEN, MOIST, DENSE, FEW SERPAN- TINE ROCKS
								--5--	SOIL HAS A "SOapy" FEEL
								--6--	
								--7--	BOTTOM OF HOLE @ 80" NO GROUNDWATER
								--8--	
								--9--	
								--10--	
								--11--	

Whitchurch Engineering, Inc. 610 9th Street Fortuna, CA 95540 (707) 725-6926										SHEET <u>3</u> OF <u>3</u> EXPLORATION TEST LOG APN: <u>210-221-13</u>	
PROJECT NAME: <u>OLIVER</u>								JOB NO: <u>OVR2001</u>			
HOLE #: <u>TH-3</u>		HOLE TYPE: <u>BACK HOE</u>		LOGGED BY: <u>TOR</u>		SAMPLE DATE: <u>8-12-20</u>					
LAB DATA								SOIL DESCRIPTION			
MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (TONS/SF)	LIQUID LIMIT	PLASTICITY INDEX	RELATIVE COMPACTION	SAMPLE	SOIL TYPE	DEPTH (FEET)	SOIL, COLOR, MOISTURE, CONSISTENCY, REMARKS, WATER LEVEL(S) AND DATE(S) (UNIFIED SOILS CLASSIFICATION SYSTEM)		
								-- --	FINE SANDY SILTY CLAY / CLAYED SILT, BLACK, DRY, DENSE		
								--1--			
								--2--	29" SILTY CLAY / CLAYED SILT, BLACK MOIST, DENSE. FEW ROCK TO 1 1/2" Ø. FEW POCKETS OF RED/YELLOW CLAY SOIL HAS A "SOAPPY" FEEL		
								--3--			
								--4--	50" BOTTOM OF HOLE @ 50" NO GROUNDWATER		
								--5--			
								--6--			
								--7--			
								--8--			
								--9--			
								--10--			
								--11--			

TECHNICAL MEMORANDUM



Engineering Geologic Evaluation
Existing Pond Embankment
2910 Burr Valley Road, Bridgeville, California
Assessor's Parcel Number 210-221-013

Date: December 22, 2020
Project No.: 9872.00

Prepared For: Morgan Oliver

Prepared By: Gary L. Manhart CEG 2651 Exp. 10/31/22
Senior Engineering Geologist



Figures: Figure 1: Location Map
Figure 2: Site Map
Figure 3: Geologic Map

Appendices: Appendix 1: Boring Logs
Appendix 2: Laboratory Test Results
Appendix 3: Site Photos

1.0 INTRODUCTION

This Technical Memorandum (Memo) presents the results of an engineering geologic evaluation performed by LACO Associates (LACO) to assess stability of an existing pond berm located at 2910 Burr Valley Road, Bridgeville, California (Site). A Site vicinity map and Site map showing the pond location are presented as Figures 1 and 2, respectively. In accordance with the Engineering Services Agreement dated December 2, 2020, between Mr. Morgan Oliver (Client) and LACO, LACO's scope of services was limited to the following:

- Review existing soils and/or geologic reports, maps, and other available relevant data (e.g., previous consultant project data) regarding the site and vicinity.
- Geotechnical exploration consisting of drilling up to three hand auger borings into the earthen embankment, anticipated up to 10 feet in depth. Measure stabilized water levels in borings at time of drilling.

- Collect soil/weathered rock samples from the borings for materials laboratory analysis, to include moisture/density from Shelby tubes, Atterberg limits, and particle size.
- Map and photograph the site to include: the unpermitted pond, embankment, spillway, adjacent drainage features, and potential new discharge locations.
- If the results of our exploration show acceptable conditions and material properties, develop conclusions related to suitability of small dam design and construction.
- Summarize the results of our geotechnical exploration in a brief report. Provide copy of report to Client.

2.0 BACKGROUND

The Site is an approximately 40-acre parcel developed with several structures, dwellings, two small ponds, and one larger pond. The evaluation is for compliance with Cannabis Permitting. The County of Humboldt Building Department required that the Client have a California licensed engineering geologist evaluate the stability of the berm forming the large pond, which was built in 2018. The pond is approximately 185 feet long by 93 feet wide as measured from Google Earth and has a depth of 19 feet with a capacity of approximately 3.2-acre-feet. The Client has identified the pond as being a rain catchment basin with a synthetic liner that is used for agricultural purposes. Water from the pond outlet flows approximately 200 feet north to an ephemeral unnamed creek.

3.0 EXPLORATION

Our limited evaluation consisted of data review, subsurface exploration, and laboratory testing. The field exploration was performed by a LACO geologist on December 9, 2020. Our geologist logged three borings and obtained samples of the materials encountered for visual inspection by ASTM D2488 and laboratory testing. The three borings were advanced to a maximum depth of 11 feet below the top of the berm. Soil samples were collected at select depths utilizing a slide hammer fitted with a soil-core sampler containing a 3-inch diameter steel Shelby tube. Boring logs describing the soils encountered are presented in Appendix 1. A select soil sample was transported to our materials testing laboratory and subjected to testing of dry density by ASTM D-2937 and Moisture Content by ASTM D-2216. The laboratory test results are enclosed in Appendix 2. The data review consisted of reviewing existing geologic maps and other available relevant data regarding the Site and vicinity. The subsurface exploration program was limited to three shallow test boring using a 3-inch diameter hand auger. Two borings were advanced at the top of the berm to native soils and one was advanced in the native soils north of the berm. Boring B-1 was started at the top of the berm but encountered refusal on a rock at approximately 2.5 feet. However, an additional boring was advanced approximately 3 feet downslope of the first boring to continue the B-1 profile to a depth of 11 feet below ground surface (bgs). Boring B2 was advanced from the top of the berm at about the midpoint along the eastern berm to a depth of 8 feet bgs. Boring N-3 was advanced in the relatively undisturbed native soils north of the berm to a depth of 2 feet bgs.

On the day of field exploration, LACO also performed a limited site reconnaissance of the immediate area surrounding the large pond. LACO measured slopes of the berm and immediate surrounding area using a clinometer and tape measure. Observations from the site reconnaissance are included in Figure 2 and photos are enclosed in Appendix 3.

LACO observed that the pond is partially build into the slope and is at native grade in the south and south west areas of the pond (Photos 1, 2 and 6, Appendix 3). The fill berm begins at grade in the south and extends to the north on the east side with the berm being approximately 6 feet at the mid distance to the maximum

height of 10 feet at the northeast portion of the pond. The berm swings around west and south to meet the hill slope another 130 feet along the top of berm.

4.0 SITE CONDITIONS

This section describes our understanding of the surface conditions, local geology, and subsurface conditions of the Project Area based on our geologic exploration and literature review.

4.1 Surface Conditions

The Site is located approximately 2 miles southwest of Dinsmore and approximately 1.5 miles west of Highway 36. The Site vicinity has a low population density and is sparsely developed with rural properties and gravel roads. The surrounding topography ranges from gentle- (5 percent slopes) to steeply-sloping (up to 40 percent) with easterly facing slopes that are partially vegetated with native grasses and native oaks and firs. Willows are prevalent along the drainages to the north of the Site. The area has not been evaluated by the state for landslides; however, no obvious slope instability was observed in the general vicinity of the Site. The southern portion of the Site comprises a ridge saddle that drains to the north and to the south. The southwest portion of the pond edge has a drainage swale (Photo 8, Appendix 3) that prevents overland flow from entering the pond. To the west and upslope of the large pond is a flat bench in the ridge approximately 150 feet wide and generally trending north-south with two small ponds approximately 45 feet wide and 65 feet long. The large pond is fed both by an onsite spring and by rainfall that falls into the two small ponds upslope of the large pond (Figure 2). Flow from the two small ponds is directed to the large pond via a manmade, synthetic-lined and rock covered channel. Photos 3 and 4 of the manmade channel and immediate area are enclosed in Appendix 3

The pond is located near the eastern edge of the property and west of Black Mountain Road. The berm is approximately 1 to 10 feet tall at its highest and approximately 10 feet wide at the top. The pond discharges excess water through a 4 foot wide by approximately 2.5 feet deep cobble-lined spillway located at the northwest portion of the pond (Photo 5, Appendix 3). The spillway was observed to extend approximately 20 feet at a 15-percent slope from the west side of the berm and extended to a natural drainage swale that flows to the northeast. The drainage from the spillway outlet was rocked on the bottom with a vegetated side. The spillway flow eventually joins an ephemeral channel flowing to the northeast. The pond is lined with a synthetic liner to prevent water from infiltrating into the ground. Berm slopes are approximately 2:1 horizontal to vertical both inside and outside of the pond. On the day of our exploration, the pond water level was approximately 10 feet below the top of berm. The earthen berm appeared intact with no discernable slumping or erosion. An approximately 8 to 10 feet wide strip of the grasses on the western outside of the berm was stripped as a fire break last summer (Photo 7, Appendix 3). Vegetation has started to regrow in the stripped areas. The remainder of the berm was vegetated with native grasses. No seeps were observed along the berm on the day of our exploration. Photos of the pond berm and immediate area are enclosed in Appendix 3.

In a discussion with the Client, the berm was constructed using an excavator, a bulldozer to move material, and a compactor. The client said that no materials testing was conducted during the construction of the berm. The berm entirely comprises excavated material from the resulting pond.

4.2 Geology

The geology of the Site is mapped as Tertiary- to Cretaceous-aged Franciscan mélangé. The Franciscan mélangé consists of pervasively sheared argillaceous matrix surrounding pebble-sized to individually mappable blocks of sandstone, greenstone, chert, semi-schist or phyllite, serpentine, serpentized ultramafic rocks, diabase, and blueschist (McLaughlin, et al., 2000) (Figure 3). This is consistent with site conditions as small random outcrops of sandstone was observed at the Site during the exploration on December 9, 2020.

4.3 Subsurface Conditions

Based on observations made during the advancement of boring B-1 and B-2, our exploration indicates the pond embankment is constructed of clayey silt with sand and gravels and is underlain by clayey sandy silt with gravel. No groundwater was encountered either during advancement of borings or approximately 1 hour after borings were installed. The depth to the bottom of fill material is estimated based on soils observation from borings. Boring B-3 was advanced in the relatively undisturbed native soils to a maximum depth of 2 feet native to evaluate in place moisture content and density to compare to the berm soils.

4.4 Embankment Stability

We compared the in-place moisture and dry density of soil collected from the berm with the relatively undisturbed native soil surface approximately 20 feet north of the toe of the berm. The native moisture content and dry density from B-3 at 6-inches to 16-inches were 22.5 percent and 94.9 pounds per cubic foot. Samples collected from the berm fill at B-2 were as follows.

- B-2 at 6-inches to 16-inches, percent moisture 19.1, dry density 107.5.
- B-2 at 5-feet to 5.8 feet, percent moisture 21.61, dry density 105.3.

Based on the higher dry densities of the berm soils we infer some compactive effort went into the berm fill during construction. The slopes of the berm are 2:1 both inside and out. With the crest of the berm being approximately 10 feet wide. These slopes are generally standard for engineering designs associated with ponds and are accepted as being stable in these configurations.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The results from our analysis of the pond embankment indicate the berm is not unstable. No groundwater was observed during and approximately 1.5 hours after boring installation, indicating that the liner is not leaking at the time of our evaluation, and that the berm fill is not saturated. LACO has the following recommendations to maintain long term stability of the pond berm:

1. The berm slope face should be inspected annually for signs of erosion and seepage.
2. Should seepage from the berm be observed in the future, retain a qualified professional to investigate the source.

6.0 LIMITATIONS

This Memo has been prepared for the exclusive use of Morgan Oliver, his agents, contractors and consultants, and appropriate public authorities for specific application to the development of the Site. LACO has exercised a standard of care equal to that generated for this industry to ensure that the information contained in this Memo is current and accurate. The opinions presented in this Memo are based upon information obtained from subsurface excavations, a Site reconnaissance, review of geologic maps and data available to us, and upon local experience and engineering judgment, and the opinions have been

formulated in accordance with generally accepted geotechnical engineering practices that exist in California at the time this Memo was prepared. In addition, geotechnical issues may arise that are not apparent at this time. No other warranty, expressed or implied, is made or should be inferred.

Data generated for this Memo represent information gathered at that time and at the widely spaced locations indicated. Subsurface conditions may be highly variable and difficult to predict. As such, the recommendations included in this Memo are based, in part, on assumptions about subsurface conditions that may only be observed and/or tested during subsequent project earthwork. Accordingly, the validity of these recommendations is contingent upon review of the subsurface conditions exposed during construction in order to check that they are consistent with those characterized in this Memo. Upon request, LACO can discuss the extent of (and fee for) observations and tests required to check the validity of the recommendations presented herein.

The opinions presented in this Memo are valid as of the present date for the property evaluated. Changes in the condition of the property can occur over time, whether due to natural processes or the works of people, on this or adjacent properties. In addition, changes in applicable standards of practice can occur, whether from legislation or the broadening of knowledge. Accordingly, the opinions presented in this Memo may be invalidated, wholly or partially, by changes outside our control. Therefore, this Memo is subject to review and should not be relied upon after a period of three years, nor should it be used, or is it applicable, for any property other than that evaluated. This Memo is valid solely for the purpose, Site, and project described in this document. Any alteration, unauthorized distribution, or deviation from this description will invalidate this Memo. LACO assumes no responsibility for any third-party reliance on the data presented. Additionally, the data presented should not be utilized by any third-party to represent data for any other time or location.

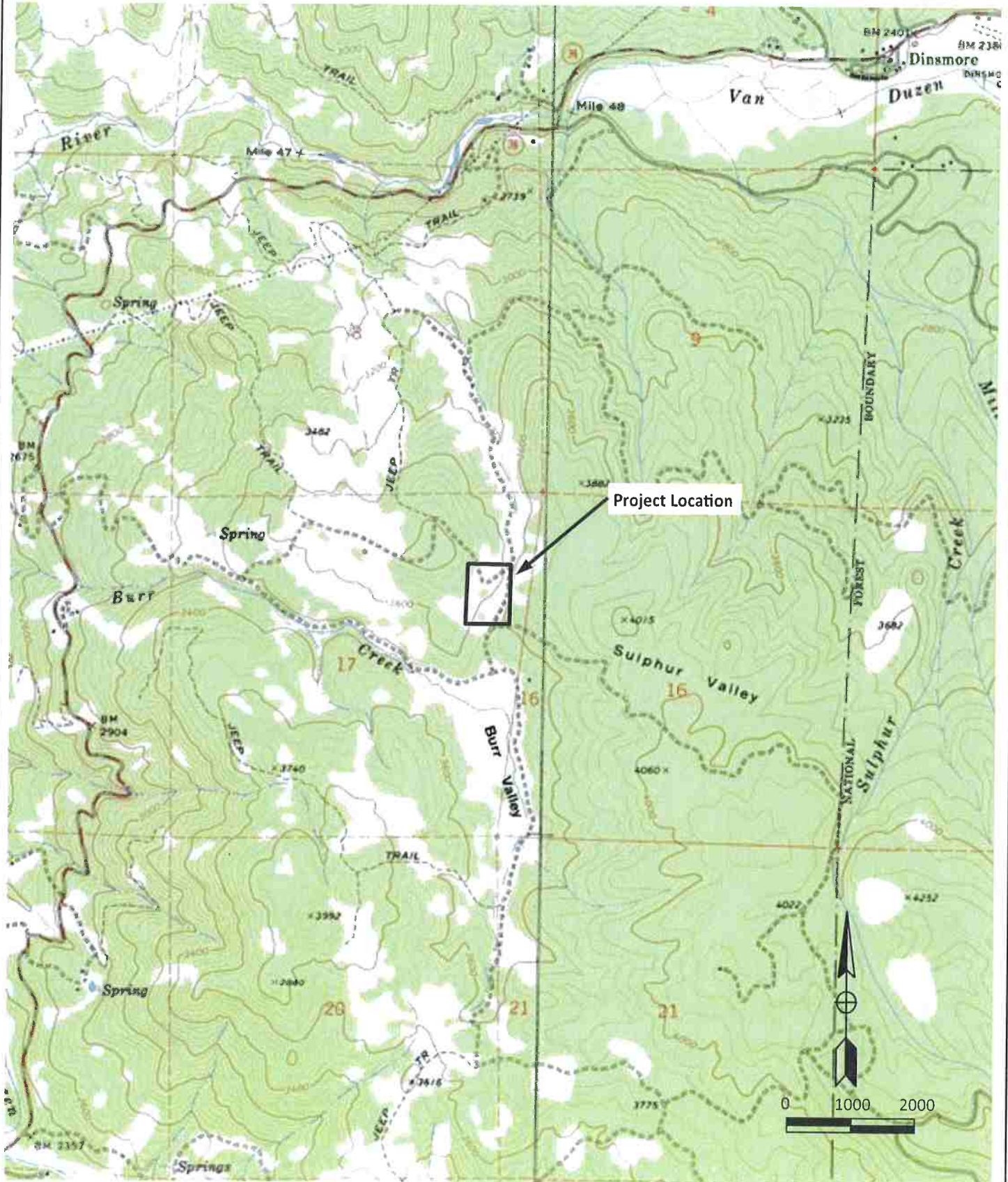
7.0 REFERENCES

McLaughlin, R. J., S. D. Ellen, M. C. Blake Jr., A. S. Jayko, W. P. Irwin, K. R. Aalto, G. A. Carver, and S. H. Clarke, Jr., 2000, Geology of the Cape Mendocino, Eureka, Garberville, and Southwestern Part of the Hayfork 30x 60 Minute Quadrangles and Adjacent Offshore Area, Northern California.

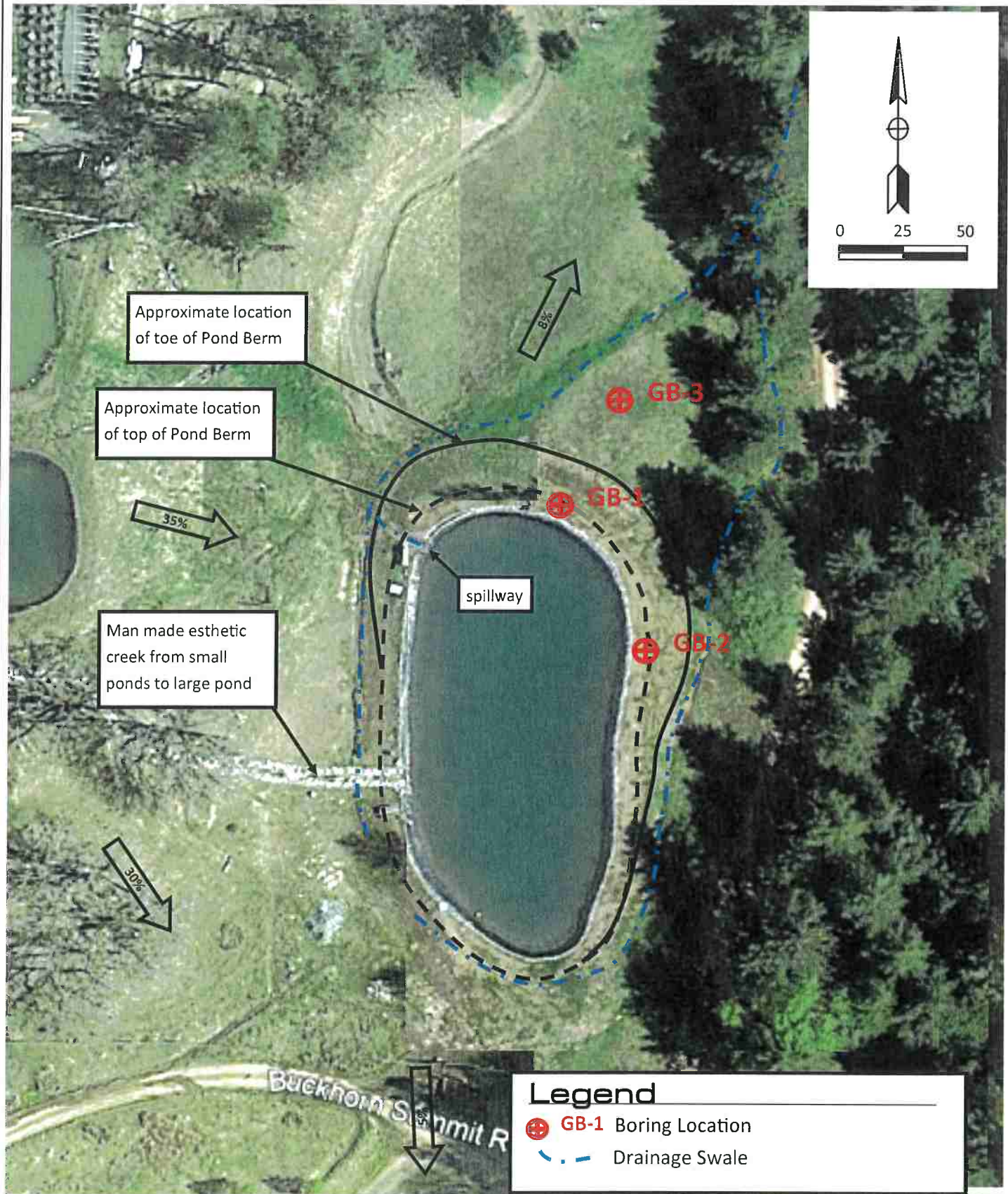
FIGURES

- | | |
|-----------------|---------------------|
| Figure 1 | Vicinity Map |
| Figure 2 | Site Map |
| Figure 3 | Geologic map |

REUSE OF DOCUMENTS; This document and the ideas and designs incorporated herein, as an instrument of professional service is the property of LACO Associates and shall not be reused in whole or part for any other project without



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LACO

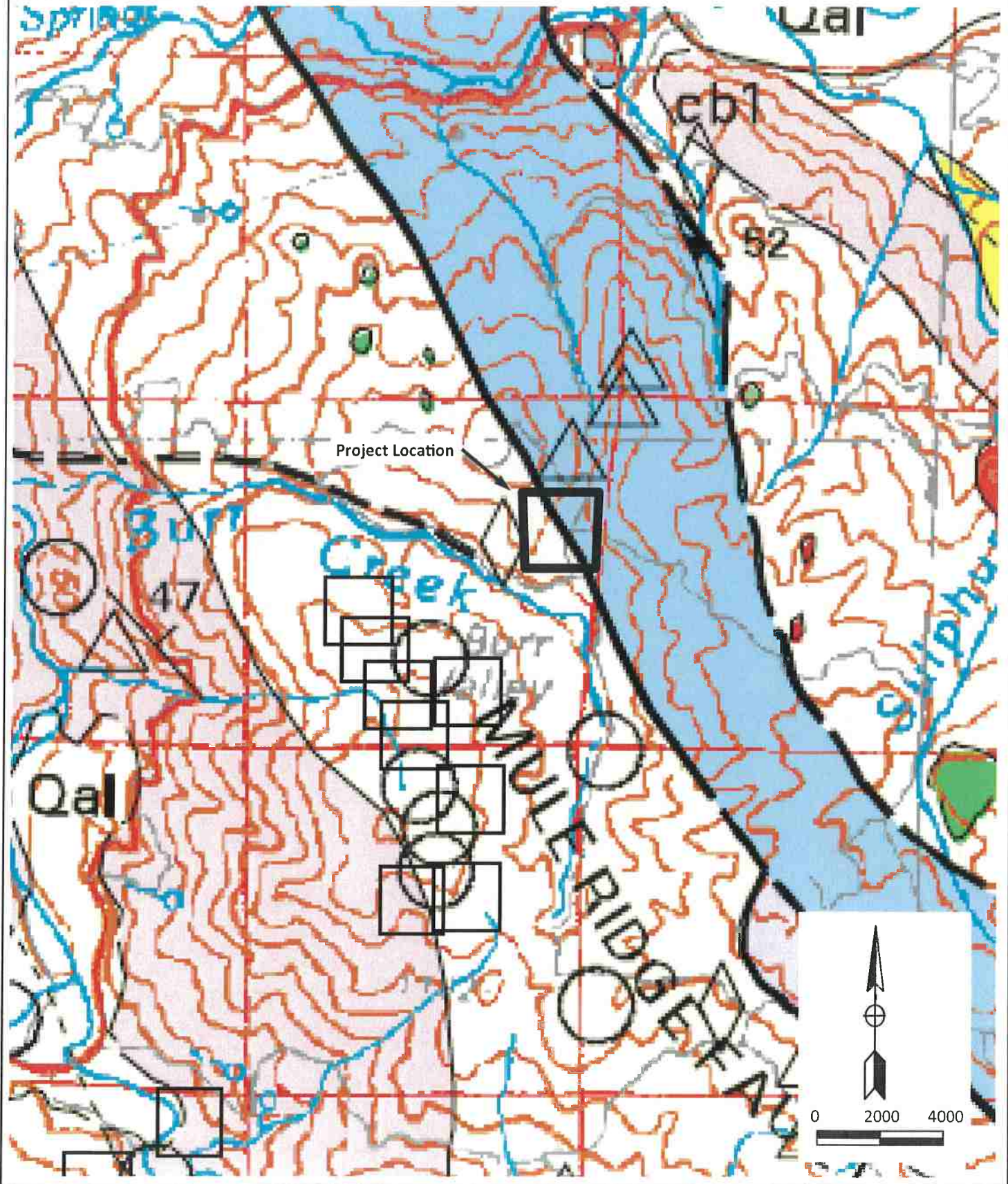
EUREKA UKIAH SANTA ROSA
1-800-515-5054 www.lacoassociates.com

PROJECT	Oliver Pond Berm Stability Report
CLIENT	Morgan Oliver
LOCATION	2910 Burr Valley Road, Bridgeville, CA
	Geologic Map

BY	GLM
DATE	12/17/20
CHECK	
SCALE	1" = 2000'

FIGURE	3a
JOB NO.	9872.00

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DESCRIPTION OF MAP UNITS

QUATERNARY AND TERTIARY OVERLAP DEPOSITS

Qal	Alluvial deposits (Holocene and late Pleistocene?)
Qm	Undeformed marine shoreline and aolian deposits (Holocene and late Pleistocene)
Qt	Undifferentiated nonmarine terrace deposits (Holocene and Pleistocene)
Qls	Landslide deposits (Holocene and Pleistocene)
QTog	Older alluvium (Pleistocene and [or] Pliocene)
QTW	Marine and nonmarine overlap deposits (late Pleistocene to middle Miocene)
Ti	Volcanic rocks of Fiddle Hill (Oligocene)

COAST RANGES PROVINCE
FRANCISCAN COMPLEX

-- Coastal Belt --

Coastal terrane (Pliocene to Late Cretaceous)

Sedimentary, igneous, and metamorphic rocks of the Coastal terrane (Pliocene to Late Cretaceous):

co1	Melange
co2	Melange
co3	Broken sandstone and argillite
co4	Intact sandstone and argillite
cob	Basaltic Rocks (Late Cretaceous)
col	Limestone (Late Cretaceous)
m	Undivided blueschist (Jurassic?)

King Range terrane (Miocene to Late Cretaceous)

Krp	Igneous and sedimentary rocks of Point Delgada (Late Cretaceous)
m	Undivided blueschist blocks (Jurassic?)
	Sandstone and argillite of King Peak (middle Miocene to Paleocene?)

krk1	Melange and (or) folded argillite
krk2	Highly folded broken formation
krk3	Highly folded, largely unbroken rocks
kl	Limestone
krc	Chert
krb	Basalt

False Cape terrane (Miocene? to Oligocene?)

fc	Sedimentary rocks of the False Cape terrane (Miocene? to Oligocene?)
----	----------------------------------------------------------------------

Yager terrane (Eocene to Paleocene?)

Sedimentary rocks of the Yager terrane (Eocene to Paleocene?):

y1	Sheared and highly folded mudstone
y2	Highly folded broken mudstone, sandstone, and conglomeratic sandstone
y3	Highly folded, little-broken sandstone, conglomerate, and mudstone
Ycgl	Conglomerate

-- Central belt --

Melange of the Central belt (early Tertiary to Late Cretaceous):

Unnamed Metasandstone and meta-argillite (Late Cretaceous to Late Jurassic):

cm1	Melange
cm2	Melange
cb1	Broken formation
cb2	Broken formation
cwr	White Rock metasandstone of Jayko and others (1989) (Paleogene and [or] Late Cretaceous)
chr	Haman Ridge graywacke of Jayko and others (1989) (Cretaceous?)
cfs	Fort Seward metasandstone (age unknown)
cls	Limestone (Late to Early Cretaceous)

cc	Chert (Late Cretaceous to Early Jurassic)
bs	Basaltic rocks (Cretaceous and Jurassic)
m	Undivided blueschist blocks (Jurassic?)
gs	Greenstone
c	Metachert
yb	Metasandstone of Yolla Bolly terrane, undivided
b	Melange block, lithology unknown

-- Eastern Belt --

Pickett Peak terrane (Early Cretaceous or older)

Metasedimentary and metavolcanic rocks of the Pickett Peak terrane (Early Cretaceous or older):

ppsm	South Fork Mountain Schist
mb	Chinquapin Metabasalt Member (Irwin and others, 1974)
ppv	Valentine Springs Formation
mv	Metabasalt and minor metachert

Yolla Bolly terrane (Early Cretaceous to Middle Jurassic?)

Metasedimentary and metaigneous rocks of the Yolla Bolly terrane (Early Cretaceous to Middle Jurassic?):

ybt	Taliaferro Metamorphic Complex of Suppe and Armstrong (1972) (Early Cretaceous to Middle Jurassic?)
ybc	Chicago Rock melange of Blake and Jayko (1983) (Early Cretaceous to Middle Jurassic)
gs	Greenstone
c	Metachert
ybh	Metagraywacke of Hammerhorn Ridge (Late Jurassic to Middle Jurassic)
c	Metachert
gs	Greenstone
sp	Serpentinite
ybd	Devils Hole Ridge broken formation of Blake and Jayko (1983) (Early Cretaceous to Middle Jurassic)
c	Radiolarian chert
ybi	Little Indian Valley argillite of McLaughlin and Ohlin (1984) (Early Cretaceous to Late Jurassic)

Yolla Bolly terrane

yb	Rocks of the Yolla Bolly terrane, undivided
----	---------------------------------------------

GREAT VALLEY SEQUENCE AND COAST RANGE OPHIOLITE

Elder Creek(?) terrane

ecms	Mudstone (Early Cretaceous)
	Coast Range ophiolite (Middle and Late Jurassic):
ecg	Layered gabbro
ecsp	Serpentinite melange

Del Puerto(?) terrane

Rocks of the Del Puerto(?) terrane:

dpm	Mudstone (Late Jurassic)
	Coast Range ophiolite (Middle and Late Jurassic):
dpt	Tuffaceous chert (Late Jurassic)
dpb	Basaltic flows and keratophytic tuff (Jurassic?)
dpc	Diabase (Jurassic?)
dpsp	Serpentinite melange (Jurassic?)
sp	Undivided Serpentinized peridotite (Jurassic?)

KLAMATH MOUNTAINS PROVINCE

Undivided Great Valley Sequence:

Ks	Sedimentary rocks (Lower Cretaceous)
----	--------------------------------------

Hayfork terrane

Eastern Hayfork subterrane:

eh	Melange and broken formation (early? Middle Jurassic)
ehls	Limestone
ehsp	Serpentinite

Western Hayfork subterrane:

whu	Hayfork Bally Meta-andesite of Irwin (1985), undivided (Middle Jurassic)
whwg	Wildwood (Chancelulla Peak of Wright and Fahan, 1988) pluton (Middle Jurassic)
whwp	Clinopyroxenite
whji	Diorite and gabbro plutons (Middle? Jurassic)

Rattlesnake Creek terrane

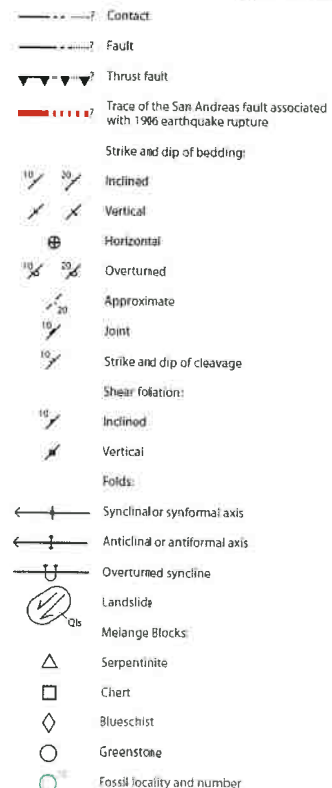
rcm	Melange (Jurassic and older)
rls	Limestone
rcc	Radiolarian chert
rcis	Volcanic Rocks (Jurassic or Triassic)
rcic	Intrusive complex (Early Jurassic or Late Triassic)
rcp	Plutonic rocks (Early Jurassic or Late Triassic)
rcum	Ultramafic rocks (age uncertain)
rcpd	Blocky peridotite

Western Klamath terrane

Smith River subterrane:

srs	Galice formation (Late Jurassic)
srv	Pyroclastic andesite
srgb	Glen Creek gabbro-ultramafic complex of Irwin and others (1974)
srpd	Serpentinized peridotite

MAP SYMBOLS



APPENDIX 1

Boring Logs

CLIENT <u>Morgan Oliver</u>		PROJECT NAME <u>Pond Stability Evaluation</u>	
PROJECT NUMBER <u>9872.00</u>		PROJECT LOCATION <u>Bridgeville, California</u>	
DATE STARTED <u>12/9/20</u>	COMPLETED <u>12/9/20</u>	GROUND ELEVATION _____	HOLE SIZE <u>3 inches</u>
DRILLING CONTRACTOR <u>LACO</u>		GROUND WATER LEVELS:	
DRILLING METHOD <u>Hand Auger</u>		AT TIME OF DRILLING <u>--- Not Encountered</u>	
LOGGED BY <u>GLM</u>	CHECKED BY <u>GLM</u>	AT END OF DRILLING <u>---</u>	
NOTES _____			

GEOTECH BORING NEW - GINT STD US LAB.GDT - 12/15/20 12:19 - P:\9800\9872 MORGAN OLIVER\9872.00 POND STABILITY EVALUATION\08 GEOLOGY\FIELD DATA\9872.00 BORING LOGS.GPJ

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	TESTS AND REMARKS	Pocket Penetrometer (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS (%)			FINES CONTENT (%)
										LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0.0		(CL-ML) Light Brown to Brown Lean Clay with Sand (Fill) moist, medium stiff medium sand, fine angular gravel											
2.5		(CL-ML) Light Brown to Brown Lean Clay with Gravel (Fill) moist, medium stiff medium sand, fine angular gravel	SH	100									
5.0													
7.5													
10.0		(ML) Brown Silt (Disturbed Native) moist, stiff fine sand											

Bottom of borehole at 11.0 feet.

CLIENT <u>Morgan Oliver</u>		PROJECT NAME <u>Pond Stability Evaluation</u>	
PROJECT NUMBER <u>9872.00</u>		PROJECT LOCATION <u>Bridgeville, California</u>	
DATE STARTED <u>12/9/20</u>	COMPLETED <u>12/9/20</u>	GROUND ELEVATION _____	HOLE SIZE <u>3 inches</u>
DRILLING CONTRACTOR <u>LACO</u>		GROUND WATER LEVELS:	
DRILLING METHOD <u>Hand Auger</u>		AT TIME OF DRILLING <u>--- Not Encountered</u>	
LOGGED BY <u>GLM</u>	CHECKED BY <u>GLM</u>	AT END OF DRILLING <u>---</u>	
NOTES _____			

GEOTECH BORING NEW - GINT STD US LAB GDT - 12/15/20 12:19 - P:\9800\9872 MORGAN OLIVER\9872.00 POND STABILITY EVALUATION\08 GEOLOGY\FIELD DATA\9872.00 BORING LOGS.GPJ

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	TESTS AND REMARKS	Pocket Penetrometer (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS (%)			FINES CONTENT (%)
										LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0.0		(CL-ML) Light Brown to Brown Lean Clay with Sand (Fill) moist, medium stiff medium to coarse sand, fine angular gravel	SH	100									
2.5													
5.0		dry to moist	SH	100									
7.5		(CL-ML) Brown Lean Clay with Sand (Disturbed Native) dry to moist, stiff fine to coarse sand											

Bottom of borehole at 8.0 feet.

CLIENT <u>Morgan Oliver</u>		PROJECT NAME <u>Pond Stability Evaluation</u>	
PROJECT NUMBER <u>9872.00</u>		PROJECT LOCATION <u>Bridgeville, California</u>	
DATE STARTED <u>12/9/20</u>	COMPLETED <u>12/9/20</u>	GROUND ELEVATION _____	HOLE SIZE <u>3 inches</u>
DRILLING CONTRACTOR <u>LACO</u>		GROUND WATER LEVELS:	
DRILLING METHOD <u>Hand Auger</u>		AT TIME OF DRILLING <u>--- Not Encountered</u>	
LOGGED BY <u>GLM</u>	CHECKED BY <u>GLM</u>	AT END OF DRILLING <u>---</u>	
NOTES _____			

GEOTECH BORING NEW - GINT STD US LAB.GDT - 12/15/20 12:19 - P:\9800\9872 MORGAN OLIVER\9872.00 POND STABILITY EVALUATION\08 GEOLOGY\FIELD DATA\9872.00 BORING LOGS.GPJ

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	TESTS AND REMARKS	Pocket Penetrometer (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS (%)			FINES CONTENT (%)
										LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0.0		(CL-ML) Light Brown to Brown Lean Clay moist, medium stiff fine to coarse sand											
			SH	100									
		few angular gravel											

Bottom of borehole at 2.0 feet.

APPENDIX 2

Laboratory Test Results



MOISTURE / DENSITY
ASTM D-2216 / 2937

PROJECT	POND STABILITY EVALUATION			JOB NO.	9872.00	SHEET 1 of 1
CLIENT	MORGAN OLIVER			LAB ID	20-106EK	
LOCATION	BARR VALLEY	TEST BY	CCR	DATE	12/10/20	
SOIL TYPE	VARIOUS	CHECKED BY	DLR	CHECK DATE	12/14/2020	

Sample Location	B-2	B-2	B-3					
Sample Depth (ft bgs)	6in	5ft	6in					
Soil Type (USCS)	0	0	0.0					
Moisture Content (%)	19.1	21.6	22.5					
Wet Density (pcf)	127.9	128.0	116.3					
Dry Density (pcf)	107.5	105.3	94.9					
Void Ratio*	0.5	0.6	0.7					
% Saturation	93.3	99.6	80.2					

*Void ratio calculation assumes a specific gravity of 2.65

APPENDIX 3

Site Photos



1. Large pond, looking from the northwest



2. Large pond, looking south from B-1

Oliver Pond Berm Stability



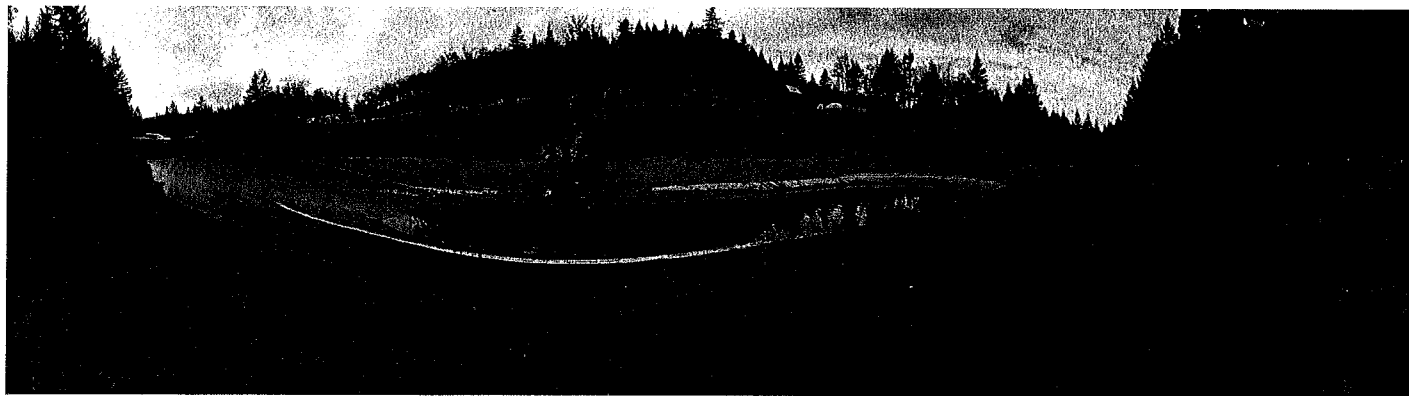
3. Manmade creek from small pond to Large pond, looking upslope



4. Manmade creek, looking down slope to large pond.



5. Large pond, spillway outfall



6. Large pond, looking west. (panorama)



7. Large pond, eastern berm stripped of vegetation.



8. Drainage swale that directs overland flow away from large pond



PACIFIC WATERSHED ASSOCIATES INC.

P.O. Box 4433 • Arcata, CA 95518-4433
Phone 707-839-5130 • Fax 707-839-8168
www.pacificwatershed.com

March 16, 2021

Humboldt County Building and Planning Department
3015 H Street
Eureka, California 95501

Re: Hydrology of Ponds on APN# 210-221-013 as they pertain to the landowner's Humboldt CMMLUO permit application

Introduction

This letter serves to provide you with a description of the hydrologic connectivity, or lack there-of, of the two rainwater catchment ponds (Pond #4 and Pond #5 as denoted on the site map submitted as part of the Humboldt County Planning Department Medical Marijuana Land Use Ordinance (CMMLUO) permit and land use application for commercial cannabis cultivation on **APN# 210-221-013**. I first investigated the property associated with the landowner's original enrollment in the State Water Resource Control Board's Waiver of Waste Discharge Program, Order No. 2015-0023. I carried out a subsequent assessment as part of the landowner's 1600/LSAA notification addressing water related resources. It has come to my attention that there is some confusion regarding the hydrologic connectivity of the rainwater ponds to wetlands or waters jurisdictional to the State. Pond #4 and Pond #5 are used to collect and store rainwater for use to irrigate the commercial cannabis operation on the parcel.

Pond #4 and Pond #5 are both lined and have berms that encompass their entire perimeter preventing surface water from contributing to the ponds. The ponds are both lined preventing any groundwater from contributing to the site. They are filled directly by rainfall, which based on PRISM average rainfall data from 1895 – 2015 is over 67 inches. The two ponds are connected by a lined spillway that has a series of rock steps, constructed to resemble a stream-like feature. It serves as an aesthetically pleasing feature as well as oxygenating the water to prevent stagnation during the summer. Pond #4 is located upslope of Pond #5, and is estimated to have a capacity of approximately 130,000 gallons. Pond #5 is estimated to have a capacity of somewhere slightly above or below 1,000,000 gallons. Based on average rainfall, combined water storage between the two ponds is approximately 850,000 gallons.

A pump house near the lower pond (Pond #5) pumps water up to the top of another lined, rocky spillway that leads down to Pond #4. Overflow from Pond #4 spills over its outlet and down the lined spillway described above, leading into Pond #5. Both spillways are hydrologically disconnected from

either surface runoff (because they also have low berms lining their sides) and are lined underneath by an impervious geotextile liner. The spillway of Pond #5 empties out onto a low gradient (<10%) slope draining toward a small Class III stream located nearby. Based on the average rainfall data, it does not appear that Pond #5 overflows very often and would only occur in wetter than average years.

Based on historical imagery during summer months dating back to the early 2000s, it does not appear that either of these ponds were originally constructed in wetlands. Note that this interpretation is simply based on the lack of green color in the historical summer imagery where the rainwater catchment ponds now exist and more recent observations in the field noting a lack wetland vegetation or evidence of springs. In contrast, there is another pond (Pond #3) that is near and to the north of Pond #4, which was constructed in what appears to be wetland/headwaters of a small drainage but is hydrologically disconnected from Pond #4. It stood out distinctly in the historical imagery and field observations indicate emergent seepage in this location.

PWA hopes this letter provides you with sufficient information on the the hydrology of these ponds. PWA is currently coordinating, involved in, and/or working with this landowner in various capacities, primarily to address land management, land stewardship, land use, environmental permitting, and/or other geologic, erosion control, water quality and engineering design work. If you have any further questions, or would like additional detail on any of the services and project work we are providing to this landowner, please don't hesitate to contact me at 707-839-5130.

Sincerely,

Christopher H. Herbst, Professional Geologist #8433
chrish@pacificwatershed.com

ATTACHMENT 4

REFERRAL AGENCY COMMENTS AND RECOMMENDATIONS

The project was referred to the following referral agencies for review and comment. Those agencies that provided written comments are checked off.

Referral Agency	Response	Recommendation	Location
Building Inspection Division	✓	Approved	Attached
Division Environmental Health	✓	Approved	Attached
Public Works, Land Use Division	✓	Conditional Approval	Attached
Cal-FIRE	✓	Comments	Attached
California Department of Fish & Wildlife		No Response	
Northwest Information Center	✓	Further Study	On file and confidential
Bear River Band Rancheria	✓	Comments	On file and confidential
Fortuna Union High School District	✓	No Response	
Bridgeville Elementary School District		No Response	
Humboldt County Sheriff		No Response	
County Counsel		No Response	
Humboldt County District Attorney		No response	
North Coast Unified Air Quality Management District		No response	
North Coast Regional Water Quality Control Board		No response	
State Water Resources Control Board – Division of Water Rights		No response	

We have reviewed the above application and recommend the following (please check one):

The Department has no comment at this time.

Suggested conditions attached.

Applicant needs to submit additional information. List of Items attached.

Recommend denial.

Other comments.

Date:

Name:

Forester Comments:

Date:

Name:

Battalion Chief Comments:

Summary:



HUMBOLDT COUNTY
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION
3015 H STREET, EUREKA, CA 95501 ~ PHONE (707) 445-7541



8/31/2017

17/18-0546

SEP 01 2017

PROJECT REFERRAL TO: Health and Human Services Environmental Health Division

Project Referred To The Following Agencies:

Building Inspection Division, Public Works Land Use Division, Health and Human Services Environmental Health Division, County Counsel, CalFire, California Department of Fish And Wildlife, Northwest Information Center, Bear River Band Rohnerville Rancheria, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, California Division of Water Resources, Humboldt county sheriff, Bridgeville Elementary School School District, Fortuna Union High School School District

HUMBOLDT CO. DIVISION
OF ENVIRONMENTAL HEALTH

Applicant Name Salty Dawg **Key Parcel Number** 210-221-013-000

Application (APPS#) 12129 **Assigned Planner** Cannabis Planner (CPOD) (707) 445-7541 **Case Number(s)** CUP16-541

Please review the above project and provide comments with any recommended conditions of approval. To help us log your response accurately, please include a copy of this form with your correspondence.

Questions concerning this project may be directed to the assigned planner for this project between 8:30am and 5:30pm Monday through Friday.

County Zoning Ordinance allows up to 15 calendar days for a response. If no response or extension request is received by the response date, processing will proceed as proposed.

☐ If this box is checked, please return large format maps with your response.

Return Response No Later Than 9/15/2017

Planning Commission Clerk
County of Humboldt Planning and Building Department
3015 H Street
Eureka, CA 95501
E-mail: PlanningClerk@co.humboldt.ca.us **Fax:** (707) 268-3792

We have reviewed the above application and recommend the following (please check one):

☒ Recommend Approval. The Department has no comment at this time.

☐ Recommend Conditional Approval. Suggested Conditions Attached.

☐ Applicant needs to submit additional information. List of items attached.

☐ Recommend Denial. Attach reasons for recommended denial.

☐ Other Comments: _____

DISTRIBUTED

2-21-18

DATE: 2/14/18

PRINT NAME: Adam Molofsky



DEPARTMENT OF PUBLIC WORKS
C O U N T Y O F H U M B O L D T

MAILING ADDRESS: 1106 SECOND STREET, EUREKA, CA 95501-0579
AREA CODE 707

ARCATA-EUREKA AIRPORT TERMINAL
MCKINLEYVILLE
FAX 839-3596

AVIATION

839-5401

PUBLIC WORKS BUILDING
SECOND & L ST., EUREKA
FAX 445-7409

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445-7377
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NATURAL RESOURCES PLANNING
PARKS
ROADS & EQUIPMENT MAINTENANCE

445-7741
267-9540
445-7651
445-7421

CLARK COMPLEX
HARRIS & H ST., EUREKA
FAX 445-7388

LAND USE

445-7205

LAND USE DIVISION INTEROFFICE MEMORANDUM

TO: Michelle Nielsen, Senior Planner, Planning & Building Department

FROM: Kenneth M. Freed, Assistant Engineer *KMF*

DATE: 2-23-2018

RE:

Applicant Name	SALTY DAWG
APN	210-221-013
APPS#	12129 CUP16-541

The Department has reviewed the above project and has the following comments:

- ☐ The Department's recommended conditions of approval are attached as **Exhibit "A"**.
- ☐ Additional information identified on **Exhibit "B"** is required before the Department can review the project. **Please re-refer the project to the Department when all of the requested information has been provided.**
- ☒ Additional review is required by Planning & Building staff for the items on **Exhibit "C"**. **No re-refer is required.**
- ☒ *Road Evaluation Reports(s)* are required; See **Exhibit "D"**. **No re-refer is required.**

*Note: Exhibits are attached as necessary.

Additional comments/notes:

Review item 1 on Exhibit "C"

// END //

Additional Review is Required by Planning & Building Staff

APPS # 12129

All of the following questions are to be answered by Planning and Building Department staff. No further involvement with the Department of Public Works is required for these items; however Public Works staff is available to answer any questions that may arise.

1. **ROADS – PART 1.** Does the project takes access from a series of non-county maintained roads that connect directly to a State Highway (36, 96, 101, 255, 299, etc...)?

☐ YES ☐ NO

If YES, the project does not need to be referred to the Department. Include the following requirement:

All recommendations in the Road Evaluation Report(s) for non-county maintained road(s) shall be constructed/implemented to the satisfaction of the Planning & Building Department prior to commencing operations, final sign-off for a building permit, or approval for a business license. A grading permit may be required; check with the Building Division of the Planning and Building Department for any permit requirements.

2. **ROADS – PART 2.** Does the project takes access from a series of non-county maintained roads that connect directly to a Caltrans State Highway, US Forest Service Road, BLM Road, or a City road?

☐ YES ☐ NO

If YES, the Department recommends that prior to the project presented to the Planning Commission or Zoning Administrator, that the project should be referred to the affected road agency(ies).

3. **ROADS – PART 3.** Does the project take access or use a county maintained road that does not have a centerline stripe or is not on the "approved list" of known category 4 roads? ☐ YES ☐ NO

If YES, a *Road Evaluation Report* must be done for the County road(s) that do not have a centerline stripe or are not on the "approved" list. The project along with the road evaluation report(s) for the County maintained road(s) must be referred to Public Works for review to ensure that the Department supports the findings in the report. If the road is on the "not approved" list, then Part B of the *Road Evaluation Report* form must be completed.

4. **Deferred Subdivision Improvements.** Does the project have deferred subdivision improvements? ☐ YES ☐ NO

How to check: Method 1: Planning and Building Department staff review the legal description for the subject property in the deed. If the deed reads similar to "Parcel ___ of Parcel Map No. ___" then there may be deferred subdivision improvements; further research will be needed. Method 2: Planning and Building Department staff need to review the title report(s) for the subject property(ies) to see if a "Notice of Construction Requirements" document is listed. If the document is listed, then there are deferred subdivision improvements.

If YES then the subject property has deferred subdivision improvements. The project cannot be presented to the Zoning Administrator or the Planning Commission until the deferred subdivision improvements are completed. The applicant should be directed to the Department of Public Works regarding the deferred subdivision improvements.

5. **AIRPORT- PART 1 (ALUCP).** Is the project located within Airport Land Use Compatibility Plan (ALUCP) Zone A, B, B1, B2, or B3 as shown on the ALUCP GIS layer? ☐ YES ☐ NO

If YES, include the following requirement:

The applicant shall cause to be dedicated to the County of Humboldt an Avigation Easement. The avigation easement shall be on the form prescribed by the Department of Public Works. This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

Additional Review is Required by Planning & Building Staff

The applicant shall conduct all operations consistent with the ALUCP and in a manner that does not attract flocks of birds. Open ponds shall not be permitted.

6. **AIRPORT – PART 2 (County Code Section 333).** Is the project is located within the County Code Section 333 GIS layer **AND** is the project proposing to construct (or permit) a fence, building or other structure? ☐ YES ☐ NO

If **YES**, the applicant shall submit a completed *Airspace Certification Form* prior to the project being presented to the Zoning Administrator or the Planning Commission for approval.

7. **AIRPORT – PART 3 (Height Restrictions).** Planning & Building Staff shall review the completed *Airspace Certification Form* as follows:
- If Box 1 is checked **NO**, the applicant shall either modify the project to comply with County Code Section 333-4 or the applicant shall request a variance pursuant to County Code Section 333-8. The project shall not be presented to the Zoning Administrator or the Planning Commission for approval until the variance is approved by the Board of Supervisors, or the project was modified to comply with County Code Section 333-4.
 - If Box 2 is checked **YES**, the applicant shall submit form FAA 7460-1 to the FAA for review and comment. The project shall not be presented to the Zoning Administrator or the Planning Commission for approval until the FAA supports the project.
 - If Box 3 is checked **YES**, then the project cannot be permitted and must be modified to conform to the easement. As an alternative, the applicant may wish to seek approval from both the County and the FAA to quitclaim a portion of the easement to allow the project to be permitted.
 - If Box 1 is checked **YES** and Box 2 is checked **NO** and Box 3 checked **NO** or **NA**, then Planning & Building staff shall signoff on the project in the "county use only" section of the form. In the "pre-construction" right of way (or "post construction" right of way if the building exists), check the approval box; date and initial your work.

Note that if the proposed structure is close to the imaginary surface (within 5 feet), then require a post construction certificate to be filed. By including the following requirement:

Applicant shall file a post construction *Airspace Certification Form* to ensure that the proposed structures are in compliance with County Code 333-3. This shall be completed within 90 days of completion of construction or prior to building final, whichever occurs first.

Submit a copy of all processed *Airspace Certification Forms* to the Land Use Division.

8. **MS4/ASBS Areas.** Is the project located within MS4 Permit Area as shown on the GIS layer? ☐ YES ☐ NO

If **YES**, include the following requirement:

The applicant shall demonstrate to the satisfaction of the Planning & Building Department that the project is in compliance with MS4/ASBS requirements.

// END //

Exhibit "D"

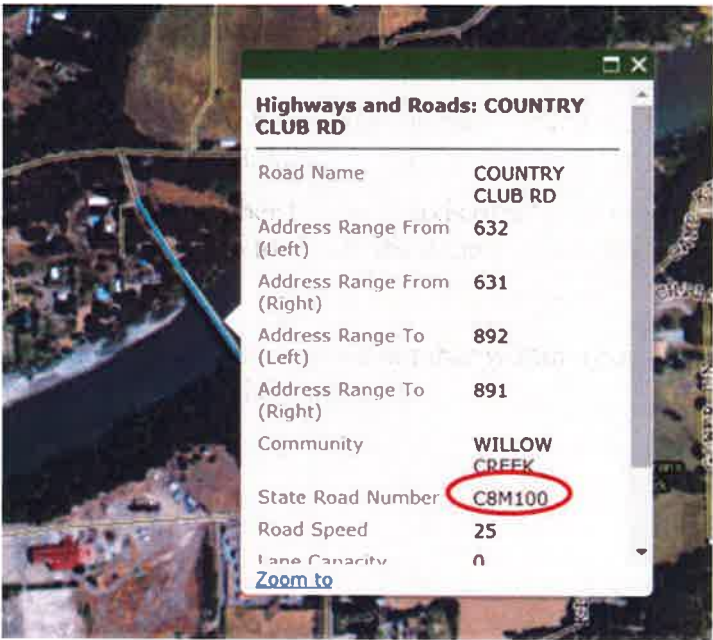
Road Evaluation Reports

1. **ROADS – Road Evaluation Reports.** Planning and Building Department staff shall request that the applicant provide Road Evaluation Reports for the project. The particular roads that require a Road Evaluation Report is to be determined by following the guidance shown below.

The Department has developed a Road Evaluation Report form so that an applicant can address the adequacy of the various roads used by their project. Most projects will require that a Road Evaluation Report form be completed.

When viewing the project site on google earth, if the County maintained road (or other publicly maintained road) has a centerline stripe, the road is adequate. If there is no centerline stripe, then the roads leading from the nearest publicly maintained road with a paved centerline stripe (or a known category 4 road) must be evaluated. A separate Road Evaluation Report form is needed for each road. This applies to all roads regardless if they are publicly or privately maintained. The Department has prepared a "approved list" of known County maintained roads that are category 4 (or are equivalent to category 4) standards for cannabis projects. The Department has also prepared a list of roads that are known to not meet road category 4 of equivalent. Both of these lists will be updated as the County information regarding the County maintained roads becomes available.

The Road Evaluation Report form needs to be provided to applicants to complete. It is important that Planning and Building Department staff provide the applicant with a map that has the roads to be evaluated highlighted. This will most likely include a combination of County maintained roads and non-County maintained roads. This will give the applicant clear direction on which roads need to be evaluated.



Above: screenshot from the WebGIS showing County Road Number circled in RED.

A County maintained road will have a 5 or 6 character identifier. The general format is ABCDDD where:

- A is an optional identifier for the functionality of the road (A=Arterial, C=Collector, F=Federal Aid)
- B is a grid identifier number for the X-axis of a "battleship" style grid that was drawn on a county map to divide the county into a series of squares.
- C is a grid identifier letter for the Y-axis for the grid.
- DDD is a three digit road identification number within a particular grid. Each grid can have up to 999 roads in them

Examples:

ABCDDD	
A 3 M 0 2 0	Murray Road
F 6 B 1 6 5	Alderpoint Road
6 C 0 4 0	Thomas Road



HUMBOLDT COUNTY
PLANNING AND BUILDING DEPARTMENT ~ PLANNING DIVISION
3015 H STREET, EUREKA, CA 95501 ~ PHONE (707) 445-7245

PRE-SITE INVESTIGATION FORM

THIS IS NOT A PERMIT DOCUMENT

APPLICATION INFORMATION

Name Salty Dawg
Address 1 Morgan B Oliver **Address 2** 3090 Patricks
Point Drive
City Trinidad **State** CA **Zip** 95570

OWNERS NAME AND MAILING ADDRESS

Name Oliver Morgan B **Email**
Address 1 **Address 2**
City Trinidad **State** CA **Zip** 95570

SITE INFORMATION

Parcel Number 210-221-013-000 **Application Number** PLN-12129-CUP
Street Address 2910 Burr Valley Rd **City** Bridgeville **State** CA **Zip**

PRESITE INVESTIGATION

Project is already started Yes	AOB Inspection No
Soil report is required due to Site Conditions	Project appears to be within wet area Other
Project is in flood zone A per No	FIRM panel number
Flood elevation certificate required No	Is 2nd Flood Certificate Required? No
Plans stamped by a licensed person required Yes	SRA requirements apply No
SRA water storage requirements apply No	Lot created prior to 1992
Appr.SRA req. need to be shown on plot plan No	Plot plan incomplete, must be revised No
Driveway slope appears to be Under 16%	Submit engineered foundation for None
Grading permit required Yes	Applicant must locate property lines Yes
Incomplete submittal Construction Plan Yes	Other concerns exist Yes
Erosion and sediment control measures req. Designed by qualified person	

Inspector Notes

6-14-19 G. Dumler
Planning referral comments 12129
Revise plot plan to show all existing cannabis in accurate locatioons, shipping containers, dimensions, uses, ponds, and grading.
Revise plot plan to show all setbacks to structures and ponds.
Revise plot plan to show all graded areas.
Building permit comments
Obtain permits for all structures.
Submit soils report addressing buildings and grading due to original slope greater than 15%
Submit grading, erosion, sediment control plans by CA licensed engineer
Submit floor and electrical plans for all greenhouses
Submit Ag exempt letters of intent for all ag structures
Identify property lines with recorded monuments or provide a letter from licensed surveyor verifying setbacks to property lines.
2.26.2021 G. Dumler
Recommend approval of planning referral
Revised site plan, soils report, erosion and sediment control received.

QUESTIONS? Please contact the County of Humboldt Building Division