



COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION

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Hearing Date: October 5, 2017

To: Humboldt County Planning Commission

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

Subject: **The Clinic 99 Conditional Use Permit**
Application Number 11340
Case Number CUP 16-233
Assessor's Parcel Number 211-362-016
15500 Dyerville Loop Rd, Miranda, CA 95553

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Please contact Joshua Dorris, Planner, at 268-3779, or by email at jdorris@co.humboldt.ca.us, if you have any questions about the scheduled public hearing item.

AGENDA ITEM TRANSMITTAL

Hearing Date	Subject	Contact
October 5, 2017	Conditional Use Permit	Joshua Dorris

Project Description: The Clinic 99 seeks a Conditional Use Permit (CUP16-233) for 42,860 square feet of existing cultivation on a 111.5 acres parcel. The cultivation activities include 32,860 square feet of outdoor and 10,000 square feet of mixed light cultivation. The cultivation is currently in five different locations within the property, the applicant proposes to relocate 3 sites and a portion of a 4th site to a more consolidated location. The water source will include a permitted well and a new well to supplement the cultivation and domestic use. Water storage will include five 5,000 gallon water tanks for cultivation and a 2,500 gallon water tank for domestic use. The projected water usage is about 565,000 gallons a year. Processing will take place onsite in a proposed 4,000 square foot metal building, cannabis will be dried, cured, and machine trimmed or hand trimmed. The applicant will have a total of eight employees during the operation and a total of fourteen employees during peak season. The Clinic 99 has filed a Notice of Intent with the North Coast Water Quality Control Board under Tier 2.

Project Location: The project is located in Humboldt County, in the Myers Flat area, on the west side of Dyerville Loop Road, approximately 4.29 miles south from the intersection of Elk Creek Road and Dyerville Loop Road.

Present Plan Land Use Designation: Timber Production (T), Framework Plan (FRWK), Density: 160 to 20 acres per dwelling unit, Slope Stability: Moderate Instability (2).

Present Zoning: Agriculture Exclusive (AE), Timberland Production (TPZ).

Case Number: CUP 16-233

Application Number: 11340

Assessor's Parcel Number: 211-362-016

Applicant

The Clinic 99
Josh Ptashn
PO Box 519
Garberville, CA 95542

Owner

Unigue Land Investments Inc.
PO Box 519
Garberville, CA 95542

Agent

Manhard Consulting
Timothy Windbigler
611 I St. Suite A
Eureka, CA 95501

Environmental Review: The existing cultivation project is exempt from environmental review pursuant to Section: 15304 – Minor Alterations to Land of the California Environmental Quality Act guidelines.

Major Issue: Timberland Conversion in TPZ and Noise impacts on Spotted Owl.

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

The Clinic 99 Conditional Use Permit
Case Number CUP 16-233
Assessor's Parcel Number (APN): 211-362-016

Recommended Planning Commission Action

1. Describe the application as a public hearing.
2. Request that staff present the project.
3. Open the public hearing and receive testimony; and.
4. Close the hearing and take the following action:

Find the project exempt from environmental review pursuant to Section 15304 of the State CEQA Guidelines, make all of the required findings for approval of the Conditional Use Permit based on evidence in the staff report and any public testimony, and adopt the Resolution approving the proposed The Clinic 99 Conditional Use Permit, subject to the recommended conditions.

Executive Summary

The proposed Conditional Use Permit for The Clinic 99 (TC9) would allow 42,860 square feet (SF) of existing cultivation at five locations on a 111.5-acre parcel to be consolidated into two cultivation areas. The result would be 32,860 SF of outdoor cultivation and 10,000 SF of mixed-light cultivation.

The existing site consists of an unpermitted two-bedroom single family residence and greenhouse cultivation facilities. In addition to the consolidated cultivation area, TC9 is proposing a new shop building to be used for processing and storage of medical cannabis cultivated onsite. New greenhouses will be constructed within the proposed, relocated cultivation areas. All activities will meet the required setbacks from the property line and surrounding streams and drainages. Several of the existing cultivation locations fall within the wooded areas. TC9 has contracted with a Registered Professional Forester and developed a Non-industrial Timber Management Program with Cal-Fire.

Operations

The subject site is in the shape of an inverted "L" with the majority of the proposed operation occurring on the eastern portion of the parcel, with an additional outdoor cultivation area in the lower southeast corner of the parcel. The primary areas of restoration are proposed in the middle of the parcel toward the west. The outdoor cultivation will be in 65-gallon pots and raised beds within cold-frame greenhouses. A total of two cultivation cycles are proposed for the mixed-light greenhouses, with a potential to scale up to three cycles in the future.

Harvesting will be done by hand using seasonal help and will be dried and cured on site. Employees will be required to wear rubber gloves and masks while using automatic trimmers for processing. The final product will be weighed, vacuumed sealed, labeled and stored securely prior to distribution. TC9 estimates 8 permanent and 7 seasonal employees.

Entrance to the parcel will have a locked gate with a *No Trespassing* sign. Cultivation facilities will be completely enclosed by a 6-foot security fence with a locked gate, motion sensors and security lights. Security cameras are proposed for the site entrance, the residence, and processing facility. The processing facility and residence will also have an alarm.

Access and Parking

The project is located in the Meyers Flat area and accessed via a private road on the west side of Dyerville Loop Road. The Road Evaluation Report submitted to the department of Public Works by TC9 describes the private access road as an equivalent to a category 4 road and is generally

20-feet wide with several pinch points which are noted and documented in the full report. Immediate onsite parking includes spaces available for the residence, an agent in charge, and guests or visitors. Employee parking is located towards the north end of the site, adjacent to the road in a flat clearing between the trees (noted on site plan). ADA parking will be provided near the processing plant.

Water Supply and Onsite Sanitation

The existing water source for irrigation and domestic use is an existing well located within the subject property. The well has been permitted and approved by the Division of Environmental Health (DEH) on February of 2017. Water storage includes five 5,000-gallon water tanks for cultivation and a 2,500-gallon water tank for domestic use, with annual projected use of 565,000 gallons.

TC9 has enrolled in the North Coast Regional Water Quality Control Board's Cannabis Cultivation Discharge Program (WDID 1B1689CHUM) and has prepared a Water Resources Protection Plan. TC9 has also submitted a Notification of Lake or Streambed Alteration (LSA) to the California Department of Fish and Wildlife (CDFW). Continued enrollment and final approval from both agencies will be a condition of approval for this permit.

Onsite wastewater treatment for the existing two-bedroom residence and the proposed processing building will be through septic systems. The septic for the two-bedroom residence has been sized for the expected occupancy of the building per DEH standards. The septic system for the processing building will be designed to accommodate a peak count of 14 employees. A portable toilet will be located at the south end of the site to serve the most remote location of the site and will be serviced once a week.

Sensitive Resources

CDWF identified a Northern Spotted Owl (NSO) activity center less than 0.5-miles from the cultivation area and requested a biological assessment be performed by a qualified biologist. In response to CDFW's request for a biological assessment, TC9 completed NSO surveys to determine the presence of activity centers within or near the property and cultivation sites. The County GIS mapping show three activity centers within 0.7 miles of the property, with one located within the property; however, no detections have been attributed to this site for more than 10 years. The survey concluded that there were no detections within 0.7 miles of the property and the non-industrial timber management plan boundary.

Due to the proximity of NSO and the applicants use of mixed-light cultivation, CDFW recommends that the county require a lighting plan as part of a conditions of approval for the project. TC9 has prepared and submitted a lighting plan as an addendum to the original application package. CDFW in other consultations have indicated it is detrimental to have generators operating in NSO habitat (which this is) and all generator use should be prohibited in TPZ zoned land. A condition has not been added to this project restricting generator use because there is not a written comment requesting such a condition, but the proposed ordinance, as drafted, would not allow generator use on this property.

Previous comments by CDFW concerning the proximity of a cultivation area near a Stream Management Area (Elk Creek) have been resolved by relocating the cultivation area away from the stream.

Relocation of cultivation sites

TC9 proposes to relocate 3 existing cultivation sites and a part of a 4th cultivation site to a consolidated location. This presents a policy decision to the Planning Commission that has not

previously been in front of the Commission. The area of existing and proposed cultivation is in timberland that is zoned TPZ. The Commercial Medical Marijuana Land Use Ordinance does not allow new cultivation in TPZ and existing cultivation can be allowed provided it complies with the performance standards of the ordinance and does not expand. In timberland outside of TPZ new cultivation is only allowed in existing 3 acre conversions or in non-timberland areas. The CMMLUO does not address on site relocation of cultivation sites in TPZ where there is a conversion of timberland.

Staff is in favor of relocation of existing cultivation sites within the same property in situations where there are clear environmental benefits. The applicant has submitted information that relocation of these sites would provide greater distances from both Northern Spotted Owl activity centers and a stream management area. In addition relocation of the western sites would allow removal of over 3,850 linear feet of road from the existing 8,128 linear foot road network. This is shown and described in "The Clinic 99 – Cultivation Relocation Narrative" (Attachment 3b.) The applicant's forester has indicated that the area of the existing cultivation sites is higher value habitat (hardwood forest) than the proposed location of the new cultivation (Douglas Fir.) Staff reviewed the historic soils maps for the property and found that the location of the existing cultivation sites have better soils than where the cultivation is being relocated to supporting the habitat value argument.

In association with the project, the applicant has prepared a Non-industrial Timber Management Plan (NTMP) for the site and proposes to remove timber from the area proposed for the new cultivation. The three current cultivation sites, and the roads would be removed and restored and the proposed cultivation would be placed in the timber harvest area (See aerial photo showing relocation). In place of the timberland, cannabis cultivation would be allowed.

The CMMLUO does not specifically prohibit this proposal, but the ordinance does prohibit new cultivation in TPZ and restricts expansion of existing cultivation. The purpose of the TPZ is to preserve timberlands for the growing and harvesting of timber. These requirements must be kept in balance with the CMMLUO allowance for existing cannabis cultivation to continue in TPZ. If the Commission is able to determine that this proposal is consistent with the objectives of the zoning district and the CMMLUO then the project can be approved, if on the other hand the Commission finds that this proposal is inconsistent with these provisions because it does not provide an environmental benefit, then the project should be modified or denied.

Staff Recommendation

There is evidence on the record to support a finding that relocating the existing cultivation sites to another location on the site provides environmental benefits.

Alternatives: The following alternatives are available to the Planning Commission:

- (a) Approve the project as proposed with the condition that generators not be permitted for cannabis cultivation.
- (b) Continue the item and give the applicant the ability to submit additional evidence to support relocation of the cultivation sites. This would include a biological analysis (by a qualified biologist) of the relative habitat values between the existing sites and the relocation site, and document whether the relocation is environmentally preferred and provide a study of the potential impacts on Northern Spotted Owl.
- (c) Approve the project with the limitation that all cultivation needs to be contained in the existing locations.
- (d) Determine that the project is not consistent with the provisions of the CMMLUO and County code and deny the project. The commission should state the reasons for denial.

**RESOLUTION OF THE PLANNING COMMISSION
OF THE COUNTY OF HUMBOLDT
Resolution Number 17-**

**Case Number: CUP 16-233
Assessor's Parcel Number: 211-362-016**

Makes the required findings for certifying compliance with the California Environmental Quality Act and conditionally approves The Clinic 99 Conditional Use Permit request.

WHEREAS, The Clinic 99 submitted an application and evidence in support of approving the Conditional Use Permit to permit an existing 32,860 square-foot outdoor cultivation area and a 10,000 square-foot mixed-light cultivation on an existing commercial cannabis establishment; and

WHEREAS, the County Planning Division reviewed the submitted application and supporting substantial evidence and has referred the application and evidence to involved reviewing agencies for site inspections, comments and recommendations; and

WHEREAS, the project is exempt from environmental review per Section 15304 (Minor Alterations to Land) of the CEQA Guidelines; and

WHEREAS, Attachment 2 in the Planning Division staff report includes substantial evidence in support of making all of the required findings for approving the proposed Conditional Use Permit (Case Number CUP 16-233); and

WHEREAS, a public hearing was held on the matter before the Humboldt County Planning Commission on October 5, 2017.

NOW, THEREFORE, be it resolved, determined, and ordered by the Humboldt County Planning Commission that:

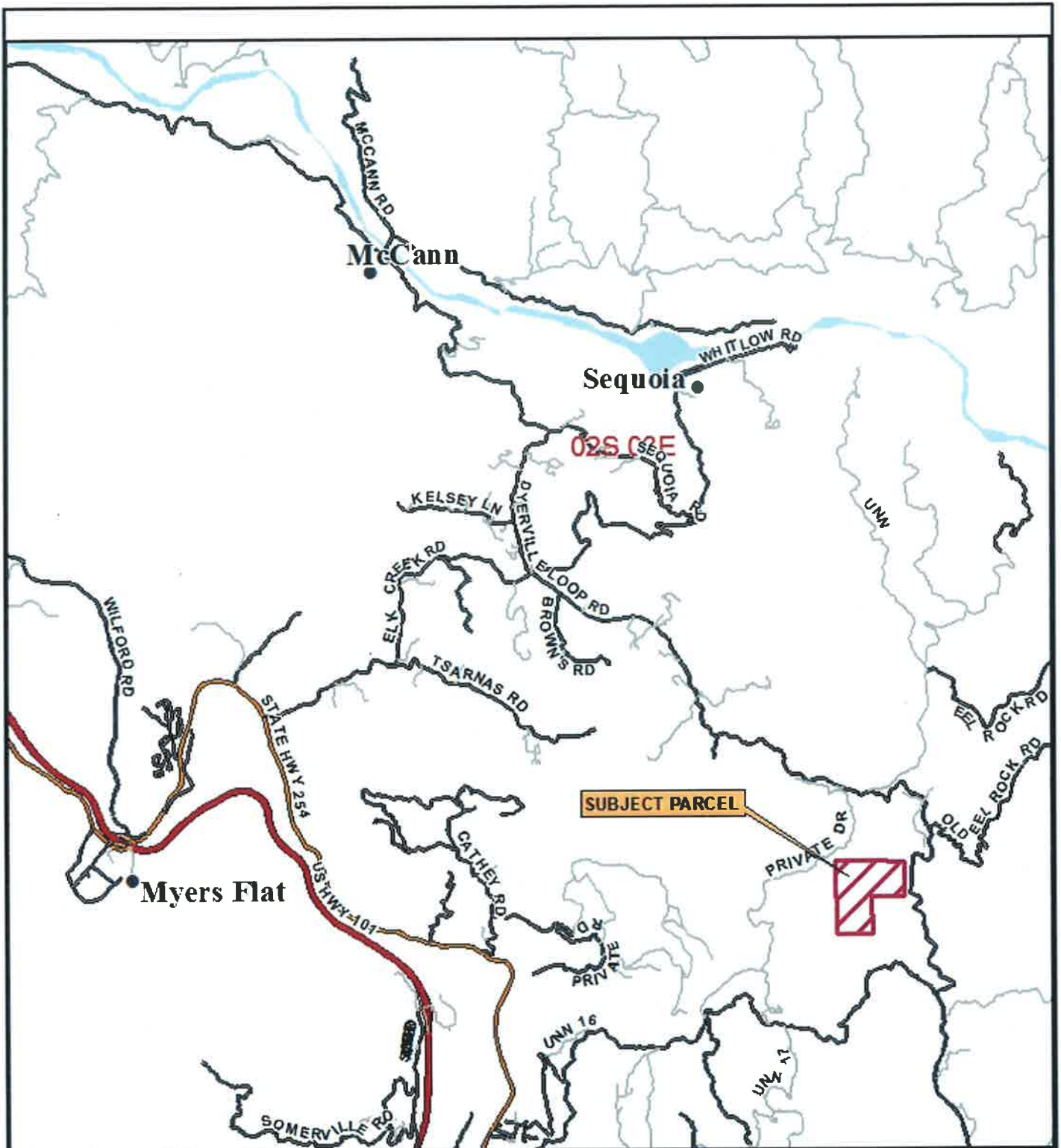
1. The proposed project is exempt from environmental review; and
2. The findings in Attachment 2 of the Planning Division staff report for Case Number CUP 16-233 based on the submitted substantial evidence support approval of the project; and
3. The Conditional Use Permit Case Number CUP 16-233 as recommended and conditioned in Attachment 1 is approved.

The motion was made by COMMISSIONER _____ and second by COMMISSIONER _____:

AYES: COMMISSIONERS:
NOES: COMMISSIONERS:
ABSENT: COMMISSIONERS:
ABSTAIN: COMMISSIONERS:
DECISION:

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.

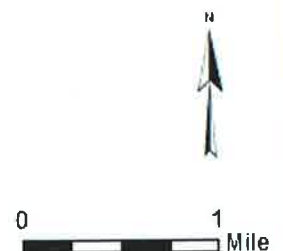
John H. Ford, Director
Department of Planning and Building
County of Humboldt

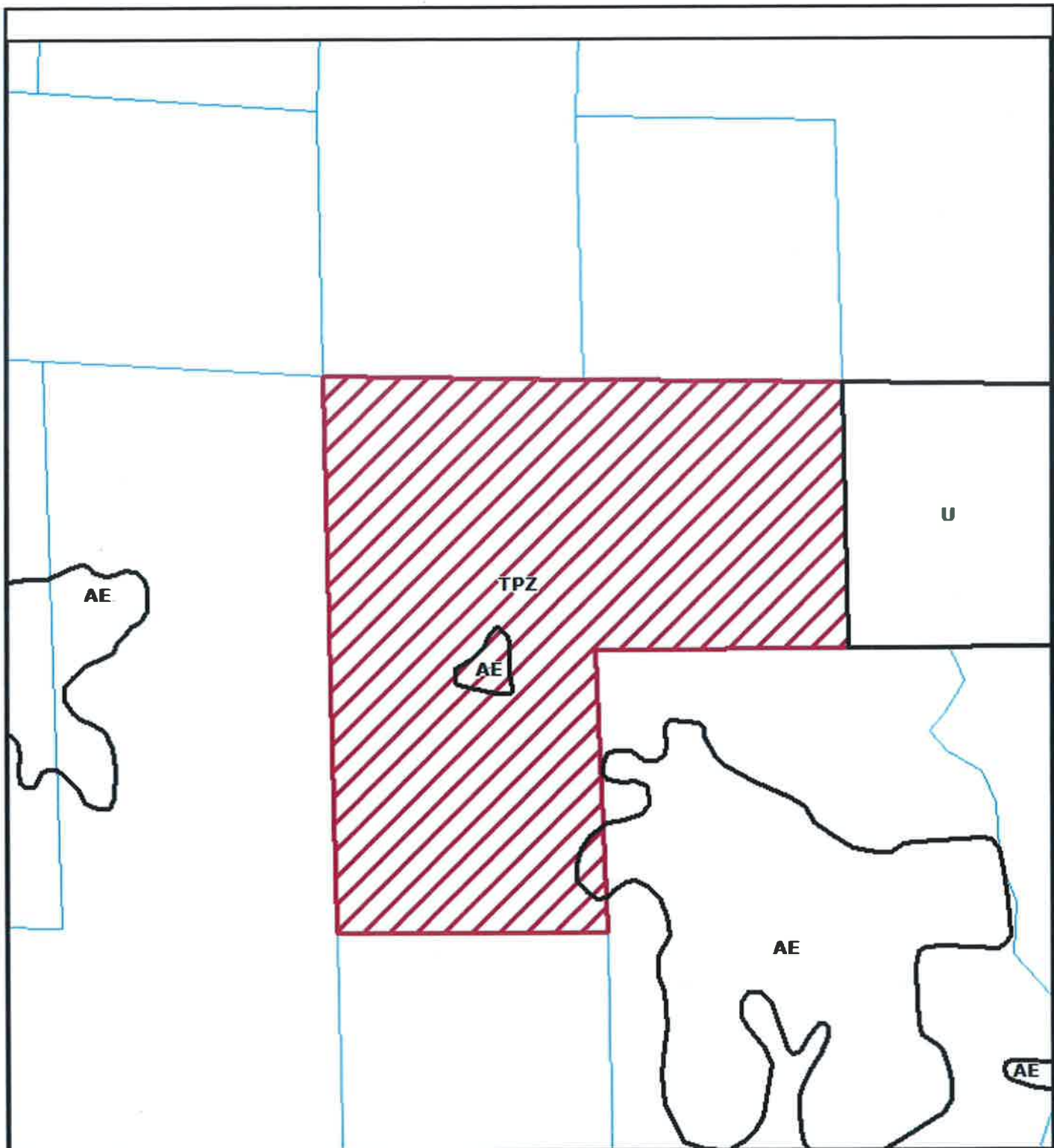


**LOCATION MAP
PROPOSED THE CLINIC 99
MYERS FLAT AREA
CUP-16-233
APN:211-362-016
T02S R04E S30 HB&M (MYERS FLAT)**

Project Area = 

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.





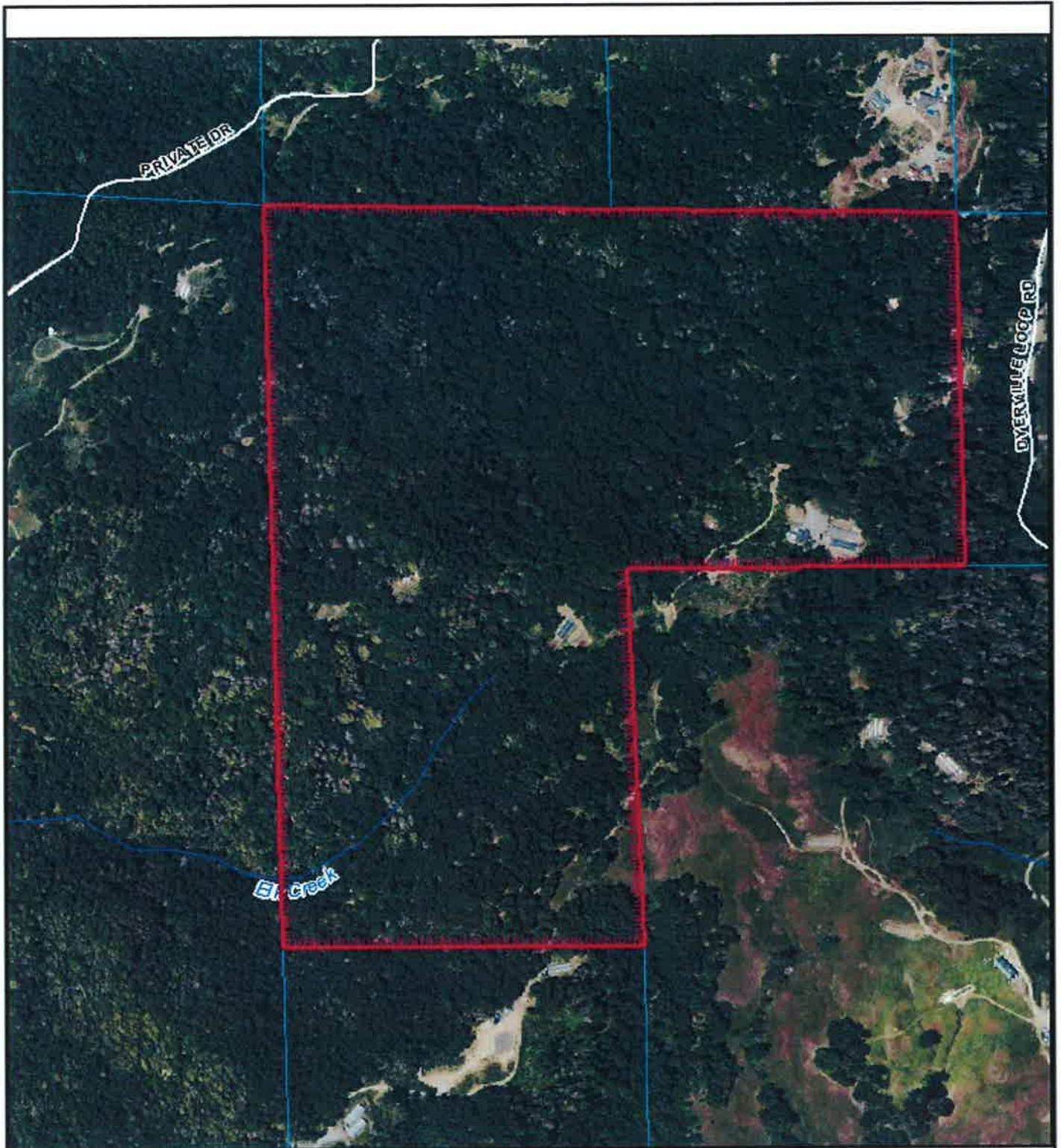
**ZONING MAP
PROPOSED THE CLINIC 99
MYERS FLAT AREA
CUP-16-233
APN:211-362-016
T02S R04E S30 HB&M (MYERS FLAT)**

Project Area = 

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.



0 250 500 750
Feet



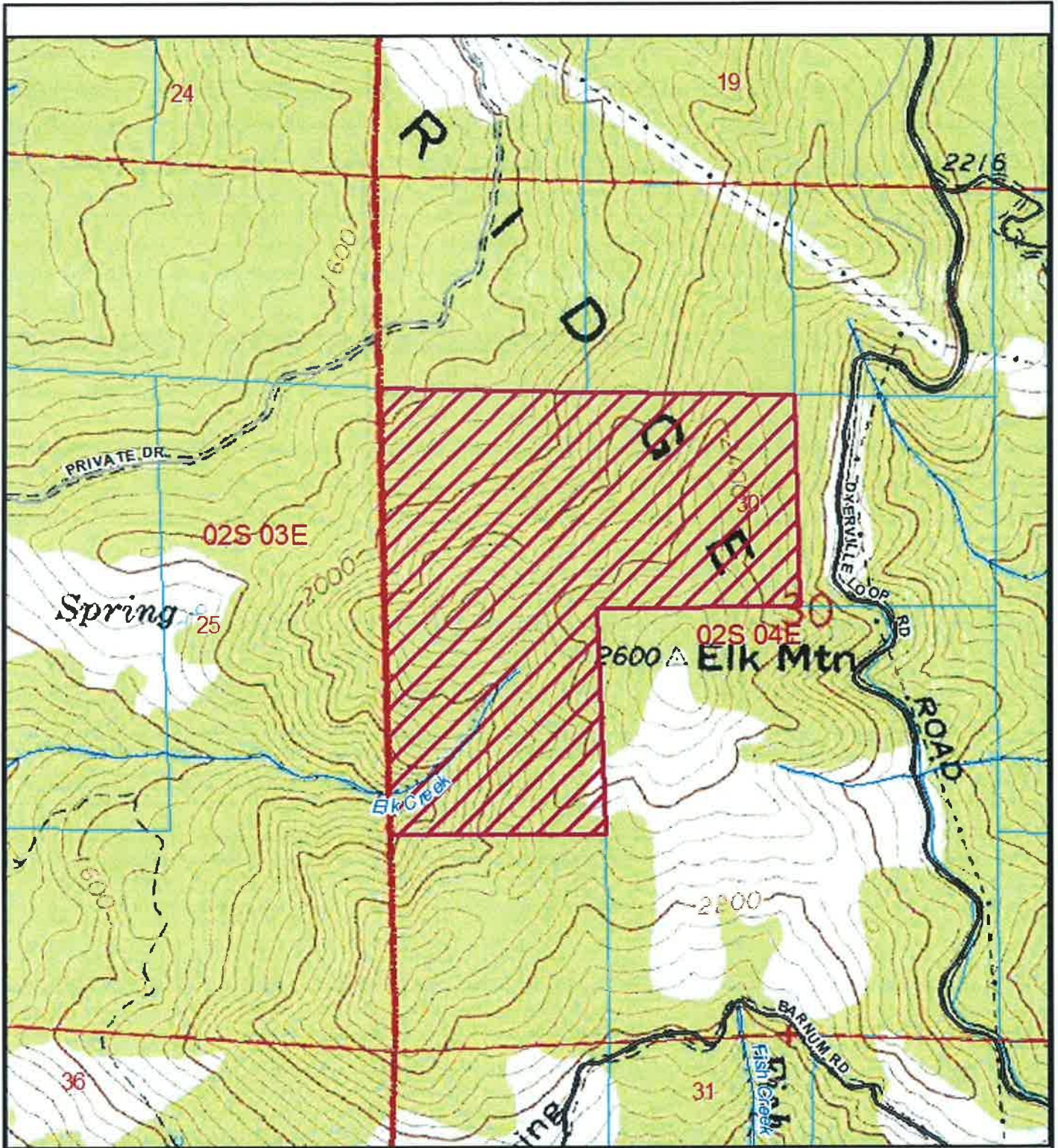
AERIAL MAP
PROPOSED THE CLINIC 99
MYERS FLAT AREA
CUP-16-233
APN:211-362-016
T02S R04E S30 HB&M (MYERS FLAT)

Project Area = 

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.



0 250 500 Feet



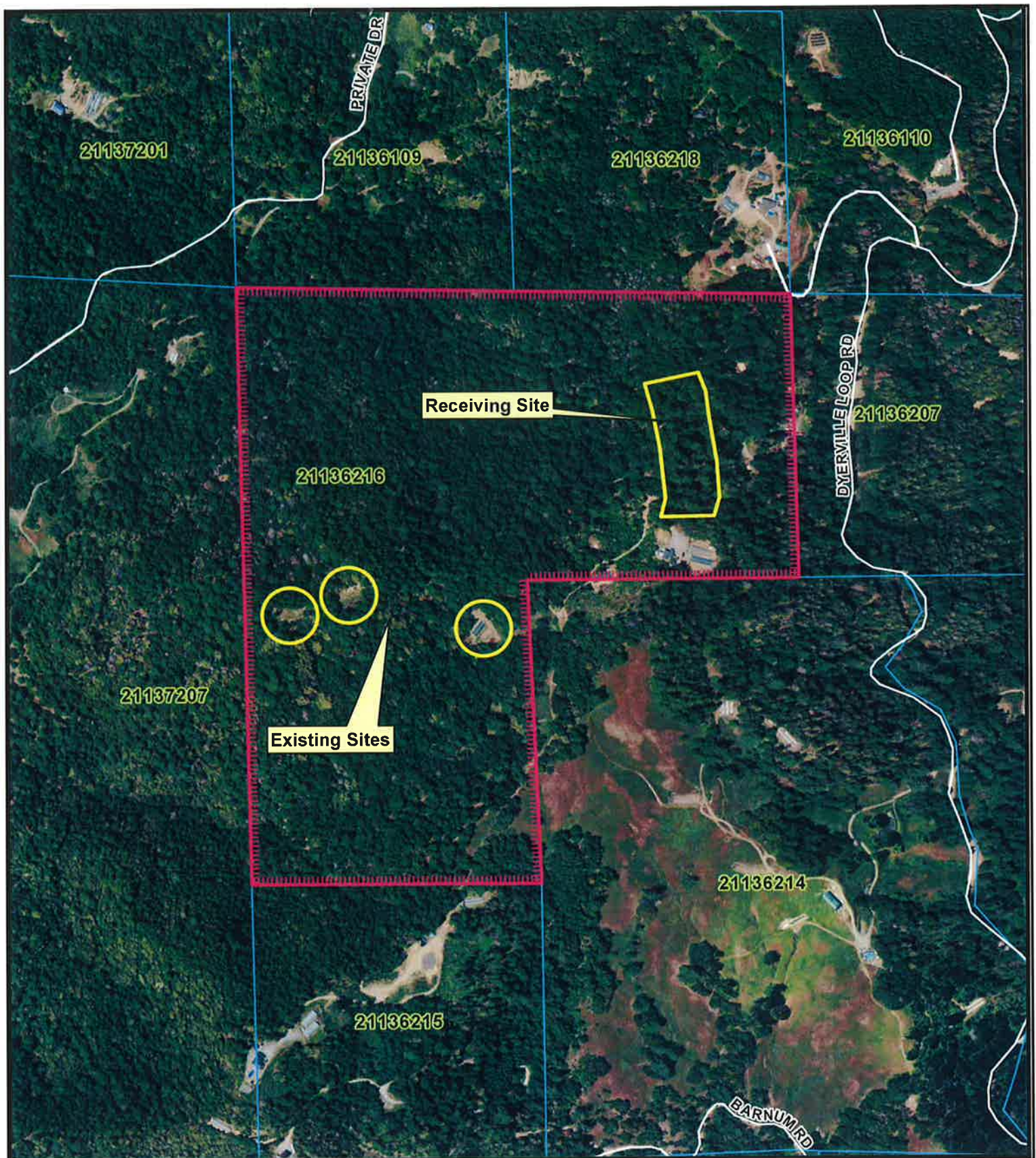
Project Area = 

**TOPO MAP
PROPOSED THE CLINIC 99
MYERS FLAT AREA
CUP-16-233
APN:211-362-016
T02S R04E S30 HB&M (MYERS FLAT)**

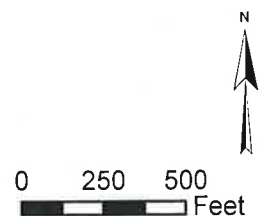


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Feet

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.



**The Clinic 99
Relocation Aerial Map
APN: 211-362-016**



THE CLINIC 99

CONDITIONAL USE PERMIT APPLICATION

APN: 211-362-016

DIRECTIONS TO SITE:
FROM SOUTHBOUND ON US-101
(APPROX. 48.9 MILES)
-TAKE EXIT 668 FOR CA-254
TOWARDS MYERS FLAT
(APPROX. 1.9 MILES)
-TURN LEFT ONTO CA-254 S
(APPROX. 2.7 MILES)
-TURN LEFT ONTO ELK CREEK RD
(APPROX. 4.4 MILES)
-TURN LEFT ONTO DYERVILLE
LOOP RD
-PROJECT SITE ON LEFT



PROJECT DESCRIPTION:

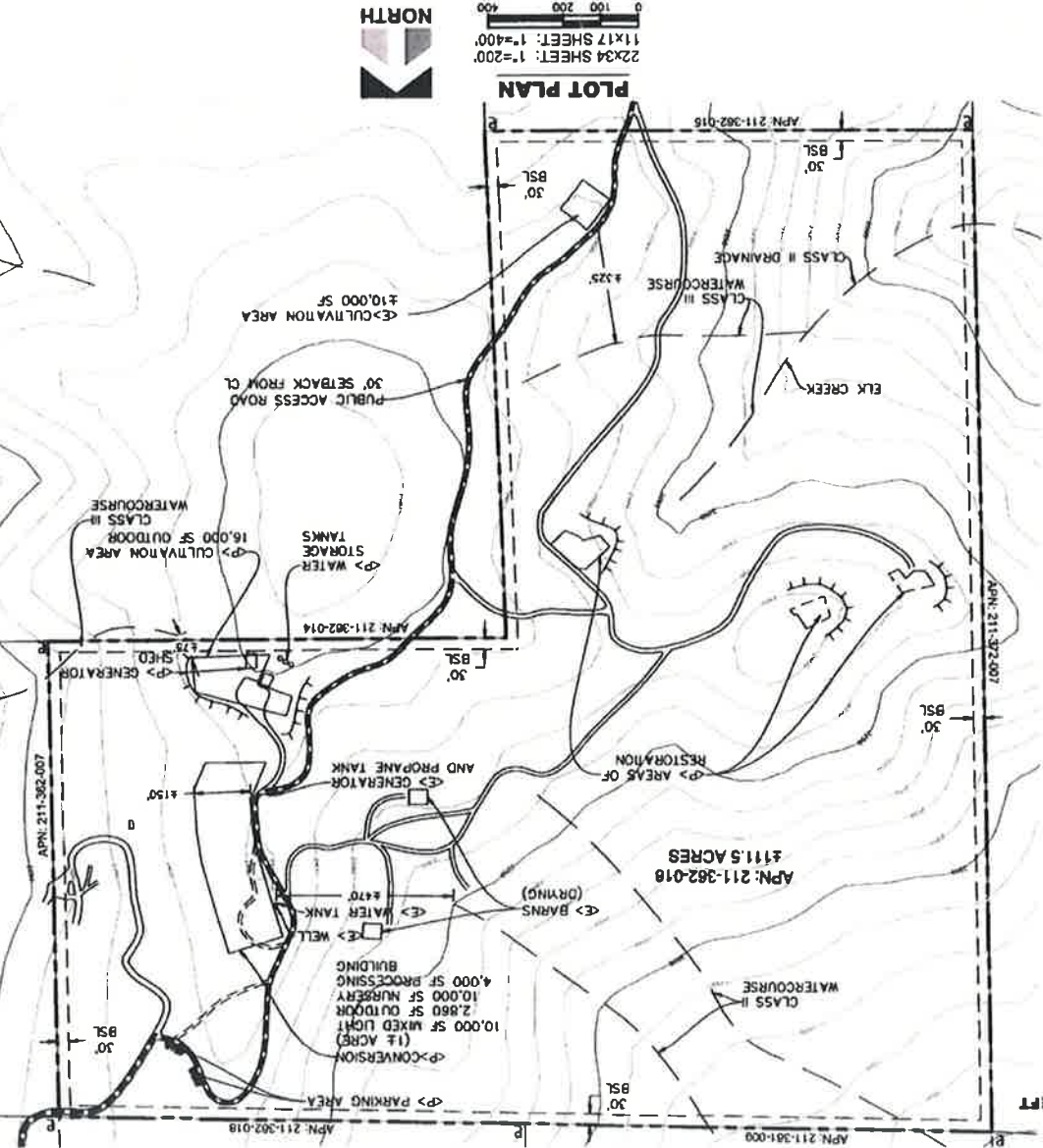
THE CLINIC 99 IS PROPOSING TO PERMIT EXISTING MEDICAL CANNABIS CULTIVATION ACTIVITIES IN ACCORDANCE WITH THE COUNTY OF HUMBOLDT'S (COUNTY) COMMERCIAL MEDICAL MARIJUANA LAND USE ORDINANCE (CMUO), ORDINANCE NO. 2554. THE EXISTING OPERATION INCLUDES APPROXIMATELY 42,860 SQUARE FEET (SF) OF MEDICAL CANNABIS CULTIVATION AREA WHICH INCLUDES 12,860 SF OF MIXED LIGHT CULTIVATION AND 30,700 SF OF OUTDOOR CULTIVATION. THE MIXED LIGHT CULTIVATION AREA WILL BE REDUCED TO 10,000 SF. THE OUTDOOR CULTIVATION AREA IS PROPOSED TO BE 32,860 SF. THE PROJECT PROPOSAL INCLUDES THE DEVELOPMENT OF FACILITIES APPURTENANT TO THE CULTIVATION INCLUDING GREENHOUSES, 1 FACILITIES FOR DRYING, CURING, GRADING AND TRIMMING OF MEDICAL CANNABIS. WATER DIVERSION WORKS AND APPROPRIATE WATER STORAGE.

GENERAL NOTES:

1. DRAWING SCALE AS NOTED. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
2. THIS IS NOT A BOUNDARY SURVEY. BOUNDARY INFORMATION DEPICTED HAS BEEN OBTAINED FROM HUMBOLDT COUNTY 2015 GIS DATA. MANHARD CONSULTING LTD. HAS NOT VERIFIED THIS PROPERTY BOUNDARY.
3. THERE ARE NO NEARBY SCHOOLS, SCHOOL BUS STOPS, PLACES OF WORSHIP, PUBLIC PARKS OR TRIBAL RESOURCES WITHIN 800 FEET OF THE PROPOSED CULTIVATION AREA.
4. THERE ARE NO RESIDENCES ON ADJOINING PARCELS WITHIN 300 FEET OF THE PROPOSED CULTIVATION AREAS.
5. ANY EXISTING DEVELOPMENT CONSTRUCTED WITHOUT THE BENEFIT OF COUNTY REVIEW WILL BE SUBJECT TO THE HUMBOLDT COUNTY BUILDING DEPARTMENT UPON APPROVAL OF THE CONDITIONAL USE PERMIT.
6. CLASSIFICATION OF WATERCOURSES AS IDENTIFIED IN TIMBERLAND RESOURCE CONSULTANTS WATER RESOURCES PROTECTION PLAN.
7. WATER FOR DOMESTIC USE AND IRRIGATION USE WILL BE SUPPLIED THROUGH PERMITTED WELLS.

NCRWQCB NOTICE OF INTENT

THE SUBJECT PARCEL HAS BEEN ENROLLED IN THE NCRWQCB CANNABIS CULTIVATION WASTE DISCHARGE REGULATORY PROGRAM. WQID NUMBER 1816890CHUM



22x34 SHEET: 1"=200'
11x17 SHEET: 1"=400'
NORTH

SHEET INDEX:

TPZ	SRA	FRONT	SIDE	REAR
		30'	30'	30'

MAX. BLDG. HT. = NONE SPECIFIED
SRA AREA: = YES
IN 100 YR FLOOD ZONE: = NO
CI - EXISTING AND PROPOSED SITE PLAN

PROJECT INFORMATION:

APPLICANT:
THE CLINIC 99
P.O. BOX 519
GARBERVILLE, CA 95542

PROPERTY OWNER:
UNIQUE LAND INVESTMENTS
P.O. BOX 519
GARBERVILLE, CA 95542

OWNER'S AGENT:
MANHARD CONSULTING
517 3rd STREET, SUITE 6
EUREKA, CA 95501
(707) 444-3800

SITE ADDRESS:
APN: 211-362-016
MIRANDA, CA 95553

TREES TO BE REMOVED = TBD

EXISTING MIXED LIGHT CULTIVATION AREA = 12,860 SQ. FT.
EXISTING OUTDOOR CULTIVATION AREA = 30,700 SQ. FT.
PROPOSED MIXED LIGHT CULTIVATION AREA = 10,000 SQ. FT.
PROPOSED OUTDOOR CULTIVATION AREA = 32,860 SQ. FT.

EARTHWORK QUANTITIES = TBD

WATER = PRIVATE
SEWER = PRIVATE

PARCEL SIZE = 111.5 ACRES

ZONING: = AE, TPZ
GENERAL PLAN DESIGNATION = T (PRWK)

BUILDING SETBACKS:

Manhard CONSULTING

211 Third Street, Suite 6
Eureka, CA 95501
(707) 444-3800

THE CLINIC 99 / APN: 211-362-016
15500 DYERVILLE LOOP RD, MIRANDA, CA 95553
CUP PLOT PLAN, VICINITY MAP AND PROJECT NOTES

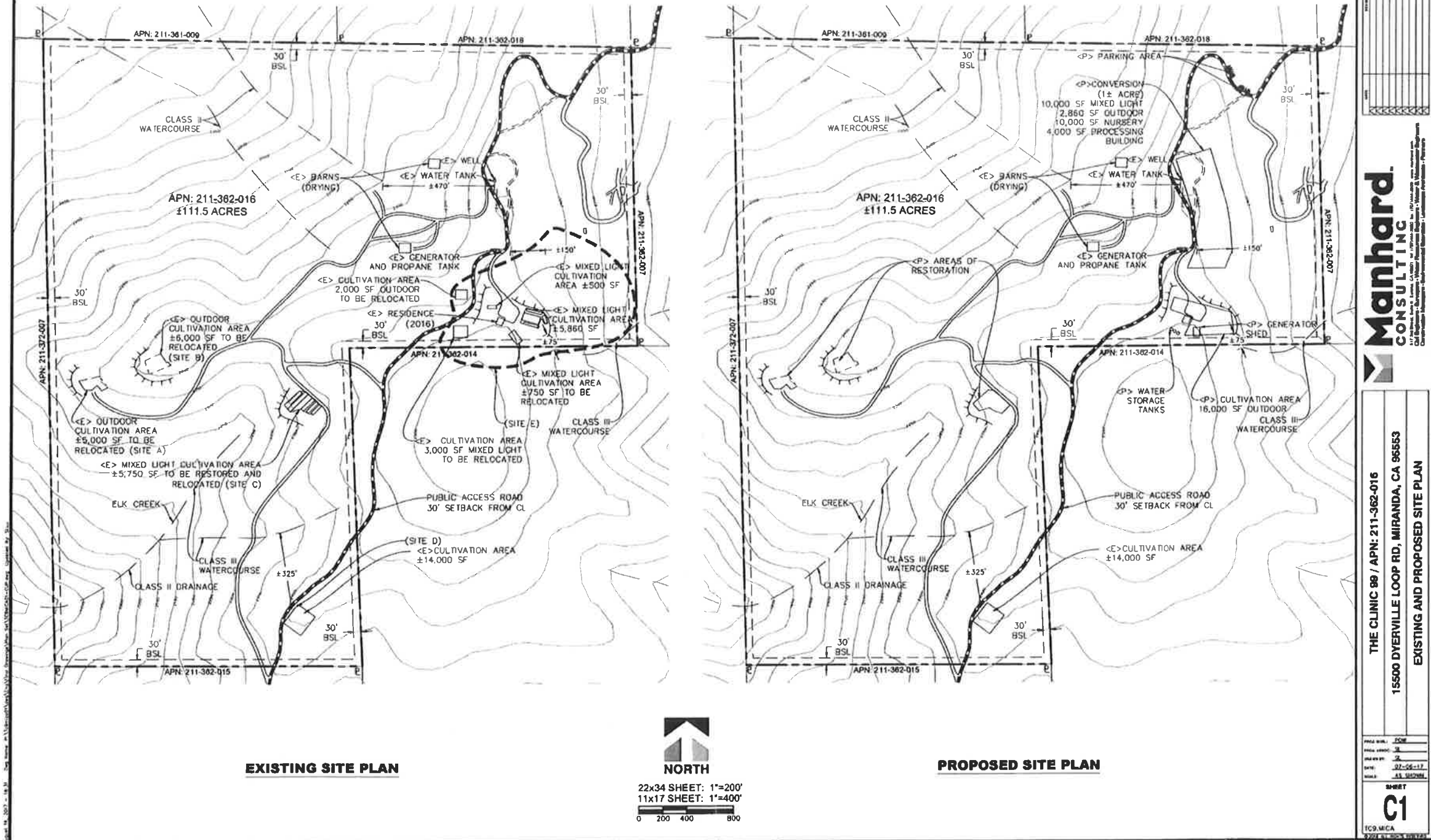
30 SHEET

THIS IS A PRELIMINARY DRAWING. IT IS NOT TO BE USED FOR CONSTRUCTION. ANY CHANGES TO THIS DRAWING MUST BE APPROVED BY MANHARD CONSULTING.

THE CLINIC 99

EXISTING AND PROPOSED SITE PLAN

APN: 211-362-062



Manhard CONSULTING

11700 Wilshire Blvd., Suite 100, Los Angeles, CA 90025
Tel: 310.207.1170 Fax: 310.207.1171
www.manhardconsulting.com

THE CLINIC 99 / APN: 211-362-016
15500 DYERVILLE LOOP RD, MIRANDA, CA 95653
EXISTING AND PROPOSED SITE PLAN

PROJECT NO.: 15006
PROJECT NAME: THE CLINIC 99
DATE: 07-04-17
SHEET: 11 OF 12
C1
TCS, MCA
1700 11th Street, Suite 100

ATTACHMENT 1

RECOMMENDED CONDITIONS OF APPROVAL

Approval of the existing cannabis cultivation, proposed relocation of cannabis cultivation and other commercial cannabis activity is conditioned on the following terms and requirements which must be satisfied before the provisional cannabis cultivation permit can be finalized.

1. Within 60 days of project approval, the applicant shall execute a Compliance Agreement with the Humboldt County Planning Department detailing all necessary permits and infrastructure improvements described under Conditions of Approval #2–10. 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.
2. The applicant shall secure permits for all unpermitted structures related to the cannabis cultivation and other commercial cannabis activity. The plans submitted for building permit approval shall be consistent with the project description and 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.
3. The approved building plans shall meet all applicable fire codes, including fire suppression infrastructure requirements deemed necessary for the project by the Building Inspection Division. Sign off on the Occupancy Permit by the Building Division shall satisfy this requirement.
4. The applicant shall secure the approval of the Division of Environmental Health and the Regional Water Quality Control Board for the on-site sewage disposal system prior to the issuance of the building permit. A letter from those agencies indicating approval has been issued will satisfy this condition.
5. Applicant will comply with all improvements (including improvements to the entrance of 20-feet wide and 50-feet long) recommend by the Department of Public Works to bring the non-county maintained road into compliance with Category 4 Road Standards.
6. Noise generated from generators shall not exceed 50db at 100 feet from the generator or at the edge of the nearest forest habitat, whichever is closer, as required by Section 314-55.4.11 (o) Humboldt County Code. Prior to issuance of a building permit or the initiation of cultivation activities, whichever occurs first, the applicant shall provide documentation from a qualified professional demonstrating that the generators conform to the specified standard. Should the applicant proposed to achieve noise attenuation by placing the generators inside a building(s), the applicant shall secure a building permit prior to construction.
7. The applicant shall implement all corrective actions detailed within the Water Resource Protection Plan developed for the parcel, prepared pursuant to Tier 2 enrollment under the North Coast Regional Water Quality Control Board Cannabis Waste Discharge Regulatory Program. A letter or similar communication from the RWQCB verifying that all their requirements have been met will satisfy this condition.
8. The applicant shall secure a final Lake and Streambed Alteration Agreement approved by the California Department of Fish and Wildlife and comply with all applicable terms.

9. The applicant shall comply with all applicable terms and conditions set forth in a CAL FIRE approved non-industrial timber management plan.
10. The applicant shall prepare a restoration plan for the areas and roads being removed consistent with the Cultivation Relocation Exhibit included in the Restoration Narrative. The restoration plan shall include restoration of topography, mitigation for compaction associated with roads, replanting of major vegetation including native grasses, trees and shrubs.

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

1. All components of project shall be developed, operated, and maintained in conformance with the Project Description, the approved Site Plan, the Plan of Operations, Cultivation Plan, Restoration Plan 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.
2. All new and existing outdoor lighting shall be compatible with the existing setting and directed within the property boundaries.
3. Commercial cannabis activity shall be conducted in compliance with all laws and regulations as set forth in the Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO) and the Medical Cannabis Regulation and Safety Act (MCRSA), as may be amended from time to time, as applicable to the permit type.
4. Possession of a current, valid required license, or licenses, issued by any agency of the State of California in accordance with the MCRSA, and regulations promulgated thereunder, as soon as such licenses become available.
4. The operation shall participate in the Medical Cannabis Track and Trace Program administered by the Humboldt County Agricultural Commissioner, when available.
5. Possession of a current, valid permit or license, issued by the Humboldt County Department of Health and Human Services – Environmental Health Division, as soon as such permits or license become available.
6. Odors shall be contained on the property on which the Cannabis activity is located. To implement this requirement air filtration and ventilation equipment is to be maintained in good working condition and monitored on an on-going basis to limit potential adverse odor emission impacts to employees and/or properties located in the vicinity. If the County receives any odor complaints, the permit holder shall work with the Building Official to correct odor concerns.
7. **Permit Duration.** The Permit shall be valid for one year from the effective date of approval, and on the anniversary date of such effective each year thereafter, unless an annual compliance inspection has been completed and the permit has been found to comply with all conditions of approval. In the event the inspection finds noncompliance, a written notification of shall be provided to the permit holder identifying the items not in compliance and the action the permit holder may take to cure the noncompliance. Failure to cure the noncompliance shall result in termination of the permit. The process of notification, re-inspection and appeal of any noncompliance determination shall be as set forth in sections 55.4.1.2.2 and 55.4.13 of the CMMLUO.

8. **Permit renewals to comply with updated laws and regulations.** Permit renewal per COA #7 above 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.
9. **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 conformance with conditions review shall accompany the request. The request shall include the following information:
 - (1) Identifying information for the new Owner(s) and management as required in an initial permit application;
 - (2) A written acknowledgment by the new Owner in accordance as required for the initial Permit application;
 - (3) The specific date on which the transfer is to occur; and
 - (4) Acknowledgement of full responsibility for complying with the existing Permit; and
 - (5) Execution of an Affidavit of Non-diversion of Medical Cannabis.
10. **Modifications to the Facility.** Aside from the improvements described in the project description, prior to making any modifications to a permitted facility, the permittee shall submit to the Planning Director a request for determination of County approvals, together with the appropriate fee. The request shall contain a description sufficiently detailed to allow the Planning Director to determine what permits and other approvals, are needed, and whether a modified Permit is required.
11. **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.
12. All signage shall comply with Section 314-87.2 of the Humboldt County Code.
13. The cultivation operations shall use the following best management practices to ensure the safety of employees and the cultivation product:
 - A. Ensure that the space in which any Medical Marijuana product is to be cultivated is a fully enclosed room and clearly designated on the approved floor plan.
 - B. Ensure that all applicable sanitary rules are followed.
 - C. Ensure that the standard operating procedure includes, but need not be limited to, step-by-step instructions on how to safely and appropriately:
 - a. Conduct all necessary safety checks prior to commencing handling;
 - b. Clean all equipment, counters and surfaces thoroughly; and
 - c. Dispose of any waste produced during the cultivation of Medical Marijuana in accordance with all applicable local, state and federal laws, rules and regulations.

- D. Establish written and documentable quality control procedures designed to maximize safety for employees and minimize potential product contamination.
- E. Have a comprehensive training manual that provides step-by-step instructions for cultivation of medical marijuana on its Licensed Premises. The training manual shall include, but need not be limited to, the following topics:
- a. All standard operating procedures used at that Licensed Premises;
 - b. The quality control procedures;
 - c. The emergency procedures for the Licensed Premises including:
 - Emergency procedures to be followed by employees in case of a fire, chemical spill or other emergency
 - Accident reporting and investigation policies;
 - Fire prevention
 - Materials handling policies;
 - Job hazard analyses; and
 - Personal protective equipment policies, including respiratory protection.
 - d. The appropriate use of any necessary safety or sanitary equipment;
 - e. The hazards presented by all chemicals and solvents used within the Licensed Premises as described in the material safety data sheet for each chemical and solvent;
 - f. Clear instructions on the safe use of all equipment involved in each process and in accordance with manufacturer's instructions, where applicable; and
 - g. Any additional periodic cleaning required to comply with all applicable sanitary rules.
- F. Provide adequate training to every employee prior to that individual undertaking any step in cultivation of a Medical Marijuana product.
- a. Adequate training shall include, but need not be limited to, providing a copy of the training manual for that Licensed Premises and live, in-person instruction detailing at least all of the topics required to be included in the training manual.
 - b. The individual training each employee shall sign and date a document attesting that all required aspects of training were conducted and that he or she is confident that the trainee can safely handle and distribute a Medical Marijuana product.
 - c. The employee that received the training shall sign and date a document attesting that he or she can safely implement all standard operating procedures, quality control procedures, and emergency procedures, operate all equipment, use all safety, sanitary and other equipment and understands all hazards presented by the chemicals and solvents to be used within the Licensed Premises and any additional period cleaning required to maintain compliance with all applicable sanitary rules.
- G. Maintain clear and comprehensive records of the name and signature of every individual who engaged in any step related to the cultivation of any Medical Marijuana product and the step that individual performed.
- H. Visibly post and maintain an emergency contact list which includes at a minimum:
- 1) Operation manager contacts;
 - 2) Emergency responder contacts;
 - 3) Poison control contacts.

- I. 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.

14. Persons engaging in the cultivation of any Medical Marijuana product shall:

- A. Be over 18 years of age.
- B. Not have been convicted of a felony for the illegal possession for sale, sale, manufacture, transportation, or cultivation of a controlled substance; a violent crime, as specified in subdivision (c) of Section 667.5 of the Penal Code; a serious crime, as specified in subdivision (c) of Section 1192.7 of the Penal Code; or a crime involving fraud, deceit, or embezzlement
- C. Ensure that all equipment, counters and surfaces used in the cultivation of any Medical Marijuana product is food-grade including ensuring that all counters and surface areas were constructed in such a manner that it reduces the potential for the development of microbials, molds and fungi and can be easily cleaned.
- D. Ensure that all equipment, counters, and surfaces used in the cultivation of any Medical Marijuana product are thoroughly cleaned after the completion of each Production Batch.
- E. Ensure that the appropriate safety or sanitary equipment, including personal protective equipment, is provided to, and appropriately used by, each person engaged in the cultivation of any Medical Marijuana product.

15. Electrical power for indoor cultivation operations including but not limited to illumination, heating, cooling, and ventilation, shall be provided by on-grid power with 100% renewable source, on-site zero net energy renewable source, or with purchase of carbon offsets of any portion of power not from renewable sources. Permittee shall maintain records sufficient to demonstrate compliance with this standard.

16. Pay all applicable taxes as required by the Humboldt County Commercial Marijuana Cultivation Tax Ordinance (Humboldt County Code Section 719-1 et seq.).

Informational Notes:

1. 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 as well as the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

The Native American Heritage Commission (NAHC) can provide information regarding the appropriate Tribal point(s) of contact for a specific area; the NAHC can be reached at 916-653-4082. 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 NAHC will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to PRC 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99

The applicant is ultimately responsible for ensuring compliance with this condition.

2. 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 of 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 of 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.
3. This 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 construction under a valid building permit or use in reliance on the permit has commenced prior to such anniversary date. Once initiated, the use is subject to the Permit Duration and Renewal provisions set forth in Condition of Approval # 7 and 8 of the On-Going Requirements /Development Restrictions, above. The period within which construction or use must be initially commenced may be extended as provided by Section 312-11.3 of the Humboldt County Code.
4. The applicant is required to pay for permit processing on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will provide a bill to the applicant after the decision. Any and all outstanding Planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

ATTACHMENT 2

Staff Analysis of the Evidence Supporting the Required Findings

Required Findings: To approve this project, the Hearing Officer must determine that the applicant has submitted evidence in support of making **all** of the following required findings.

The County Zoning Ordinance, Section 312-17.1 of the Humboldt County Code (Required Findings for All Discretionary Permits) specifies the findings that are required to grant a Conditional Use Permit:

1. The proposed development is in conformance with the County General Plan;
2. The proposed development is consistent with the purposes of the existing zone in which the site is located;
3. The proposed development conforms with all applicable standards and requirements of these regulations;
4. The proposed development and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare; or materially injurious to property or improvements in the vicinity;
5. 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 (the mid-point of the density range specified in the plan designation).
6. In addition, the California Environmental Quality Act (CEQA) states that one of the following findings must be made prior to approval of any development which is subject to the regulations of CEQA. The project either:
 - a) is categorically or statutorily exempt; or
 - b) has no substantial evidence that the project will have a significant effect on the environment and a negative declaration has been prepared; or
 - c) has had an environmental impact report (EIR) prepared and all significant environmental effects have been eliminated or substantially lessened, or the required findings in Section 15091 of the CEQA Guidelines have been made.

1. General Plan Consistency. The following table identifies the evidence which supports finding that the proposed tree removal is in conformance with all applicable policies and standards in the Framework Plan (FRWK).

Relevant Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Land Use: Timber Production , §2721 (FRWK)	Timber Production designation is utilized to classify land that is primarily suitable for the growing, harvesting and production of timber. Compatible uses include grazing and other agricultural uses. Density Range: One (1) dwelling unit per 160 acres to one (1) dwelling unit/ per 20 acres.	Compatible uses for Timber Production include grazing and agricultural uses. The MMRSA, Health and Safety Code section 11362.777(a) provides that medical cannabis is an agricultural product, subject to extensive state and local regulation.
Urban Limits: §2600 (FP)	New development shall be located within existing developed areas or in areas with adequate public services.	The project site is outside the urban area.
Housing §2400 (FRWK)	Housing shall be developed in conformity with the goals and policies of the Humboldt County Housing Element.	The project does not involve residential development.
Hazards §3200 (FRWK) Flood §3220 (FRWK) Geologic Hazards §3210 (FRWK) Fire §3230 (FRWK)	New development shall minimize risk to life and property in areas of high geologic, flood and fire hazards.	According to the Flood Insurance Rate Map (FIRM) Panel No. 1675 of 2050, the project site is located in Flood Zone X, which is defined as "areas of minimal flooding". The project site is outside of the 100 year flood boundary. Geologic hazard maps of the Framework Plan show the slope instability of the property to be moderate. The parcel is in an area of Very High Fire Hazard rating and falls within Cal Fire's State Responsibility Area. All applicable referral agencies that have not identified any issues relating to hazards.
Biological Resources §3420 (FRWK)	Protect designated sensitive and critical resource habitats.	The Biological Resource maps of the Framework Plan do not identify any sensitive or critical habitat areas on the project site. CDFW identified NSO to be within 0.5 miles of one of the cultivation areas and recommended biological clearance surveys. The applicant contracted a forester to complete surveys and determined that there are no current NSO activity centers within 0.5 miles of cultivation sites. The applicant has resolved earlier concerns from CDFW regarding cultivation areas

Relevant Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
		near the SMA and has relocated all cultivations sites to be outside their buffer. The applicant is enrolled Tier 2 of the North Coast Regional Water Quality Control Board's (NCRWQCB) Order No. 2015-0023 (Order), and has prepared a Water Resources Protection Plan (WRPP) to protect water quality from cannabis cultivation and related activities. Additionally, the applicant has applied for a CDFW 1602 LSA.
Cultural Resource Protection §3500 (FRWK)	New development shall protect cultural, archeological and paleontological resources.	The subject parcel was reviewed with respect to archaeological and cultural resources. The Northwest Information Center was referred, and records indicate that there are no cultural resources on the property. An archeologist survey and report has been prepared as requested by NWIC and as part of the NTMP. A condition of approval regarding legal protection requirements has been added to the conditions of approval to this permit.
Noise §3240 (FRWK)	Conform with noise standards.	The applicant has submitted generator specifications for portions of the cultivation that require generators. Noise generated from the generator shall comply with the standards set forth in Section 55.4.11(o) of the CMMLUO and Department Policy Statement #DPS-16-005.
§4220, 4237.7 (FRWK): Access	Goal: To develop, operate, and maintain a well-coordinated, balanced, circulation system that is safe, efficient and provides good access to all cities, communities, neighborhoods, recreational facilities and adjoining areas.	Access to the property is on a private road off a County maintained road. The applicant has submitted to the County Public Works Department a Self-Certification of compliance with Category 4 Roads and all supporting evidence. Compliance with these standards has been made a condition of approval for a conditional use permit.

2. The proposed development is consistent with the purposes of the existing zone in which the site is located; and 3. The proposed development conforms with all applicable standards and requirements of these regulations. The following table identifies the evidence which supports finding that the proposed development is in conformance with all applicable policies and standards in the Humboldt County Zoning Regulations.

Zoning Section	Summary of Applicable Requirement	Evidence
§314-7.1 AE - Agriculture Exclusive; §314-7.4 TPZ-Timberland Production Zone §314-55.4.8.2.2 Approvals for existing outdoor and mixed-light cultivation	Agricultural uses are principally permitted in Agriculture Exclusive Zones; grazing and other agricultural use are considered to be principal permitted uses compatible with timber production. Under a conditional use permit, up to one-acre of outdoor cultivation and up to 22,000 square feet of mixed-light cultivation is permitted on legally created parcels in AE and TPZ zones.	The proposed project is a Conditional Use Permit with a total of 43,560 square of cultivation area, where 30,700 square feet would be outdoor and 12,860 square feet would be mixed-light. This is the maximum allowable limit for cultivation under this zoning and permit type. The proposed use is an agricultural use that is specifically allowed with a Conditional Use Permit in these zoning district under Section 314-55 of the Humboldt County Code. The parcel as reflected in an approved Lot Line Adjustment (Record of Survey, Book 211, Page 36 recorded Sept 16, 2015).
Development Standards		
Min. Lot Area:	20 acres (AE); 160 or 40 (TPZ)	The parcel is approximately 111 acres. Per Government Code Section 51119.5, parcels may be less than 160-acre if the owner prepares a joint timber management plan. The applicant has prepared a Cal Fire approved timber management plan.
Max. Lot Coverage:	35%	Less than 1%
Min. Yard Setbacks (through the SRA requirements):	Front 30 feet; Rear 20 feet; Side 10% of lot width, no more than 20 feet (AE); Front 20 feet; Side 30 feet; Rear 30 feet TPZ)	The proposed cultivation areas and buildings are 30 feet or more from the property
Max. Building Height:	none	All buildings onsite will be less than 35 feet.

314-55.4 Indoor Commercial Cultivation of Cannabis for Medical Use Inland Land Use Regulation (CMMLUO)

Zoning Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
314-55.4.8.2.2 Existing Cultivation	Existing outdoor cultivation areas up to one acre in size are allowed on parcels zoned AE and TPZ provided they were in existence prior to January 1, 2016.	The proposed project is a Conditional Use Permit with a total of 42,860 square of cultivation area, where 32,860 square feet would be outdoor and 10,000 square feet would be mixed-light. The subject property is zoned, AE - Agricultural Exclusive and TPZ - Timber Production Zone, and the applicant will comply with all conditions of the CMMLUO ordinance, as specified in the recommended conditions of approval.
§314-55.4.9.1 Accessory Processing	Processing for cultivation requiring a Special Permit or Use Permit will be considered in the Use Permit application.	The existing processing facilities are shown on the site plan. The buildings will be used as cultivation processing facilities solely for product grown on-site. They will provide space for drying, curing, and processing cannabis grown on site. The project's conditions of approval include the requirement that the applicant secure any required building permits for the structures.
§314-55.4.9.4 Pre-Application Registration	Existing cultivation sites shall register with the County within 180 days of the effective date of this ordinance.	The applicant submitted the required registration form.
§314-55.4.8.10 Permit Limit	No more than four commercial cannabis activity permits may be issued to a single person.	According to records maintained by the Department, the applicant holds no other cannabis activity permits, and is entitled to four.
§314-55.4.10 Application Requirements	Identifies the Information Required for All Applications	The project file contains all the information required by the ordinance.
§314-55.4.11 Performance Standards	Identifies the Performance Standards for Cannabis Cultivation Activities	All the applicable performance standards are included as conditions of project approval. They are required to be met throughout the timeframe of the permit.
§314-55.4.17 Sunset Date	No application for any Use Permit pursuant to the CMMLUO shall be processed for issuance or approval that is received after December 31, 2016.	The County acknowledges that the applicant met the appropriate deadline requirements.

4. Public Health, Safety, and Welfare and 6. Environmental Impact: The following table identifies the evidence which supports finding that the proposed development will not be detrimental to the public health, safety and welfare, and will not adversely impact the environment.

Code Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
§312-17.1.4 Special Permit Findings	The proposed development will not be detrimental to the public health, safety and welfare, and will not be materially injurious to properties or improvements in the vicinity.	All responding referral agencies have either provided no comment, recommended approval, or provided comments with conditions of approval for of the proposed use. The proposed agricultural use is consistent with the type of development in the area. There is no evidence that the project will be materially injurious to properties or improvements in the vicinity.

5. Residential Density Target: The following table identifies the evidence which supports finding that the proposed project will 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.

Code Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
312-17.1.5 Housing Element Densities	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 (the midpoint of the density range specified in the plan designation), except where: 1) the reduction is consistent with the adopted general plan including the housing element; and 2) the remaining sites identified in the housing element are adequate to accommodate the County share of the regional housing need; and 3) the property contains insurmountable physical or environmental limitations and clustering of residential units on the developable portions of the site has been maximized.	The proposed project involves an outdoor and mixed-light operation on lands designated and zoned "AE - Agricultural Exclusive and TPZ - Timberland Production Zone". The parcel was not inventoried as source of potential residential housing. Therefore, the project will 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.

6. Environmental Impact:

Consistent with the California Environmental Quality Act (CEQA), the project was evaluated for any potential adverse effects on the environment. Based on a site inspection, information in the application, a review of relevant references in the Department, and comments from affected agencies, staff has determined that there is no evidence before the Department that the project could have any adverse effect, either individually or cumulatively, on the environment.

The project has been determined to be exempt from CEQA pursuant to Sections 15304 – Minor Alterations to Land of the Guidelines for the implementation of CEQA. Section 15304 exempts from environmental review the minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees. The proposed development to involve up to 43,560 square-foot of existing cultivation with some sites being consolidated or removed and restored. A new 4,000 square-foot processing facility and septic system will also be included in the project. No use of hazardous materials are proposed aside from the cleaning agents, fertilizer, pesticide and fungicide described on the MSDS Data Sheets in the project file. The project site is in an agricultural production zone that permits agricultural use. The proposed project will not result in any significant adverse impact on the environment as the lot is 111 acres in size and ground coverage will be less than 1% of the lot area.

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. (Not Applicable)
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 ¼ mile (1,320 ft.) 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; and 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. (Attachment 3A)
5. Copy of the statement of water diversion, or other permit, license or registration filed with the State Water Resources Control Board, Division of Water Rights, if applicable. (Not Applicable)
6. Description of water source, storage, irrigation plan, and projected water usage. (Attachment 3A)
7. 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. (Attachment 3B)
8. 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 Department of Fish & Wildlife. (On file)

9. If the source of water is a well, a copy of the County well permit, if available. (Attachment 3C)
10. 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. (On-file)
11. Consent for onsite 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)
12. 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)
13. 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)
14. 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)

**THE CLINIC 99
OPERATIONS MANUAL
HUMBOLDT COUNTY, CA**

**PROPOSED MEDICAL CANNABIS
CULTIVATION FACILITIES**

PREPARED FOR:



FEBRUARY 2017

**Cultivation and Operations Manual
For
The Clinic 99**

Proposed Medical Cannabis Cultivation Facilities

Lead Agency:

Humboldt County Planning Department
3015 H Street
Eureka, CA 95501

Prepared By:

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In Consultation with:

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AUGUST 2017

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OPERATIONS MANUAL

THE CLINIC 99

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1. PROJECT SUMMARY

1.1. PROJECT NARRATIVE

The Clinic 99 (TC9) is applying for land use approval for existing medical cannabis cultivation facilities, located on Assessor Parcel Number (APN) 211-362-016, near the community of Miranda. The proposed TC9 cultivation facilities are within the County of Humboldt's (County) Timber Production Zone (TPZ) zone. The subject parcel is approximately 111.5 acres in size (per County of Humboldt WebGIS). Land uses surrounding the parcel are comprised of residential, timber and agriculture. The majority of the surrounding parcels are zoned Agricultural Exclusive (AE), TPZ, Unclassified (U).

The existing site consists of an unpermitted two-bedroom single family residence and greenhouse cultivation facilities.

TC9 is proposing to permit 42,860 square feet of existing cultivation area consisting of 10,000 square feet of mixed light cultivation and 32,860 square feet of outdoor cultivation. A new shop building is proposed to be used for processing and storage of medical cannabis cultivated onsite. New greenhouses will be constructed within the proposed, relocated cultivation areas. All activity will meet the required setbacks from the property line and surrounding streams and drainages.

Permits will be obtained from all jurisdictional government entities.

1.2. STATE AND LOCAL COMPLIANCE

1.2.1. STATE OF CALIFORNIA COMMERCIAL CANNABIS ACTIVITY LICENSE

TC9 will obtain a Commercial Cannabis Activity license from the State of California as soon as such license becomes available.

1.2.2. STATE WATER RESOURCES CONTROL BOARD

The primary water source on the property will be wells. Water rights permits will be obtained for the wells if required for the State Water Resources Control Board.

1.2.3. NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD

TC9 is enrolled with the North Coast Regional Water Quality Control Board (NCRWQCB) Order No. 2015-0023 through a third party program (WDID Number 1B1689CHUM).

1.2.4. HUMBOLDT COUNTY BUILDING DEPARTMENT

Building permits will be obtained from the Humboldt County Building Department for all existing structures, proposed structures and supporting infrastructure (including septic systems) and grading activity upon approval of the use permit.

1.2.5. CAL FIRE

Several of the existing cultivation locations fall within wooded areas. TC9 has contracted with a Registered Professional Forester (RPF) to develop a Non-industrial Timber Management Program (NTMP) for the property.

1.2.6. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

A Lake and Streambed Alteration Agreement (LSAA) will be obtained from the Department of Fish and Wildlife (DFW).

1.3. AUTHORIZATION FOR COUNTY OF HUMBOLDT STAFF

Per the County of Humboldt's *Commercial Medical Marijuana Land Use Ordinance No. 2544* (CMMLUO) §314-55.4, *The Clinic 99 Operations Manual* contains the required information for operating medical marijuana cultivation facilities within the limits of the County of Humboldt. The operations detailed in the manual follow the operating standards described in CMMLUO §§314-55.4.10 and 314-55.4.11.

The Clinic 99 is committed to maintaining all necessary permits. Staff at the TC9 is required to adhere to *The Clinic 99 Cultivation and Operations Manual* to ensure compliance with state and local regulations (see Attachment A – *Personnel Acknowledgement Form*). Through this application, the applicant authorizes the County of Humboldt, its agents and employees, to seek verification of the information contained with this application, including verification of the operations as described in *The Clinic 99 Cultivation and Operations Manual*.

The Clinic 99 consents for onsite inspection of the parcel by County officials at a prearranged date and time in consultation with the applicant prior to issuance of any permit and once annually thereafter. TC9 acknowledges that the County reserves the right to reduce the size of the area allowed for cultivation in the event that environmental conditions, such as sustained drought or low flows in the watershed, will not support diversions for irrigation. TC9 also acknowledges that the County reserves the right to engage with local Tribes before consenting to issuance of any permit, if the cultivation operations.

2. OPERATIONS PLAN

2.1. WATER SUPPLY AND WATER USE

The existing water source for irrigation and domestic use is an existing well located within the subject property which has provided sufficient production. The well was reviewed by the Department of Fish and Wildlife and based on its distance from neighboring streams, it did not appear jurisdictional.

A new well is proposed at a higher elevation to reduce the need to pump water around the site. The Clinic 99 is working with a local well driller to obtain permits for the existing and proposed well. Well logs will be supplied to the Environmental Health Department and the Department of Fish and Wildlife for final review. Two 5,000 gallon water storage tanks will be installed near the new well for irrigation. Three 5,000 (irrigation) gallon and one 2,500 gallon (domestic use) water storage tanks will be installed near the residence.

Refer to section 2.7.2 for a summary of irrigation practices.

2.2. SITE DRAINAGE, RUNOFF AND EROSION CONTROL

Refer to the Water Resources Protection Plan for descriptions of the site drainage and runoff and erosion control measures.

2.3. WATERSHED AND HABITAT PROTECTION

Refer to the Water Resources Protection Plan for descriptions of watershed protection measures

2.4. USE AND STORAGE OF REGULATED PRODUCTS

The State of California Agricultural Department as well as the Humboldt County Agricultural Department recognize the need for use of pesticides and fungicides. TC9 will employ best management practices when storing, handling, mixing, application and disposal of all pesticides/fungicides. TC9 will also engage in the use of pesticides and fungicides that have been approved by the state of California Agricultural Department, Humboldt County Agricultural Department or by any county or state initiative.

TC9 will follow required regulations in the storing, handling, mixing, application and disposal of any and all pesticides. The Agent In Charge will hold a State of California Agricultural Department Private Pesticide Applicators License issued through the Humboldt County Agricultural Department. Training of employees in the storing, handling, mixing, application, disposal and emergency spill containment and clean up procedure will be sole responsibility of the Lead Cultivator as the holder of the Private Pesticide Applicators License.

All nutrients, pesticides and fungicides will be stored in accordance with manufactures instruction. In addition, at any place where pesticide/fungicide to be stored, handled, mixed, applied or disposed, TC9 will provide saline eye wash stations and emergency containment and clean up kits as prescribed in the State of California Agricultural Department Pesticide Private Applicators License handbook as well as manufacture labeling directions. (see Appendix D - *Pesticide Storage, Handling and Application Plan* and Appendix E *Water Resources Protection Plan* for detailed descriptions of practices). Nutrients used include Botanicare Pro Grow, Botanicare Pro Bloom, Botanicare Kind Base, Botanicare Pure Blend Tea Soluable Compost Tea Solution and are stored in 55 gallon drums. Approximately 165 gallons of each Botanicare product is used in a year. Earth Juice Hi-Brix Molasses and fish-based soil amendments are also used and are stored in 5 gallon buckets. Approximately 20 gallons each of molasses and fish-based soil amendments are used in a year.

Diesel fuel for on-site power generators and heating will be stored in tanks with secondary containment. A total of 3,500 gallons of diesel fuel will be stored in a 1,000 gallon tank and a 2,500 gallon tank.

Propane fuel is stored in a 500 gallon tank which will be properly anchored and secured. Propane is used for cooking and heat within the home and for heaters within the greenhouses.

Bleach and rubbing alcohol (approximately 1 gallon of each) are stored within the residence.

Generator maintenance including motor oil and coolant changes will be performed on site. Approximately 10 gallons of motor oil and 5 gallons of coolant are stored on site.

TC9 will enroll with the Humboldt County Environmental Health Department (HCEHD) as the Certified Unified Program Agency and will comply with HCEHD's inventory reporting and response plan requirements.

A copy of the Operations Plan will be kept on site by the Agent in Charge and will contain all material safety data sheets for all regulated products used on site (MSDS).

2.5. WASTE MANAGEMENT PLAN

2.5.1. SOLID WASTE MANAGEMENT

A trash enclosure with covered waste and recycling bins will be located adjacent to the proposed processing building.

A trailer with 4' foot side walls and cover will be utilized for transportation of waste. The trailer will be stored adjacent to the residence.

Waste is removed from the property every Monday and is transported to Redway transfer station.

Spent soil will be stockpiled in a depressed stockpile area to prevent erosion and will be amended and re-used the following season.

2.5.2. WASTEWATER MANAGEMENT

On-site wastewater treatment will be achieved with septic systems for the existing two-bedroom residence and the proposed processing building.

TC9 has contracted with a local firm to test the soils and develop a suitability analysis for the proposed septic systems.

The septic system for the two-bedroom residence has been sized for the expected occupancy of the building per DEH standards..

The septic system for the processing building will be designed to accommodate a peak count of 14 employees which occurs during the processing season. During the rest of the year, there will be a peak of approximately 8 employees.

Restroom access will be available for all employees at the processing building which is located ¼ mile from the majority of the proposed cultivation areas. A portable toilet will be located at the south end of the site to serve the most remote cultivation areas and will be serviced once a week.

2.6. EMPLOYMENT PLAN

2.6.1. ALATORRE-ZENOVICH-DUNLAP-BERMAN AGRICULTURAL LABOR RELATIONS ACT STATEMENT

The Clinic 99 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.

2.6.2. CALIFORNIA AGRICULTURAL EMPLOYER COMPLIANCE

TC9 will comply with all applicable federal, state and local laws and regulations governing California Agricultural Employers.

2.6.3. JOB DESCRIPTIONS AND EMPLOYEE SUMMARY

- **Agent in Charge:** Oversight and management of the entire facility. Responsibilities will include but not be limited to: personnel, records keeping, budget, and liaison with State and County inspectors as needed.
- **Lead Cultivator:** Oversight and management of the day to day cultivation of medical cannabis. This will include but not be limited to: irrigation, fertilization, pesticide management and harvest.
- **Assistant Cultivator / Processing Manager:** The person will support the responsibilities of the Lead Cultivator. Mainly, the *Assistant Cultivator/ Processing Manager* will assist the *Lead Cultivator* in his/her day to day duties as well as take the Lead Role during times when the *Lead Cultivator* may be off site. During harvests, the *Assistant Cultivator / Processing Manager* duties will switch to oversight and management of the processing the dried/cured medical cannabis.
- **Seasonal Labor:** This position is temporary and employee count will vary based on the needs of the farm during the cultivation, harvest and processing seasons.

The *Agent in Charge* is a principal for The Clinic 99. In addition to the *Agent in Charge* and *Lead Cultivator*, TC9 intends to employ one (1) full time Assistant Cultivator, one (1) Seasonal Processing Manager and up to eleven (11) seasonal labor positions for an estimated total of approximately fourteen (14) employees maximum at the Project site at any given time. A peak of 8 employees during the cultivation season and a peak of 14 employees during the harvest and processing seasons are expected.

All TC9 employees will be required to wear an TC9-issued photo ID badge on a lanyard at all times while working at the cultivation site. They will be required to read the TC9 Operating Manual along with the TC9 Employee Handbook. They will also be required to sign and date a form acknowledging they have read and understand its contents (see Attachment A – *Personnel Acknowledgement Form*).

The *Agent in Charge* will meet with the *Lead Cultivator* and the *Assistant Cultivator and Processing Manager* daily to discuss any pending internal issues relating to day to day operations as well as discuss any upcoming schedule needs. Each department will give a daily synopsis related to their particular tasks. This will include a daily plant count inventory, a daily fertilizer application summary, a daily pesticide application summary a daily water use summary and a daily inventory of processing and packaging as well as product packaged for distribution. The *Lead Cultivator* will maintain daily contact with the *Agent in Charge* to keep the *Agent in Charge* abreast of any issues that occur pertaining to cultivation, inventory, non-security related employee issues and facility compliance needs. It is the intention of the *Agent in Charge* to maintain a transparent communication at all times to ensure the uninterrupted flow of medical cannabis remains compliant and within the code of conduct.

The *Agent in Charge* will monitor the entire facility daily to ensure all medical cannabis from freshly cut clone to packaging for sale is tracked, accounted for and inventoried in real time. In addition, weekly physical inventory will be taken by each department to ensure all inventory logs are accurate. Cultivation inventory is tracked via in-house recording (until such time as a seed to sale program is introduced via county or state regulation) from explants (new plant cutting) to harvest and sale and will be recorded to the Master Log every 24 hours. The Master Log will be made available upon the

request of any County or State official deemed by his or her agency to have authority to view it. Harvested packaged ready for retail medical cannabis will be monitored and inventoried via the Master Log (until such time as a seed to sale program is introduced via county or state regulation). This will include the plant number, the site number, the date it was planted, the date it was harvested as well as other pertinent information outlined in the *In-house Seed to Sale Master Log Description* section of this manual.

By having designated duties and procedures in place for each job title, TC9 can efficiently manage the work flow and chain of custody for the product as well as identify and address problems as they arise.

2.6.4. EMPLOYEE SAFETY PRACTICES

All part time seasonal employees will be trained on proper safety procedure. This training will include but not be limited to: fire safety, proper harvesting techniques, use of harvesting equipment, use of rubber gloves and respirators, use and cleaning of trimming machines per manufactures direction, proper hand washing guidelines and an Emergency Procedures Plan in case of emergency. Contact information for the local fire department, CAL FIRE, Humboldt County Sheriff and Poison Control as well as the Agent in Charge will be posted in a conspicuous place. TC9 will provide rubber gloves and respirators or dust masks to all employees. TC9 will provide Saline Eye Wash Stations at strategic places inside the Processing Facility. TC9 will also provide each Employee with a written copy of emergency procedures and contact information (see Appendix D – Emergency Procedures and Contact Information). A copy of the Operations Plan will be kept on site by the Agent in Charge and will contain all material safety data sheets (MSDS), see Appendix F.

2.7. CULTIVATION PLAN

2.7.1. PLANTING METHODS AND MEDIUMS

Medical cannabis will be cultivated outdoors in 65 gallon smart pots and in raised beds within cold frame greenhouses (see Attachment C – *Site Plans, Floor Plans and Elevations*). The cold frames will consist of heavy gauge steel tubing, covered with a woven poly translucent opaque tarp. Each cold frame will be ventilated by intake and exhaust fans as well as roll up side panels. Cold frames and solar power systems will be installed per the 2013 California Building Code.

Final Planting will be done in raised beds within the greenhouses. Raised beds will measure the length of the greenhouse by nine feet width by sixteen inches in height. Each cold frame structure will house two (2) such beds. The beds will be constructed in such a way as to allow drainage from the bottom. Each bed will be filled with an organic, nutrient-rich proprietary soil formula. A complete list of base soil and amendments will be recorded in the Lead Cultivators Handbook. All soil and amendments will be OMRI (or equivalent) certified and MSDS for each applicable amendment will be recorded in the Lead Cultivators Handbook. The total amount of plants per bed is dependent upon the cultivar and run length.

2.7.2. IRRIGATION AND FERTILIZATION PRACTICES

TC9 will implement water resource management strategies designed in consultation with a local engineering firm to address water needs for the cultivation activities described herein. This plan may include but not be limited to:

- Annual forbearance as determined by a *Water Availability Analysis* or 150 days during the dry season.
- Obtaining a Lake or Streambed Alteration Agreement for the water diversion works and storage through the Department of Fish and Wildlife (DFW)
- Enrollment in the North Coast Regional Water Quality Control Board's (NCRWQCB) Cannabis Cultivation Discharge Program (Order #R1-2015-00230, which includes preparation of a Water Resources Protection Plan (WRPP).

Water for the Project will be pumped from permitted wells on the subject parcel. TC9 registered with the NCRWQCB as a Tier 2 Cultivation site with every effort being made to move into the NCRWQCB Tier 2* category in subsequent years.

The *Lead Cultivator* will be solely responsible for the implementation of the irrigation and fertilization program. The *Lead Cultivator* will also provide the necessary training of the *Assistant Cultivator* and oversee all product handling.

A proprietary nutrient solution is prepared as needed by the *Lead Cultivator* and housed in a light-resistant, agricultural grade fertilization holding tank at each site. The solution is formulated by manufacturer instructions. The subsequent nutrient is then dosed with either an agricultural base or acid in order to ensure proper pH prior to feeding. MSDS and manufacturer labels will be available onsite.

Irrigation and fertigation of plants will occur initially via hand water. At this stage the plants are juvenile and planted in a container; therefore, the amount of irrigation and fertigation needed is better controlled via hand watering. Upon final planting plants will be irrigated and fertilized using drip emitters specifically tailored to the application. Additional hand watering/feeding will be implemented at this stage at the direction of the *Lead Cultivator*, as needed.

Estimated Annual Irrigation Water Usage (Gallons)

Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
3,000	3,000	3,000	70,000	70,000	70,000	100,000	100,000	70,000	70,000	3,000	3,000

The table above outlines the estimated irrigation water usage for TC9 during a typical year. Irrigation water usage will be dependent on weather conditions.

2.7.3. CULTIVATION SCHEDULE

A total of two cultivation cycles are proposed for mixed light greenhouses as outlined below. TC9 may scale up to three cycles in future years if operationally feasible based on market conditions and infrastructure costs.

February 1 - May 15: Raising Nursery Stock, Initial Transplant

All plant samples used in TC9 cultivation sites will be composed of clones taken from 'mother' plants. Mother plants are composed of samples that have been deemed to demonstrate superior genetics for desired outcomes. Cuttings, or *clones*, are taken from the mother plants at various intervals. These cuttings are then rooted at the on-site nursery. The *Lead Cultivator* will examine the clones and approve initial planting to begin.

Upon the *Lead Cultivator's* approval, the *Initial Transplant* will commence. The rooted clones will be planted directly into one (1) gallon plastic containers. This point in the cultivation process most often referred to as the 'vegetative' cycle. Due to container and plant size, utilizing a hand watering method is most effective. The *Initial Transplant* phase lasts from one to two weeks depending on the desired outcome. During this phase the adolescent plants are irrigated using hand watering methods and fertilized using our high nitrogen proprietary feeding program. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture

compliance. MSDS are recorded into the Lead Cultivator's Handbook. At this point, the pesticide/fungicide management plan is implemented. (see Attachment D - *Pesticide Application and Storage Plan* for pesticide storage, handling, application and disposal procedures)

The plants are then transplanted into 3 gallon plastic containers and the irrigation and fertilizer regime above is repeated.

When the *Lead Cultivator* has determined the plants have achieved desired height and plant growth density for final transplant, the plants are immediately planted into either a raised bed. Due to the increase in container size and increase in daylight hours, the plants will contain to grow in a vegetative state for two to four (2-4) weeks. The approximate desired height and growth density would be three to four feet (3'-4'). Upon final transplant into either raised beds, a drip irrigation / fertilization system will be implemented. A specifically designed one gallon per hour (1g/hr) drip emitter will deliver irrigation and fertilization to each plant. During the Final Transplant / Vegetative Phase, the plants are fertilized using our high nitrogen proprietary feeding program. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture compliance. MSDS are recorded into the Lead Cultivators Handbook. Once this desired height and vegetative growth density has been achieved the Light Deprivation Phase begins.

May 1 - July 1: Light Deprivation Phase

Taking into account factors such as height, growth density and overall health of the plant, the *Lead Cultivator* will determine the exact date for the Light Deprivation process to begin. Once that date is determined, 100% light resistant, specifically designed tarps will be automatically pulled over the inside of the cold frames. This process will reduce the day light hours from approximately fifteen (15) hours of daylight to the desired twelve (12) hours of daylight, twelve (12) hours of darkness desired to induce flowering. During the first two weeks of Light Deprivation, the plants will enter into a transitional phase. During this transitional phase plants will continue vegetative growth while transitioning into flowering. Once the plants enter the budding stage they will be fertilized using a proprietary blend of high phosphorus fertilizers as well as aerobic based supplements. All products used are in compliance with state and federal agricultural guidelines and corresponding MSD and labels are recorded into the Lead Cultivator's Handbook.

It is not uncommon for plants to obtain 25% of their entire height and vegetative growth density during the transitional phase. Once the plants enter in the final bloom or flowering phase, they will begin to expend energy into the production of flowers, therefore, ceasing vegetative growth and begin to flower. The entire flowering process, including the transitional and final bloom phases, will last fifty-five (55) to sixty-five (65) days depending on strain variation and weather conditions.

July 1-15: First Harvest and Re-Planting

Once the Light Deprivation Phase has concluded and the *Lead Cultivator* has determined the plants are at their peak, harvest procedures will be initiated (see *Harvesting/Processing Plan* for harvesting and processing procedure). The raised beds will be turned and amended. All amendments used are in accordance with Humboldt County and State of California Department of Agriculture compliance. MSDS are recorded into the Lead Cultivators Handbook. New clones will transplanted from the Nursery.

Due to the length of daylight hours, the plants will continue in a vegetative state for approximately one month. Plants will be planted using the same methodology as with the Initial Transplant Phase. Final Transplant will occur when deemed appropriate by the *Lead Cultivator*, usually seven to 14 days from initial transplant.

August 14 - November 7: Final Transplant /Natural Flowering Cycle and Harvest Two Phase

Once the Final Transplant Phase has been initiated by the *Lead Cultivator*, the plants are fertilized with our high nitrogen proprietary feeding program. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture compliance. MSDS are recorded into the Lead Cultivators Handbook.

Due to the natural decline in daylight hours, approximately one (1) month after the Re-Planting Phase has begun the plants will begin to flower naturally. This natural drop in light will negate the need for Light Deprivation Techniques. As in the Light Deprivation Phase, the plants will go through the transitional phase and final bloom phase. Once the plants enter into the bloom phase they will be fertilized using our proprietary high phosphorus feeding program. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture compliance. MSDS are recorded into the Lead Cultivators Handbook. Once the plants are through the final bloom phase and the lead Cultivator has determined they have reached peak potential, Harvest Two will be initiated (see *Harvesting/Processing Plan* for harvesting and processing procedure).

November 7 - February 1: Repair, Upgrade and Recondition Phase

TC9 will inspect all cold frames and covers for wear and replace as necessary. The irrigation system will be inspected and repaired or replaced, as appropriate. Refilling of irrigation tanks will commence in accordance with the Small Irrigation Use Registration and conditions of the Department of Fish and Wildlife (DFW) Lake or Streambed Alteration Agreement (LSAA). Winter road and site maintenance will begin in line with procedures outlined in the *Site and Road Maintenance Plan*. The *Agent in Charge* and the *Lead Cultivator* will meet weekly to determine the best action plan for the upcoming season.

2.7.4. GENERATOR USE PLAN

Due to the remote location and off the grid nature of the site, it will be necessary for TC9 to employ the use of a generator for power. TC9 will limit the use of the generator to an as needed basis following all guidelines set up by Humboldt County and the State of California. WhisperWatt 25 (Model DCA25USI4CAN) and WhisperWatt 85 (Model DCA85USI) generators will be used for power on site. Both generators have a peak of 63 decibels within 23 feet. The generators will be located over one hundred feet from the property line to ensure the noise level will not exceed 60 decibels at the property line. Potential noise impacts to protected species will be identified as part of studies conducted as part of the NTMP. Generator sites will be adjusted accordingly if species of concern and habitat are found. See Appendix E for generator data sheets.

A generator will be in operation from March 1st to June 1st for supplemental lighting within the green houses. The residence and proposed processing building will have a generator operating year round.

See Section 2.4. for details on the storage of generator fuel.

2.7.5. PRODUCT INVENTORY AND TRACKING

Until such time as either a County or Statewide seed to sale tracking system can be implemented, TC9 intends to follow an internally-developed tracking procedure. Inventory of all plants shall be performed by the *Agent in Charge* and *Lead Cultivator*. Batches of plants are inventoried by logging into record the individual plant tags of each plant located at the base of each plant. This takes into account any plants that have been added to inventory from a permitted medical cannabis nursery and any plants that were removed from inventory (due to disease or pest infestation) or any plants moved to another phase of its lifecycle and any plants that have been destroyed. Any discrepancy in physical

plant inventory is traced to the source of the discrepancy, documented. After further investigation, any appropriate corrective measures will be taken.

Tracking the Change of Plants to Bulk Inventory

In this phase of the lifecycle, the plant batches are changed from a living plant count inventory (where the plant is the unit) to bulk inventory, which is tracked by weight. This provides accurate yield information – a key insight into the cost of cultivation for each batch and the ability to forecast accurate yields for future batches. This information is added to the records created in the previous phase. Specific details that are recorded include:

- Initial harvest (wet) weight
- Weight after separation into flower, by-product, and waste
- Weight after trimming
- Staff identification (at each step)
- Physical location of the plant material at all times

Reporting

Discrepancies are traced to the source, documented, and reported to the *Agent in Charge*. After investigation, any appropriate corrective measures are taken. All cultivation and harvest records are retained for a minimum of five (5) years.

2.8. PROCESSING PLAN

The Lead Cultivator will be responsible for all training of seasonal harvest and processing employees. Workers employed as harvesters/processors will be required to train in each aspect of the procedure including use of harvesting tools, proper harvesting techniques and fresh harvested plant handling, trimming machine use and handling of cured processed flowers. This training will also include the use of rubber gloves, face masks and hand washing requirements. Access to any part of the onsite Drying and Curing Facility will be limited to the Agent in Charge, the Lead Cultivator, the Process Manager, the Trimming Manager and authorized trained processing employees.

2.8.1. HARVESTING

Harvesting will be done by hand employing seasonal help. Each harvester will be issued an agricultural grade, spring loaded, hand held anvil style pruner. Each harvester will be trained by the Lead Cultivator on the use of the pruner and the methods by which each plant is to be harvested. In addition, TC9 will provide all harvest workers with proper hand, eye, body and respiratory safety equipment.

At the time of harvest, each plant will be recorded into the master log. Each plant will be harvested individually. All waterleaf around the flowers are manually pruned. The plants are then cut into branches, approximately sixteen inches (16") long. The original numbered tag will remain with the cut plant. The branches are then transported to sheds and the processing building for drying and curing.

2.8.2. DRYING AND CURING

Prior to entering the on-site drying and curing facilities, the product will be examined, weighed,

recorded and logged into the Master Log by the Processing Manager. Branches will be hung on racks in sheds to air dry and cure or on racks within the proposed processing building which will have dehumidifiers/heaters and circulation in the form of wall fans, exhaust fans and box fans. Each rack will contain the original numbered tag(s) of the plant(s). The exact date and time of day along with the identification numbers of each plant(s) will immediately be recorded into the Master Log.

The drying and curing process takes between five (5) and seven (7) days. The Processing Manager and the Lead Cultivator will be checking the facility five (5) to six (6) times per day to monitor the progress. Once the material has reached the desired consistency the processing will begin. At this stage the Processing Manager will also randomly select up to five batch samples for third party testing. The samples will be vacuum sealed and labeled with a batch number, strain, plant number and site number and recorded into the Master Log.

2.8.3. PROCESSING

Once the *Lead Cultivator* has determined the drying and curing process meets TC9 proprietary standards, the dried and cured flowers are sent to process. The *Lead Cultivator* will then instruct the *Processing Manager* to remove the racks from the drying and curing chamber and begin the processing procedures. Processing will consist of three following main components: *Bucking Down*, *Trimming* and *Packaging*. The *Processing Manager* will be responsible for training employees hired as processors. This training will include the *bucking down* procedure and proper use of automatic trimming machines, along with the use of rubber gloves, particulate masks and hand washing.

Bucking Down is the process by which the actual flowers or buds are removed from the stalks. This is achieved by using scissors to cut each individual bud from the stalk into a sterilized, locking lid bin. The discarded stalks will then be shredded and composted on site. Once each bin is full the Processing Manager will seal, label, weigh and record in the Master Log the contents of each bin. Great care will be taken to ensure that each of the original numbered tags of the plants the bin contains are affixed to the corresponding bin. Each bin will then be moved into the trimming room. Once the bins arrive in the trimming room the Processing Manager will record the date, time of day, weight and plant(s) or batch number(s) into the Master Log. Once all of the flowers from the drying chamber have been bucked down, binned and recorded the trimming process will begin.

Trimming will be done via trimming machines and by hand via seasonal labor. TC9 will employ the use of a *Twister T2 Trimming Machine*. Trimming will also be done by hand by experienced seasonal labor. The trimmed material will be placed into sterilized locking lid bins. These bins will be weighed, labeled, logged and sealed. Great care will be taken to ensure that the original numbered corresponding plant tag remains affixed to each bin. The Processing Manager will then deliver the sealed and logged bins to the processed materials holding facility.

The waste product from the machines or "trim" will be collected and placed into sterilized locking lid bins. These bins will then be weighed, labeled and sealed for transport and delivery to an offsite, contracted, licensed Manufacturing Facility. Upon completion of the trimming process, the *Processing Manager* will turn over all of the now processed material to the *Agent in Charge* or the *Lead Cultivator* and log this action in the Master Log. Only the *Agent in Charge* or the *Lead Cultivator* can accept and handle material in the processed state. Once in control of either the *Agent in Charge* or the *Lead Cultivator* the final processed material is removed from the processing floor and moved to a secured and locked storage area within the processing facility. This facility will be only accessible to either the *Agent in Charge* or the *Lead Cultivator*. Once securely in the Processed Material Holding Facility, the *Agent in Charge* and the *Lead Cultivator* will begin to weigh, vacuum seal and label individual one

pound packages for distribution. This procedure will be done always with both the *Agent in Charge* and the *Lead Cultivator* present. After weighing, labeling and packaging each unit will be placed inside of a lock box or safe inside the *Processed Materials Holding Facility*.

2.8.4. DESCRIPTION OF PROCESSING LOCATION

The Clinic 99 will conduct all processing on site at the proposed processing facility. This facility will incorporate all aspects of processing including drying, curing, bucking down and machine trimming. The site was picked due to its favorable qualities for building. This facility will be housed in an approximately four thousand square foot (4,000 SF) metal building that conforms to commercial building standards per the 2016 California Building Code. Once the required approvals are in place, the metal building will be constructed upon a cement slab and all work will be conducted by licensed and bonded contractors in accordance with Humboldt County Building Codes. The Clinic 99 will employ best management practices to ensure proper maintenance, not only of the structure, but of the site as well. The interior of the building will house the drying and curing chamber, trimming machines, commercial stainless steel work tables and employee bathroom. The work space will be well lit and ventilated.

2.8.5. NUMBER OF EMPLOYEES

See Section 2.6.3.

2.8.6. SUMMARY OF EMPLOYEE SAFETY PRACTICES

See Section 2.6.4.

2.8.7. TOLIET AND HANDWASHING FACILITIES

TC9 will install one (1) ADA-compliant restroom inside the processing center. The restroom will be clearly marked and well lit. It will include a working flush toilet as well as a sink with hot and cold running water. Anti-bacterial Liquid Soap and paper hand towels will be made available. Above the sink in a conspicuous place a “*Before Returning to Work*” hand washing procedure placard will be posted. The cleaning and sanitation of the restroom will be the responsibility of the Processing Manager. A record of cleanings will be kept in the restroom at all times and include date and time of day cleaned.

2.8.8. PLUMBING AND SEPTIC SYSTEM

See section 2.6.2.

2.8.9. DRINKING WATER

TC9 will provide safe, clean, purified drinking water via store bought individual sealed bottled water bottles as well as an upright office style water cooler. Clean disposable paper cups will be made available to all employees.

2.8.10. ROAD USE AND MITIGATION STRATEGY

TC9 started its initial road repair and maintenance activities. All roads are in the process of being out sloped. In addition, rolling dips have been inserted at regular intervals as required for standard maintenance for logging roads. All outlets for water are clear of debris and allow free flow of water from the road surface. All berms have been removed. In addition, all roads on the property are in the process of being rocked. Once initial road repair and maintenance activities are complete,

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seasonal maintenance will include regrading of out slopes and rolling water bars to ensure good run off. We will also replace rock where necessary.

TC9 will conduct road maintenance inspections during any and all *major rain events*. TC9 considers a *major rain event* to be any rainfall above one half inch (1/2"). This inspection will include observing existing features for any minor or major issues, such as rolling dips, standing water in outlets, and the diversion of water running directly down and eroding the road surface.

TC9 will implement procedures to reduce traffic on our roads. Transportation and deliveries of medical cannabis and associated supplies will be delivered in bulk to minimize road impacts. By employing the use of mechanical trimming and drying machines, TC9 will mitigate the need for a large number of employees for processing, therefore, reducing the number of daily trips to the property. TC9 will encourage ride sharing to and from the site by seasonal employees. It is also our intention to provide transportation to and from the work the site via a company car. It will be the responsibility of the *Processing Manager* to arrange the transportation of seasonal employees.

2.8.11. ON-SITE HOUSING

A single family residence is proposed for onsite housing and security purposes. No other residential structures are proposed as a part of this project.

2.9. SECURITY PLAN

A locked gate is located at the entrance to the parcel. A *No Trespassing* sign is proposed near the gate. Cultivation facilities will be completely enclosed by a six foot (6') security fence that features a locked gate. Proposed lighting outside of the cultivation and processing facility consists of a minimum of four (4) security lights that illuminate the entrances and parking areas. The Clinic 99 is proposing to have security cameras at the entrance to the site, residence, and processing facility with data storage for up to thirty (30) days. Motion sensors will be installed at all cultivation sites. The processing facility and residence will have an alarm system.

All potential employees will be subject to a criminal background check prior to employment. Employees will be issued a company issued ID badge and will be required to display the badge at all times while working at the subject property.

2.10. TRANSPORTATION AND DISTRIBUTION PLAN

Transportation will be handled via a third party, contracted, licensed transporter/distributor in accordance with MMRSA. All merchantable product will only be distributed through licensed medical cannabis dispensaries. Prior to moving packages from the on-site holding facility to another physical location, a transport manifest will be created by the distributor/transporter. This distribution document is required for each movement of packages and will be recorded in the Master Log.

The *Agent In Charge* and the *Processing Manager* are responsible for performing a physical inventory of all packages being transported, ensuring that the physical inventory reconciles with the transport manifest, as well as the packaging material is intact and the labeling is secure. The distribution document records the current location and status of the packages, such as "in-transit" or "received." The licensed distributor must also create detailed transport manifests for the package distribution. The manifest contains details such as:

- Time of departure
- Time of arrival

- **Product and product weight**
- **Route to be travelled**
- **Origin and destination addresses**

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3. RESOURCES

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**Appendix A: Personnel
Acknowledgement Form**

Personnel Acknowledgement Form

It is the intention of The Clinic 99 to create an enjoyable, safe and sane workplace. We feel that understanding and compliance with our Operations Manual will create just that. It is the responsibility of each employee to read and understand the procedures outlined herein. If after reading and reviewing this entire document, you have any questions please see the Agent in Charge immediately for clarification. By signing this document below, it confirms your reading, understanding and adherence to the entire *The Clinic 99 OPERATIONS MANUAL FOR MEDICAL CANNABIS CULTIVATION*.

Employee sign and date

Agent in Charge sign and date

**Appendix B: Site Plan, Floor Plans
and Elevations**

[illegible]

THE CLINIC 99 / APN: 211-362-016
15500 DYERVILLE LOOP RD, MIRANDA, CA 95533
EXISTING AND PROPOSED SITE PLAN

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**Appendix C: Pesticide Storage,
Handling and Application Plan**

The Clinic 99**Pesticide Storage, Handling and Application Plan**

All pesticides, disinfectants, fungicides and agricultural chemical products used by The Clinic 99 (TC9), will maintain strict compliance with standards imposed by the Humboldt County Agricultural department and State of California Department of Agriculture Department and US Environmental Protection Agency. The manager will maintain a current Private Applicators License with the Humboldt County Agricultural Department. This license will be posted and a copy will be entered into the Manager's Handbook and available for view by any regulatory agency deemed appropriate by Humboldt County or State of California.

Storage

All pesticides, disinfectants, fungicides and agricultural chemicals will be secured in an appropriate locked and labeled housing and accessed only by those employees that have been trained under the guidelines of *State of California Agricultural Department Personal Pesticide Application License* guidelines in handling, application and disposal of each product. Entry into the locked facility will be logged by the Lead Cultivator. This log will include: The name of employee removing the material, the date and time of day and the amount and type of pesticide removed.

Any over-the-counter pesticide products may be applied by either the *Manager* or trained personnel in accordance with State of California Agricultural Department's Private Applicators License criteria. Training of employees will be in accordance with *State of California Private Applicators License* criteria. These products will be limited to safe chemicals recognized by the Humboldt County Department of Agriculture, the California Department of Agriculture and the Federal EPA. Copies of all MSDSs and labels will be clearly identified and maintained onsite at all times in the Lead Cultivators Handbook. TC9 will make available to its employees saline eye wash stations where ever pesticides are stored.

Handling

The handling of pesticides/fungicide will be done in accordance with *State of California Agricultural Department Personal Pesticide Application License* guidelines. Handling will include, transportation from retail outlet to cultivation site, logging and entering into secured, labeled storage, mixing, preparation, transport to application locations on site, application and disposal. These activities will be logged into the Master Log immediately by the *Lead Cultivator*. By having a strictly monitored Pesticide Management plan in place, TC9 will strive for a "ZERO SPILL POLICY". In the event of a spill, TC9 will maintain on site an Emergency Containment and Clean Up policy in accordance with *State of California Agricultural Department Personal Pesticide Application License* guidelines.

TC9 will also maintain on site in a clearly marked and accessible secure location any materials deemed necessary for clean up or spill containment and abatement. TC9 will maintain a well-marked and easily accessible plan for accidental personnel exposure as well as proper applicators training as set forth by *State of California Agricultural Department Personal Pesticide Application License* guidelines

OPERATIONS MANUAL

THE CLINIC 99

in the event of such accidental exposure. Any spills or accidental personnel exposure will be reported to the appropriate agencies as deemed necessary by *State of California Agricultural Department Personal Pesticide Application License* guidelines. These incidents will also be documented into the Master Log by the Lead Cultivator.

Application

All application will be done in accordance with *State of California Agricultural Department Personal Pesticide Application License* guidelines. A copy of all applications will be manually entered into the Master Log. Proper eye, face and body protective wear as well as approved respirators shall be provided by TC9 and worn and available at all times during application of all pesticides/fungicides. A preventive application program per manufactures directions and label requirements will be established from the onset of the plants initial transplant. Application frequency will vary with each phase of growth or infestation pressure. This will help to ensure the least amount of pesticide/fungicide will be needed. Application will end no less than thirty days before harvest or by manufactures able requirements, whichever is longer.

During application factors such as wind, temperature and humidity will be taken into account. This will ensure that the pesticide/fungicide is used in the most efficient manner and will mitigate drift. Pesticides will be applied using a variety of methods including atomizer, back pack sprayer and air less sprayer. Nozzle types and pressure settings will be determined by manufacture directions. Anywhere pesticide is applied TC9 will provide a saline eye wash station in case of accidental exposure.

Disposal

Any mixed solutions will be used to their entirety. In the event there is a surplus of used mixed solution, it will be disposed of according to guidelines set forth by *State of California Agricultural Department Personal Pesticide Application License* procedures. After the applicator has finished application, the protective wear shall be discarded and disposed according to *State of California Agricultural Department Private Applicators License* guidelines. All bottles, containers or receptacles that have come into contact with, or contained, any product that falls under the state's guidelines for pesticides, disinfectants, fungicides and agricultural chemicals shall be washed, rinsed and or disposed of according to strict EPA and *State of California Agricultural Department Private Applicators License* guidelines. Proper training of employees in rinsing, washing and disposal shall be overseen by the Licensed Lead Cultivator on premise. All washing, rinsing or disposal of any product packaging, applicator or protective clothing will be logged into the Master Log.

**Appendix D: Emergency
Procedures and Contact
Information**

Emergency Procedures Instructions The Clinic 99

The first priority in the event of an emergency is for the safety of all people present. Move quickly out of area danger. Meet at assigned meeting place to get a headcount. Enact Emergency Procedures.

Emergency Phone Numbers

Dial 911 for Fire/Police/Ambulance:

- 1. Tell the operator which emergency service you want**
- 2. Wait until the service answers**
- 3. Give the following address:**

**Humboldt County APN 211-362-016
Miranda CA, 95543**

- 4. Do not hang up until told to do so by the 911 Operator**

Other Emergency Contacts

Humboldt County Sheriff: 707-445-7251

Fruitland Ridge VFD: 707-943-3402

Humboldt County HazMat: 707-445-6215

Humboldt County Ag Dept.: 707-441-5260

Fire and Emergency Procedures Checklist

You must know and understand what to do if a fire occurs. Your first concern is the immediate safety of visitors and staff; secondly, the need to call emergency services and then to contain the fire but only if it is safe to do so. If help is available, allocate responsibilities to others to create a competent fire fighting team.

- Evacuate people from the area
- If it is safe to do so, switch off power to all equipment
- Call the fire department (dial 911)
- If a small fire, use your fire extinguisher if it is safe to do so – try to contain and extinguish the fire
- If the fire is near a fuel tank, do not attempt to extinguish the fire – retreat to a safe distance
- Be prepared to direct the fire service to the scene

Spill Procedures Checklist

You must know and understand what to do if a spill occurs. Your first consideration is the immediate safety of visitors and staff; secondly, the need to call emergency services and then contain the spill if it is safe to do so. If help is available allocate responsibilities to others to create a competent team to deal with the spill.

- If the spill is from the hose or tap, shut the isolation valve
- Warn people in area of the spill – evacuate if necessary
- Remove sources of ignition if flammable substance present
- Evaluate the spill – only respond if you believe it is safe to do so
- Refer to the safety data sheet or call on an approved handler or other specialists for advice
- If necessary, call emergency services and advise local authority
- Put on safety equipment (e.g. overalls, boots, gloves, eye protection, etc.)
- Contain the spill if it is safe to do so – utilize a drip tray or oversize container or spill kit to soak up the substance
- Dispose of waste safely as set out in the material safety data sheet

Incident Reporting

Every accident resulting in injury or damage to farm property must be reported to your manager immediately.

Respond to the accident promptly and positively

Collect relevant information about the accident

Develop and take remedial actions

Complete insurance claims and reports required

First Aid

- A first aid kit must be kept on the premises and maintained
- All staff must know basic first aid procedures

Minor Injury Accidents

- Minor cuts and abrasions must be attended to immediately
- If in doubt contact a physician or call 911

Serious Injury Accidents

- Call an ambulance immediately (dial 911)
- Seek the assistance of any first responder
- Stabilize Victim
- Advise your manager

Property Damage

- All damage to farm property must be reported to your manager

Emergency First Aid-Procedures

Control of Bleeding

- 1. Direct pressure – use your hand(s).**
- 2. Elevate (raise) the limb**
- 3. Apply a pad and firm bandage.**
- 4. If necessary use clean rags or clothing.**

Remember!!

- Always check circulation below the bandage!***
- If there is tingling, numbness or blueness
loosen the bandage.***

Management of Burns

- 1. Cool the burnt area with cool water for 10-15 minutes**
- 2. If necessary, cover the burn with a clean dressing or plastic wrap before removing person to medical aid.**

Remember!!

- Do not burst blisters.***
- Do not remove clothing that is stuck.***
- Do not apply creams***

Management of Eye Injuries

Foreign bodies in the eye(s)

- 1. Wash the eye(s) with eyewash or clean water.**
- 2. If the foreign body is stuck to the eye DO NOT attempt remove.**
- 3. Place covering over the eye and obtain medical attention.**

Management of Chemicals in Eye(s)

- 1. Wash the eye(s) with clean cool water for at least 15 minutes.**
- 2. Wash from near the nose outward.**
- 3. Always wash under the upper eyelid.**
- 4. Obtain medical attention**

Breathing

If a person is breathing but unconscious turn them on their side to prevent tongue swelling or vomit from obstructing airway.

If person *is not breathing*

- *Check airway for blockage and clear***
 - *Call 911***
 - *Administer CPR***
-

Location of Firefighting Equipment, Spill and First Aid Kits

A fire extinguisher is located in the following places:

- *All Generator Sheds*
- *All Cold Frames*
- *Fertilizer Storage Facility*
- *Pesticide Storage Facility*
- *Drying and Processing Facility*

A first aid kit is located in the following places:

- *All Generator Sheds*
- *Cultivation Site*
- *Fertilizer Storage Facility*
- *Pesticide Storage Facility*
- *Drying and Curing Facility*

A spill kit is located in the following places:

- *All Generator Sheds*
- *Cultivation Site*

- ***Fertilizer Storage Facility***
- ***Pesticide Storage Facility***

**Appendix E: Generator
Specifications**



DCA25USI4CAN

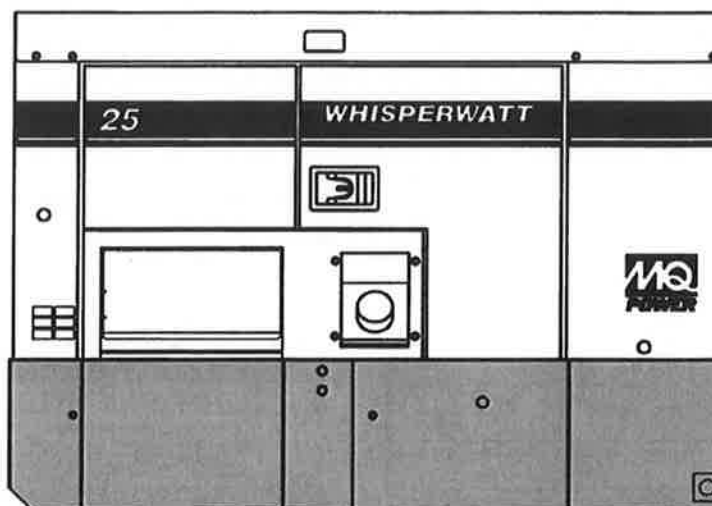
MQ POWER Series Generator

WhisperWatt™ 25

Prime Rating — 20 kW (25 kVA)

Standby Rating — 22 kW (27.5 kVA)

60 Hertz



STANDARD FEATURES

- Heavy duty, 4-cycle, direct injection, diesel engine provides maximum reliability.
- Brushless alternator reduces service and maintenance requirements and meets temperature rise standards for Class F insulation systems.
- Open delta excitation design provides virtually unlimited excitation for maximum motor starting capability.
- Automatic voltage regulator (AVR) provides precise regulation.
- Full load acceptance of standby nameplate rating in one step (NFPA 110, para 5-13.2.6).
- Sound attenuated, weather resistant, steel housing provides operation at 59 dB(A) at 23 feet. Fully lockable enclosure allows safe unattended operation.
- Internal fuel tank with direct reading of fuel gauge.
- E-coat and powder coat paint provide durability and weather protection.
- Fuel/water separator removes condensation from fuel for extended engine life. Panel mounted alarm light included.
- Complete engine analog instrumentation includes DC ammeter, oil pressure gauge, water temp. gauge, fuel level gauge, tachometer/hour meter, preheat indicator, emergency shutdown monitors, and keyed start switch.
- Complete generator analog instrumentation includes voltage regulator control, ammeter phase selector switch, voltmeter phase selector switch, AC voltmeter, AC ammeter, frequency meter, panel light, and circuit breaker.
- Automatic safety shutdown system monitors the engine oil pressure and coolant temperature. Warning lights indicate abnormal conditions.
- Complete power panel. Fully covered; three-phase terminals and single phase receptacles allow fast and convenient hookup for most applications including temporary power boxes, tools and lighting equipment. The GFCI receptacles are NEMA 5-20, and the auxiliary outputs use CS6369 twist-lock receptacles.
- Simultaneous single and three phase power.
- Voltage selector switch offers the operator a wide range of voltages that are manually selectable. Fine tuning of the output voltage can be accomplished by adjusting the voltage regulator control knob to obtain the desired voltage.
- Interim Tier 4 emissions compliant.
- External Fuel Fill.
- Cold Weather Kit to maintain optimal temperature.
- Water Heater for easy starting in cold weather climates.
- CSA listed.

DCA25USI4CAN — MQ POWER SERIES GENERATOR — REV. #1 (03/20/14)



DCA25USI4CAN

MQ POWER Series Generator

SPECIFICATIONS

Generator Specifications		
Design	Revolving field, self-ventilated Drip-proof, single bearing	
Armature Connection	Star with Neutral	Zig Zag
Phase	3	Single
Standby Output	22 KW (27.5 KVA)	15.3 KW
Prime Output	20 KW (25 KVA)	14.4 KW
3Ø Voltage (L-L/L-N) Voltage Selector Switch at 3Ø 240/139	208Y/120, 220Y/127, 240Y/139	N/A
3Ø Voltage (L-L/L-N) Voltage Selector Switch at 3Ø 480/277	416Y/240, 440Y/254, 480Y/277	N/A
1Ø Voltage (L-L/L-N) (Voltage Selector Switch at 1Ø 240/120)	N/A	240/120
Power Factor	0.8	1.0
Voltage Regulation (No load to full load)	±0.5%	
Generator RPM	1800	
Frequency	60 Hz	
No. of Poles	4	
Excitation	Brushless with AVR	
Frequency	60 Hz	
Frequency Regulation: No Load to Full Load	3-5% under varying loads from no load to 100% rated load	
Frequency Regulation: Steady State	±0.5% of mean value for constant loads from no load to full load.	
Insulation	Class F	
Sound Level dB(A) Full load at 23 feet	59	

Engine Specifications	
Make / Model	Isuzu / BV-4LE2
Emissions	Interim Tier 4 Certified
Starting System	Electric
Design	4-cycle, water cooled, direct injection
Displacement	133.0 in ³ (2179 cc)
No. cylinders	4
Bore x Stroke (mm)	85 x 96
Gross Engine Power Output	35.9 bhp (26.8 kWm)
BMEP	100 psi (691 kPa)
Piston Speed	1134 ft./min. (5.76 m/s)
Compression Ratio	18:1
Engine Speed	1800 rpm
Overspeed Limit	2100 rpm
Oil Capacity	2.25 gallons (8.5 liters)
Battery	12V 53Ah x 1

Fuel System		
Recommended Fuel	ASTM-D975-No.1 & No.2-D	
Maximum Fuel Flow (per hour)	3.7 gallons (14.0 liters)	
Maximum Inlet Restriction (Hg)	8.66 in. (220 mm)	
Fuel Tank Capacity	41.7 gallons (158 liters)	
Fuel Consumption	gph	lph
At full load	1.66	6.3
At 3/4 load	1.21	4.6
At 1/2 load	0.85	3.2
At 1/4 load	0.58	2.2

Cooling System	
Fan Load	0.13 hp (0.1 kW)
Coolant Capacity (with radiator)	1.70 gallons (6.4 liters)
Coolant Flow Rate (per minute)	15.6 gallons (59 liters)
Heat Rejection to Coolant (per minute)	862 Btu (0.91 MJ)
Heat Rejection to Room (per minute)	209 Btu (0.22 MJ)
Maximum Coolant Friction Head	3.1 psi (21.6 kPa)
Maximum Coolant Static Head	21 feet (6.4 meters)
Ambient Temperature Rating	104°F (40°C)

Air	
Combustion Air	56 cfm (1.6 m ³ /min)
Maximum Air Cleaner Restriction	24.9 in. H ₂ O (6.2 kPa)
Alternator Cooling Air	388 cfm (11 m ³ /min)
Radiator Cooling Air	1059 cfm (30 m ³ /min)

Exhaust System	
Gas Flow (full load)	152 cfm (4.08 m ³ /min)
Gas Temperature	1004°F (570°C)
Maximum Back Pressure	28.0 in. H ₂ O (7.0 kPa)

Amperage	
Rated Voltage	Maximum Amps
1Ø 120 Volt	55.6 Amps (4 wire) 60A x 2 (Zigzag)
1Ø 240 Volt	27.8 Amps (4 wire) 60A (Zigzag)
3Ø 240 Volt	60 Amps
3Ø 480 Volt	30 Amps
Main Line Circuit Breaker Rating	60 Amps
Over Current Relay Trip Set Point 480V Mode Only	30 Amps

WARRANTY*

Isuzu Engine

12 months from date of purchase with unlimited hours or 24 months from date of purchase with 2000 hours (whichever comes first).

Generator

24 months from date of purchase or 2000 hours (whichever occurs first).

Trailer

12 months excluding normal wear items.

*Refer to the express written, one-year limited warranty sheet for additional information.

NOTICE

Generator is not intended for use in enclosed areas or where free flow of air is restricted.

Backfeed to a utility system can cause electrocution, shock and/or property damage. **DO NOT** connect to any building's electrical system except through an approved device.

Specifications are subject to change without notice.



DCA25USI4CAN

MQ POWER Series Generator

MQ POWER DECIBEL LEVELS

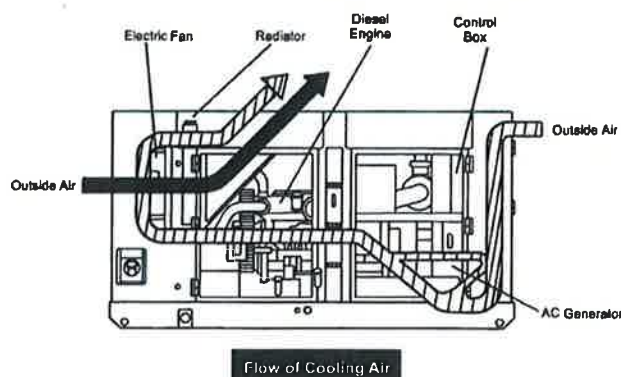
Our soundproof housing allows substantially lower operating noise levels than competitive designs. WhisperWatts are at home on construction sites, in residential neighborhoods, and at hospitals — just about anywhere.

- ⑨0 — Subway / truck traffic
 - ⑧0 — Average city traffic
 - ⑦0 — Inside car at 60 mph
 - ⑥0 — Air conditioner at 20 feet
 - ⑤0 — Normal conversation
- Ultra Silent at 23 feet

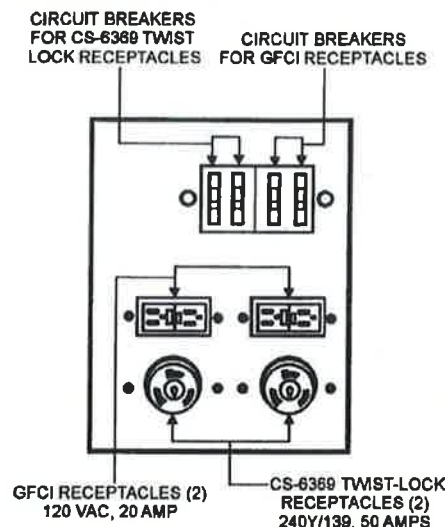
59.0
DECIBELS

ULTRA-SILENT FEATURES

- **Low Noise Muffler** — Large capacity low noise muffler minimizes exhaust sound.
- **Soundproof Casing** — The new design divides the cabinet into three sections, separating the engine, muffler and radiator for more efficient cooling and reduces noise from the engine and fans.
- **New Cooling System** — An advanced design uses two separate air intake systems to cool the generator. The engine fan draws air in to cool the engine and generator housing while a second electric fan directly cools the radiator. With less air being drawn into the generator through each fan, considerably less noise is produced through the top of the generator.
- **Environmental Design** — Constructed using an integrated environmental skid and fuel tank. This design fully contains fuel leakage and any liquid that might leak from the engine such as lube oil or radiator coolant. All potentially hazardous liquids are contained without contaminating the surrounding area.



GENERATOR OUTPUT PANEL



OPTIONAL CONTROL FEATURES

- **Emergency Stop Switch** — when manually activated shuts down generator in the event of an emergency.
- **Audible Alarm** — alerts operator of abnormal conditions.
- **Automatic Start / Stop Control** — automatically starts the generator set during a commercial power failure when used in conjunction with a transfer switch.

OPTIONAL GENERATOR FEATURES

- **Electronic Governor Control (Crystal Sync)** — maintains frequency to within $\pm 0.25\%$ from no load to full load.
- **Battery Charger** — provides fully automatic and self-adjusting charging to the generator's battery system.
- **Low Coolant Level Shutdown** — provides protection from critically low coolant levels. Includes control panel warning light.
- **Trailer Mounted Package** — meets National Highway Traffic Safety Administration (NHTSA) regulations. Trailer is equipped with electronic or surge brakes with single axle configuration.

OPTIONAL OUTPUT CONNECTIONS

- **Pin and Sleeve Connectors** — provides industry standard connectors for all voltage requirements.

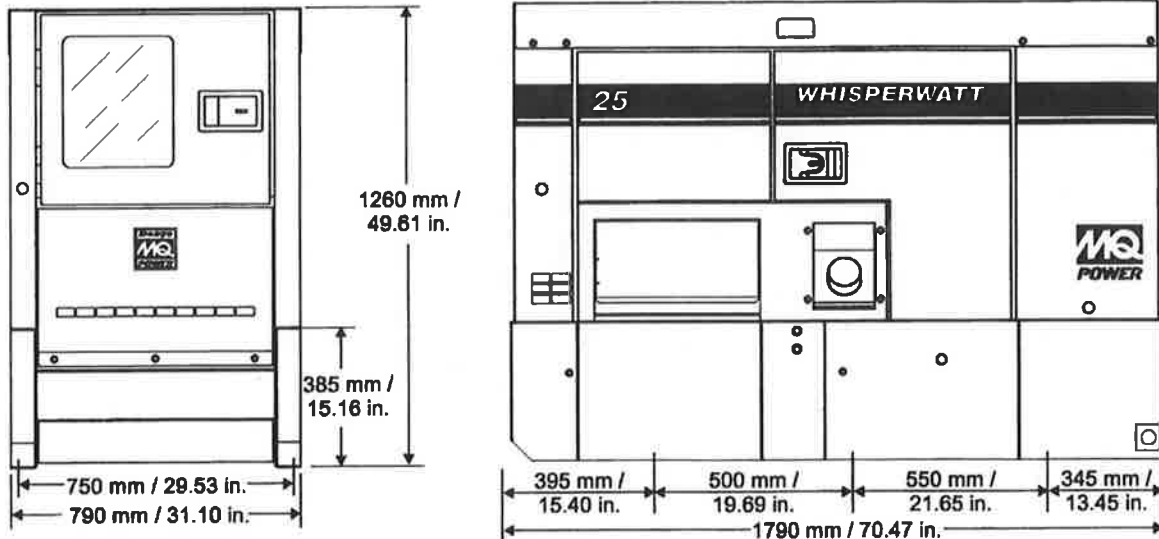
DCA25USI4CAN — MQ POWER SERIES GENERATOR — REV. #1 (03/20/14)



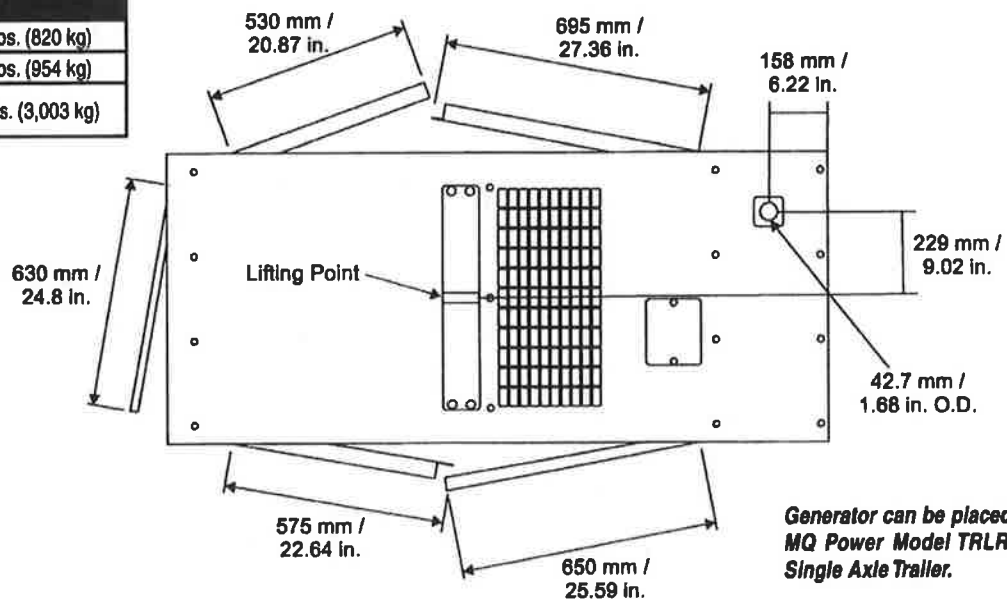
DCA25USI4CAN

MQ POWER Series Generator

DIMENSIONS



Weight	
Dry Weight	1,808 lbs. (820 kg)
Wet Weight	2,104 lbs. (954 kg)
Max. Lifting Point Capacity	6,620 lbs. (3,003 kg)



**Generator can be placed on a
MQ Power Model TRLR25US
Single Axle Trailer.**

Manufactured by Denyo Co.

Your MultiQuip dealer is:

© COPYRIGHT 2014 MULTIQUIP INC.
DCA25USI4CAN Rev. #1 (03/20/14)



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POST OFFICE BOX 6254
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FAX: 310-604-3831
E-MAIL: sales@multiquip.com
WEBSITE: www.multiquip.com



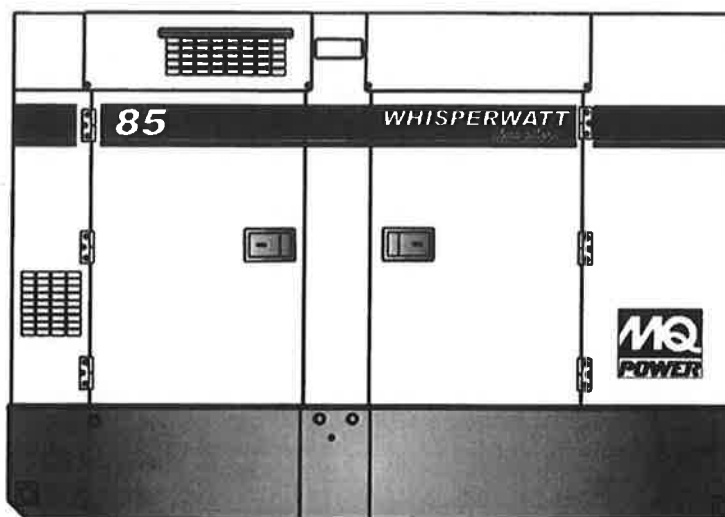
DCA85USJ

MQ POWER WhisperWatt™ Series Generator

Prime Rating — 68 kW (85 kVA)

Standby Rating — 75 kW (94 kVA)

Three-Phase, 60 Hertz, 0.8 PF



STANDARD FEATURES

- Heavy duty, 4-cycle, direct injection, turbocharged diesel engine provides maximum reliability.
- Brushless alternator reduces service and maintenance requirements and meets temperature rise standards for Class F insulation systems.
- Open delta excitation design provides virtually unlimited excitation for maximum motor starting capability.
- Automatic voltage regulator (AVR) provides precise regulation.
- Electronic Governor Control (Crystal Sync) — maintains frequency to within $\pm 0.25\%$ from no load to full load.
- Full load acceptance of standby nameplate rating in one step (NFPA 110, para 5-13.2.6).
- Sound attenuated, weather resistant, steel housing provides operation at 63 dB(A) at 23 feet. Fully lockable enclosure allows safe unattended operation.
- Internal fuel tank with direct reading of fuel gauge.
- Seven stage powder coat paint system provides durability and weather protection.
- Fuel/water separator removes condensation from fuel for extended engine life. Panel mounted alarm light included.
- Complete engine analog instrumentation includes DC ammeter, oil pressure gauge, water temp. gauge, fuel level gauge, tachometer/hour meter, preheat indicator, and emergency shutdown monitors.
- Complete generator analog instrumentation includes voltage regulator control, ammeter phase selector switch, voltmeter phase selector switch, AC voltmeter, AC ammeter, frequency meter, panel light, and circuit breaker.
- Automatic safety shutdown system monitors the engine oil pressure and coolant temperature. Warning lights indicate abnormal conditions.
- Automatic start/stop control — automatically starts the generator set during a commercial power failure when used in conjunction with a transfer switch.
- Complete power panel. Fully covered; three-phase terminals and single phase receptacles allow fast and convenient hookup for most applications including temporary power boxes, tools and lighting equipment. The GFCI receptacles are NEMA 5-20, and the auxiliary outputs use CS6369 twist-lock receptacles.
- Simultaneous single and three phase power.
- Voltage selector switch offers the operator a wide range of voltages that are manually selectable. Fine tuning of the output voltage can be accomplished by adjusting the voltage regulator control knob to obtain the desired voltage.
- EPA emissions certified - Tier 3 emissions compliant.

DCA85USJ — MQ POWER WHISPERWATT™ SERIES GENERATOR — REV. #11 (01/14/15)



DCA85USJ

MQ POWER WhisperWatt™ Series Generator

SPECIFICATIONS

Generator Specifications

Design	Revolving field, self-ventilated Drip-proof, single bearing	
Armature Connection	Star with Neutral	Zig Zag
Phase	3	Single
Standby Output	75 KW (94 KVA)	66 KW
Prime Output	68 KW (85 KVA)	60 KW
3Ø Voltage (L-L/L-N) Voltage Selector Switch at 3Ø 240/139	208Y/120, 220Y/127, 240Y/139	N/A
3Ø Voltage (L-L/L-N) Voltage Selector Switch at 3Ø 480/277	416Y/240, 440Y/254, 480Y/277	N/A
1Ø Voltage (L-L/L-N) (Voltage Selector Switch at 1Ø 240/120)	N/A	240/120
Power Factor	0.8	1.0
Voltage Regulation (No load to full load)	±0.5%	
Generator RPM	1800	
Frequency	60 Hz	
No. of Poles	4	
Excitation	Brushless with AVR	
Frequency	60 Hz	
Frequency Regulation: No Load to Full Load	3-5% under varying loads from no load to 100% rated load	
Frequency Regulation: Steady State	±0.5% of mean value for constant loads from no load to full load.	
Insulation	Class F	
Sound Level dB(A) Full load at 23 feet	63	

Engine Specifications

Make / Model	John Deere / 4045HF285
Emissions	EPA Tier 3 Certified
Starting System	Electric
Design	4-cycle, water cooled, direct injection turbocharged
Displacement	274.6 in³ (4500 cc)
No. cylinders	4
Bore x Stroke (mm)	106 x 127
Gross Engine Power Output	113.0 bhp (84.3 kWm)
BMEP	162 psi (1119 kPa)
Piston Speed	1500 ft./min. (7.62 m/s)
Compression Ratio	17:1
Engine Speed	1800 rpm
Overspeed Limit	2100 rpm
Oil Capacity	3.49 gallons (13.2 liters)
Battery	12V 72Ah x 1

Fuel System

Recommended Fuel	ASTM-D975-No.1 & No.2-D	
Maximum Fuel Flow (per hour)	15.9 gallons (60 liters)	
Maximum Inlet Restriction (Hg)	5.9 in. (150 mm)	
Fuel Tank Capacity	126 gallons (150 liters)	
Fuel Consumption	gph	lph
At full load	5.3	20.1
At 3/4 load	4.3	16.2
At 1/2 load	3.1	11.9
At 1/4 load	2.0	7.6

Cooling System

Fan Load	1.6 hp (1.2 kW)
Coolant Capacity (with radiator)	3.70 gallons (14.0 liters)
Coolant Flow Rate (per minute)	38 gallons (144 liters)
Heat Rejection to Coolant (per minute)	3300 Btu (3.5 MJ)
Heat Rejection to Room (per minute)	582 Btu (0.614 MJ)
Maximum Coolant Friction Head	4.0 psi (27.6 kPa)
Maximum Coolant Static Head	32 feet (9.8 meters)
Ambient Temperature Rating	104°F (40°C)

Air

Combustion Air	226 cfm (6.4 m³/min)
Maximum Air Cleaner Restriction	25 in. H₂O (6.25 kPa)
Alternator Cooling Air	911 cfm (45 m³/min)
Radiator Cooling Air	1589 cfm (30 m³/min)
Minimum Air Opening to Room	7.85 sq. ft. (0.73 sq. m)
Minimum Discharge Opening	3.87 sq. ft. (0.36 sq. m)

Exhaust System

Gas Flow (full load)	674 cfm (19.1 m³/min)
Gas Temperature	1094°F (590°C)
Maximum Back Pressure	30.0 in. H₂O (7.5 kPa)

Amperage

Rated Voltage	Maximum Amps
1Ø 120 Volt	188.9Amps (4 wire) 250A x 2 (Zigzag)
1Ø 240 Volt	94.4Amps (4 wire) 250A (Zigzag)
3Ø 240 Volt	204 Amps
3Ø 480 Volt	102 Amps
Main Line Circuit Breaker Rating	250 Amps
Over Current Relay Trip Set Point 480V Mode Only	102 Amps

WARRANTY*

John Deere

12 months from date of purchase with unlimited hours or 24 months from date of purchase with 2000 hours (whichever comes first).

Generator

24 months from date of purchase or 2000 hours (whichever occurs first).

Trailer

12 months excluding normal wear items.

*Refer to the express written, one-year limited warranty sheet for additional information

NOTICE

Generator is not intended for use in enclosed areas or where free flow of air is restricted.

Backfeed to a utility system can cause electrocution, shock and/or property damage. **DO NOT** connect to any building's electrical system except through an approved device.

Specifications are subject to change without notice.



DCA85USJ

MQ POWER WhisperWatt™ Series Generator

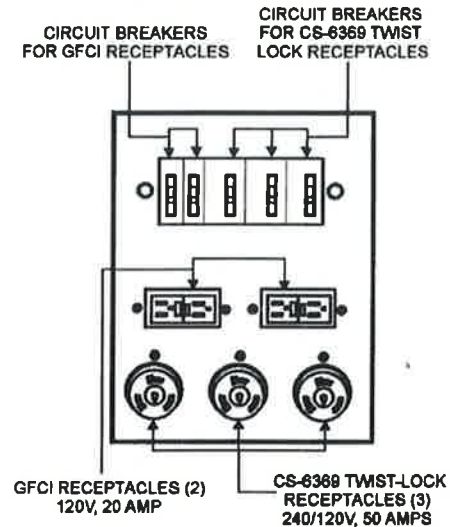
MQ POWER DECIBEL LEVELS

Our soundproof housing allows substantially lower operating noise levels than competitive designs. WhisperWatts are at home on construction sites, in residential neighborhoods, and at hospitals — just about anywhere.

- ⑨0 — Subway / truck traffic
- ⑧0 — Average city traffic
- ⑦0 — Inside car at 60 mph
- ⑥0 — Air conditioner at 20 feet
- ⑤0 — Normal conversation

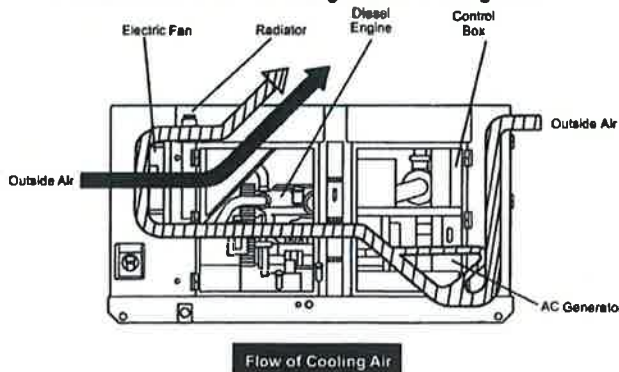
63.0
DECIBELS

GENERATOR OUTPUT PANEL



ULTRA-SILENT FEATURES

- **Low Noise Muffler** — Large capacity low noise muffler minimizes exhaust sound.
- **Soundproof Casing** — The new design divides the cabinet into three sections, separating the engine, muffler and radiator for more efficient cooling and reduces noise from the engine and fans.
- **New Cooling System** — An advanced design uses two separate air intake systems to cool the generator. The engine fan draws air in to cool the engine and generator housing while a second electric fan directly cools the radiator. With less air being drawn into the generator through each fan, considerably less noise is produced through the top of the generator.
- **Environmental Design** — Constructed using an integrated environmental skid and fuel tank. This design fully contains fuel leakage and any liquid that might leak from the engine such as lube oil or radiator coolant. All potentially hazardous liquids are contained without contaminating the surrounding area.



OPTIONAL CONTROL FEATURES

- **Emergency Stop Switch** — when manually activated shuts down generator in the event of an emergency.
- **Audible alarm** — alerts operator of abnormal conditions.

OPTIONAL GENERATOR FEATURES

- **Electronic Governor Control (Crystal Sync)** — maintains frequency to within $\pm 0.25\%$ from no load to full load.
- **Battery Charger** — provides fully automatic and self-adjusting charging to the generator's battery system.
- **Jacket Water Heater** — for easy starting in cold weather climates.
- **Special Batteries** — long life batteries provide extra engine cranking power.
- **Spring Isolators** — provides extra vibration protection for standby applications.
- **Low Coolant Level Shutdown** — provides protection from critically low coolant levels. Includes control panel warning light.
- **Trailer Mounted Package** — meets National Highway Traffic Safety Administration (NHTSA) regulations. Trailer is equipped with electric or surge-hydraulic brakes with tandem axle configuration.

OPTIONAL OUTPUT CONNECTIONS

- **Cam-Lock Connectors** — provides quick disconnect alternative to bolt-on connectors.
- **Pin and Sleeve Connectors** — provides industry standard connectors for all voltage requirements.
- **Output Cable** — available in any custom length and size configuration.

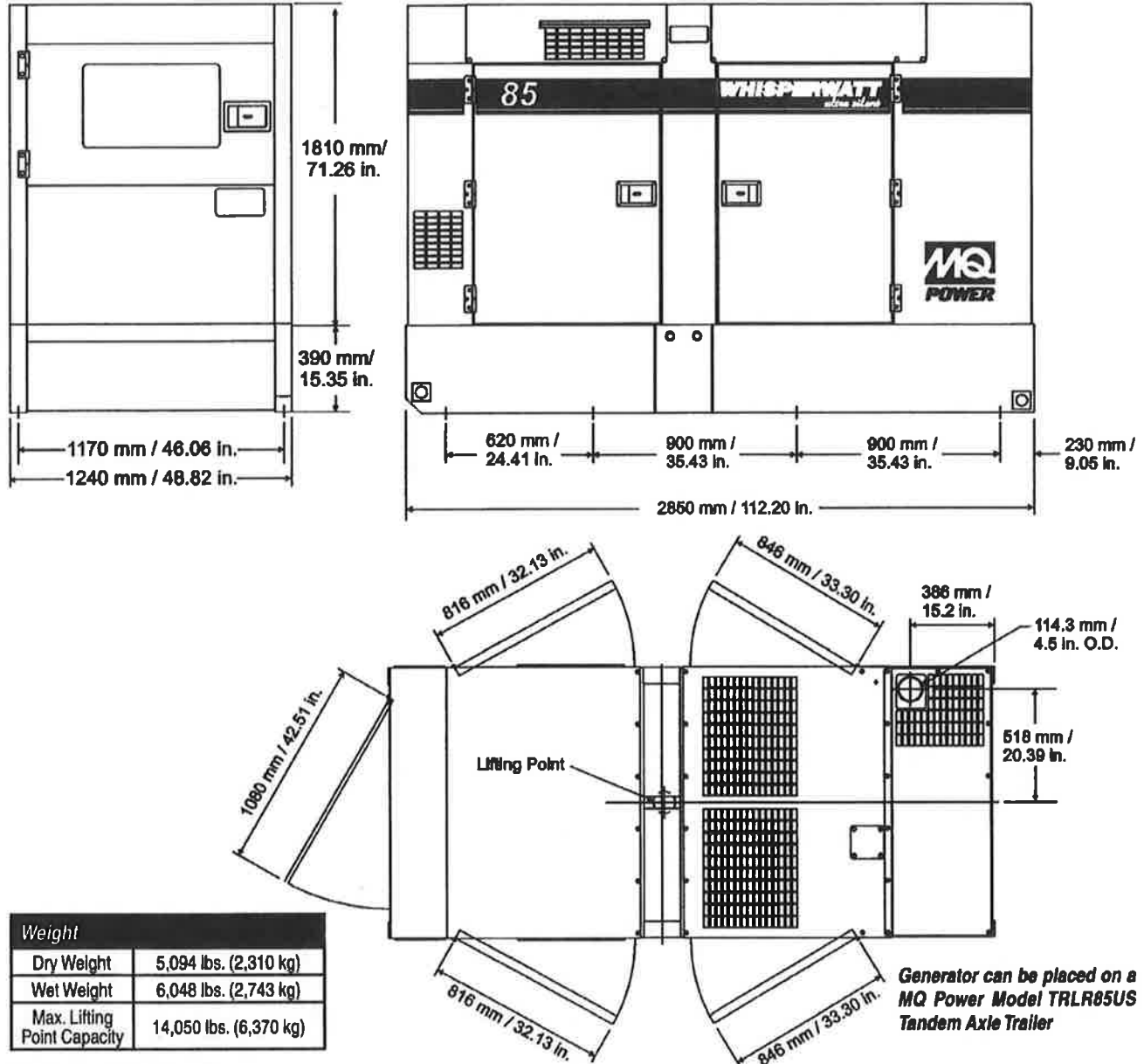
DCA85USJ — MQ POWER WHISPERWATT™ SERIES GENERATOR — REV. #11 (01/14/15)



DCA85USJ

MQ POWER WhisperWatt™ Series Generator

DIMENSIONS



Weight

Dry Weight	5,094 lbs. (2,310 kg)
Wet Weight	6,048 lbs. (2,743 kg)
Max. Lifting Point Capacity	14,050 lbs. (6,370 kg)

Manufactured by Denyo Co.

Your MultiQuip dealer is:

© COPYRIGHT 2015 MULTIQUIP INC.
DCA85USJ2 Rev. #11 (01/14/15)



MULTIQUIP
POST OFFICE BOX 6254
CARSON, CA 90749
310-537-3700 • 800-883-2551
FAX: 310-604-3831
E-MAIL: sales@multiquip.com
WEBSITE: www.multiquip.com

**Appendix F: Material Data
Safety Sheets**

Trade Name/Synonym : **Pure Neem Oil Organic Leaf Polish**
Date Prepared : June 1, 2009
Chemical Name : 100% Cold Pressed Neem Oil
Formula : Extracts of Neem Seeds

Section 1: Manufacturer or Supplier

Dyna-Gro Nutrition Solutions, 2775 Giant Road, Richmond, CA 94806, (800) 396-2476 Emergency (510) 233-0254

Section 2: Hazardous Ingredients

Contains no hazardous mixtures

Section 3: Physical Data & Ingredients

Physical State at STP : Liquid	pH : 6.5 – 7.5
Appearance : Brown	Specific Gravity : 0.9137
Odor : Garlic	Solubility in Water : Slightly Soluble
Boiling Point : > 392° F	Vapor Pressure at 20° C: < 1.33 EE-5 Pa
Melt/Freeze Point : 55° F	Vapor Density : Greater than air

Chemical or Common Name	%	CAS#	Exposure limits in air:
			ACGIH TLV: OSHA PEL :
Neem Oil	100%	8002-65-1	Not Established

Section 4: Fire & Explosion Hazard Data

Flash Point : >239° F
Extinguishing Media to Use : Dry Chemicals, CO₂, Water or Water Based Foam
Special Fire Fighting Procedures : None
Unusual Fire & Explosion Risk : None

Section 5: Reactivity Hazard Data

Stability : Stable
Incompatibility : None Noted
Hazardous Decomposition : None
Hazardous Polymerization : None

Section 6: Health Hazard Data

Effects of Over-Exposure: None Noted.

Health Hazards: Acute: May cause mild irritation to eyes and skin.
Chronic: Repeated skin exposure may cause mild sensitization.

Emergency First Aid:

If Swallowed : Under 1 ounce does not have any harmful effects. For larger amounts, do not induce vomiting. Drink one or two glasses of water. Never give anything by mouth to an unconscious person. Call a physician.
Skin Exposure : Wash with soap and water. Get medical attention if irritation persists.
Eye Exposure : Flush eyes with water for 15 minutes. Call a physician.
If Inhaled : Remove to fresh air. Get medical attention if irritation persists.

Section 7: Spill or Leak Procedures

Environmental Hazard : Do not apply directly to bodies of water. This product is toxic to bees exposed to direct treatment.
Steps to take if Spill Occurs. : Ventilate the area. Absorb liquid and scrub the area with detergent and water. Avoid runoff into storm sewers and ditches leading to waterways.
Waste Disposal Method : Dispose of all waste according to local, state and federal regulations. Mix with water and dispose of in approved landfill.

Section 8: Special Protection Information

Respiratory Protection. : No special requirements.
Ventilation : Adequate ventilation
Eye Protection. : Safety goggles
Protective Gloves : Rubber

Section 9: Handling & Storage Conditions

Storage Temperature (Min./Max.) : 60° F / 95° F
Shelf Life : Stable under normal storage conditions up to two years.
Special Sensitivity : Keep from freezing.
Handling Precautions. : Do not drink, get in eyes, on skin or on clothing. Use in well ventilated area. Wash thoroughly with soap and water after handling.
Storage Precautions : Do not keep near flame. Store in a cool, dry place.

The information contained herein is provided in good faith and is believed to be correct and equivalent to OSHA Form 174, as of the date hereof, but is issued without guarantee. Since conditions of use are beyond our control, user assumes all responsibility and risk.

**HYDRO-ORGANICS WHOLESale, INC.
MATERIAL DATA SAFETY SHEET
EARTH JUICE PRODUCTS**

REVISED 03/17/09

SECTION I: GENERAL INFORMATION

PRODUCT NUMBER: F08302-F08308

PRODUCT NAME: EARTH JUICE HI BRIX 0-0-3

CHEMICAL NAME AND SYNONYMS: NA

PRECAUTIONS: Avoid prolonged contact with eyes, skin. Will stain clothing.

SECTION II: HAZARDOUS INGREDIENTS

Not Applicable This product is not a DOT hazardous material.

SECTION III: PHYSICAL/CHEMICAL DATA

BOILING POINT: VERY HIGH

% VOLATILE BY VOLUME: NO DATA

VAPOR DENSITY IN AIR: WATER VAPOR ONLY

VAPOR PRESSURE (MM HG): LOW

SOLUBILITY IN WATER: SOLUBLE

SPECIFIC GRAVITY (H20-1): 1.45

pH : 2.25 TO 6.0

APPEARANCE AND ODOR: Dark brown syrupy liquid, sweet smell

SECTION IV: FIRE AND EXPLOSION DATA

FLASH POINT (method used): Non flammable, non combustible

FLAMMABLE LIMITS IN AIR: Non flammable, non combustible

EXTINGUISHING MEDIA: NA

UNUSUAL FIRE EXPLOSION HAZARDS: Fermentation occurs when diluted with water and is accelerated by heat. During fermentation, carbon monoxide with possible traces of ethanol or volatile fatty acids (e.g., acetic, propionic, lactic, or butyric) is given off, which produces inhalation hazards and possible explosion hazards. This material should be stored in a vented tank designed to contain a material with a specific gravity of 1.3 or greater. Material can ferment if excessive moisture contamination is allowed.

SECTION V: REACTIVITY DATA

STABILITY: Stable- Avoid excess moisture, heat or unventilated containers

HAZARDOUS POLYMERIZATION: NA

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, alcohol or fatty acid vapors

INCOMPATIBILITY: Reacts with concentrated nitric acid or concentrated sulphuric acid. Ferments when diluted with water.

SECTION VI: HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE/ EMERGENCY AND FIRST AID PROCEDURES:

EYES: Avoid contact with eyes. Flush eyes with water for 15 minutes. SKIN: Wash off with soap water. Use rubber gloves when handling product.

INHALATION: If vapors or mist causes irritation or distress, remove to fresh air.

INGESTION: No Data

RESPIRATORY PROTECTION: None

SECTION VII: SPILL, LEAK, AND DISPOSAL PROCEDURES

Contain spills. Absorb with commercial or other absorbent material and shovel into container for proper disposal. Prevent spill from entering a waterway or sewer. For large spills, dike and mop up or pump material into a container (metal or plastic) for proper disposal at an approved facility such as a municipal landfill or land application site. If solid crystals form as the material cools, add water to help with clean up. Prevent releases to land or water. If spill could potentially enter any waterway such as small creeks, contact local authorities. For navigable waterways, contact the US coast Guard National Response Center 800-424-8802. Notify as appropriate, federal, state and local agencies. Results in high Biological Oxygen Demand (BOD) and potential oxygen depletion of aquatic systems. Discharges to a waterway of the U.S. are regulated by the Environmental Protection Agency.

SECTION VIII: SPECIAL PRECAUTIONS

Do not add water to container of concentrate. Avoid overheating or freezing.

Other Precautions: Wash thoroughly after handling.

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Botanicare
6858 W. Chicago St #3
Chandler, AZ 85226
877.753.0404

MSDS SHEETS

PRODUCT NAME: PURE BLENDTM PRO GROW PRO SOIL & PRO BLOOM

1. **INGREDIENTS:** Dolomite, potassium carbonate, fish meal, seaweed extract, magnesium sulfate, humic acid.

2. **PHYSICAL DATA:**

Physical Form: Liquid
Boiling Point: 100°C
Vap Press: N/A
Vap Density: N/A
Sol in Water: Appreciable
Evaporation Rate: N/A
Appearance: Dark, coffee-colored liquid
Odor: Slight organic odor

3. **FIRE AND EXPLOSION HAZARD DATA:**

Flash Point: N/A
Method Used: N/A

FLAMMABLE LIMITS:

LFL: N/A
UFL: N/A

EXTINGUISHING MEDIA: This product is not combustible. Use any appropriate medium for extinguishing surrounding fires.

4. **REACTIVITY DATA:**

STABILITY: Stable.
POLYMERIZATION: Will not occur.

Conditions to Avoid: Water of crystallization from applicable components driven off at approximately 235° Fahrenheit / 113° Celsius.

Materials to Avoid: Solutions can be corrosive to metals. Avoid strong oxidizing and reducing agents.

Hazardous Decomposition Products: None.

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS OR LEAKS: Wear protective equipment, including rubber boots, rubber gloves, rubber apron and chemical goggles. For small spills, sweep up and dispose of in DOT-approved waste containers. Comply with all applicable governmental regulations on spill reporting, and handling and disposal of waste.

6. FIRST AID:

IF INHALED: Remove to fresh air.

IN CASE OF EYE CONTACT: Flush eyes with lots of running water.

IN CASE OF SKIN CONTACT: Wash skin with lot's of soap and water. Remove contaminated clothing and shoes. Get medical attention if irritation persists.

IF SWALLOWED: Do not induce vomiting. Consult a physician.

7. HEALTH HAZARD INFORMATION:

PRIMARY ROUTES OF EXPOSURE: Skin or eye contact, swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE:

Eye Contact: May moderately irritate eyes.

Skin Contact: May irritate damp skin.

Swallowed: Swallowing may result in abdominal discomfort.

CHRONIC EFFECTS OF EXPOSURE: No specific information available.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

8. HANDLING PRECAUTIONS:

EXPOSURE GUIDELINE:

VENTILATION: Local mechanical exhaust ventilation at the point of use.

RESPIRATORY PROTECTION: NIOSH-Approved dust and vapor respirator or mask in the absence of adequate environmental controls at the point of use.

PROTECTIVE CLOTHING: Long-sleeved shirt, trousers, safety shoes and gloves.

EYE PROTECTION: Chemical goggles.

OTHER PROTECTIVE MEASURES: An eyewash and safety shower should be nearby and ready for use.

PURE BLEND TEA MATERIAL SAFETY DATA SHEET

EMERGENCY ASSISTANCE

For emergency assistance involving PURE BLEND TEA, call Botanicare at 480-777-2000, or 877-753-0404. For product and sales information contact Botanicare at the same numbers.

PRODUCT INFORMATION

Product Name: PURE BLEND TEA with seaweed, blood meal, seabird guano, earthworm castings, fishmeal, citric acid, and leonardite ore.

PHYSICAL & CHEMICAL CHARACTERISTICS

Physical Form:	Liquid
Boiling Point, degrees (F):	>210 @ 1 amt
Specific Gravity (H2O=1):	1.187
Weight per gallon:	9 pounds
Vapor Pressure (mm hg):	17mm @68 deg F
Vapor Density (air=1):	.62
Solubility in Water:	95%
Percent Volatile (%):	n/a
Evaporation Rate:	.08
Appearance & Odor:	Medium brown liquid Pungent odor
Melting Point:	None

FIRE & EXPLOSION DATA

Flash Point:	None
Method:	p-m closed cup
Auto Ignition Temp:	None
Special Fire Procedures:	Self-contained air to protect from oxides of Nitrogen and Sulfur
Extinguisher Media:	None, product decomposes w/o flame
Unusual Fire Explosion Hazards:	None

PHYSICAL HAZARDS (REACTIVITY DATA)

Stability:	Stable
Incompatibility:	None
Hazardous Decomposition Products:	Oxides of Nitrogen and Sulfur
Hazardous Polymerization:	Will not occur

HEALTH HAZARDS

Acute:	Low toxicity
Chronic:	Low toxicity
Signs and symptoms of exposure:	May dry out sensitive skin after prolonged contact
Medical conditions aggravated by exposure:	None
Chemical listed as carcinogen	
Or potential carcinogen:	No
National Toxicity Program:	No
LARC Monographs:	No
OSHA:	No
Emergency & First Aid procedures:	No
Routes of entry:	
Inhalation:	None
Eyes:	Rinse thoroughly with water for 30 minutes, consult physician
Skin:	Staining – wash with soap and water
Ingestion:	Consistent with nitrate toxicity. Large amounts delay absorption of ingested nitrate by giving milk or activated charcoal and then remove by gastric lavage or emesis (induce vomiting). Maintain blood pressure. Consult physician.

SPECIAL PRECAUTIONS & SPILL/LEAK PROCEDURES

Precautions for handling & storage:	Keep container tightly sealed-will stratify at 32 deg F. May be thawed and remixed.
Other Precautions:	Area of spill may become slippery.
Steps for released or spilled:	No special requirements known.
Waste disposal methods:	Dispose of material in accordance with local, state and federal laws and regulations. No special requirements known.

SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Local exhaust/ventilation:	Normal
Mechanical:	n/a
Respiratory protection:	None required
Protective gloves:	Water resistant recommended
Eye protection:	Safety glasses with side shields or chemical goggles
Other protective clothing or equipment:	Not required
Work hygienic practices:	Normal



SAFETY DATA SHEET

KIND Base

Section 1. Identification

GHS product identifier : KIND Base
Product code : Not available.
Other means of identification : Not available.
Product type : Liquid.

Identified uses
Fertilizer.

Supplier's details : Botanicare, LLC
6858 W. Chicago Street Suite 3
Chandler, AZ 85226
Tel: +1-480-777-2000
Toll Free: +1-877-753-0404
Fax: +1-480-777-2015
Email: info@botanicare.com
Web: www.botanicare.com

Emergency telephone number (with hours of operation) : +1-480-777-2000
Monday - Friday 8:00 a.m. - 5:00 p.m.

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : ACUTE TOXICITY (oral) - Category 4
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 - Harmful if swallowed.
H318 - Causes serious eye damage.

Precautionary statements

Prevention :

P280 - Wear eye or face protection.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash hands thoroughly after handling.

Response :

P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.
P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.



KMK Regulatory Services

Tel : +1-888-GHS-7769 (447-7769) / +1-450-GHS-7767 (447-7767)
www.kmkregservices.com www.askdrluc.com www.ghssmart.com

1/10

Section 2. Hazards identification

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified (HNOC) : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.

Product code : Not available.

Ingredient name	%	CAS number
Nitric acid, ammonium calcium salt	10 - 30	15245-12-2
Ammonium nitrate	1 - 5	6484-52-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Maintain an open airway. Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : Harmful if swallowed. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Section 4. First aid measures

- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No special protection is required.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
nitrogen oxides
metal oxide/oxides

- Special protective actions for fire-fighters** : No special measures are required.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Avoid contact with eyes. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

- Spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Hand protection**



Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Light brown to yellow.
- Odor** : Odorless.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : 100°C (212°F)
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : Not available.
- Solubility** : Complete in water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.
- Volatility** : Not available.
- VOC (w/w)** : 0 % (w/w)

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable. Water of crystallization from applicable components driven off at approximately 235°F / 113°C.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.



Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials: Strong oxidizers or reducing agents.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/Ingredient name	Result	Species	Dose	Exposure
Nitric acid, ammonium calcium salt	LD50 Oral	Rat	4715 mg/kg	-
Ammonium nitrate	LD50 Oral	Rat	2217 mg/kg	-

Irritation/Corrosion

There is no data available.

Sensitization

There is no data available.

Carcinogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : Causes serious eye damage.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : Harmful if swallowed. May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness
Inhalation : No known significant effects or critical hazards.
Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
Ingestion : Adverse symptoms may include the following:
stomach pains

Section 11. Toxicological information

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	1606.3 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Ammonium nitrate	Chronic NOEC >6 mg/L. Fresh water	Crustaceans - Cladocera	21 days

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional Information	-	-	-

AERG : Not applicable.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed



Section 15. Regulatory information

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Nitric acid, ammonium calcium salt Ammonium nitrate	10 - 30 1 - 5	No. Yes.	No. No.	No. No.	Yes. Yes.	No. No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Ammonium nitrate	6484-52-2	1 - 5
Supplier notification	Ammonium nitrate	6484-52-2	1 - 5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: Ammonium nitrate

New York : None of the components are listed.

New Jersey : The following components are listed: Ammonium nitrate

Pennsylvania : The following components are listed: Ammonium nitrate

California Prop. 65

No products were found.

Section 16. Other information

History

Date of issue mm/dd/yyyy : 06/01/2015

Version : 1

Prepared by : KMK Regulatory Services Inc.

Key to abbreviations

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)





Section 16. Other information

UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



The Clinic 99 – Cultivation Relocation Narrative

On APN 211-362-016, existing cultivation is divided in five separate locations (Sites A, B, C,D, and E).

SFL is proposing to relocate cultivation Sites A, B, C and a portion of Site E to a more suitable location.

The relocation of Sites A, B, C and a portion of Site E presents benefits to the surrounding plant and animal habitats. Site A is located approximately 650' away from a mapped Northern Spotted Owl Activity Center (OAC), Site B is located approximately 400' away and Site C is located approximately 83' away. A portion of Site E is located approximately 850' from the OAC. The California Department of Fish and Wildlife requested a setback of at least 500 feet surrounding the OAC as noted in the Pre-harvest inspection. The proposed cultivation locations will be over 900' away from the OAC.

As identified in Addendum 41 of the Non-industrial Timber Management Plan, Stand 1 where sites A, B, and C are proposed to be restored is comprised of a larger percentage of hardwoods than Stand 2 where the cultivation is proposed to be relocated. As indicated by the Department of Fish and Wildlife PHI comments, hardwood tree species provide valuable habitat for wildlife. As such, restoration of Sites A, B, and C will create a higher quality habitat than exists in the target relocation site.

Stand Description (Stand 1 – 96 acres)

a. Species Composition: The stand consists of Douglas-fir, tanoak and other hardwoods. (Hardwoods consist of Madrone, pepperwood, true oaks and canyon live oak.)

By Basal Area per acre		By Trees per Acre	
Douglas-fir (10">DBH)	59.5%	Douglas-fir (10">DBH)	19%
Douglas-fir (≤8"DBH)	5.8%	Douglas-fir (≤8"DBH)	43.8%
Tanoak	16.3%	Tanoak	18.4%
Other Hardwoods	18.4%	Other Hardwoods	18.8%

By species group (BA ft ² /acre)		By species group (Trees/acre)	
Conifer (A)	65.5%	Conifer (A)	62.8%
Hardwoods (B)	34.5%	Hardwoods (B)	37.2%

Stand Description (Stand 2 – 7 acres)

a. Species Composition

The stand consists of Douglas-fir and hardwoods.

By Basal Area per acre		By Trees per Acre	
Douglas-fir (10">DBH)	20%	Douglas-fir (10">DBH)	10%
Douglas-fir (≤8"DBH)	65%	Douglas-fir (≤8"DBH)	80%
Tanoak	10%	Tanoak	7%
Misc. Hardwoods	5%	Misc. Hardwoods	3%

By species group (BA ft ² /acre)		By species group (Trees/acre)	
Conifer (A)	85%	Conifer (A)	90%
Hardwoods (B)	15%	Hardwoods (B)	10%

The existing road network length to service the property and its cultivation areas is approximately 8,128 linear feet. Road systems are a source of sediment and road traffic is a constant source of disruption to the surrounding habitat. By consolidating cultivation activities as proposed, over 3,850 feet of roads can be abandoned. Road systems are a source of sedimentation and road traffic is a constant source of disruption to the surrounding habitat.

Assuming a 50' footprint of human presence and activity around the road systems and cultivation areas, relocation of the cultivation sites will reduce human presence on the property from approximately 19.3 acres to 10.4 acres.

The relocation and consolidation of the cultivation sites and access roads will greatly benefit the surrounding environment. By relocating cultivation activity to the target area within the property, high quality sensitive habitat can be restored and re-stocked and the human impact and footprint on the property will be greatly reduced.

[illegible]

Domlnik Schwab, Forest Practice Program Manager
1-17NTMP-001 HUM, ELK Mountain
April 12, 2017
Page 5 of 11

habitat within 1,000 feet of the AC. CDFW recommends the core area for AC HUM0785 be reconfigured to include all nesting/roosting habitat within 1,000 feet (approximately 12 acres as depicted in Figure 2 by the red hatching) (**Recommendation 2**).

Cannabis cultivation

The TLO has applied for a commercial cannabis permit (#11340) with Humboldt County. The permit indicates that 43,560 square feet (one acre) of cultivation is currently occurring on the property. One cultivation site near Road Point 3, a 2,000 square foot greenhouse, is located within the 500 foot core of NSO Activity Center HUM0785. Several other cultivation sites are located within 1,000 feet of the Activity Center near Road Points 5 and 7 and the TLO indicated these cultivation sites would be abandoned and remediated. The TLO did not state what he planned to do with the cultivation site near Road Point 3 (the greenhouse). It appears based on the NTMP maps that the TLO intends to maintain the cultivation site. The location of the cultivation site within the 500 foot core area of Activity Center HUM0785 appears to be in conflict with the mitigated negative declaration and resolution (16-14) adopted by the Humboldt County Board of Supervisors for the commercial medical marijuana land use ordinance.

Wildlife tree retention

The NTMP has included provisions for maintaining high value conifer wildlife trees in Section II, Item 38. However, the wildlife tree language does not provide provisions for protecting hardwoods. As indicated above, a large portion of the NTMP area was observed on the PHI, and high value to wildlife trees (both conifer and hardwood) were observed scattered across the property. The RPF indicated some of the conifer trees reviewed during the PHI would be retained as wildlife trees and others may be harvested since a merchantable log could be present. It was noted during the PHI that hardwoods may need to be managed in portions of the NTMP area to maintain site occupancy of Group A species (conifers) and the CAL FIRE report recommended Section II, Item 14(e) be checked "yes".

Management plans for hardwoods while retaining hardwoods for wildlife are provisions in many NTMPs. High wildlife value hardwoods are generally larger than 18 inches DBH, have large limbs (>6 inches diameter) or crooks, basal hollows, cavities, or other indicators of internal or external rot. CDFW recommends Section II, Item 38 be amended to include provisions for retention of hardwoods valuable to wildlife (**Recommendation 3**).

Watercourse classification

During the PHI, the inspection team evaluated proposed road work at Road Point 2 associated with a large unstable feature and old skid road. A mapped Class II watercourse with an approximately 75 foot segment of Class III watercourse above the road work site was observed to have features that appeared likely to support obligate aquatic vertebrate life, including a well-defined channel, flowing water, and obligate



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August 9, 2017

CALFIRE
135 Ridgeway Avenue.
Santa Rosa, CA 95402

Dear Deputy Director Forest Practice:

SUBJECT: PTASHNE NTMP – NSO SURVEYS

This amendment serves to include the 2017 NSO survey data into the NTMP for operations anticipated to occur in the future. Three NSO Activity Centers (HUM0777, HUM785, and HUM0803) are located just within 0.7 miles of the NTMP. HUM0785 is located within the NTMP boundary however no detections have been attributed to this location in more than 10 years. The following information includes results of the 2017 survey season.

Six call stations have been surveyed for the last one year. These six stations were deemed adequate given the NSO survey coverage within and adjacent to this NTMP's NSOAA. There were three detections outside of the NTMP boundary in 2017. The second survey visit of 2017 had a response from an NSO, sex unknown, approximately 0.8 miles north of the NTMP boundary. This response came from approximately 2,000 feet west of the known location of HUM0939. There was a second response from a male NSO approximately 1.1 miles north of the NTMP boundary on the same visit. This second response came from approximately 0.6 miles southeast of HUM0567. On the fifth survey visit, conducted August 1, a nighttime response from a male NSO was detected from Station 3 in the vicinity of owl territories for HUM0939 and HUM0567. Follow ups were not conducted due to a lack of permitted access on that private property.

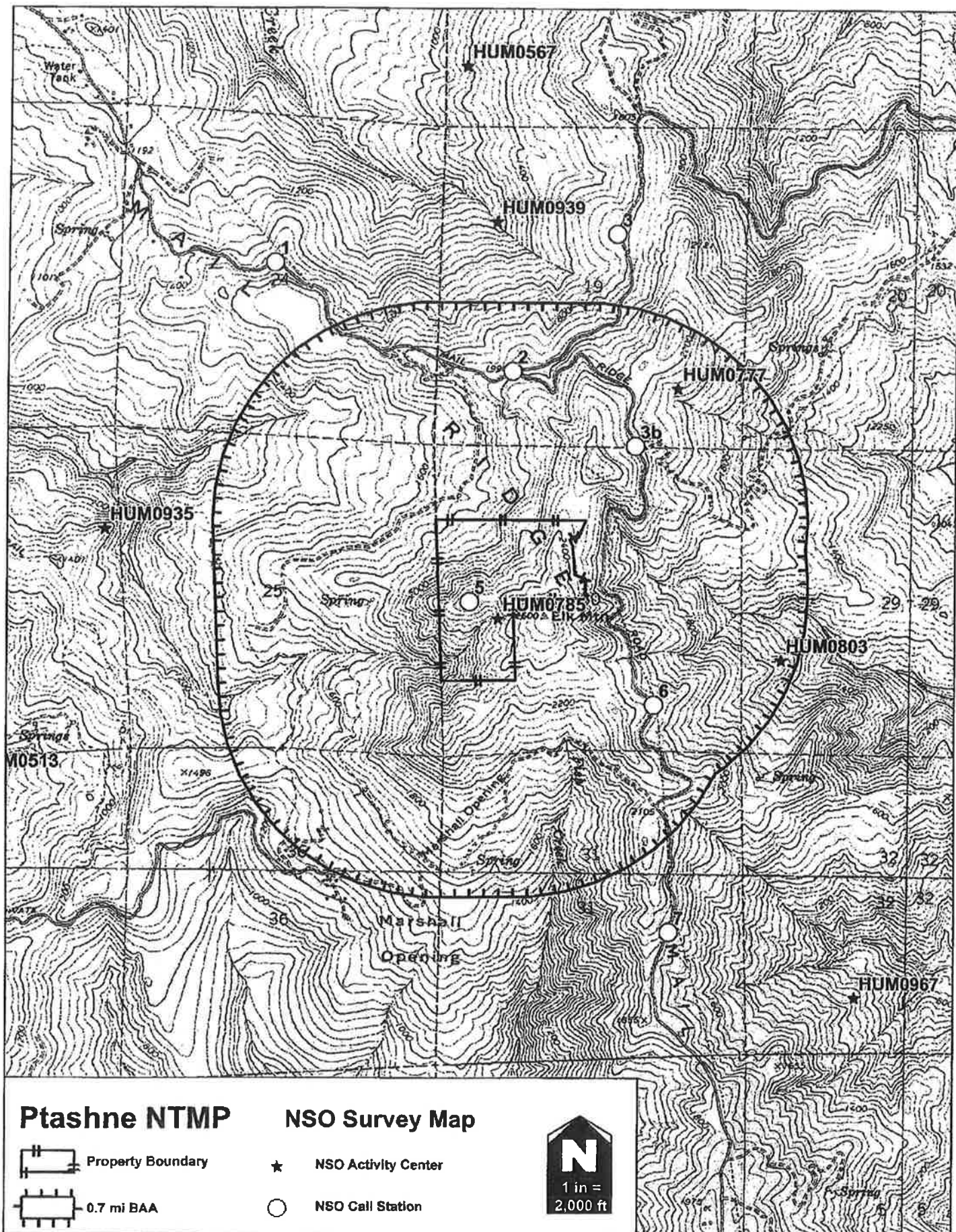
Please consider this to be a minor amendment as it is not expected to make a significant change in the conduct of timber operations, and can be reasonably expected not to adversely affect timberland productivity or values relating to soil, water quality, watershed, wildlife, fisheries, recreation or aesthetics.

Sincerely,



**Chris Carroll, RPF# 2628
Timberland Resource Consultants**

Attachments: NSO Surveys



Northern Spotted Owl Survey Form

Visit # 1

Project PTASHNE NTMP		Date 4-15-17		Weather, Wind, Temp. CL, 0, 50	
Observer J.D. LEONARD		Station NSO CON			

[illegible]

*List all stations and note if skipped.

Weather codes:

CL	Clear
FG	Fog
PC	Partly Cloudy
OC	Overcast
DR	Drizzle

Wind Codes:

Wind Codes:	
0	Calm
1	Light Air
2	Light Breeze
3	Gentle Breeze
4	Moderate Breeze
5	Fresh Breeze
6	Strong Breeze

Sex Codes:

Sex Codes:
M Male
F Female
U Unknown
PR Pair

Data Logged

Data Entered

Northern Spotted Owl Survey Form

Visit # 2

Project PTASHNE NTMP		Date 6-20-2017		Weather, Wind, Temp. FG, 2, 60°	
Observer J. D. LEONARD					
Station*	Start	End	NSO	CON	

[illegible]

*List all stations and note if skipped.

Weather codes:

CL	Clear
FG	Fog
PC	Partly Cloudy
OC	Overcast
DR	Drizzle

Wind Codes:

0	Calm
1	Light Air
2	Light Breeze
3	Gentle Breeze
4	Moderate Breeze
5	Fresh Breeze
6	Strong Breeze

Sex Codes:

M	Male
F	Female
U	Unknown
PR	Pair

Data Logged

Data Entered

Visit # 3

[illegible]

Data Entered: _____

Northern Spotted Owl Survey Form.

Visit # 4

Project PYASHINE NTMP		Visit # 4	
Observer J. D. LEONARD		Date 7-10-17	Weather, Wind, Temp. CL, 0, 60° Full moon.
Station*	Start	End	NSO CON

[illegible]

*List all stations and note if shipped.

Weather codes:

CL	Clear
FG	Fog
PC	Partly Cloudy
OC	Overcast
DR	Drizzle

Wind Codes:

Wind Codes:	
0	Calm
1	Light Air
2	Light Breeze
3	Gentle Breeze
4	Moderate Breeze
5	Fresh Breeze
6	Strong Breeze

Sex Codes:

M	Male
F	Female
U	Unknown
PR	Pair

Data Logged

Data Entered

Northern Spotted Owl Survey Form.

Visit # 5

Project		VISIT # 5	
PTASHINS NTMP			
Observer		Date	Weather, Wind, Temp.
J. D. LEONARD		8-1-17	06, 0, 80
Station*	Start	End	NSO CON

[illegible]

*List all stations and note if skipped.

Weather codes:

CL	Clear
FG	Fog
PC	Partly Cloudy
OC	Overcast
DR	Drizzle

Wind Codes:

0	Calm
1	Light Air
2	Light Breeze
3	Gentle Breeze
4	Moderate Breeze
5	Fresh Breeze
6	Strong Breeze

Sex Codes:

M	Male
F	Female
U	Unknown
PR	Pair

Data Logged

Data Entered

Northern Spotted Owl Survey Form

Visit # 6

Project		PTASHNE NTMP		Visit # 6	
Observer		J D LEONARD		Date	
				8-8-17	
				Weather, Wind, Temp.	
				CL, 0, 70°	
Station*	Start	End	NSO	CON	

[illegible]

*List all stations and note if skipped.

Weather codes:

CL	Clear
FG	Fog
PC	Partly Cloudy
OC	Overcast
DR	Drizzle

Wind Codes;

0	Calm
1	Light Air
2	Light Breeze
3	Gentle Breeze
4	Moderate Breeze
5	Fresh Breeze
6	Strong Breeze

Sex Codes:

M	Male
F	Female
U	Unknown
PR	Pair

Data Logged

Data Entered

Addendum 41 – Timberstand Characteristics

Timber cruise methodology:

- The timber stand was inventoried using the variable plot sampling system.
- 1 plot per acre was systematically established on a 200-ft by 200-ft grid throughout the NTMP area.
- At every plot, a prism swing was made using a 40 BAF wedge prism and all trees greater than 10" DBH were measured for DBH. Heights were determined on a sub-sample at every other cruise plot. Form class was visually estimated. Additionally, the closest tree to plot center was bored to for age, 10-year past growth & bark thickness.
- At every plot, a nested 1/300 acre fixed radius plot (6.8') was established and all trees 10 inches DBH and less were measured for DBH. Heights were determined on a sub-sample at every other cruise plot.
- The Scribner board foot volumes were calculated using Wensel and Krumland's board foot volume equation coefficients from the publication *Volume and Taper Relationships for Redwood, Douglas-fir, and Other Conifers in California's North Coast* (University of California, Bulletin 1907).

Stand Description (Stand 1 – 96 acres)

a. Species Composition: The stand consists of Douglas-fir, tanoak and other hardwoods. (Hardwoods consist of Madrone, pepperwood, true oaks and canyon live oak.)

By Basal Area per acre		By Trees per Acre	
Douglas-fir (10">DBH)	59.5%	Douglas-fir (10">DBH)	19%
Douglas-fir (≤8"DBH)	5.8%	Douglas-fir (≤8"DBH)	43.8%
Tanoak	16.3%	Tanoak	18.4%
Other Hardwoods	18.4%	Other Hardwoods	18.8%

By species group (BA ft ² /acre)		By species group (Trees/acre)	
Conifer (A)	65.5%	Conifer (A)	62.8%
Hardwoods (B)	34.5%	Hardwoods (B)	37.2%

b. Age Classes: There are two age classes present within the stand. Trees from 1"-8" DBH have an inconsistent age but are generally less than 25 years old; and trees 10"-30" DBH have an average age of 60 years.

c. Present Stocking Level:

Basal Area per acre		Trees per Acre	
Douglas-fir (10">DBH)	92.4	Douglas-fir (10">DBH)	55.9
Douglas-fir (≤8"DBH)	9.1	Douglas-fir (≤8"DBH)	129.0
Tanoak	25.4	Tanoak	54.1
Misc. Hardwoods	28.1	Misc. Hardwoods	55.3

By species group (BA ft ² /acre)		By species group (Trees/acre)	
Conifer (A)	101.5	Conifer (A)	184.9
Hardwoods (B)	53.5	Hardwoods (B)	109.4

d. Present Volume per acre: Net Scribner board feet for conifer and net green tons for hardwoods.

Douglas-fir	14,545
Tanoak	21
Misc. Hardwoods	22.8

e. Size Class Distribution: Diameter distribution within the stand ranges from 0" (seedlings) to 54"+ DBH with a QMD of 17.4 for Douglas-fir and 15-15.6 for hardwoods. Trees of all sizes will be available for harvesting over time. Stand tables by species can be found in Section V under the supplemental inventory information.

Addendum 41 – Timberstand Characteristics (Cont.)

f. Stand Management History: This stand was established by natural regeneration following clearcut harvesting during the 1950's or 60's. The NTMP area contains Site Class II and III timberlands. This was determined from examining the Soil – Vegetation Maps that encompass the area, and from comparing total height and age data from the area with available timber site class charts.

g. Potential Pest or Protection Problems: There are no present or potential pest problems occurring within the NTMP area. Sudden Oak Death has not been observed on the property to date. However, as noted in Section III – Addendum 39, this NTMP contains a significant number of hardwoods that are susceptible to Sudden Oak Death (SOD). Mitigation measures for SOD are contained in Section II – Item 15. Many of the trees have various forms of physical defects, mostly in the form of mechanical damage from past logging. Merchantable trees that have significant damage should be harvested during NTOs, while trees that are not merchantable will be retained as snags and wildlife trees.

h. Management Objectives - The primary management objective is to increase productivity and overall volume within the stand. The desired balanced state of the stand is to have approximately 30 MBF per acre with a inverse J-shaped diameter distribution. Increasing the composition of Douglas-fir relative to tanoak is another objective. Light harvests are planned to capture mortality and improve forest health are planned for the next several decades until the desired conditions are achieved. Once the stand is balanced, harvests will aim to harvest the growth of every ten year period while maintaining the balanced state of the stand.

i. Cruise Statistics of the Stand - Within this stand, 100 plots were taken resulting in a standard error of the conifer volume of 1,247 board feet.

j. Pre and Post Stand Tables - See Pre and Post-Harvest Stand Tables at the end of Section III.

k. Projected growth - The following chart demonstrates the projected growth and harvest over the next six decades. Stand table projection sheets for the first decade are included in Section V under the supplemental inventory information. The Stand is projected to have an average Periodic Annual Increment (PAI) of 724 bd ft, based on the six growth periods (2016-2066). Harvesting was modeled based on the Management Objectives described under h. above. Projected growth was determined using current stand tables and "Stand Table Projection". A stand table gives number of trees in each diameter class. Future stand tables can be predicted from current stand tables using a stand table projection method. Beginning period inventories are depleted prior to stem movement in the STP and post harvest basal area is checked against the retention standards required for the site class to ensure MSP (e.g. 15 ft² BA of trees ≥18" DBH for Site Class III) is met. There is a small percentage of acreage in this unit that is contained in the WLPZ. The WLPZ will be harvested using the selection silviculture similar to the remainder of the stand. Due to the similarities in treatment inside and outside of the WLPZ as demonstrated by the light harvest being projected the Stand Table Projection is appropriate for the WLPZ and planned management. This stand will be reevaluated on a ten year bases as described on page 53, Future Stand Evaluations.

ELK MOUNTAIN NTMP Growth & Yield Summary (Conifer only)

PART OF PLAN

Timber Capable Land Base (ac.):			96.00					
Years (period)	Beginning Period (BF)	Average / Ac.	Harvest per period (BF)	Average / Ac.	Growth per period (BF)	Average / Ac / Yr	Inventory Ending Period (BF)	
2016	1,394,904	14,530	139,490	1,453	449,595	468	1,705,008	
2026	1,705,008	17,761	170,501	1,776	590,777	615	2,125,285	
2036	2,125,285	22,138	212,528	2,214	698,519	728	2,611,275	
2046	2,611,275	27,201	522,255	5,440	735,691	766	2,824,711	
2056	2,824,711	29,424	698,823	7,279	865,732	902	2,991,621	
2066	2,991,621	31,163	740,693	7,716	834,553	869	3,085,481	
Totals			2,484,291		4,174,868			

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ELK MOUNTAIN NTMP

COAST AREA
RESOURCE MANAGEMENT

49

REVISED
3-9-2017

SECTION III

Addendum 41 – Timberstand Characteristics (Cont.)

Stand Description (Stand 2 – 7 acres)

a. Species Composition

The stand consists of Douglas-fir and hardwoods.

By Basal Area per acre		By Trees per Acre	
Douglas-fir (10">DBH)	20%	Douglas-fir (10">DBH)	10%
Douglas-fir (≤8"DBH)	65%	Douglas-fir (≤8"DBH)	80%
Tanoak	10%	Tanoak	7%
Misc. Hardwoods	5%	Misc. Hardwoods	3%

By species group (BA ft ² /acre)		By species group (Trees/acre)	
Conifer (A)	85%	Conifer (A)	90%
Hardwoods (B)	15%	Hardwoods (B)	10%

b. Age Classes - Across this stand, as a result of previous harvests, there are two age classes present. One age class consists of conifer stocking that is 10-15 years old. Another age class consists of residual second growth conifer and hardwood trees that are 50-70+ years old. The residual second growth conifer within the stand was retained in association with Palco's wildlife tree retention strategy.

c. Present Stocking Level- The stand meets the state stocking standards for stocked stands. All future timber harvests of this stand will be to improve the conifer stocking. Now, and in the future, only stocking of group A species will be used to meet the stocking requirements under 912.7.

d. Present Volume per acre-

Conifer Stocking: 341 Third Growth Trees per Acre and 15 square feet of residual second growth.

Hardwood Stocking: 24 Third Growth Trees per Acre and 10 square feet of residual second growth.

e. Size Class Distribution - The trees range in size from 6" high seedlings up to trees 32" DBH.

f. Stand Management History - This stand was established by natural regeneration following clearcut harvesting during the 1990s. The NTMP area contains Site Class II and III timberlands. This was determined from examining the Soil – Vegetation Maps that encompass the area, and from comparing total height and age data from the area with available timber site class charts.

g. Potential Pest or Protection Problems - There are no present or potential pest problems occurring within the NTMP area. Sudden Oak Death has not been observed on the property to date. However, as noted in Section III – Addendum 39, this NTMP contains a significant number of hardwoods that are susceptible to Sudden Oak Death (SOD). Mitigation measures for SOD are contained in Section II – Item 15. Many of the trees have various forms of physical defects, mostly in the form of mechanical damage from past logging. Merchantable trees that have significant damage should be harvested during NTOs, while trees that are not merchantable will be retained as snags and wildlife trees.

h. Management Objectives - The primary management objective is to increase productivity and overall volume within the stand. The desired balanced state of the stand is to have approximately 30 MBF per acre with a inverse J-shaped diameter distribution. Increasing the composition of Douglas-fir relative to tanoak is another objective. Light harvests are planned to capture mortality and improve forest health are planned for the next several decades until the desired conditions are achieved. Once the stand is balanced, harvests will aim to harvest the growth of every ten year period while maintaining the balanced state of the stand.

i. Cruise Statistics of the Stand - Within this stand, 8 stocking plots were taken. Scattered over story conifer is located within the stand and was visually estimated.

j. Pre and Post Stand Tables - See Pre and Post-Harvest Stand Tables at the end of Section III.

k. Projected timber volumes - The following chart demonstrates the projected growth and harvest over the next six decades. The NTMP uses adjusted normal yield tables to demonstrate projected growth and yield of Stand 2. Growth rates for Stand 2 were determined using Table 10, Board-foot Volume per acres yields, for site index 100, found in Yield, Stand and Volume tables for Douglas-fir in California (Francis X. Schumacher). Due to the young age of the evenaged stand yield tables were used to predict the expected volume per acre for a sequence of stand ages. were made to the growth rates found in the bulletin for site index 100 for purposes of "Dialing In" the bulletin to the present NTMP area capacities. The growth rates were reduced by 20% to account for a natural hardwood component expected to become established within the stands. This small occurrence of hardwoods will reduce the site occupancy of conifers relative to those stands sampled and used to determine the growth rates in the bulletin. This stand will be reevaluated on a ten year bases as described on page 53, Future Stand Evaluatlons.

Years (period)	Inventory		Harvest		Growth		Inventory	
	Beginning Period (BF)	Average / Ac.	per period (BF)	Average / Ac.	per period (BF)	Average / Ac / Period	Ending Period (BF)	Average / Ac.
2016	14000	2000	0	0	36400	5200	50400	7200
2026	50400	7200	0	0	47880	6840	98280	14040
2036	98280	14040	0	0	80640	11520	178920	25560
2046	178920	25560	17500	2500	56980	8140	218400	31200
2056	218400	31200	35000	5000	31640	4520	215040	30720
2066	215040	30720	35000	5000	23240	3320	203280	29040

PART OF PLAN

ELK MOUNTAIN NTMP

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REVISED
3-9-2017

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MAR 10 2017
COAST AREA
RESOURCE MANAGEMENT

SECTION III

Addendum 42 – Management Units

1. Management Unit Descriptions

The NTMP area is considered one Management Unit with two stand types. See Addendum 41, Section III for Stand information. See Addendum 14, Section III for a description of how the selection silviculture is to be applied.

Addendum 43 – Proposed Activities to meet Management Objectives

1. Projected frequencies of harvest:

The frequency of harvest will correlate to market conditions. The NTMP area may be entered several times during a ten-year period for the purpose of capturing high market values on targeted species. There are up to 2 commercial species (Douglas-fir and tanoak) present on the property capable of providing harvestable volume. Tanoak is a low value species that need to be removed when the market conditions are favorable. As such, one year may provide a better price for hardwoods, while the price for Douglas-fir is still relatively low. The landowner does not want to be constrained to harvesting trees at a lower price because they are limited to one entry in a ten-year period. The major factor to determining harvest frequency is the project area's growth. Growth projections have been based on ten year periods and harvest shall not exceed growth for any ten-year period. The harvest schedules may be adjusted to account for fluctuations in future growth rates, market conditions, or other factors that may require deviation from such a rigid schedule. However, in no case shall harvest exceed growth for any specified period.

2. Time frame for each stand to be managed using the Selection Silviculture:

The NTMP area may be entered several times during a ten-year period. Growth projections have been based on ten year periods and harvest shall not exceed growth for any ten-year period.

3. Silvicultural prescriptions for harvesting:

The silvicultural prescriptions are selection and group selection pursuant to Item 14, Section II. See Addendum 14, Section III for a description of how the selection and group selection silvicultures will be applied.

4. Type of yarding systems to be used for each area:

The yarding system for the NTMP is ground based and cable based.

5. Anticipated interim management activities that may result in rule compliance questions:

There are no anticipated management activities proposed between entries. However, use of the property as a rural residence *could* have the potential to impact erosion control structures and facilities during the erosion control maintenance period. Based upon current conditions of the property, drainage structures have been adequately maintained to minimize concentration of runoff and soil erosion. Continued maintenance is necessary to maintain functioning drainage structures. In the future, the landowner should require LTOs to install large oversized water breaks and waterbars that will require less maintenance over time. There is always a likelihood that drainage structures will break down over time. These structures will require additional maintenance outside the 3-year maintenance period and shall be the responsibility of the landowner as required by 14 CCR 1050.

Addendum 44 – Maximum Sustained Production

This NTMP will rely on 913.11(C)(2) to demonstrate Maximum Sustained Production (MSP).

913.11 (c) In a THP, or NTMP, MSP is achieved by:

(2) For unevenaged management, complying with the seed tree retention standards pursuant to 14 CCR § 913.1(c)(1)(A), meeting minimum stocking and basal area standards for the selected silvicultural methods as contained in these rules only with group A species, and protecting the soil, air, fish and wildlife, water resources and other public trust resources through the application of these rules.

The primary objective of this NTMP is to periodically harvest timber while improving timberland productivity, increasing inventory, increasing MSP, increasing wildlife habitat, minimizing soil erosion and improving water quality. This objective will be met using the selection and group selection silvicultural methods that are designed and planned to create or maintain a unevenaged stand structure across the entire NTMP. The utilization of selection and group selection requires complying with the seed tree retention standards pursuant to 14 CCR § 913.1(c)(1)(A). Compliance with the seed tree retention standards pursuant to 14 CCR § 913.1(c)(1)(A) and meeting minimum stocking and basal area standards for the selection and group selection silvicultural methods with group A species, while protecting the soil, air, fish and wildlife, water resources and other public trust resources through the application of these rules is all that is required to achieve MSP pursuant to 913.11(c).

Addendum 44 – Maximum Sustained Production (Cont.)

The NTMP proposes to be balanced when the NTMP area has an average volume per acre of 30 MBF. Based on current projections, this is expected to happen in 2066. In the first four periods, harvests are modeled to take approximately 10% of the stems per acre, across all diameter classes, specifically to remove dead and dying trees, improve spacing, and encourage regeneration. As stocking is improved in the NTMP area, harvest volumes are expected to increase. Thereafter, the NTMP proposes to harvest at a level that is slightly below the projected growth for the purpose of increasing stand diameter and promoting growth of the residual stand while creating enough openings in the overstory stand to promote the growth of a new age class. This NTMP proposes to perpetually harvest slightly below the projected 10-year growth to ensure an increasing level of growing stock. Please note that growth and harvest schedules may be adjusted to account for fluctuations in future growth rates, market conditions, or other factors that may require deviation from such a rigid schedule.

Future Stand Evaluations

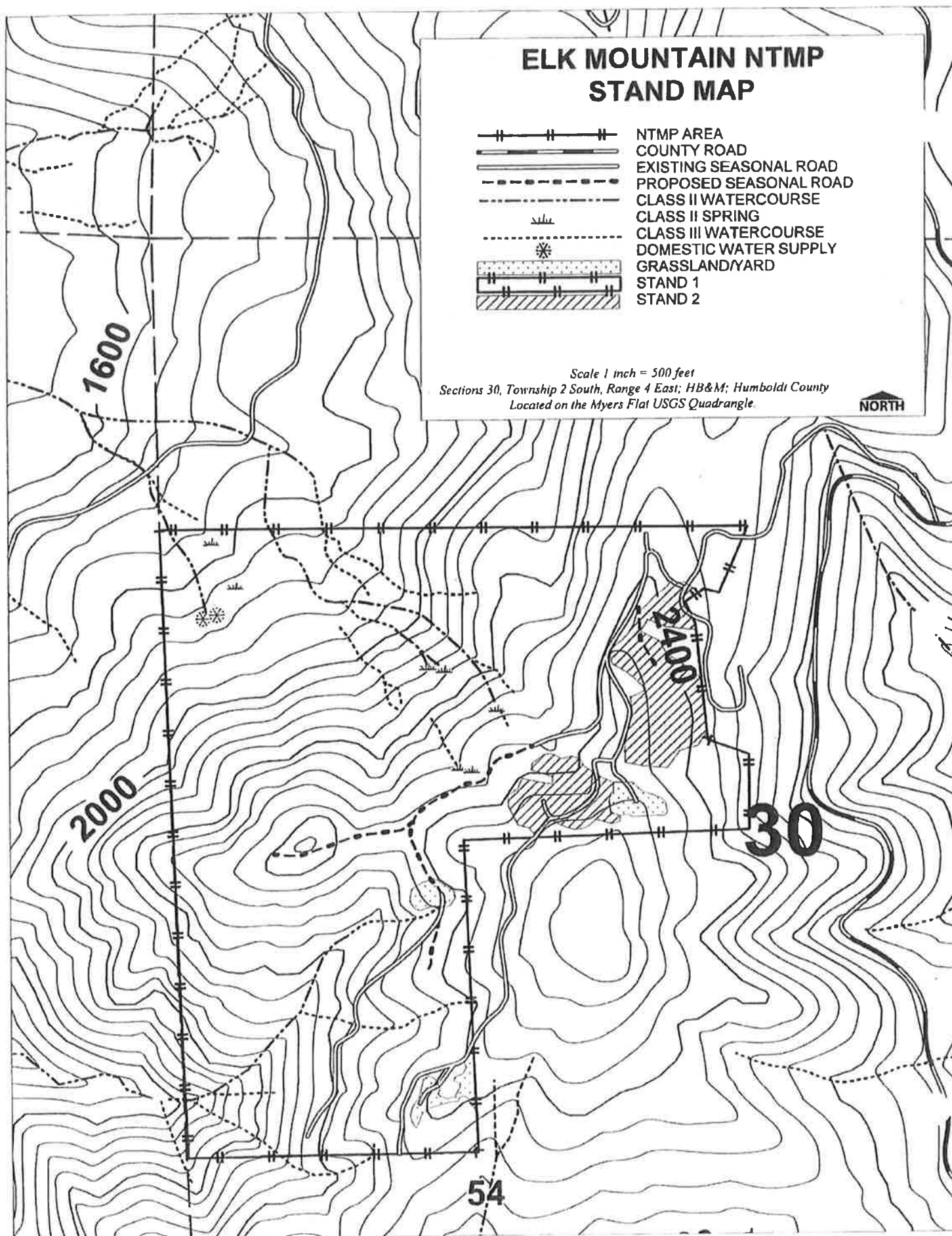
Stand evaluations will be required every ten years. For areas where active timber management has occurred, the extent and intensity is to be identified. Stands will then be updated and if necessary future management trajectories will be defined. Where no management has occurred, stands will be evaluated and similarly be updated as necessary. A re-inventory may be necessary where conditions have significantly changed (such as following a fire) or stand evaluations find the stand grossly underperforming relative to what is projected. Growth data applied to future modeling or localized volume tables may also need to be adjusted over time as determined by the RPF. Results of the stand evaluation shall be reported to CAL FIRE.

Baseline and Period 1 Stand Table – Stand 1

STAND TABLE (Conifers per Acre)			
DBH Class	Pre-Harvest 2016	Post-Harvest 2016	End of Period 2026
0	57.00	57.00	33.17
2	24.00	24.00	22.12
4	27.00	27.00	11.84
6	9.00	9.00	24.74
8	12.00	12.00	21.07
10	7.30	6.57	10.34
12	8.10	7.28	6.86
14	7.10	6.39	6.50
16	10.50	9.45	6.16
18	9.10	8.19	7.74
20	5.00	4.50	6.13
22	2.90	2.61	5.76
24	1.90	1.71	3.31
26	1.60	1.44	2.04
28	0.70	0.63	1.50
30	0.80	0.64	1.03
32	0.30	0.27	0.56
34	0.40	0.38	0.41
36	0.10	0.09	0.29
38	-	-	0.25
40	0.10	0.09	0.08
42	-	-	0.03
44	-	-	0.06
46	-	-	-
48	0.05	0.05	-
50	-	-	0.01
52	-	-	0.03
54	0.05	0.05	-
56	-	-	0.01
58	-	-	0.03
60	-	-	-
62	-	-	-
64	-	-	-
66	-	-	-
68	-	-	-
Total TPA	184.80	179.22	173.84

Baseline and Period 1 Stand Table – Stand 2

STAND TABLE (Conifers per Acre)			
DBH Class	Pre-Harvest 2016	Post-Harvest 2016	End of Period 2026
0	97.00	97.00	-
2	118.00	118.00	48.00
4	78.00	78.00	150.00
6	33.00	33.00	94.00
8	11.00	11.00	24.00
10	-	-	15.00
12	-	-	4.00
14	-	-	-
16	-	-	-
18	1.00	1.00	-
20	-	-	1.00
22	1.00	1.00	-
24	-	-	1.00
26	-	-	-
28	-	-	-
30	1.00	1.00	-
32	-	-	1.00
34	-	-	-
36	1.00	1.00	-
38	-	-	1.00
40	-	-	-
42	-	-	-
44	-	-	-
46	-	-	-
48	-	-	-
50	-	-	-
52	-	-	-
54	-	-	-
56	-	-	-
58	-	-	-
60	-	-	-
62	-	-	-
64	-	-	-
66	-	-	-
68	-	-	-
Total TPA	341.00	341.00	339.00



ATTACHMENT 4

Referral Agency Comments and Recommendation

Referral Agency	Response	Recommendation	On File
County Building Inspection Division	✓	Additional information requires; submitted by applicant in site plan	
County Public Works, Land Use Division	✓	Submit road Evaluation; submitted by applicant in road evaluation	
County Division of Environmental Health	✓	Conditional Approval	✓
Supervising Planner		No response	
Current Planning Division		No response	
County Counsel		No response	
CALFIRE	✓	Form letter	✓
CA Dept. of Fish and Wildlife	✓	Additional actions recommend; submitted by applicant in revised site plan and surveys	✓
NWIC	✓	Prepare archeology survey; survey submitted by applicant	✓
Bear river Band Rohnerville Rancheria	✓	Defer to NWIC	✓
Regional Water Quality Control Board		No response	
Humboldt Co. District Attorney		No response	
Humboldt Co. Agricultural Commissioner		No response	
CA Division of Water Resources		No response	
Southern Humboldt Joint Unified School District		No response	
Fruitland Ridge VFC Fire Protection District		No response	