



**COUNTY OF HUMBOLDT**  
**PLANNING AND BUILDING DEPARTMENT**  
**CURRENT PLANNING DIVISION**

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Hearing Date: June 06, 2019

To: Humboldt County Planning Commission

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

Subject: **Empress Farms, LLC Conditional Use Permit and Special Permits**  
Application Number: 12694  
Case Number: PLN-2016-12694  
Assessor's Parcel Numbers (APNs): 104-311-019, 104-281-005, and 104-281-004  
36332 Mattole Road, Petrolia area

<b>Table of Contents</b>	<b>Page</b>
Agenda Item Transmittal	2
Recommended Action and Executive Summary	3
Draft Resolution	7
<b>Maps</b>	
Topo Map	9
Zoning Map	10
Aerial Map	11
Site Plan and Project Proposal Maps	12
<b>Attachments</b>	
Attachment 1: Recommended Conditions of Approval	13
Attachment 2: Staff Analysis of Evidence Supporting the Required Findings	21
Attachment 3: CEQA Addendum	40
Attachment 4: Applicant's Evidence in Support of the Required Findings	43
Attachment 5: Referral Agency Comments and Recommendations	155

Please contact Liza Welsh, Planner, at (707) 445-7541, or by email at [lwelsh@co.humboldt.ca.us](mailto:lwelsh@co.humboldt.ca.us) if you have any questions about the scheduled public hearing item.

## AGENDA ITEM TRANSMITTAL

Hearing Date	Subject	Contact
June 06, 2019	Conditional Use Permit - PLN-2016-12694	Liza Welsh, Planner

**Project Description:** A Conditional Use Permit for the continued operation of an existing cannabis cultivation site consisting of 35,560 square feet of outdoor cannabis cultivation. Water is sourced from rain catchment and from a point of diversion on APN 104-281-004. Water will be stored in an existing engineered water tank and in a proposed pond with a combined capacity of 503, 285 gallons. The Applicant estimates that the annual water usage is 469,928 gallons. Nursery and processing activities will occur on APN 104-321-001. A maximum of six employees will work at the site from May-October. Power is provided by PG&E and by solar. A Special Permit for encroachment into the Streamside Management Area for a point of diversion and a Special Permit to perform restoration activities within a Streamside Management Area are included in this project. APN 104-311-019 is also proposed as a RRR receiving site for 20,000 square feet of cannabis to be relocated from APN 104-143-015 under a separate Zoning Clearance Certificate.

**Project Location:** The project is located in the Petrolia area, on the southwest side of Mattole Road, at the intersection of Miner Lane and Mattole Road, on the property known as 36332 Mattole Road, Petrolia.

**Present Plan Land Use Designations:** Residential Agriculture (RA-20), 2017 General Plan, Slope Stability: Low Instability (1), Moderate Instability (2), Density: 20 acres per dwelling unit.

**Present Zoning:** Unclassified (U)

**Case Number:** PLN-2016-12694

**Application Numbers:** 12694

**Assessor Parcel Numbers:** 104-311-019, 104-281-005, and 104-281-004

**Applicant**

Empress Farms, LLC  
Josh Free  
PO Box 7  
Petrolia, CA 95558

**Owner**

Free Joshua Smjt Et Al  
PO Box 7  
Petrolia, CA 95558

**Agent**

Empress Farms, LLC  
Kate Cenci  
PO Box 7  
Petrolia, CA 95558

**Environmental Review:** An addendum to a previously adopted Mitigated Negative Declaration has been prepared for consideration pursuant to Section 15164 of the CEQA Guidelines.

**State Appeal Status:** Project is located outside the Coastal Zone and is therefore NOT appealable to the California Coastal Commission.

**Major Issues:** None.



## EMPRESS FARMS, LCC

Case Number: PLN-2016-12694

Assessor's Parcel Numbers: 104-311-019, 104-281-005, and 104-281-004

### Recommended Commission Action:

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

*Find that the Planning Commission has considered the Addendum to the Mitigated Negative Declaration adopted for the Commercial Medical Marijuana Land Use Ordinance, make all of the required findings for approval of the Conditional Use Permit based on evidence in the staff report, and adopt the Resolution approving the proposed Empress Farms, LLC, Conditional Use Permit and Special Permits subject to the recommended conditions.*

### Executive Summary:

The proposed Conditional Use Permit would allow the continued operation of an existing 35,560-square-foot outdoor commercial cannabis cultivation site in compliance with the County Commercial Medical Marijuana Land Use Ordinance (CMMLUO). The proposed cannabis activity occurs on Assessor's Parcel Numbers (APNs) 104-311-019 and 104-281-005. The two parcels constitute one legal parcel. A point of diversion on APN 104-281-004 supports the project. Review of historic imagery, testimony from a licensed land surveyor describing a field survey, a meeting between the applicant and the Planning Department on July 23, 2018, and a site visit conducted by Planning staff on April 12, 2019 resulted in a high confidence determination that there was over an acre of cannabis cultivation between seven areas on the subject parcels in 2014. The historic cultivation was concentrated along a riparian corridor within the Streamside Management Area of the Mattole River. An Interim permit was issued for 38,440 square feet of existing outdoor cannabis cultivation and the historic cannabis was relocated to a field on APN 104-311-019 with prime agricultural soil that had been historically used for cultivating crops including wheat, rye, barley, and grass hay. As a condition of project approval, all cultivation-related materials remaining within the historic cultivation area shall be removed and any ground disturbance (e.g. holes and trenches where plants were cultivated) will be filled and replanted with native species subject to a Special Permit for restoration work to be conducted within the SMA of the Mattole River.

For the 2019 cultivation year and thereafter, cultivation will consist of 35,560 square feet (SF) of existing outdoor commercial cannabis cultivation grown in full sun on native prime agricultural soil on APN 104-311-019. An additional 20,000 square feet is proposed to relocate to the site pursuant to the Retirement, Remediation, and Restoration (RRR) program, to be considered under a separate action. The cultivation area will be configured into three distinct premises per California Department of Food and Agriculture (CDFA) regulations, a 35,560-square-foot Medium Outdoor premise (the subject of this report), and two outdoor premises of 10,000 square feet each.

The cultivation area has slopes of less than 15%. It is located at least 150 feet away from the river bank margin of the Mattole River with a vegetated riparian buffer of approximately 90 feet. The cultivation area complies with requirements for setbacks from adjacent residences, watercourses, property lines, and sensitive uses such as bus stops and places of religious worship. The existing cannabis is planted in 15 garden beds with a 6-foot aisle in between each bed. The aisles are not considered in the calculation of the cultivation area. This configuration supports the applicant's organic farming practices including use of a zero-emission electric cart for farming operations, integrated pest management, and reduced disturbance during plant maintenance. During

winter months, the applicant plants cover crops on the field used for cultivation, followed, by minimal tilling and mulching

Existing structures on the subject parcels that are used ancillary to the cannabis cultivation include an agricultural shed used for storage of agricultural chemicals, trash and recycling, records, and as a CDFA administrative hold area, a 90,000-gallon water tank, a locked trailer used for temporary storage while items are use, a compost area for cannabis vegetation waste, and a portable restroom for employee and contractor use. All other structures on the parcel do not have a nexus to the cannabis land use.

The power source for the parcel is PG&E. Solar will also supply some power needs. Water for cannabis cultivation is sourced from rainwater catchment and from a stream diversion with a pre-1914 deeded water right for diversion from an un-named perennial Class II tributary to the Mattole River on APN 104-281-004. The applicant proposes a 413,285-gallon agricultural pond to be placed near the cultivation premise on APN 104-311-019. An existing 90,000-gallon steel agricultural tank is also placed near the cultivation area. The total water storage available for the project will be 503,285 gallons.

The proposed pond and the tank will be filled primarily by rain catchment but will be topped off by water sourced from the point of diversion between November 1<sup>st</sup> and March 31<sup>st</sup>, outside of the forbearance period. The Mattole Basin receives 80-100 inches of rainfall each year on average. The applicant anticipates that they will receive enough rainfall to fill the proposed pond during a typical rain year. They estimate that they can capture 47,969-59,961 gallons of rainwater per year with the catchment tank. Any remaining storage space will be filled from the point-of-diversion. An Initial Statement of Water Diversion, amended to include cannabis irrigation, is on file for the point of diversion (S024676). Engineering plans for the pond include overflow into a bioswale. The pond will be constructed or finished to allow escapement by wildlife. The applicant has provided structural calculations prepared by a Registered Professional Engineer, for the water tank and will be required to obtain permits from the Building Division for the pond and the water tank. A final Lake and Streambed Alteration Agreement (LSA) has been secured with the California Department of Fish and Wildlife for the stream diversion and the proposed pond (1600-2017-0404-R1). The applicant will be required to obtain a Small Irrigation Use Registration for storage of water sourced from stream diversion and to implement several measures suggested by the California Department of Fish and Wildlife (CDFW) for the existing rainwater catchment ponds including: installation of overflow spillways, installation of exit ramp to prevent wildlife entrapment, compliance with a Bullfrog Management Plan, and a prohibition on fish stocking without written permission from CDFW.

There will be one outdoor harvest per year. The applicant estimates that irrigation of the pre-existing cannabis requires 313,443 gallons per year, while irrigation of the RRR cannabis requires 156,723 gallons per year and an additional 5,258 gallons per year will be used for compost teas and overhand watering. In total, the project requires 469,928 gallons of water annually, or approximately 8.56 gallons per square foot. Water meters will be installed at exit points from storage facilities, to account for and report actual water used, which will be recorded weekly and reported in accordance in accordance to local and state guidelines. Safety valves shall also exist at the pond and tanks to prevent loss of water in the event of a leak. Irrigation will occur through a timed drip irrigation system and via a limited amount of hand watering.

Propagation and nursery activities occur on another parcel owned by the applicant, APN 104-291-005, associated with approved project ZCC 16-134, as modified by PLN-14247-ZCC. Drying and processing also occur at this site or will occur off site with a licensed third-party facility should meeting these conditions prove unfeasible. A maximum of 6 employees or contracted farm

laborers will work at the site from May-October depending on planting and harvest times. A portable toilet will be available on APN 104-311-019 for employee use. The toilet will be positioned to limit smell and visual pollution from Mattole Road and nearby residences. Hand washing facilities will be available adjacent to the toilet site. A gray-water system will be used for hand washing effluent. Until a permitted Onsite Waste Treatment System (OWTS) is installed on the subject parcels, on an annual basis, prior to permit renewal, the applicant will be required to submit receipts or other documentation confirming the continued availability of the portable toilet to the Department of Environmental Health. No onsite housing is proposed for employees.

The subject parcels are accessed via Miner Lane from Mattole Road. Mattole Road is maintained by the County, is paved, and is developed to the functional capacity of a Category 4 road. It is adequate for the proposed use without further review. The project was referred to the Department of Public Works which recommended approval with the condition that the applicant pave Miner Lane for a minimum width of 20 feet and a length of 50 feet where it intersects the County road. An encroachment permit shall be issued by the Department of Public Works prior to commencement of this work. All fences and gates shall be relocated out of the County right of way. All gates shall be setback sufficiently from Mattole Road so that vehicles will not block traffic when staging to open/close the gate. In addition, no materials shall be stored or placed in the County right of way. All driveways and private road intersections on the County Road shall also be maintained in accordance with County Code Section 341-1 (Sight Visibility Ordinance).

A review of data from the California Natural Diversity Database (CNDDB) demonstrates the presence or potential habitat of a mapped species on the subject parcels, the summer-run steelhead trout (*Oncorhynchus mykiss irideus* pop. 36) in the Mattole River, the western boundary of APN 104-311-019. The project is not anticipated to have an impact on this species. The applicant does not use synthetic fertilizers or pesticides and maintains a vegetated riparian buffer between developed areas on the parcel and the Mattole River. The project design includes measures taken to ensure that no runoff from soil or garden wastes enter the watercourse. Straw and/or mycroremediated straw baffles surround compost bins, areas, and piles and topsoil preservation measures including planting cover crops keep soil stable during the fallow season. Any site grading or ground disturbance that may take place (e.g. during pond construction) will be mulched with native grass straw/hay, which shall not only reduce erosion, but also provide a mechanism for reseeding during the following wet season. During the wet period, disturbed areas may additionally be planted with native bunch grass species acquired from a local watershed restoration group.

The Foothill yellow-legged frog (*Rana boylei*) is mapped on an adjacent parcel. The applicant will assume the presence of frogs. Within two weeks prior to ground disturbing activities, project contractors shall be trained by a qualified biologist in the identification of the Foothill yellow-legged frog. Construction crews shall begin each day with a visual search around all stacked or stored materials, as well as along any silt fences, to detect the presence of frogs. If a Foothill yellow-legged frog is detected, construction activities shall be halted. Construction crews shall contact the California Department of Fish and Wildlife or a qualified biologist and gain clearance prior to re-initiating work. If a rain event occurs during the construction period, all construction-related activities shall cease for a period of 48-hours after the rain stops. Prior to resuming construction activities, trained construction crew member(s) shall examine the site for the presence of frogs. If no special-status frogs are found, construction activities may resume. In addition, the applicant shall adhere to the following ongoing conditions recommended by CDFW: The applicant shall not use any synthetic netting on the project site, the applicant shall leave any wildlife that they encounter unharmed, and the applicant shall always contain all refuse in wildlife proof storage containers and shall dispose of refuse at an authorized waste management facility.

A Cultural Resources Study was conducted for APN 104-281-005 and APN 104-311-019 by James Roscoe, M.A, in June 2017. No historical resources, as defined in the CEQA, Article 4, Section 15064.5 (a) were identified within or adjacent to the project area as a result of this investigation. The authors concluded that no substantial changes to historical resources as defined by the CEA and Public Resources Code Section 21084.1 will occur as a result of the proposed project. The Cultural Resources report was reviewed by the Tribal Historic Preservation Officer of the Bear River Band of the Rohnerville Rancheria, who concluded that the tribe had no specific concerns and who requested that the standard inadvertent discovery language be included as an ongoing condition of approval.

#### *Staff Recommendation*

Staff believes the existing cultivation and appurtenant infrastructure of the project can be considered as consistent with the Mitigated Negative Declaration adopted for the Commercial Medical Marijuana Land Use Ordinance and has prepared an addendum for consideration pursuant to Section 15164 of the CEQA Guidelines.

Based on the on-site inspection, a review of Planning Division reference sources, and comments from all involved referral agencies, planning staff believes that the applicant has submitted evidence in support of making all the required findings for approving the Conditional Use Permit. Staff recommends that the Planning Commission describe the application as a part of the consent agenda, survey the audience to see if any person would like to discuss the application and, if no one requests discussion, make all the required findings based on the evidence in the record and approve the application subject to the recommended conditions.

**ALTERNATIVES:** The Planning Commission could elect not to approve the project, require the applicant to submit further evidence, or modify the project. These alternatives could be implemented if the Commission is unable to make all the required findings. Planning Division staff has stated that the required findings in support of the proposal have been made. Consequently, Planning Commission staff does not recommend further consideration of the alternatives.

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

**Resolution Number 19-**

**Case Number: PLN-2016-12694**

**Assessor's Parcel Number: 104-311-019, 104-281-005, and 104-281-004**

**Makes the required findings for certifying compliance with the California Environmental Quality Act and conditionally approves Empress Farms, LLC, Conditional Use Permit and Special Permits request.**

**WHEREAS**, Empress Farms, LLC, submitted an application and evidence in support of approving a Conditional Use Permit for the continued operation of an existing cannabis cultivation site consisting of 35,560 square feet of existing outdoor cannabis cultivation. A Special Permit for encroachment into the Streamside Management Area for a point of diversion and a Special Permit to perform restoration activities within a Streamside Management Area are included in this project.

**WHEREAS**, Empress Farms, LLC, submitted an application and evidence in support of approving a Special Permit for a point of diversion on an unnamed Class II tributary to the Mattole River within a Streamside Management Area; and

**WHEREAS**, Empress Farms, LLC, submitted an application and evidence in support of approving a Special Permit for restoration activities including removal of cultivation-related materials and refuse, filling of holes and trenches, and re-planting of native species within a Streamside Management Area; and

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

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

**WHEREAS**, Attachment 2 in the Planning Division staff report includes substantial evidence in support of making all the required findings for approving the proposed Conditional Use Permit and Special Permits (Case Number PLN-2016-12694).

**WHEREAS**, a public hearing was held on the matter before the Humboldt County Planning Commission on June 06, 2019.

**NOW, THEREFORE**, be it resolved, determined, and ordered by the Humboldt County Planning Commission that the following findings be and are hereby made:

1. The Planning Commission considered the Addendum to the MND adopted for the Commercial Medical Marijuana Land Use Ordinance; and

2. The Planning Commission makes all of the required findings in Attachment 2 of the Planning Commission staff report for Case Number PLN-2016-12694 based on the submitted substantial evidence; and
3. The Conditional Use Permit and Special Permits (Case Number PLN-2016-12694) are approved as recommended and conditioned in Attachment 1.

Adopted after review and consideration of all the evidence on June 06, 2019.

The motion was made by COMMISSIONER \_\_\_\_\_ and second by COMMISSIONER \_\_\_\_\_:

AYES: COMMISSIONERS:

NOES: COMMISSIONERS:

ABSENT: COMMISSIONERS:

ABSTAIN: COMMISSIONERS:

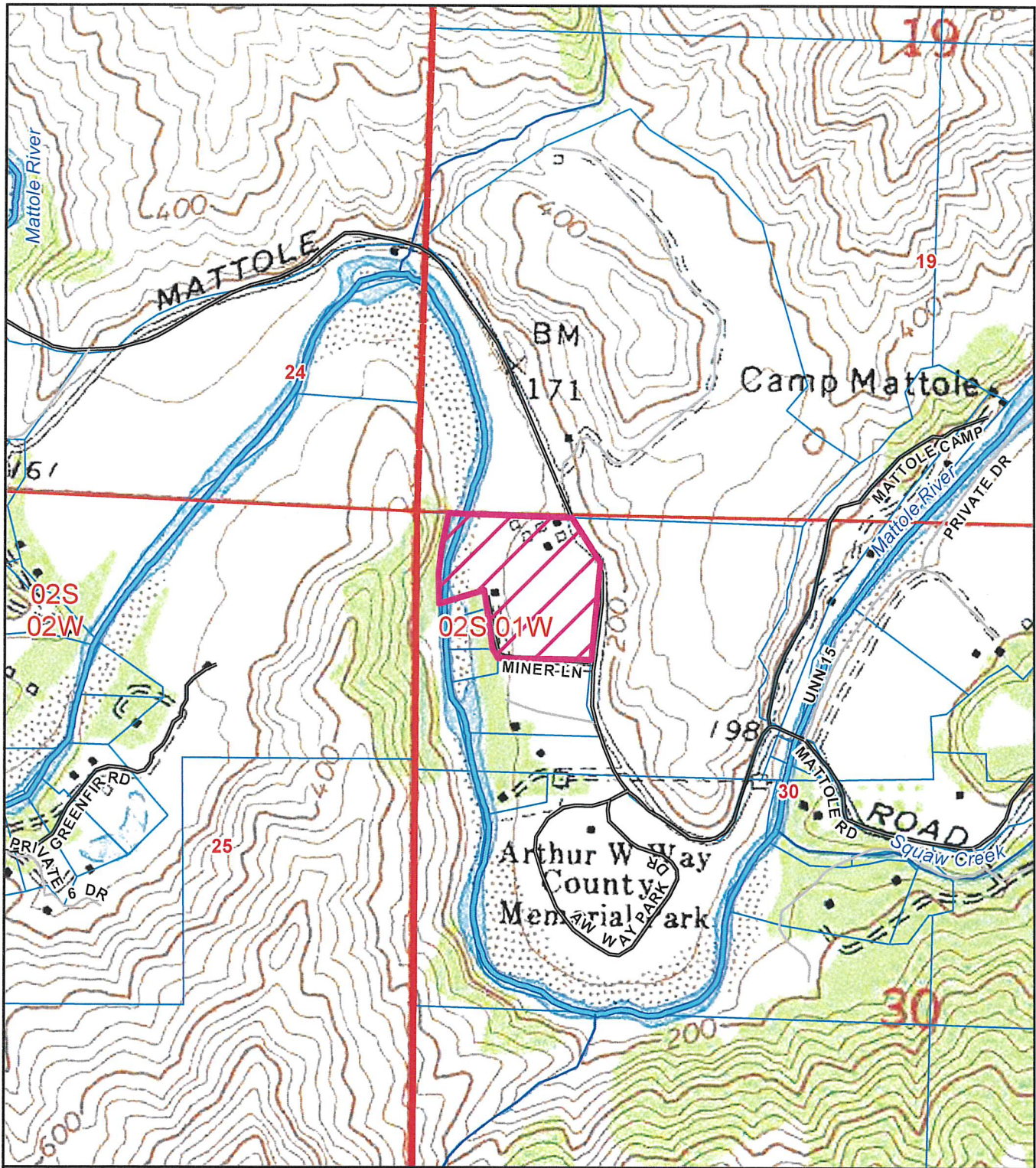
DECISION:

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.

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John Ford  
Director, Planning and Building Department





Project Area = 

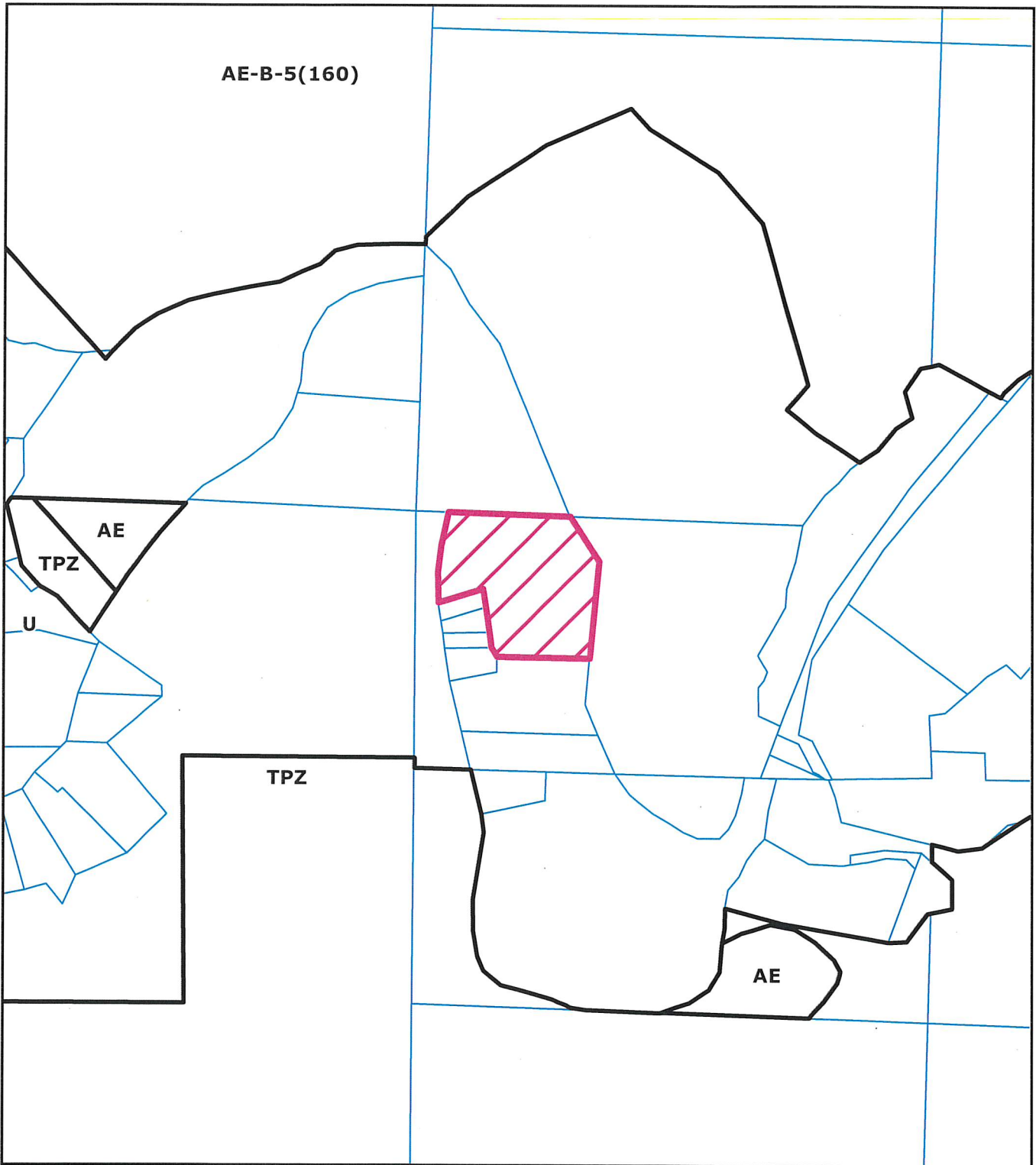
**TOPO MAP  
PROPOSED EMPRESS FARMS  
PETROLIA AREA  
CUP-16-806  
APN: 104-311-019  
T02S R01W S30 HB&M (BUCKEYE MTN)**

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.

0 950 1,900 Feet








Project Area = 

**ZONING MAP  
PROPOSED EMPRESS FARMS  
PETROLIA AREA  
CUP-16-806  
APN: 104-311-019  
T02S R01W S30 HB&M (BUCKEYE MTN)**

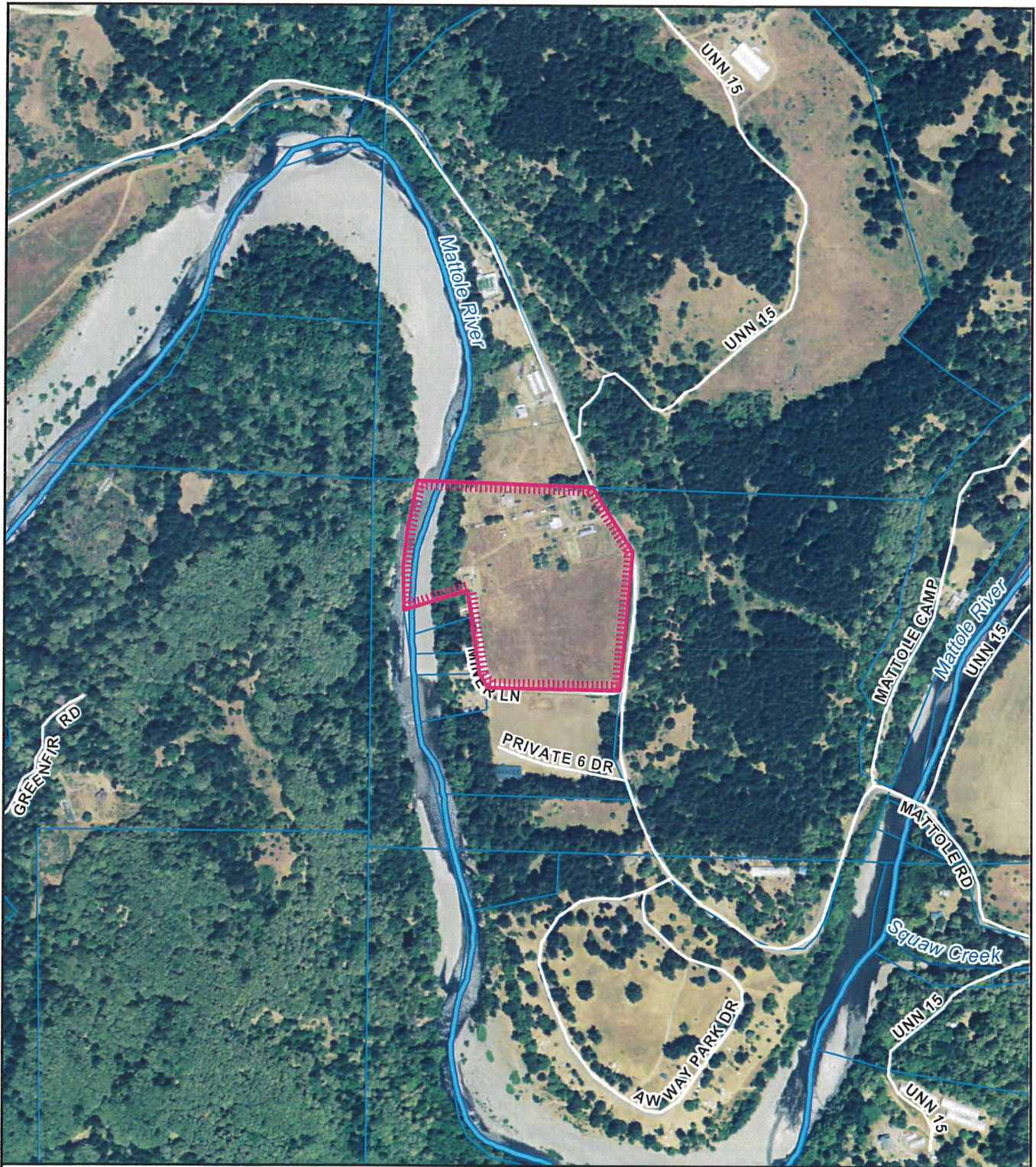


0 950 1,900 Feet



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.





Project Area = 

**AERIAL MAP  
PROPOSED EMPRESS FARMS  
PETROLIA AREA  
CUP-16-806  
APN: 104-311-019  
T02S R01W S30 HB&M (BUCKEYE MTN)**



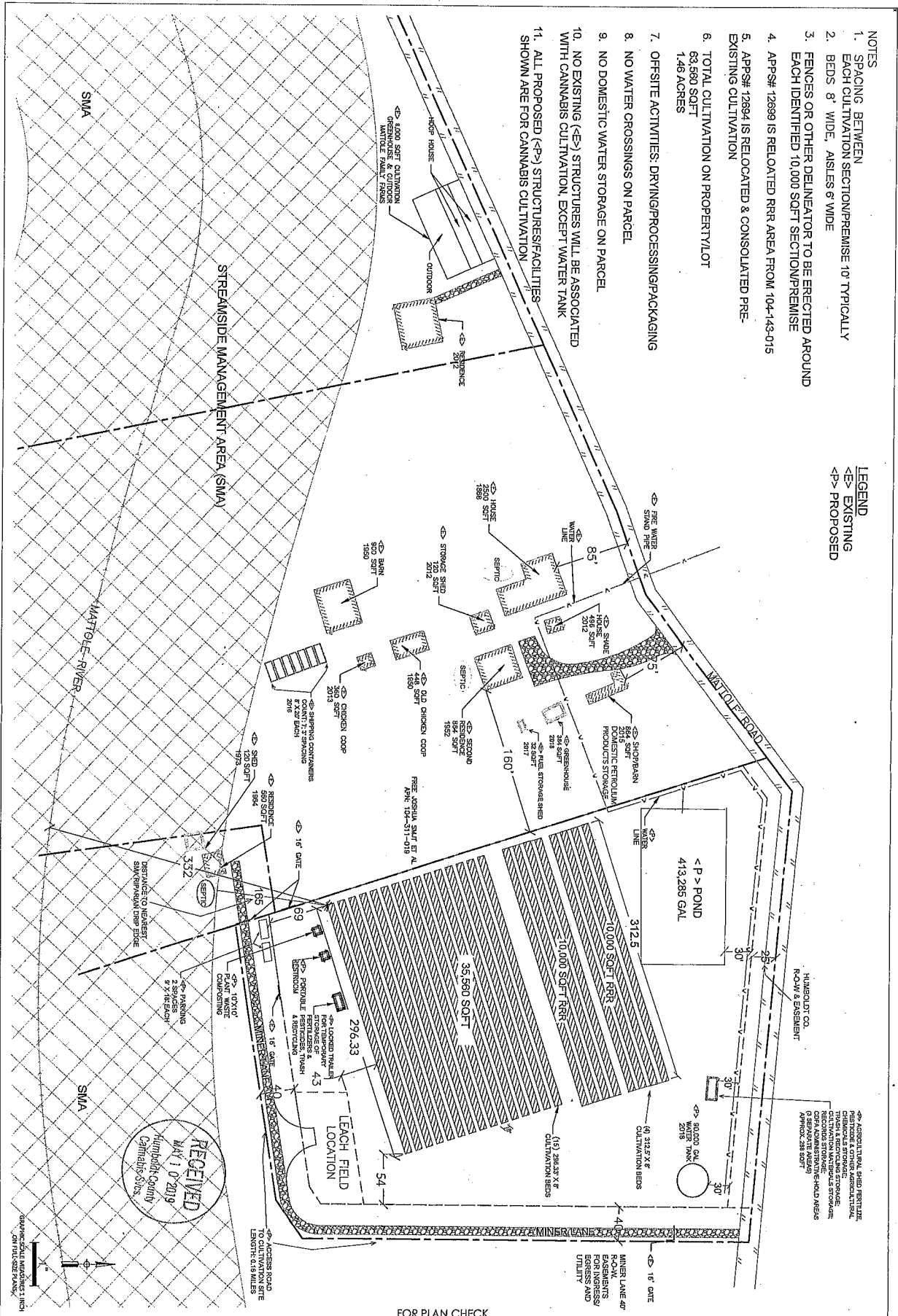
This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 650 1,300 Feet



- NOTES**
1. SPACING BETWEEN EACH CULTIVATION SECTION/PREMISE 10' TYPICALLY
  2. BEDS 8' WIDE, AISLES 6' WIDE
  3. FENCES OR OTHER DELINEATOR TO BE ERRECTED AROUND EACH IDENTIFIED 10,000 SQFT SECTION/PREMISE
  4. APPS# 12699 IS RELOCATED RRR AREA FROM 104-143-015
  5. APPS# 12894 IS RELOCATED & CONSOLATED PRE-EXISTING CULTIVATION
  6. TOTAL CULTIVATION ON PROPERTY LOT 63,560 SQFT 1.46 ACRES
  7. OFFSITE ACTIVITIES: DRYING/PROCESSING/PACKAGING
  8. NO WATER CROSSINGS ON PARCEL
  9. NO DOMESTIC WATER STORAGE ON PARCEL
  10. NO EXISTING (<E>) STRUCTURES WILL BE ASSOCIATED WITH CANNABIS CULTIVATION, EXCEPT WATER TANK
  11. ALL PROPOSED (<P>) STRUCTURES/FACILITIES SHOWN ARE FOR CANNABIS CULTIVATION

**LEGEND**  
 <E> EXISTING  
 <P> PROPOSED



**EMPRESS FARMS**  
 WATERFALL RANCH  
 104-311-019

NO.	HISTORY / REVISION	BY	CHK.	DATE
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

EMPRESS FARMS - WATERFALL RANCH  
 104-311-019  
 SITE PLAN  
 EMPRESS FARMS  
 P.O. BOX 7, PETROLIA, CA 95558

NO.	DESCRIPTION	DATE
1	DESIGNED	05/09/19
2	REVISED	05/09/19
3	REVISED	05/09/19
4	REVISED	05/09/19
5	REVISED	05/09/19
6	REVISED	05/09/19
7	REVISED	05/09/19
8	REVISED	05/09/19
9	REVISED	05/09/19
10	REVISED	05/09/19

UPDATED 05-09-19

**ATTACHMENT 1**  
**RECOMMENDED CONDITIONS OF APPROVAL**

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

1. The applicant is responsible for obtaining all necessary County and State permits and licenses, and for meeting all of the requirements as set forth by other regulatory agencies.
2. The applicant is required to pay the Provisional Approval Compliance Agreement fee as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors (currently \$175.00) shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka. This fee is a deposit, and if actual review costs exceed this amount, additional fees will be billed at the County's current burdened hourly rate.
3. 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.
4. Within 60 days of the effective date 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 #5-14. The agreement shall provide a timeline for completing all outstanding items. All activities detailed under the agreement must be completed to the satisfaction of the Planning and Building Department before the permit may be finalized and no longer considered provisional.
5. The applicant shall secure permits for all unpermitted grading and structures related to the cannabis cultivation and other commercial cannabis activity, including the proposed pond, the 90,000-gallon water tank, and any sheds or outbuilding of greater than 120 square feet. 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.
6. The Applicant shall install and utilize a water meter to demonstrate that there is sufficient water supply to meet the demands of the project without having to rely on surface water diversion during the summer months. The applicant shall install additional water storage tanks if needed. As part of the annual inspection, the applicant shall present water use records showing water use for the year broken down by month. The water use for cultivation is limited to the amount of water available in storage tanks and ponds and water sourced from permitted points of diversion outside of the forbearance period.
7. All cultivation-related materials remaining in the historic cultivation area within the Streamside Management Area (SMA) of the Mattole River shall be removed, any ground disturbance (eg holes and trenches where plants were cultivated) will be filled, and any soil exposed during the restoration shall be revegetated with native species subject to a Special Permit for restoration work in a SMA. Photos from the applicant documenting completion of this work will satisfy this condition.

8. The applicant shall pave Miner Lane for a minimum width of 20 feet and a length of 50 feet where it intersects the County road. An encroachment permit shall be issued by the Department of Public Works prior to commencement of this work. The applicant shall submit photos demonstrating that the work has been completed and the requirement will be satisfied upon the confirmation by Public Works that the intersection complies with commercial standards.
9. All fences and gates shall be relocated out of the County right of way. All gates shall be setback sufficiently from Mattole Road so that vehicles will not block traffic when staging to open/close the gate. In addition, no materials shall be stored or placed in the County right of way. All driveways and private road intersections on the County Road shall also be maintained in accordance with County Code Section 341-1 (Sight Visibility Ordinance). The applicant shall submit photos demonstrating that the work has been completed and the requirement will be satisfied upon the confirmation by Public Works that the County right of way is clear and that the intersection(s) comply with the Sight Visibility Ordinance.
10. At the request of California Department of Fish and Wildlife (CDFW), the applicant shall implement the following for both of their rain catchment ponds:
  - a. Install an overflow spillway that will withstand a 100-year flood event, designed with a dispersal mechanism, or low-impact design that discourages channelization and promotes dispersal and infiltration of flows to prevent surface overflow from reaching waters of the State. CDFW recommends the spillway be designed and placed to allow for a minimum of two feet of freeboard.
  - b. Install several exit ramps to prevent wildlife entrapment. Exit ramps shall meet the following requirements: installed at no greater than 2:1 slope, securely fixed, and made of solid material (e.g. wood).
  - c. Comply with the CDFW Bullfrog Management Plan. Reporting requirements shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501, no later than December 31 of each year.
  - d. Refrain from fish stocking unless doing so with written permission from CDFW pursuant to Section 6400 of the Fish and Game Code.
11. The applicant shall implement all corrective actions detailed within the Water Resource Protection Plan (WRPP) developed for the parcel, prepared pursuant to Tier 2 enrollment under the North Coast Regional Water Quality Control Board (NCRWQCB) Cannabis Waste Discharge Regulatory Program, including those measures later determined necessary during annual and periodic site inspections in accordance with the monitoring element. A copy of the reporting form portion of the Mitigation and Reporting Program (MRP) shall be submitted annually to the Planning and Building Department concurrent with the submittal to the RWQCB. A letter or similar communication from the RWQCB verifying that all their requirements have been met by the listed dates or the applicant has proven to the satisfaction of RWQCB or the Third Party Consultant verifying that all the requirements in the MRP have been met will satisfy this condition [After July 31, 2019, plans and reporting shall conform to the Cannabis Cultivation Policy and Cannabis General Order adopted October 17, 2017, by the State Water Board].
12. The applicant shall contact the local fire service provider [Petrolia Fire PDAA] and furnish written documentation from that agency of the available emergency response and fire suppression services and any recommended project mitigation measures. Mitigation measures shall be incorporated into the project, if applicable. If emergency response and fire suppression services are not provided, the applicant shall cause to be recorded an "ACKNOWLEDGMENT OF NO AVAILABLE EMERGENCY RESPONSE AND FIRE SUPPRESSION

SERVICES" for the parcel(s) on a form provided by the Humboldt County Planning Division. Document review fees as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors will be required.

13. The applicant shall be compliant with the County of Humboldt's Certified Unified Program Agency (CUPA) requirements regarding hazardous materials. A written verification of compliance shall be required before any provisional permits may be finalized. Ongoing proof of compliance with this condition shall be required at each annual inspection in order to keep the permit valid.
14. The applicant shall execute and file the statement titled, "Notice and Acknowledgment regarding Agricultural Activities in Humboldt County," ("Right to Farm" ordinance) with the Planning Division as required by the HCC and available at the Planning Division.

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

1. All processing will occur off site, unless the permit is Modified to include onsite processing. Until an approved Onsite Waste Treatment System (OWTS) is installed, the applicant must submit an invoice or equivalent documentation to the Department of Environmental Health confirming the presence of portable toilets to serve the needs of cultivation staff. These shall be submitted each year prior to the reissuance of the annual permit.
2. No cannabis is to be cultivated or otherwise present, whether in native soil, in pots, or as canopy area, in the aisles between the applicant's garden beds as identified on the approved Site Map. Presence of cannabis outside of the approved garden beds will be considered an unauthorized expansion.
3. Within two weeks prior to ground disturbing activities, project contractors shall be trained by a qualified biologist in the identification of the Foothill yellow-legged frog. Construction crews shall begin each day with a visual search around all stacked or stored materials, as well as along any silt fences, to detect the presence of frogs. If a Foothill yellow-legged frog is detected, construction activities shall be halted. Construction crews shall contact the California Department of Fish and Wildlife or a qualified biologist and gain clearance prior to re-initiating work. If a rain event occurs during the construction period, all construction-related activities shall cease for a period of 48-hours after the rain stops. Prior to resuming construction activities, trained construction crew member(s) shall examine the site for the presence of frogs. If no special-status frogs are found, construction activities may resume.
4. The primary power source is PG&E supplemented by solar power. If a generator is used as emergency backup, a noise containment structure shall be used with the generator. The noise produced by said generators shall not be audible by humans from neighboring residences. The decibel level for generators measured at 100 feet from the generator or at the property line shall be no more than 60 decibels. Sound levels must show that they will not result in the harassment of Marbled Murrelet or Spotted Owl species. Conformance will be evaluated using current auditory disturbance guidance prepared by the United State Fish and Wildlife Service, and further consultation where necessary.
5. The use of monofilament netting for all uses, including but not limited for erosion control, shall be prohibited. Geotextiles, fiber rolls, and other erosion control measure materials shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves to minimize the risk of ensnaring and strangling wildlife.

6. Should any wildlife be encountered during to work activities, the wildlife shall not be disturbed and be allowed to leave the work site unharmed.
7. All refuse shall be contained in wildlife proof storage containers, at all times, and shall be disposed of at an authorized waste management facility.
8. The applicant shall adhere to the terms and the required reporting conditions of their Final Lake or Streambed Alteration Agreement (1600-20177-0404-R1).
9. Security lighting shall be motion activated and comply with the International Dark Sky Association standards and Fixture Seal of Approval Program. Standards include, but are not limited to, the following, 1) Light shall be shielded and downward facing, 2) shall consist of Low-Pressure Sodium (LPS) light or low spectrum Light Emitting Diodes (LED) with a color temperature of 3000 kelvins or less and 3) only placed where needed.
10. All components of the project shall be developed, operated, and maintained in conformance with the Project Description, the approved Site Plan, the Plan of Operations, and these conditions of approval. Changes shall require modification of this permit except where consistent with Humboldt County Code Section 312-11.1, Minor Deviations to Approved Plot Plan. If offsite processing is chosen to be the preferred method of processing, this permit shall be modified to identify the offsite licensed facility.
11. Cannabis cultivation and other commercial cannabis activity shall be conducted in compliance with all laws and regulations as set forth in the CMMLUO and MAUCRSA, as applicable to the permit type.
12. If operating pursuant to a written approved compliance agreement, permittee shall abate or cure violations at the earliest feasible date, but in no event no more than two (2) years from the date of issuance of a provisional clearance or permit. Permittee shall provide plans for curing such violations to the Planning & Building Department within one (1) year of issuance of the provisional clearance or permit. If good faith effort towards compliance can be shown within the two years following the issuance of the provisional clearance or permit, The Planning Department may, at the discretion of the Director, provide for extensions of the provisional permit to allow for additional time to meet the outstanding requirements.
13. Possession of a current, valid required license, or licenses, issued by any agency of the State of California in accordance with the MAUCRSA, and regulations promulgated thereunder, as soon as such licenses become available.
14. Comply with the terms of the applicable Streambed Alteration (1600) Permit obtained from the California Department of Fish & Wildlife. The applicant shall abide by the Avoidance and Minimization Measures outlined in the signed Lake and Streambed Alteration Agreement (1600-2017-0404-R1) approved by the California Department of Fish and Wildlife (CDFW) and comply with all applicable terms.
15. The applicant shall not use any erosion control measures that contain synthetic (e.g. plastic or nylon) monofilament netting, including photo- or biodegradable plastic netting. Geotextiles, fiber rolls, and other erosion control measures shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without weaves.

16. Any on-site lighting existing or proposed in the future shall comply with International Dark Sky Association standards for Lighting Zone 0 and Lighting Zone 1 and be designed to regulate light spillage onto neighboring properties resulting from backlight, up light, or glare (BUG). On-site lighting shall be fully shielded and designed and installed to minimize off-site lighting and direct light within the property boundaries.
17. Compliance with all statutes, regulations and requirements of the California State Water Resources Control Board and the Division of Water Rights, at a minimum to include a statement of diversion of surface water from a stream, river, underground stream, or other watercourse required by Water Code Section 5101, or other applicable permit, license, or registration, as applicable.
18. Confinement of the area of cannabis cultivation, processing, manufacture or distribution to the locations depicted on the approved site plan. The commercial cannabis activity shall be set back at least 30 feet from any property line, and 600 feet from any School, School Bus Stop, Church or other Place of Religious Worship, Public Park, or Tribal Cultural Resources, except where a reduction to this setback has been approved pursuant to Section 55.4.11 (d).
19. Maintain enrollment in Tier 1, 2 or 3, certification with the North Coast Regional Water Quality Control Board (NCRWQCB) Order No. 2015-0023, if applicable, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency.
20. Comply with the terms of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (CAL-FIRE), if applicable.
21. Consent to an annual on-site compliance inspection, with at least 24 hours prior notice, to be conducted by appropriate County officials during regular business hours (Monday – Friday, 9:00 am – 5:00 pm, excluding holidays).
22. Refrain from the improper storage or use of any fuels, fertilizer, pesticide, fungicide, rodenticide, or herbicide.
23. Pay all applicable application and annual inspection fees.
24. The noise produced by a generator used for cannabis drying, curing, and processing shall not be audible by humans at neighboring residences. The decibel level for generators measured at the property line shall be no more than 60 decibels. Where applicable, sound levels must also show that they will not result in the harassment of Marbled Murrelet or Spotted Owl species. Conformance will be evaluated using current auditory disturbance guidance prepared by the United State Fish and Wildlife Service, and further consultation where necessary. Under these guidelines, generator noise may not exceed 50dB as measured at 100 feet from the generator or at the edge of the nearest Marbled Murrelet or Spotted Owl habitat, whichever is closer.
25. Storage of Fuel - Fuel shall be stored and handled in compliance with applicable state and local laws and regulations, including the County of Humboldt's CUPA program, and in such a way that no spillage occurs.
26. The Master Log Books maintained by the applicant to track production and sales shall be maintained for inspection by the County.

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

**Performance Standards for Cultivation and Processing Operations**

1. Pursuant to the MAUCRSA, Health and Safety Code section 19322(a)(9), an applicant seeking a cultivation license shall "provide a statement declaring the applicant is an 'agricultural employer,' as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (Part 3.5 commencing with Section 1140) of Division 2 of the Labor Code), to the extent not prohibited by law."
2. Cultivators shall comply with all applicable federal, state, and local laws and regulations governing California Agricultural Employers, which may include: federal and state wage and hour laws, CAL/OSHA, OSHA, California Agricultural Labor Relations Act, and the Humboldt County Code (including the Building Code).
3. Cultivators engaged in processing shall comply with the following Processing Practices:
  - i. Processing operations must be maintained in a clean and sanitary condition including all work surfaces and equipment;
  - ii. Processing operations must implement protocols which prevent processing contamination and mold and mildew growth on cannabis;
  - iii. Employees handling cannabis in processing operations must have access to facemasks and gloves in good operable condition as applicable to their job function; and,
  - iv. Employees must wash hands sufficiently when handling cannabis or use gloves.
4. All persons hiring employees to engage in commercial cannabis cultivation and processing shall comply with the following Employee Safety Practices:
  - I. Cultivation operations and processing operations must implement safety protocols and provide all employees with adequate safety training relevant to their specific job functions, which may include:
    - (a) Emergency action response planning as necessary;
    - (b) Employee accident reporting and investigation policies;
    - (c) Fire prevention;
    - (d) Hazard communication policies, including maintenance of material safety data sheets (MSDS);
    - (e) Materials handling policies;
    - (f) Job hazard analyses; andPersonal protective equipment policies, including respiratory protection.
  - II. Cultivation operations and processing operations must visibly post and maintain an emergency contact list which includes at a minimum:
    - (a) Operation manager contacts;
    - (b) Emergency responder contacts; and
    - (c) Poison control contacts.
  - III. 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.



- IV. On-site housing provided to employees shall comply with all applicable federal, state, and local laws and regulations.
5. All cultivators shall comply with the approved Processing Plan as to the following:
  - I. Processing Practices;
  - II. Location where processing will occur;
  - III. Number of employees, if any;
  - IV. Employee Safety Practices;
  - V. Toilet and handwashing facilities;
  - VI. Plumbing and/or septic system and whether or not the system is capable of handling increased usage;
  - VII. Drinking water for employees;
  - VIII. Plan to minimize impact from increased road use resulting from processing; and
  - IX. On-site housing, if any.
6. Term of Commercial Cannabis Activity Special Permit. Any Commercial Cannabis Cultivation SP issued pursuant to the CMMLUO shall expire after one (1) year after date of issuance, and on the anniversary date of such issuance each year thereafter, unless an annual compliance inspection has been conducted and the permittee(s) and the permitted site have been found to comply with all conditions of approval.

If the inspector or other County official determines that the permittee(s) or site do not comply with the conditions of approval, the inspector shall serve the SP or permit holder with a written statement identifying the items not in compliance, and the action that the permit holder may take to cure the non-compliance, or file an appeal within ten (10) days of the date that the written statement is delivered to the permit holder. Personal delivery or mailing the written statement to the mailing address listed on the application by regular mail, plus three (3) days after date of mailing, shall constitute delivery. The permit holder may request a reinspection to determine whether or not the permit holder has cured all issues of non-compliance. Failure to request reinspection or to cure any items of non-compliance shall terminate the Special Permit, immediately upon the expiration of any appeal period, or final determination of the appeal if an appeal has been timely filed pursuant to section 55.4.13.

7. Permit Renewals to comply with Updated Laws and Regulations. Permit renewal is subject to the laws and regulations effective at the time of renewal, which may be substantially different than the regulations currently in place and may require the submittal of additional information to ensure that new standards are met.
8. Acknowledgements to Remain in Full Force and Effect. Permittee Acknowledges that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as a sustained drought or low flows in the watershed in which the cultivation area is located will not support diversions for irrigation.
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 permit transfer review shall accompany the request. The request shall include the following information:
  - a. Identifying information for the new Owner(s) and management as required in an initial permit application;
  - b. A written acknowledgment by the new Owner in accordance as required for the initial Permit application;

- c. The specific date on which the transfer is to occur;
- d. Acknowledgement of full responsibility for complying with the existing Permit; and
- e. Execution of an Affidavit of Non-diversion of Commercial Cannabis.

10. Inspections. The permit holder and subject property owner are to permit the County or representative(s) or designee(s) to make inspections at any reasonable time deemed necessary to assure that the activities being performed under the authority of this permit are in accordance with the terms and conditions prescribed herein.

**Informational Notes:**

1. Pursuant to section 314-55.4.11(a) of the CMMLUO, if upon inspection for the initial application, violations of any building or other health, safety, or other state or county statute, ordinance, or regulation are discovered, the Planning and Building Department may issue a provisional clearance or permit with a written approved Compliance Agreement. By signing the agreement, the permittee agrees to abate or cure the violations at the earliest opportunity but in no event more than two (2) years 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.
2. This provisional permit approval shall expire and become null and void at the expiration of one (1) year after all appeal periods have lapsed (see "Effective Date"); except where the Compliance Agreement has been executed and the corrective actions pursuant to the agreement are being undertaken. Once building permits have been secured and/or the use initiated pursuant to the terms of the agreement, the use is subject to the Permit Duration and Renewal provisions set forth in the Conditions of Approval and the On-Going Requirements /Development Restrictions, above.

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.

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.

**ATTACHMENT 2**  
**Required Findings for Approval**

**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, Sections 312-1.1.2 and 312-17.1 of the Humboldt County Code (Required Findings for All Discretionary Permits) specify the findings that are required to grant a Conditional Use Permit and a Special 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 midpoint of the density range specified in the plan designation) unless the following written findings are made supported by substantial evidence:  
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; and
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. The proposed development must be consistent with the General Plan.** The following table identifies the substantial evidence which supports finding that the proposed development is in conformance with all applicable policies and standards of Humboldt County General Plan, 2017.

Relevant Plan Section	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Land Use Chapter 4  Land Use Designations Section 4.8	<p><b>Residential Agriculture (RA):</b> Lands used for large lot residential uses that typically rely upon on-site water and wastewater systems. Allowable land uses vary and include residential, cottage industry, bed and breakfast inns, community assembly, neighborhood commercial, non-commercial recreation, office and professional, private institution, general and intensive agriculture, stables and kennels, timber production, fish and wildlife management, essential services, and similar compatible uses.</p> <p>Density range is 20 - 160 acres/unit.</p>	<p>The proposed project includes approximately 35,560 square feet of outdoor cannabis cultivation.</p> <p>The subject parcels are designated Residential Agriculture, 20 acres per unit (RA-20). General and intensive agriculture are allowable use types for this designation.</p>
Circulation Chapter 7	<p>Goals and policies contained in this Chapter relate to a balanced, safe, efficient, accessible and convenient circulation system that is appropriate for each type of unincorporated community (C-G1, C-G2); coordinated planning design, development, operations, and maintenance between the County and other transportation system service providers (C-G3); and access for all transportation mode types with improved opportunities to move goods within, into and out of</p>	<p>The project is located in the Petrolia area, on the southwest side of Mattole Road, at the intersection of Miner Lane and Mattole Road, on the property known as 36332 Mattole Road, Petrolia.</p> <p>The subject parcels are accessed via Miner Lane from Mattole Road. Mattole Road is maintained by the County, is paved, and is developed to the functional capacity of a Category 4 road. It is adequate for the proposed use without further review. Miner Lane is a native surface, low-gradient road of 0.16 miles in length that serves as an access road for several neighboring parcels and receives moderate to minimal use.</p> <p>The project was referred to the Department of Public Works which recommended approval with the condition that the applicant pave</p>

	<p>Humboldt County. (C-G4, C-G5)</p> <p>Related policies: C-P3, Consideration of Transportation Impacts in Land Use Decision Making.</p>	<p>Miner Lane for a minimum width of 20 feet and a length of 50 feet where it intersects the County road. An encroachment permit shall be issued by the Department of Public Works prior to commencement of this work. All fences and gates shall be relocated out of the County right of way. All gates shall be setback sufficiently from Mattole Road so that vehicles will not block traffic when staging to open/close the gate. In addition, no materials shall be stored or placed in the County right of way. All driveways and private road intersections on the County Road shall also be maintained in accordance with County Code Section 341-1 (Sight Visibility Ordinance).</p>
<p>Housing Chapter 8</p>	<p>Goals and policies contained in this Chapter seek to identify existing and projected housing needs and establish goals, policies, standards and measures for the preservation, improvement, and development of housing.</p> <p>Related policies: H-P3, Development of Properties in the Residential Land Inventory.</p>	<p>The project does not involve residential development.. However, the project will not preclude any future residential development. 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.</p>
<p>Conservation and Open Space Chapter 10</p> <p>Open Space Section 10.2</p>	<p>Goals and policies contained in this Chapter relate to an Open Space and Conservation Program that is complimentary to other agencies' plans and that preserves the county's unique open spaces. (CO-G1, CO-G3)</p> <p>Related policies: CO-P1, Conservation and Open Space Program; CO-P12, Development Review, CO-S1. Identification of Local Open Space Plan, and CO-S2. Identification of the Open Space Action Program</p>	<p>The project site is within or near a land use designation or zoning classification identified for the Local Open Space Plan, but the proposed development is consistent with the Plan. The subject parcels are designated Residential Agriculture. The Mattole River forms the western boundary of the subject parcels and a vegetated buffer is maintained between developed areas of the subject parcels and the Mattole River. No timber conversion is involved in the project.</p> <p>(see Biological Resources Section 10.3 for additional discussion).</p>

<p>Conservation and Open Space Chapter 10</p> <p>Biological Resources Section 10.3</p>	<p>Goals and policies contained in this Chapter relate to mapped sensitive habitat areas where policies are applied to protect fish and wildlife and facilitate the recovery of endangered species (BR-G1, Threatened and Endangered Species, BR-G2, Sensitive and Critical Habitat, BR-G3, Benefits of Biological Resources).</p> <p>Related policies: BR-P1, Compatible Land Uses; BR-P5, Streamside Management Areas.</p>	<p>The subject parcels are part of the historic Miner Ranch. Since their development in the late 1800s, the parcels have been used for residential and agricultural uses. They contain prime agricultural soils and flat, open, agricultural and grazing land with a handful of cultivated redwood and Douglas fir trees. They are bordered by a strip of riparian habitat running in a north-south direction through the property along the Mattole River. Development on the subject parcels is outside of the Streamside Management Areas around the Mattole River and its associated NWI wetland.</p> <p>Historic cannabis cultivation was located under tree canopy in the riparian buffer around the Mattole River. Current cultivation activities and associated structures are now 332 feet from the Mattole River and 165 feet from the drip edge of the riparian zone. As a condition of project approval, all materials related to the cannabis cultivation and all refuse will be removed from the Streamside Management Area subject to a Special Permit for encroachment into the Streamside Management Area to perform restoration work.</p> <p>A review of data from the California Natural Diversity Database (CNDDDB) demonstrates the presence or potential habitat of a mapped species on the subject parcels, the summer-run steelhead trout (<i>Oncorhynchus mykiss irideus</i> pop. 36) in the Mattole River, the western boundary of APN 104-311-019. The project is not anticipated to have an impact on this species. The applicant maintains a vegetated riparian buffer between developed areas on the parcel and the Mattole River and takes measures to ensure that no runoff from soil or garden wastes enter the watercourse. Straw and/or mycroremediated straw baffles surround compost bins, areas, and piles and topsoil preservation measures including planting cover crops keep soil stable during the fallow season. Any site grading or ground disturbance that may take place (e.g. during pond construction) will be mulched with native grass straw/hay, which shall not only reduce erosion, but also provide a mechanism for reseeding during the following wet season. During the wet period, disturbed areas may additionally be planted with native</p>
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		<p>bunch grass species acquired from a local watershed restoration group.</p> <p>The foothill yellow-legged frog (<i>Rana boylei</i>) is mapped on an adjacent parcel. The applicant will assume the presence of frogs. Within two weeks prior to ground disturbing activities, project contractors shall be trained by a qualified biologist in the identification of the Foothill yellow-legged frog. Construction crews shall begin each day with a visual search around all stacked or stored materials, as well as along any silt fences, to detect the presence of frogs. If a Foothill yellow-legged frog is detected, construction activities shall be halted. Construction crews shall contact the California Department of Fish and Wildlife or a qualified biologist and gain clearance prior to re-initiating work. If a rain event occurs during the construction period, all construction-related activities shall cease for a period of 48-hours after the rain stops. Prior to resuming construction activities, trained construction crew member(s) shall examine the site for the presence of frogs. If no special-status frogs are found, construction activities may resume. In addition, the applicant shall adhere to the following ongoing conditions recommended by CDFW: The applicant shall not use any synthetic netting on the project site, the applicant shall leave any wildlife that they encounter unharmed, and the applicant shall always contain all refuse in wildlife proof storage containers and the applicant shall dispose of all refuse at an authorized waste management facility.</p> <p>The applicant has received a California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Agreement (LSAA) for one existing stream diversion located on a Class II tributary to the Mattole River on APN 104-281-004. A condition of approval is included requiring the applicant to adhere to the measures to protect fish and wildlife resources found in the LSAA.</p>
Conservation and Open Space Chapter 10	Goals and policies contained in this Chapter relate to the protection and enhancement of significant cultural resources, providing heritage, historic, scientific,	<p>The existing residence on APN 104-311-019 is potentially a historic structure. No alteration or demolition is proposed under this permit.</p> <p>A Cultural Resources Study was conducted for APN 104-281-005 and APN 104-311-019 by James</p>

Cultural Resources Section 10.6	<p>educational, social and economic values to benefit present and future generations (CU-G1, Protection and Enhancement of Significant Cultural Resources).</p> <p>Related policies: CU-P1, Identification and Protection; CU-P2, Native American Tribal Consultation.</p>	<p>Roscoe, M.A, in June 2017. No historical resources, as defined in the CEQA, Article 4, Section 15064.5 (a) were identified within or adjacent to the project area as a result of this investigation. The authors concluded that no substantial changes to historical resources as defined by the CEA and Public Resources Code Section 21084.1 will occur as a result of the proposed project. The Cultural Resources report was reviewed by the Tribal Historic Preservation Officer of the Bear River Band of the Rohnerville Rancheria, who concluded that the tribe had no specific concerns and who requested that the standard inadvertent discovery language be included as an ongoing condition of approval.</p>
<p>Conservation and Open Space Chapter 10</p> <p>Scenic Resources Section 10.7</p>	<p>Goals and policies contained in this Chapter relate to the protection of scenic areas that contribute to the enjoyment of Humboldt County's beauty and abundant natural resources (SR-G1); and a system of scenic highways that increase the enjoyment of, and opportunities for, recreational and cultural pursuits and tourism in the County. (SR-G2)</p> <p>Related policies: SR-S4, Light and Glare.</p>	<p>The project is for existing outdoor cannabis cultivation in full sun. No mixed light will be used on the subject parcels. A riparian buffer is maintained between developed areas on the parcel and the Mattole River.</p> <p>Security lighting shall be motion activated and comply with the International Dark Sky Association standards and Fixture Seal of Approval Program. Standards include, but are not limited to, the following, 1) Light shall be shielded and downward facing, 2) shall consist of Low-Pressure Sodium (LPS) light or low spectrum Light Emitting Diodes (LED) with a color temperature of 3000 kelvins or less and 3) only placed where needed.</p>
<p>Water Resources Chapter 11</p> <p>Stormwater Drainage</p>	<p>Goals and policies contained in this Chapter relate to coordinated watershed planning and land use decision making to advance management priorities (WR-G3, WR-G4, WR-G5); watershed conservation and restoration efforts aimed at de-listing water bodies and watersheds which are restored to meet all beneficial uses, including water use, salmon and steelhead recovery plans, recreational activities, and the economy. (WR-G1, WR-G2, WR-G7, WR-G8, WR-G9)</p>	<p>The applicant has enrolled in the North Coast Regional Water Quality Control Board's (NCRWQCB's) Cannabis Waste Discharge Regulatory Program as a Tier 2 discharger. Conditions of Approval required the Applicant to implement all corrective measures from the Water Resource Protection Plan submitted to the County on May 08, 2019. Ongoing Conditions of Approval requires the applicant to comply with the terms of the applicable 1600 Permit obtained from the CDFW.</p> <p>The applicant has identified two watercourses on the parcel, the Mattole River and an unnamed Class II stream. There are no stream crossings on the property. Pursuant to the applicant's Water Resource Protection Plan, the cannabis cultivation sites and the access roads were evaluated for controllable sediment delivery sites, irrigation runoff, waste disposal,</p>



	<p>Related policies: WR-P10, Erosion and Sediment Discharge; WR-P42, Erosion and Sediment Control Measures.</p>	<p>and storage of petroleum, fertilizers, and other chemicals used in the cultivation process. The WRPP identified an existing Class II stream channel that facilitates overall parcel drainage during the wet season. No evidence of erosion or sediment contribution to surface water was present during the Initial Site survey or subsequent monitoring events.</p> <p>Measures taken to improve site drainage and runoff include irrigating at agronomic rates with a timed drip irrigation system, an engineered pond overflow to be constructed such that overflow either recharges the natural landscape, bioswales, and/or is redirected back into a watercourse, storage of soil and garden wastes on low-gradient slopes in distinct compost bins with straw and/or mycroremediated straw baffles around compost bins, areas, and piles. Measures taken to control erosion include planting of cover crops during the fallow season to [preserve topsoil, followed by minimal tilling on calm days during planting, and mulching, or utilizing weed mats where appropriate. Road conditions shall be inspected on a weekly basis during the year and after major storm events during the wet season. All construction will take place between May 1<sup>st</sup> and October 15<sup>th</sup> in periods of dry weather. All ground disturbance will be mulched with native grass/straw/hay at a rate of 2 tons/acre, which will reduce erosion and provide a mechanism for reseeding during the following wet season. These areas may also be planted during the wet season with native bunch grass species or native flower and forb mix.</p>
<p>Water Resources Chapter 11</p> <p>Onsite Wastewater Systems</p>	<p>Goals and policies contained in this Chapter relate to adequate public water supply as well as onsite wastewater systems and natural and developed storm drainage systems that minimize interference with surface and groundwater flows and storm water pollution. (WR-G6, WR-G9, WR G10)</p> <p>Related policies: WR-IM7, Basin Plan Septic</p>	<p>A portable toilet will be available for employee use. Empress Farms will utilize the services of a licensed company to service the toilet. It will be positioned to limit smell and visual pollution from Mattole Road and nearby residences. Hand washing facilities will be available adjacent to the toilet site and a gray-water system will be used for hand washing effluent. Until a permitted Onsite Waste Treatment System (OWTS) is installed, on an annual basis, prior to permit renewal, the applicant will be required to submit receipts or other documentation confirming the continued availability of the portable toilet to the Department of Environmental Health.</p>

	Requirements; and IS-P17, On-Site Sewage Disposal Requirements.	
Noise Chapter 13	<p>Goals and policies contained in this Chapter discourage incompatible uses within communities and reduce excessive noise through the application of standards. (N-G1, N-G2)</p> <p>Related policies: N-P1, Minimize Noise from Stationary and Mobile Sources; N-P4, Protection from Excessive Noise.</p>	The subject parcels are not located in an area that requires special noise attenuation measures to protect adjacent communities. The power sources for the parcel are PG&E and solar power. Cannabis is cultivated outdoors in full sun. Propagation and processing occur off site. Generators will not be required to support the cannabis cultivation. Overall noise levels associated with the cultivation of cannabis shall be kept at 60 decibels or less at the property lines.
Safety Element Chapter 14  Geologic & Seismic	<p>Goals and policies contained in this Chapter relate to communities that are designed and built to minimize the potential for loss of life and property resulting from natural and manmade hazards; and to prevent unnecessary exposure to areas of geologic instability, floodplains, tsunami run-up areas, high risk wildland fire areas, and airport areas planned and conditioned to prevent unnecessary exposure of people and property to risks of damage or injury. (S-G1, S-G2)</p> <p>Related policies: S-P11, Site Suitability; S-P7, Structural Hazards.</p>	The project site is not located in a mapped Alquist-Priolo fault zone nor is it subject to liquefaction. The County's GIS shows the site in an area designated as Low to Moderate Instability (1-2). The cultivation area is mapped by USGS as having slopes of less than 15%. No portion of the project site has been mapped as an area of historic landslides. As a condition of approval, the applicant shall obtain permits or other clearances from the Building Division for the 90,000-gallon water tank, for the proposed pond, and for any sheds or outbuildings used ancillary to the cannabis cultivation that are greater than 120 square feet in size. These features shall be reviewed by the County Building Division for consistency with applicable State and local regulations of building standards, including those addressing slope stability, ground shaking, and geologic risks.
Safety Element Chapter 14  Flooding	<p>Goals and policies contained in this Chapter relate to the use of natural drainage channels and watersheds that are managed to minimize peak flows in order to reduce the severity and frequency of flooding. (S-G3)</p> <p>Related policies include: S-P12, Federal Flood Insurance Program; S-P13, Flood Plains; S-P15, Construction Within Special Flood Hazard Areas.</p>	The County's GIS shows that the cultivation area on the project site is outside any mapped flood hazard areas. The project site is not within a mapped dam or levee inundation area and, at approximately 5.48 miles distance from the coast, the site is outside the areas subject to tsunami run-up.

<p>Safety Element Chapter 14</p> <p>Fire Hazards</p>	<p>Goals and policies of this Chapter encourage development designed to reduce the risk of structural and wildland fires supported by fire protection services that minimize the potential.</p> <p>Related policies: S-P19, Conformance with State Responsibility Areas (SRA) Fire Safe Regulations.</p>	<p>The subject property is located in an area designated as a high fire hazard severity. The property is located within the Petrolia Fire PDAA, but is in the State Responsibility Area where the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. CALFIRE comments recommended compliance with the requirements of the County's Fire Safe Regulations. The Humboldt County Fire Safe Ordinance (Section 3111-1 et seq.) establishes development standards for minimizing wildfire danger in State Responsibility Areas. Compliance with these requirements has been incorporated as a condition of approval.</p> <p>All water storage (domestic and cannabis) will serve as an emergency supply of water in the event of fire on the property or nearby, if needed. Domestic water storage (10,000 gallons) satisfies Humboldt County Code and Cal Fire Requirements for residences (2,500 gallons per residence), three (3) of which are located on the property. There is no specific amount of cannabis water that is officially designated and stored with the sole intent of fire suppression. Notwithstanding the above, all water on the property – cannabis and domestic – shall be available for use in the event of fire. Two standpipes that meet CCR Title 14, Division 1.5, Chapter 7 requirements (CalFire SRA Fire Safe Regulations) and Humboldt County Code section 31114-4 (SRA Fires Safe Regulations) are located on the property: one in the vicinity of domestic operations, near the driveway and appropriate turn-around, and the other at the base of the 90,000-gallon steel water tank at the southeast corner of the property, near the intersection of Miner Lane with Mattole Road. In addition, the landowner keeps several lengths of fire hose on hand and an operational fire truck is also located on the property.</p>
<p>Air Quality Chapter 15</p>	<p>Goals and policies contained in this Chapter relate to improved air quality to meet current and future state and federal standards, including attainment of particulate matter requirements (AQ-G1, AQ-G2, AQ-G3) and the successful reduction of greenhouse gas emissions to</p>	<p>The project is an existing operation, with no proposed construction other than the proposed pond. The proposed project would not result in generation of particulate matter or greenhouse gases inconsistent with state and federal requirements.</p>

	<p>levels consistent with state and federal requirements (AQ-G4).</p> <p>Related policies: AQ-P4, Construction and Grading Dust Control; AQ-P7, Interagency Coordination; AQ-S1, Construction and Grading Dust Control.</p>	
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**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 That Supports the Zoning Finding
§312-1.1.2 Legal Lot Requirement	Development permits shall be issued only for a lot that was created in compliance with all applicable state and local subdivision regulations.	APNs 104-281-005 and 104-311-019 together comprise one separate legal parcel per LLA-04-89 and memorialized by Record of Survey 49 RS 106.  There are no terms or conditions that apply to new development on the parcel and there are no violations of Humboldt county Code on the parcel.
Unclassified (U): §314-8.1	The principal permitted uses in the Unclassified zoning designation are one-family dwelling, general agriculture, rooming and boarding of not more than two people, and manufactured home.	APNs 104-311-019, 104-281-005, and 104-281-004 are in an area zoned Unclassified (U). The proposed cannabis cultivation use is specifically allowed with a Conditional Use Permit in this zoning district and under Section 314-55.4.8.2.2 of the CMMLUO.
Minimum Lot Area:	6,000 square feet	25.5 acres
Minimum Lot Width:	50 feet	~ 2230 feet
Maximum Lot Depth:	Three times the width	~ 868 feet
Minimum Yard Setbacks:	Front: 20 feet Rear: 10 feet Side: 5 feet	Front: >30 feet Rear: >30 feet Side: > 30 feet
Through the SRA Setbacks	SRA: 30 feet all sides	
Minimum Distance Between Major Buildings:	20 feet	> 20 feet.
Maximum Ground Coverage:	< 40%	< 40%.
Max. Building Height:	None specified	< 35 feet tall.
§314-61.1 Streamside Management Area Ordinance (SMAO)	Purpose: to provide minimum standards pertaining to the use and development of land located within Streamside Management Areas (SMAs) and other wet areas (OWA) such as natural ponds, springs, vernal	The proposed cannabis activity occurs primarily on APN 104-311-019. The parcel contains two watercourses, the Mattole River, and an unnamed Class II tributary to the Mattole River. Historic cannabis cultivation was located under tree canopy in the SMA around the Mattole River.

Zoning Section	Summary of Applicable Requirement	Evidence That Supports the Zoning Finding
	pools, marshes, and wet meadows (exhibiting standing water year-long or riparian vegetation) to implement the County's Open Space Element of the General Plan.	<p>Current cultivation activities and associated structures are now located in a field 332 feet from the Mattole River and 165 feet from the drip edge of the riparian zone. On 4/12/2019 Planning staff conducted a site visit. Staff observed cultivation-related materials remaining in the SMA including smart pots, t-stakes, and water conveyance infrastructure. Conditions of approval require the applicant to remove all remaining refuse and cultivation-related materials within the SMA of the Mattole River pursuant to a Special Permit for restoration work within the SMA, which is included in this project.</p> <p>A point of water diversion on a perennial Class III stream on an adjacent parcel, APN 104-281-004 supplies water to the parcel. The point-of-diversion is deeded to APN 104-311-019 and is a pre-1914 water claim. An Initial Statement of Diversion and Use has been filed for the point of diversion and a final Lake and Streambed Alteration Agreement has been issued by CDFW for the point of diversion. A Special Permit authorizing the point of diversion is included in this project. Conditions of approval require the applicant to acquire a Small Irrigation Use registration establishing the right to store water sourced from stream diversion.</p>
§314-109.1.3: Off-Street Parking	<p>Off Street Parking for Agricultural use*: One parking space per employee at peak shift. A minimum of two parking spaces are required.</p> <p><i>*Use for this activity is not specified. Per Section 314-109.1.2.9, the Director may fix the required number of parking spaces based on standards for most comparable use.</i></p>	8 spaces along Miner Lane

3. **Conformance to the Commercial Medical Marijuana Land Use Ordinance:** The following table identifies the evidence which supports finding that the proposed development is in conformance with all applicable policies and standards in 314-55.4, the Commercial Cultivation, Processing, Manufacturing and Distribution of Cannabis for Medical Use Inland Land Use Regulation Ordinance (CMMLUO)

CMMLUO Section	Summary of Applicable Requirement	Evidence That Supports the CMMLUO Finding
<p>§314-55.4.8.2</p> <p>Timber Conversion</p>	<p>Outdoor and Mixed-Light Commercial Cultivation of cannabis for commercial use shall be allowed in zones in which general agriculture is a principally permitted use or conditional use.</p> <p>Cannabis cultivation is allowed in the U zone on parcels 1 acre or larger and where the General Plan designates the area for Agricultural Development.</p> <p>In all zones where cultivation is allowed consisting of timberland, the commercial cultivation of cannabis for commercial use shall only be permitted with a 3-acre conversion, or non-timberland open area.</p>	<p>The subject parcels are designated Residential Agriculture and are zoned Unclassified. APN 104-311-019 consists primarily of a field with prime agricultural soils. A vegetated riparian buffer is present between the field and the Mattole River. No timber conversion has occurred or is proposed in association with this project.</p>
<p>§314-55.4.8.2.2</p> <p>Existing Outdoor and Mixed Light Cultivation Areas</p>	<p>A Zoning Clearance Certificate, Special Permit or Use Permit may be issued for outdoor or mixed-light commercial cannabis cultivation for some or all of the cultivation area in existence prior to January 1, 2016, in [...] TPZ districts (on parcels of one acre or larger) only when possible to bring them into compliance with all applicable standards set forth in this section and to eliminate existing violations as specified in this ordinance. No expansion of the existing cultivation area shall be permitted. The total cultivation area allowed on a single parcel shall not exceed one acre for outdoor cultivation.</p>	<p>Based on review of historic imagery on TerraServer, evidence submitted by a Licensed Land Surveyor, and a site visit conducted by Planning staff, the site was used for cannabis cultivation prior to January 1, 2016. Approximately one acre of cannabis was cultivated, mostly under canopy in the riparian buffer around the Mattole River.</p> <p>The proposed project includes permitting up to 35,560 square feet of existing outdoor, cannabis cultivation on a parcel zoned U. The cultivation area is consistent with the requirements for the cultivation type, status, and zoning of the parcel. The applicant will comply with all conditions of the CMMLUO, as specified in the recommended conditions of approval.</p>

§314-55.4.8.4 Processing Facilities	Processing Facilities for commercial cannabis for commercial use for other than an appurtenant, on-premises cultivation operation as provided in Section 314-55.4.9.1 shall be a permitted use in zoning districts as specified in the CMMLUO and shall meet the Processing Performance Standards and Employee Safety Practices enumerated in Section 314-55.4.11 (a) through (u).	Propagation and nursery activities occur on another parcel owned by the applicant, APN 104-291-005, associated with approved project ZCC 16-134, as modified by PLN-14247-ZCC. The applicant estimates that five employees will assist with processing at this location. Drying and processing also occur at this site or will occur off site with a licensed third-party facility should that prove more feasible.
§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 a license for one other cannabis site and has proposed to retire and relocate three additional sites through the RRR program.
§314-55.4.10 Application Requirements	Identifies the Information Required for All Applications	Attachment 4 identifies the information submitted with the application and collected after. Contents of the application are on file. All outstanding items are included as conditions of approval.
§314-55.4.11 Performance Standards	Identifies the Performance Standards for Cannabis Cultivation Activities.  The area of cannabis cultivation and on-site processing shall be located at least 30 feet from any property line.	All the applicable performance standards are included as conditions of project approval. They are required to be met throughout the timeframe of the permit.



<p>§314-55.4.11.c Performance Standards-Water</p>	<p>Compliance with all statutes, regulations and requirements of the California State Water Resources Control Board, Division of Water Rights, at a minimum to include a statement of diversion of surface water from a stream, river, underground stream, or other watercourse required by Water Code Section 5101, or other applicable permit, license, or registration.</p>	<p>The applicant anticipates one cultivation cycle per year and estimates that the project will require 469,928 gallons annually to support the existing cultivation and 20,000 square feet of cultivation to be relocated to APN 104-311-019 under a separate permit. Water for cannabis cultivation is sourced from rainwater catchment and from a stream diversion with a pre-1914 deeded water claim for diversion from an un-named perennial Class II tributary to the Mattole River on APN 104-281-004. A Statement of Water Diversion and Use (SDU) was registered for the point of diversion (POD) with the SWRCB (SDU-S024676) in 2014, and subsequent yearly reports have been filed thereafter.</p> <p>The applicant proposes a 413,285-gallon agricultural pond to be placed near the cultivation premise on APN 104-311-019. An existing 90,000-gallon steel agricultural tank is also placed near the cultivation area. The total water storage available for the project will be 503,285 gallons. The pond and tank will provide irrigation water during the forbearance period. They will be filled primarily by rain catchment, with additional water from the stream as needed outside of the forbearance period (November 1<sup>st</sup> – March 31<sup>st</sup>). Up to 10% of the stream at the POD (but in no event greater than 5 gallons/minute) may be diverted to fill the storage tanks and ponds. No water will be diverted during the low flow/forbearance period from April 1 – October 31. A Cannabis Small Irrigation Use Registration (SIUR) will be filed with the State Water Resources Control Board Division of Water Rights for the water storage for cannabis irrigation since it will partially be sourced from the stream diversion.</p> <p>A final Lake and Streambed Alteration Agreement (LSA) has been secured with the California Department of Fish and Wildlife (CDFW) for the stream diversion and an associated pond (1600-2017-0404-R1). Conditions of approval require the applicant to obtain a Small Irrigation Use</p>
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		Registration establishing their right to store water sourced from surface water diversion.
§314-55.4.11.d Performance Standards- Setbacks	The area of cannabis cultivation and on-site processing shall be setback at least 30 feet from any property line, and 600 feet from any school, school bus stop, church or other place of religious worship, public park, or tribal cultural resources (TCRs).	The site plan shows that all cultivation facilities are located at least 30 feet from any property line. The site plan also shows that the cultivation area is not within 600 feet of a school bus stop, school, public park, place of worship, or Tribal cultural resource.
§314-55.4.11.o Performance Standards- Generator Noise	The noise produced by a generator used for cannabis cultivation shall not be audible by humans from neighboring residences. The combined decibel level for all noise sources, including generators, at the property line shall be no more than 60 decibels. Where applicable, sound levels must also show that they will not result in the harassment of Marbled Murrelet or Spotted Owl species, when generator use is to occur in the vicinity of potential habitat. Conformance will be evaluated using current auditory disturbance guidance prepared by the United State Fish and Wildlife Service.	The subject parcels are not located in an area that requires special noise attenuation measures to protect adjacent communities. The power sources for the parcel are PG&E and solar power. Cannabis is cultivated outdoors in full sun. Propagation and processing occur off site. Generators will not be required to support the cannabis cultivation. Overall noise levels associated with the cultivation of cannabis shall be kept at 60 decibels or less at the property lines.
§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 application was submitted on December 26, 2016.

**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 or materially injurious to properties or improvements in the vicinity and will not adversely impact the environment.

Code Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
§312-17.1.4 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.	The Department finds that the proposed project will not be detrimental to the public health, safety and welfare. The project as proposed and conditioned is consistent with the general plan and zoning ordinances. All performance standards are required to be complied with throughout the timeframe of the permit and are included as conditions of approval.

**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.

<b>Code Section</b>	<b>Summary of Applicable Requirement</b>	<b>Evidence that Supports the Required Finding</b>
312-17.1.5 Housing Element Densities	The proposed development shall 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 project would not change the housing development potential of the site (two farm dwelling units) or surrounding properties.

**6. Environmental Impact:** The following section identifies the evidence which supports finding that the proposed development will not adversely impact the environment.

As lead agency, the Department prepared an Addendum to the previously adopted Mitigated Negative Declaration (MND) (State Clearinghouse # 2015102005) prepared for the Commercial Medical Marijuana Land Use Ordinance (CMMLUO) and adopted by the County Board of Supervisors January 26, 2016. The MND prepared for the CMMLUO established that the environmental effects of existing cultivation operations would be reduced from the baseline impacts through the regulations applied by the CMMLUO. The proposed project is consistent with all regulations within the CMMLUO and all mitigation measures of the MND. The project is for the approval of an existing cultivation site, for ancillary structures, and for two points of diversion. The environmental document on file include detailed discussions of all the relevant environmental issues.

**ATTACHMENT 3**

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

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

***APNs 104-311-019, 104-281-005, and 104-281-004, County of Humboldt***

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

**June 2019**

## **Background**

### **Modified Project Description and Project History**

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

The modified project involves a Conditional Use Permit for the continued operation of an existing cannabis cultivation site consisting of 35,560 square feet of existing outdoor cannabis cultivation. Water is sourced from rain catchment and from a point of diversion on APN 104-281-004. Water will be stored in an existing engineered water tank and in a proposed pond with a combined capacity of 503, 285 gallons. The Applicant estimates that the annual water usage is 469,928 gallons. Nursery and processing activities will occur on APN 104-321-001. A maximum of six employees will work at the site from May-October. Power is provided by PG&E and by solar. A Special Permit for encroachment into the Streamside Management Area for a point of diversion and a Special Permit to perform restoration activities within a Streamside Management Area are included in this project. Implementation of all aspects of the Conditional Use Permit and Special Permits will result in an improved environmental baseline.

The project site has sensitive riparian habitat, and the project includes relocation of cultivation from areas within riparian buffer zones to result in increased setbacks from riparian areas. Areas where relocation is occurring will be restored. The site has been analyzed for cultural resources and determined to not have sensitive cultural or archaeological resources that could be impacted from on-going cultivation.

The modified project is consistent with the adopted MND for the CMMLUO because it complies with all standards of the CMMLUO which were intended to mitigate for impacts of existing cultivation. These include relocation from sensitive riparian areas and implementation of habitat restoration, increased water storage to allow for complete forbearance from water diversion during the dry season, and proper storage of fertilizers and soil amendments.

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

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

#### **Summary of Significant Project Effects and Mitigation Recommended**

No changes are proposed for the original MND recommended mitigations. The proposal to authorize the continued operation of an existing cannabis cultivation site consisting of 35,560 square feet of existing outdoor cannabis cultivation and ancillary storage facilities, and the request to authorize encroachment into Streamside Management Areas for a point of diversion and to perform restoration work is fully consistent with the impacts identified and adequately mitigated in the original MND. The project as conditioned to implement responsible agency recommendations, results in no significantly adverse environmental effects beyond those identified in the MND. Compliance with the CMMLUO ensures consistency with the adopted MND and provides for mitigation of all project related impacts to a less than significant level.

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

- A Cultural Resources Study by James Roscoe, M.A, in June 2017.
- A Water Resources Protection Plan for Empress Farms submitted under the North Coast Regional Water Quality Control Board Order No. 2015-0023.
- Plan of Operations submitted for the Empress Farms Application.
- Site visit conducted by County staff on April 12, 2019.
- A final Lake and Streambed Alteration Agreement (LSA) secured with the California Department of Fish and Wildlife (CDFW) for the stream diversion and an associated pond (1600-2017-0404-R1).

#### **Other CEQA Considerations**



Staff suggests no changes for the revised project.

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

See **Purpose** statement above.

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

#### **FINDINGS**

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

#### **CONCLUSION**

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

## **ATTACHMENT 4**

### **Applicant's Evidence in Support of the Required Findings**

Attachment 4 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. An amended 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. (Attached)
5. An Addendum to the Cultivation and Operations Plan titled Cultivation Area Configuration. (Attached)
6. A map prepared by a licensed land surveyor detailing areas where he observed evidence of historic cultivation, resulting in a high-confidence verification of the cultivation area under consideration in this permit. (Attached).
7. An Addendum to the Cultivation and Operations Plan titled On-Site Relocation & Consolidation of the Pre-Existing Cultivation Area. (Attached)
8. Structural Calculations for the existing water tank prepared by a Registered Professional Engineer. (Attached)
9. Irrigation Pond Grading Plan. (Attached)
10. 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. (Attached)

11. Description of water source, storage, irrigation plan, and projected water usage. (On file, Cultivation and Operations Plan, see Attachment 3)
12. 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. (On file)
13. 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. (Attached)
14. Water Resource Protection Plan received May 8, 2019. (Attached)
15. If the source of water is a well, a copy of the County well permit, if available. (Not applicable)
16. 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. (Not applicable)
17. Consent for on-site inspection of the parcel by County officials at prearranged date and time in consultation with the applicant prior to issuance of any clearance or permit, and once annually thereafter. (On file)
18. 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)
19. 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)
20. 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)

21. Road Evaluation Report received May 31, 2018 (Attached).

**AMENDMENT TO CULTIVATION & OPERATIONS PLAN  
FOR  
HUMBOLDT COUNTY PARCEL 104-311-019  
EMPRESS FARMS**



## Introduction

This Amendment to the Empress Farms Cultivation and Operations Plan for APN 104-311-019 includes updates and changes that were made in May 2019. Changes/updates were required as a result of the following:

- A determination in pre-existing cultivation area of 35,560 ft<sup>2</sup> was made in April 2019 by Humboldt County Planning & Building Department (PBD). This was a reduction from the 38,440 ft<sup>2</sup> which was applied for in the original application from December 2016.
- A direct, specified request by the PBD. This request was received via email on 05/08/19 from Liza Welsh, a Cannabis Planner.

The sections following this Introduction are organized so as to reflect the specific questions and/or items from the email mentioned above. The remainder of the text in this Introduction amends section 1. *Background* from the document *Cultivation & Operations Plan\_WFR\_updated 07-03-18*.

All cultivation will be outdoor, without the use of hoop houses or tarps, in native soil. A total of 55,560 ft<sup>2</sup> of cultivation will occur at this site, and is broken down as follows:

- Apps# 12694: 35,560 ft<sup>2</sup>  
Pre-existing cultivation from 2014 that was located within the SMA/riparian buffer zone and residential zone on the property and was moved in 2017 to the current location.
- Apps# 12699: 20,000 ft<sup>2</sup>  
Relocated RRR cultivation area plus incentive multiplier up to 20,000 ft<sup>2</sup> (13,924 ft<sup>2</sup> pre-existing + 6,076 ft<sup>2</sup>). Anticipated move of RRR area in summer 2018.

The cultivation area will be configured into three (3) distinct "premises", as defined by CDFA regulations. One premise will be a Medium Outdoor of 35,560 ft<sup>2</sup>, and the other two that make up the RRR relocated area will each be Small Outdoor of 10,000 ft<sup>2</sup>.

Each premise is configured into eight (8) foot beds separated by six (6) foot wide aisle. The 35,560 ft<sup>2</sup> premise has fifteen (15) beds, each 296.33 feet long. Each 10,000 ft<sup>2</sup> premise has four (4) beds, each 312.5 feet long.

## Response to Questions

### 1. Access

Access to the cultivation site is via Miner Lane, which is approximately 0.16 miles in length. The Applicant will pave the entrance to Miner Lane for a width of 20 feet and length of 50 feet, in accordance with Humboldt County Code (HCC) within two years of permit approval. The road will be maintained in accordance with Ordinances 2554 and 2599 (Category 4 road standard or equivalent), Humboldt County Code, and State Water Resources Control Board Order (SWRCB) No. WQ-2019-0001-DWQ.

The intersection of Miner Lane with Mattole Road currently meets the site visibility standards set forth in HCC 341-1. No construction or new buildings are proposed within the visibility triangle. The existing fence is of a nature and type that does not obstruct vision, and all brush and vegetation is kept mowed at this intersection.

### 2. Structures related to cannabis cultivation

Below is a list of structures related to cannabis cultivation and their uses.

- Agricultural Shed – pesticide, fertilizer, amendment, and other agricultural chemical storage; cultivation-related materials storage; trash and recycling container storage; records storage; CDFA administrative-hold area/s
- Water Tank – 90,000 gallons; cannabis irrigation water storage
- Pond – 413,285 gallons; cannabis irrigation water storage
- Locked Trailer – for temporary storage (i.e. when actively being used) of pesticides, fertilizers, and other agricultural chemicals and trash & recycling
- Compost area – cannabis vegetation waste area
- Portable restroom – for employee/contractor use

The following structures are for domestic use only:

- Residences (2 on 104-311-019 and 1 on 104-281-005)
- House
- Barn
- Shop/Barn

- Chicken coops (2)
- Sheds (2)
- Greenhouse
- Shade house
- Fuel storage shed
- Shipping containers (7)

### 3. Water Meters

Water meters have not yet been installed. These are required after the Point of Diversion from the un-named tributary to the Mattole River and after any water storage infrastructure used for cannabis irrigation (currently the 90,000-gallon water tank). Expected installation date is May 2019.

### 4. Water source, storage, irrigation plan, and projected water usage

This section amends Section 2.b and 2.d and adds Section e of *Cultivation & Operations Plan\_WFR\_updated 07-03-18*.

#### b. Water storage

In total, 503,285 gallons of water storage is proposed. Projected use for pre-existing cultivation is 300,520 gallons and projected use for relocated RRR is 169,408 gallons, for a total of 469,928 gallons (see *d* below). Thus, there is more-than-enough proposed water storage to accommodate existing cultivation areas and relocated RRR cultivation areas.

#### d. Projected water usage - cannabis

In all, 300,520 gallons of water will be used for pre-existing cultivation (35,560 ft<sup>2</sup>) and 169,408 gallons for relocated RRR (20,000 ft<sup>2</sup>) for a total combined use of 469,928 gallons. A maximum of 125.1 gallons per plant are anticipated with a total of approximately 2,223 plants for pre-existing cultivation and 125.1 gallons per plant for 1,250 plants from anticipated RRR relocation. Water usage is primarily based on drip irrigation rates show in the following table:

**Table 1. Drip Irrigation Rates for Empress Farms**

DATES	WATER AMOUNT (GAL/PLANT/WEEK)	TOTAL (PER PLANT)
Jun 1 - 14	2.5	5
Jun 15 - 30	4	8.6
Jul 1 - 14	6	12
Jul 15 - Sep 30	8	82.5
Oct 1 - 30	4	17



Additionally, approximately 300 gallons per week for 25 weeks (May 1 – mid-October) will be used for a small amount of overhand watering and compost teas. Compost teas are sprayed onto the soil pre-planting to inoculate the native soil, and then post-planting onto plants directly to maintain plant vigor and promote natural defense to pests.

Table 2 shows water use in gallons by month and a yearly total. This is broken down by the use from the existing cultivation area (35,560 ft<sup>2</sup>; 2,223 plants) and use by the additional RRR relocated area (20,000 ft<sup>2</sup>; 1,250 plants). The addition of the RRR area will increase the water use at the cultivation site by approximately 56 %.

The water storage amounts proposed herein accommodate this measure of water usage for the size of the gardens, as shown on associated site plans. If garden size/s increase in the future or the number of plants increase, the water storage amount will increase accordingly and proportionately, unless other farming practices (i.e. dry farming) or cultivation of specific drought-tolerant strains are pursued.

With a project planting date of early to mid-June, water usage will be minimal to none prior to this date, depending on the timing of spring rains as it pertains to soil conditioning. Water use shall increase in late June through July with the planting and irrigation of full season plants. Water use will remain relatively steady in July through August and will decrease in September with the onset of harvest, as well as reduced evapo-transpiration due to reduced daylight hours. All exposed soils in garden beds shall be mulched or cover-cropped so as a means to reduce evaporative loss and conserve water.

e. Water use – other

i. Domestic

Four (4) 2,500-gallon plastic tanks are used for domestic water storage. These tanks are located on a neighboring parcel near the diversion. These tanks shall maintain separate infrastructure from water used for cannabis cultivation.

ii. Pond evaporation

A total of 33,357 gallons is allotted for evaporative loss from the pond. The Applicant may pursue additional water storage infrastructure (e.g. more tanks) if evaporative loss is more than this amount.

iii. Fire suppression

All water storage (domestic and cannabis) will serve as an emergency supply of water in the event of fire on the property or nearby, if needed. Domestic water storage (10,000 gal) satisfies HCC and Cal FIRE requirements for residences (2,500 gallons per residence), three (3) of which are located on the property. There is no specific amount of cannabis water that is officially designated and stored with the sole intent of fire suppression. Notwithstanding the above, *all* water on the property – cannabis and domestic – shall be available for use in the event of fire. Two standpipes that meet CCR Title 14, Division 1.5, Chapter 7 requirements (Cal FIRE SRA Fire Safe Regulations) and Humboldt County Code § 3114-4

(SRA Fire Safe Regulations) are located on the property: one in the vicinity of domestic operations, near the driveway and appropriate turn-around, and the other at the base of the 90,000-gallon steel water tank at the southeast corner of the property, near the intersection of Miner Lane with Mattole Road. In addition, the landowner keeps several lengths of fire hose on hand. An operational fire truck is also located on the property.

Table 2. Water Use in Gallons (gal) by Month at 104-311-019, Displayed by Type of Cultivation Area & Other Uses

Month	Irrigation 35,560 sqft Pre-existing (gal)	Pre-existing Compost Teas & Overhand Watering (0.0052 gal/sqft/wk)	Total 35,560 sqft Pre-existing (gal)	Irrigation RRR Relocation 20,000 sqft (gal)	RRR Compost Teas & Overhand Watering (0.0052 gal/sqft/wk)	Total 20,000 sqft RRR (gal)	Total by Month
January	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0
May	0	819	819	0	461	461	1,279
June	31,440	793	32,232	17,679	446	18,124	50,356
July	69,866	819	70,685	39,286	461	39,746	110,431
August	78,758	819	79,577	44,286	461	44,746	124,323
September	76,217	792	77,010	42,857	446	43,303	120,312
October	39,379	819	40,198	22,143	886	23,029	63,226
November	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0
<b>TOTAL BY YEAR</b>	<b>295,660</b>	<b>4,861</b>	<b>300,520</b>	<b>166,251</b>	<b>3,160</b>	<b>169,408</b>	<b>469,928</b>

### *5. Employees*

An estimated 2 – 6 employees and/or contracted farm laborers will work at the site from May – October, depending on planting and harvest times (peak times). For the 2019 season, the Applicant will use contracted farm labor.

### *6. Parking*

Parking is at the end of Miner Lane, near the gate to the cultivation site. Parking is along the Lane in a parallel fashion. Two parking spaces have been designated on the Site Plan (updated 05-09-19), but more are available if needed along this same line, between Miner Lane and the fenced cultivation area.

### *7. Cannabis Small Irrigation Use Registration*

The Applicant is currently enrolled in the North Coast Region Water Quality Control Board's Order No. R1-2015-0023. All cannabis cultivators are required to enroll in the SWRCB Order WQ 2019-0001-DWQ by July 1, 2019. The Applicant is intending to complete this enrollment in May 2019, at which time they will also apply for a Cannabis Small Irrigation Use Registration with Department of Water Resources. This is required to use stored water if it was sourced from a stream diversion. Since a portion of the water in the water tank and in the pond may be sourced from the stream diversion, each year a Cannabis SIUR is required by SWRCB.



## CULTIVATION & OPERATIONS PLAN

### EMPRESS FARMS

#### 1. *Background*

This Cultivation and Operations Plan is intended for APN 104-311-019. All cultivation will be outdoor, without the use of hoop houses or tarps, in native soil. A total of 58,440 ft<sup>2</sup> of cultivation will occur at this site, and is broken down as follows:

Apps# 12694: 38,440 ft<sup>2</sup>

Pre-existing cultivation from 2014 that was located within the SMA/riparian buffer zone and residential zone on the property and was moved in 2017 to the current location.

Apps# 12699: 20,000 ft<sup>2</sup>

Relocated RRR cultivation area plus incentive multiplier up to 20,000 ft<sup>2</sup> (13,924 ft<sup>2</sup> pre-existing + 6,076 ft<sup>2</sup>). Anticipated move of RRR area in summer 2018. - NO

The cultivation area will be configured into three (3) distinct "premises", as defined by CDFA CalCannabis regulations. One premise will be a Medium Outdoor of 38,440 ft<sup>2</sup>, and the other two that make up the RRR relocated area will each be Small Outdoor of 10,000 ft<sup>2</sup>.

Each premise is configured into eight (8) foot beds separated by six (6) foot wide aisle. The 38,440 ft<sup>2</sup> premise has sixteen (16) beds, each 300.3125 feet long. Each 10,00 ft<sup>2</sup> premise has four (4) beds, each 300 feet long.

#### 2. *Water source, storage, irrigation plan, and projected water usage*

##### a. Water source

Water for APN 104-311-019 will be sourced from rainwater catchment and a stream diversion with a pre-1914 water right claim from an un-named tributary to the Mattole River. A Final Lake and Streambed Alteration Agreement (LSAA) has been secured with the California Department of Fish & Wildlife for the stream diversion and associated pond.

##### b. Water storage

In total, 503,285 gallons of water storage is proposed. Projected use is 475,424 gallons (see *d* below). Thus, there is more-than-enough proposed water storage to accommodate existing cultivation areas and relocated RRR cultivation areas.

Rainwater catchment will occur into one agricultural pond (proposed) with a capacity of 413,285 gallons and a 90,000-gallon steel agricultural tank. Water sourced from the stream diversion will be used to fill remainder of the pond and fill additional water

storage tanks as may be added. Please see application materials for the engineered pond design. The pond will be constructed upon approval by the county during dry conditions, in accordance with SWRCB Order No. WQ 2017-0023 DWQ. The steel agricultural water storage tank will be constructed in July 2018.<sup>1</sup> The pond has been engineered to allow for overflow into a bioswale, and will also be constructed or finished so as to allow escapement by wildlife.

Irrigation water will be collected via passive collection methods during rain events. Water will also be collected from the stream diversion during the non-forbearance period of November 1 – March 31, or as adjusted by updated local and state regulations. Up to 10% (but in no event greater than 5 gallons/minute) of stream diversion may be diverted to fill the storage tank(s) and ponds.

The Mattole basin receives 80 – 100 inches of rainfall each year, on average.<sup>2</sup> The footprint of the proposed pond is 7,000 ft<sup>2</sup>. This translates to 348,880 – 436,100 gal of harvested rainwater. If 94.77 inches of precipitation is received, then the tank will be full. If less than this amount is received, then the pond will be filled with water from the stream diversion during permitted times of diversion, as determined by guidelines set forth by the SWCQB Order No. WQ 2017-0023-DWQ. The footprint of the steel water storage tank is 962 ft<sup>2</sup> (circular). This translates to 47,969 – 59,961 gal of harvested rainwater. The remainder will be filled via the stream diversion during permitted times of diversion, as determined by guidelines set forth by the SWCQB Order No. WQ 2017-0023-DWQ.

c. Irrigation plan

All irrigation water will be subject to the California State Water Resources Control Board, Department of Water Rights Small Irrigation Use Cannabis program guidelines and restrictions. Empress Farms shall apply under this program upon approval of application/s by Humboldt County Planning Department for local permit/s. Water meters will be installed at all exit points from storage facilities, to account for and report actual water used, which will be recorded weekly and reported in accordance to local and state guidelines. The water level in all storage facilities will be monitored once per week during the forbearance period and at least 2 times per month during other times; it shall be recorded at least once per month. Safety valves (volume or time oriented) shall exist at pond and tanks so that in the event of a leak, only a limited amount of water can be lost.

During the forbearance period, leaks will be monitored for at least once per week in all lines and fittings or more frequently after wind events. During other times of the year,

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<sup>1</sup> Detailed engineered design plans consist of a large book. If these are needed to continue processing, please request so that they can be delivered by hand.

<sup>2</sup> Source: [https://www.wrh.noaa.gov/eka/climate/annual\\_rain.gif](https://www.wrh.noaa.gov/eka/climate/annual_rain.gif)

leaks will be checked for through regular visual inspection of storage facilities and irrigation lines conducted at least 2 times per month, or after large storm events.

Crop irrigation will occur via a timed drip irrigation system. Full season plants received 2.5 - 8 gal per plant per week, depending on plant maturity and weather conditions. These amounts may be adjusted based on weather, site-specific microclimates, plant maturity and strain, and soil composition. Irrigation shall be applied at agricultural rates so that runoff does not occur.

A limited amount of hand-watering will be done at time of transplant and during any top-dress fertilization or amendment (which will be applied only if plant exhibit nutrient stress).

d. Projected water usage

In total, 475,424 gallons of water will be used. A maximum of 125.1 gallons per plant are anticipated with a maximum total of approximately 2,400 plants for existing cultivation and 125.1 gallons per plant for 1,200 plants from anticipated RRR relocation. Additionally, 200 gallons per week for 25 weeks (May 1 – mid-October) for compost teas, which are then sprayed onto the soil pre-planting, and then also onto plants post-planting.

Water usage is primarily based on drip irrigation rates show in the following table:

**Table 1. Drip Irrigation Rates for Empress Farms**

DATES	WATER AMOUNT (GAL/PLANT/WEEK)	TOTAL (PER PLANT)
Jun 1 – 14	2.5	5
Jun 15 - 30	4	8.6
Jul 1 - 14	6	12
Jul 15 – Sep 30	8	82.5
Oct 1 - 30	4	17



In addition to water use from irrigation, there is also water use from compost tea applications and some overhand watering. These two combined average 200 gallons/week beginning in May (to inoculate the native soil) and continuing throughout the growing season. Table 2 shows water use in gallons by month and a yearly total. This is broken down by the use from the existing cultivation area (38,440 ft<sup>2</sup>; 2,400 plants) and use by the additional RRR relocated area (20,000 ft<sup>2</sup>; 1,200 plants). The addition of the RRR area will increase the water use at the cultivation site by approximately 50%.

**Table 2. Water Use in Gallons by Month at 104-311-019, Displayed by Type of Cultivation Area & Other Uses**

<b>Month</b>	<b>Pre-existing 38,440 sqft</b>	<b>RRR Relocation 20,000 sqft</b>	<b>Compost Teas &amp; Overhand Watering</b>	<b>Total by Month</b>
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	886	886
June	32,640	16,320	857	49,817
July	72,687	36,344	886	109,917
August	85,029	42,515	886	128,430
September	82,287	41,144	857	124,288
October	40,800	20,400	886	62,086
November	0	0	0	0
December	0	0	0	0
<b>TOTAL BY YEAR</b>	<b>313,443</b>	<b>156,723</b>	<b>5,258</b>	<b>475,424</b>

The water storage amounts proposed herein accommodate this measure of water usage for the size of the gardens, as shown on associated site plans. If garden size/s increase in the future or the number of plants increase, the water storage amount will increase accordingly and proportionately, unless other farming practices (i.e. dry farming) or cultivation of specific drought-tolerant strains are pursued.

With a project planting date of early to mid-June, water usage will be minimal to none prior to this date, depending on the timing of spring rains as it pertains to soil conditioning. Water use shall increase in late June through July with the planting and irrigation of full season plants. Water use will remain relatively steady in July through August and will decrease in September with the onset of harvest, as well as reduced evapo-transpiration due to reduced daylight hours. All exposed soils in garden beds shall be mulched or cover-cropped so as a means to reduce evaporative loss and conserve water.

### *3. Site drainage, runoff, and erosion control measures*

#### *a. Site drainage & runoff*

An existing Class II stream channel facilitates overall parcel drainage during the wet season. As the slope of the garden site is 6.1% or less in (many) places, surface water is naturally absorbed and recharged back into the existing landscape without channelization. In future years, bioswales may be installed at key locations to further facilitate this water recharge mechanism. The cultivation site is located at least 150 feet from the river bank margin of the Mattole River, with a vegetated riparian buffer of approximately 90 feet (the Streamside Management Area).

Runoff will be minimized during the growing season by applying irrigation at agronomic rates via timed drip irrigation (i.e. there will be no runoff from irrigation). Any detected leaks in the irrigation system/s shall be fixed immediately so as to reduce runoff from such incidents.

Pond overflow shall be consistent with engineering professional standards and relevant local and state guidelines. The pond shall be constructed so that overflow either recharges the natural landscape, bioswales, and/or redirected back into a watercourse. The pond will be engineered and constructed by an appropriate licensed geologist and contractor in accordance with Humboldt County Planning & Building codes and regulations. Please see accompanying engineered designs.

All runoff from soil and garden wastes shall be minimized by storing such wastes on low-gradient slopes in distinct compost bins and/or areas. Straw and/or mycoremediated straw baffles shall surround compost bins, areas, and piles, as may be deemed necessary. Drainage and potential runoff associated with fertilizer, amendment, and fuel storage shall be minimized through proper covered, off-the ground storage and secondary containment systems, if applicable.

b. Erosion control measures

Topsoil preservation measures include planting cover crop (clover and other species) during the fallow season, followed by minimal tilling on calm days during planting, and mulching or utilizing weed mats where appropriate.

For minimizing erosion relating to roads and driveways, road conditions shall be inspected on a weekly basis during the year, and after major storm events during the wet season. All culvert road improvements in the future shall utilize angular rock, outsloping, rolling dips, and water bars, as appropriate.

Any site grading or ground disturbance that may take place (e.g. during pond construction) will be mulched with native grass straw/hay, which shall not only reduce erosion, but also provide a mechanism for reseeding during the following wet season. Also during the wet period, disturbed areas may additionally be planted with native bunch grass species acquired from a local watershed restoration group.

4. *Plant management plan*

Plants will be obtained from an off-site non-commercial (i.e. "in-house") nursery facility owned by Empress Farms on a nearby property leased by Empress Farms. This property is under ZCC 16-134. An application for modification to include the greenhouse and indoor propagation facility (as well as processing facility) is currently being submitted to Humboldt County Planning & Building Department. Plants will either be sourced from seed or clones. Propagation will occur in an indoor setting in a building constructed circa 1998. Plants will then be grown in a greenhouse (nursery) under natural light. Immature plants will remain at the nursery facility until they are ready to be planted in the cultivation/canopy area on 104-311-019. All plants will be tagged with pertinent county and state Track and Trace tags when placed into the canopy area.

In spring of 2018 only, plants were held in temporary hoop houses adjacent to the cultivation area. These were deconstructed by June 30, as plants were moved into the cultivation area. This was a stop-gap measure since the greenhouse nursery facility on the nearby property was not constructed. In future years (beginning with the 2019 growing season), it is not anticipated these temporary structures will need to be constructed, and therefor are not identified on site maps of the premises, nor are they included as a standard part of the operations plan.

5. *Soil management plan*

Existing site soil is classified as prime agricultural soils. The cultivation area and all other disturbed areas are seeded with cover crop in the fall of each year. Each spring, some amending of the native soil with composted manures and other agricultural minerals will take place, dependent on the results of yearly soil tests.

There will be a minor input of other soils to the cultivation site for a few years (approximately 3) when immature plants are planted. Immature plants will be grown in 1 gallon bags or pots at the off-site nursery in potting soil from retired & remediated cultivation areas previously used by Empress Farms. This amounts to 5,000 gallons (approximately 25 yds<sup>3</sup>) annual input of other soils to the cultivation area. Following the complete use of these reused soils, soil for immature plants will likely be sourced from the cultivation area itself. No soil will be taken off-site.

6. *Measures taken to ensure protection of watershed and nearby habitat*

The following measures and methods are practiced:

- Water withdrawal forbearance
- Permitted water diversions according to CDFW and CA SWRCB appropriate diversion rates
- Drip irrigation & irrigating at agronomic rates
- Mulching of exposed soils
- Organic farming practices
- Only OMRI-certified plant-based and bio-based pesticides and fungicides
- Absolutely no use of rodenticide or other poisons
- Composting of vegetative wastes
- Soil recycling w/in garden site, so as not creating additional spoils
- Maintenance of vegetative buffers
- Wildlife exclusionary fencing & caging
- Regular invasive species removal
- Neighborhood communication to ensure appropriate management practices are taking place on neighboring parcels
- Solar energy use when possible
- Generator use only when utility power unavailable
- Research into waterless toilet systems & gray water recycling (water conservation)
- Regular inspection of all facilities and infrastructure throughout the year

7. *Protocols for storage and use of fertilizers, pesticides, and other regulated products*

a. Fertilizers & pesticides

Empress Farms exclusively uses organic farming practices, and as such, no synthetic fertilizers or pesticides are used. To enhance soil health and fertility, all full-season garden plots are cover-cropped the previous winter. To supplement natural soil health compost, seabird guano, bat guano, trace minerals (Azomite), cal-phos, kelp & seaweed, worm castings, crushed oyster shell, crab shell meal, and bio-char are used. Compost teas and beneficial bacteria solutions are used during the growing season to maintain and enhance plant vitality and vigor.

Integrated pest management strategies that include chemical, biological, and cultural controls are used so that only affected areas are treated when there is an economic benefit. Pests and diseases are controlled with OMRI-certified products that utilize plant essential oils and/or beneficial bacteria. All products are applied according to label instructions.

All amendments and nutrients will be stored in a mobile, locked, enclosed trailer during the growing season, and moved to an approved off-site storage facility (also leased by Empress Farms) at a nearby location. Containers and storage will have secondary containment vessels or systems.

b. Safety

Employees shall be trained in proper amendment, fertilizer, and fuel handling and use practices, as well as spill prevention, countermeasures, and cleanup protocols should emergency arise. Spill kits will be available at the storage trailer mentioned above. Safety gear, such as masks, goggles, and gloves will be also be provided and are stored in a separate compartment in the trailer.

c. Generators

No generators are proposed for use at this location.

d. Other

Only gentle, castile-based soaps (e.g. Dr. Bronner's) will be used for general cleaning purposes. It will be available for use at hand washing stations and in designated materials storage areas.

8. *Cultivation activities*

Cultivation of cannabis will occur in full-sun outdoor garden plots or beds. Please see the calendar of activities below for more details regarding timing.

9. *Processing plan*

a. Summary of Processing Practices

A clean and sanitary environment shall be maintained at all times during harvest. Upon harvest, plant material will be moved to a nearby facility, also leased by Empress Farms for drying and further processing. This facility is part of a proposed modification to ZCC 16-134 (submitted July 2018) and will be constructed as soon as the modification is approved by Humboldt County.<sup>3</sup>

Product may be prepared according to customer specifications for fresh-plant material. Other product will be dried for approximately 5-10 days, depending on environmental

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<sup>3</sup> Please see documents associated with ZCC 16-134 (Apps# 11418) for site and building plans.

conditions. Product will be dried utilizing ambient environmental conditions, humidifiers, wood or propane, or electric heat, or a combination thereof. After this time, material will appropriately stored and/or trimmed with 1-2 mechanized trimming machines, or processed in accordance with customer specifications for whole-plant material. After finishing, the product will be packaged to preserve freshness and stored at the facility. At all times during drying, trimming or other processing, and storage, temperature and humidity will be controlled so as to maintain product freshness and prevent against mold and mildew formation. Isopropyl alcohol will be used to clean processing equipment and tools. Gentle castile soaps will be used for hand washing and general cleaning of surfaces. These items will be stored in approved locations at the nearby facility.

b. Location where processing will occur

Processing will occur at a nearby facility, leased by Empress Farms and to be constructed in 2018, under a modification to ZCC 16-134 (Apps# 11418).

c. Estimated number of employees

All processing shall be done by Empress Farms employees hired in accordance with state & Federal Labor laws or by contracted labor through a Farm Labor Contractor. Employees will work a standard 40-hour work week. A crew of 2 persons will be associated with each trim machine; a maximum of 5 employees will be involved in processing.

d. Summary of Employee Safety Practices

Employees will be trained in the use and handling of all hazardous materials (e.g. solvents, scissors, trimming machines). Employees will also be briefed and given a copy of Empress Farms' emergency plan in case of medical emergencies or natural disasters. If preferred, employees will wear gloves and/or facemasks, and/or aprons. Employees must wash hands upon entering the processing facility, and after using the toilet, eating, or smoking.

e. Toilet & hand washing facilities

A portable toilet/s will be available for employee use. Empress farms will utilize the services of a licensed company that services such facilities. The toilet will be positioned to limit smell and visual pollution from Mattole Road and nearby residences. Hand washing facilities will be available adjacent to the toilet site.

f. Plumbing and/or septic system

A gray-water system will be used for hand washing effluent. It is estimated that an extra 10 gpd will be generated during the harvest. The current system can accommodate this amount.

g. Source of drinking water

Drinking water is filtered water sourced from temporary (<30 days) storage of water collected from the stream diversion identified previously. Hand washing water is also sourced from this same diversion.

h. Road usage

The access road to the cultivation site is via Miner Lane. Traffic along this road will moderately increase during harvest as material is transported to the nearby processing location.

i. On-site housing

No on-site housing is provided for employees.

10. *Mixed light cultivation*

Applicant is not applying for nor intending to use mixed light cultivation.

11. *Schedule of activities*

January

Invasive species removal  
Garden site maintenance

February

Invasive species removal  
Seed germination

March

Seedling growth

April

Transplant seedlings to pots  
Vegetative growth of all plants  
Clone from some seedlings

May

Vegetative growth  
Garden site prep – amending, weeding  
Cut & till cover crop  
Compost tea application to field

June

Continue planting & transplanting plants  
Plant health and maintenance activities, including IPM



Empress Farms  
APN: 104-311-019  
Cultivation & Operations Plan  
Updated 07-03-18

July

- Continue planting full-season plants
- Full-season plants vegetative growth
- Plant health and maintenance activities, including IPM

August

- Vegetative growth
- Plant health and maintenance activities, including IPM

September

- Plant health and maintenance activities, including IPM
- Full-season plants initial harvest
- Drying & processing

October

- Harvest
- Drying & processing

November

- Drying & processing
- Garden site cleanup & winterization
- Create compost piles

December

- Garden site cleanup & maintenance
- Maintain compost

*12. Security Plan*

The garden site is fenced with access via a locked gate/s. Only employees of Empress Farms and designated county and state officials accompanied by Empress Farms employees shall be allowed to enter the garden sites, or any other facilities leased by Empress Farms. All Empress Farms employees shall be at least 21 years of age.

The cultivation premises and any associated facilities shall be locked when not staffed. To ensure that no issues may arise from public and private events held at nearby facilities (Mattole Grange, A.W.Way County Park), the cultivation premises will always be staffed and patrolled when plants are in the ground (i.e. the growing season). The gates leading to the premises will also be locked during these times. To provide additional natural screening of the premises, the landowner has planted a windrow of hazelnut trees along Miner Lane and may also plant a windrow of nut or fruit trees along the property fence adjacent to Mattole Road.

Empress Farms  
APN: 104-311-019  
Cultivation & Operations Plan  
Updated 07-03-18

To ensure against diversion to illegal marketplaces, Empress Farms will be a participant in a "Track & Trace Program" under guidelines and regulations set forth by Humboldt County and the State of California. Empress Farms will also delineate specified areas at each site for materials holding and/or destruction, as may be deemed necessary according to state regulations. Empress Farms shall also comply with any safety and security regulations that may be specified by the county or state. All appropriate and pertinent paperwork, permits, and licenses shall be on-hand at each garden site, pursuant to Humboldt County and state regulations.

### *13. Road system*

Empress Farms will pave the entrance to Miner Lane for a width of 20 feet and length of 50 feet. The road will be maintained in accordance with Ordinances 2554 and 2599 (Category 4 road standard or equivalent) and Humboldt County Code.

The intersection of Miner Lane with Mattole Road currently meets the site visibility standards set forth in HCC 341-1. No construction or new buildings are proposed within the visibility triangle. The existing fence is of a nature and type that does not obstruct vision, and all brush and vegetation is kept mowed at this intersection.



## CULTIVATION AREA CONFIGURATION EMPRESS FARMS

Our configuration of cultivation area consists of 16 garden beds, each 300 feet by 8 feet. We are well into the 2018 growing season, and what is described herein and expressly depicted on our most recent site plan accurately portrays the current on-the-ground conditions of the cultivation area.

Despite previous communications that indicated otherwise, Empress Farms has now been told that the 6 foot wide aisles *between* garden beds will count toward the total cultivation area, even though these areas will not contain cannabis plants at any point in time. This policy of the Planning & Building Department (the Department) is in apparent discord with the definition of “cultivation area” as set forth in Ordinance 1.0:

“Cultivation Area” means the sum of the area(s) of cannabis cultivation as measured around the perimeter of each discrete area of cannabis cultivation on a single premises, as defined herein. Area of cannabis cultivation is the physical space where cannabis is grown and includes, but is not limited to, garden beds or plots, the exterior dimensions of hoop houses or green houses, and the total area of each of the pots and bags containing cannabis plants on the premises. The cultivation area shall include the maximum anticipated extent of all vegetative growth of cannabis plants to be grown on the premises.

Below is a list of how our current configuration meets this definition, as broken down by each sentence. As defined, the “cultivation area” is:

- 1) “...the sum of the area(s) of cannabis cultivation as measured around the perimeter of each discrete area of cannabis cultivation on a single premises, as defined herein.”
  - We have delineated the perimeter of each discrete area of cannabis cultivation, both on our site plan and in practice on the ground (with a physical boundary).
- 2) “...the physical space where cannabis is grown and includes, but is not limited to, garden beds or plots, the exterior dimensions of hoop houses or green houses, and the total area of each of the pots and bags containing cannabis plants on the premises.”
  - The only physical space where cannabis is grown on the premises is in the garden beds. Cannabis is not grown in the aisles. The total area of each garden bed is included in our cultivation area calculation.

3) "...the maximum anticipated extent of all vegetative growth of cannabis plants to be grown on the premises."

- The size of our garden beds (not the size of the aisles) reflects the maximum anticipated extent of vegetative growth of cannabis plants. Again, plants will not be grown in the aisles.

While we applied under Ordinance 1.0 and are subject to its terms and conditions, we understand the county is shifting toward an emphasis on compliance regulations set forth in Ordinance 2599 (Ordinance 2.0). Regardless, our current site configuration remains in compliance with the definition of "cultivation area" under the new ordinance:

"Cultivation Area" means the sum of the area(s) used for cannabis cultivation, calculated in square feet and measured using clearly identifiable boundaries around the perimeter of all area (s) that will contain plants at any point in time, including all the space within the boundary as shown on the approved plot plan. Cultivation area shall include the maximum anticipated extent of all vegetative growth of cannabis plants to be grown to maturity on the premises. Between January 1 and January 31 of any given year, applicants with approved permits for cannabis cultivation may submit a written declaration on forms provided by the County that they will reduce the size of their approved cultivation area for that year. The County shall assess taxes for cannabis cultivation on the site based on the reduced area of cultivation in the declaration. See also "Propagation".

Below is a list of how our current configuration meets this new definition, as broken down by each sentence. As defined, the "cultivation area" is:

- 1) "...the sum of the area(s) used for cannabis cultivation, calculated in square feet and measured using clearly identifiable boundaries around the perimeter of all area (s) that will contain plants at any point in time, including all the space within the boundary as shown on the approved plot plan."
  - We have summed each discrete area of cannabis cultivation in calculating our total cultivation area, in square feet. The perimeter of each area (garden bed) is defined with clearly identifiable boundaries. *We are not contesting the space within each garden bed.* We are contesting the county counting the space *between*

each bed. These in-between spaces will not contain plants – or vegetative growth from a plant – at any point in time.

- 2) "...shall include the maximum anticipated extent of all vegetative growth of cannabis plants to be grown to maturity on the premises."
  - As stated previously, the size of our garden beds reflects the maximum anticipated extent of all vegetative growth of cannabis plants on the premises. For reasons outlined below, vegetative growth *cannot and will not* occur in the aisles.

The remainder of the definition of "cultivation area" in Ordinance 2.0 pertains to requests for reductions in cultivation amount each year and is not pertinent to the issue at hand.

In short, our aisles will not contain cannabis plants – or living portions thereof – at any point in time and should not count toward or total cultivation area. We utilize "clearly identifiable boundaries" around each bed. Each bed is sized appropriately so that the "maximum anticipated extent of vegetative growth" will not occur within the aisles. In the unlikely event that vegetation does protrude into the aisle, our SOP of cutting and/or pruning plant material or bending the plants and/or branches to the extent that vegetative growth will not occur in the aisle ensures that we continue to meet the definition of cultivation area throughout the term of the growing season.

This issue is important because it strikes at the core of our farming practices. There are several main reasons for our cultivation area configuration.

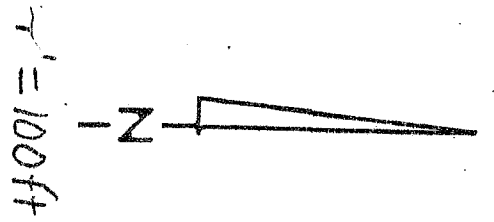
- a) Logistics – We are utilizing a zero-emission electric cart for farming operations (plant maintenance, harvest, etc.). This is part of our larger effort to power our farm with 100% renewable energy (from local solar and grid-tied renewables), as well as efforts to increase our farming efficiency. Logistically, we cannot have vegetative material existing in our aisles – we need to be able to freely drive the cart between the beds.
- b) IPM – Wider spacing between garden beds is a key cultural component of our Integrated Pest Management (IPM) strategy. Being somewhat coastal, we are susceptible to powdery mildew. Allowing space for plants to grow without being crowded and with ample air circulation is one of the main preventative measures that can be taken to ward off this disease. Providing more space between plants also limits the extent of contamination of other cannabis pests and diseases, should they arise (various mites, other molds, viruses,, etc.).
- c) Plant maintenance – Wider spacing allows less disturbance to plants during maintenance activities (easier access), which corresponds to less plant waste from breakage and a reduction in any possible foreign material and/or pest/disease contamination from workers.

The current state of affairs regarding this issue has let us to several questions:

- 1) How is what we show on our site plan and what is described herein fall outside of the definition of "cultivation area"?
- 2) Does the Department define garden plot or garden bed? Where is this definition available and why is it not included in either ordinance?
- 3) Would it be considered differently by the Department if the spacing between garden beds was larger? What is the minimum spacing required for them to be considered separate areas? What are the parameters for a non-contiguous plot or bed?
- 4) Would it be considered differently by the Department if each bed was covered with a row cover or hoophouse? (Not that we want to do this, but we are just trying to decipher the standards).
- 5) What are the publically known standards and policies in regard to cultivation area set by the Department and where are these available? We have heard anecdotal information that the Department has allowed for areas of biannual crop rotation and also used multipliers around grow pots to account for cultivation area rather than including all the area between the pots.

At this point in time in the growing season it is not feasible for us to rearrange the cultivation area. We are happy to work with the Department to come up with an agreeable solution or consider other alternatives for future years. That being said, however, we cannot understand the justification for the Department to include aisles – particularly as we have designed and implemented them, as well as described herein – as part of the cultivation area calculation. This will need to be more clearly explained before we can consider any alternative for cultivation area configuration that includes them in the total area calculation.





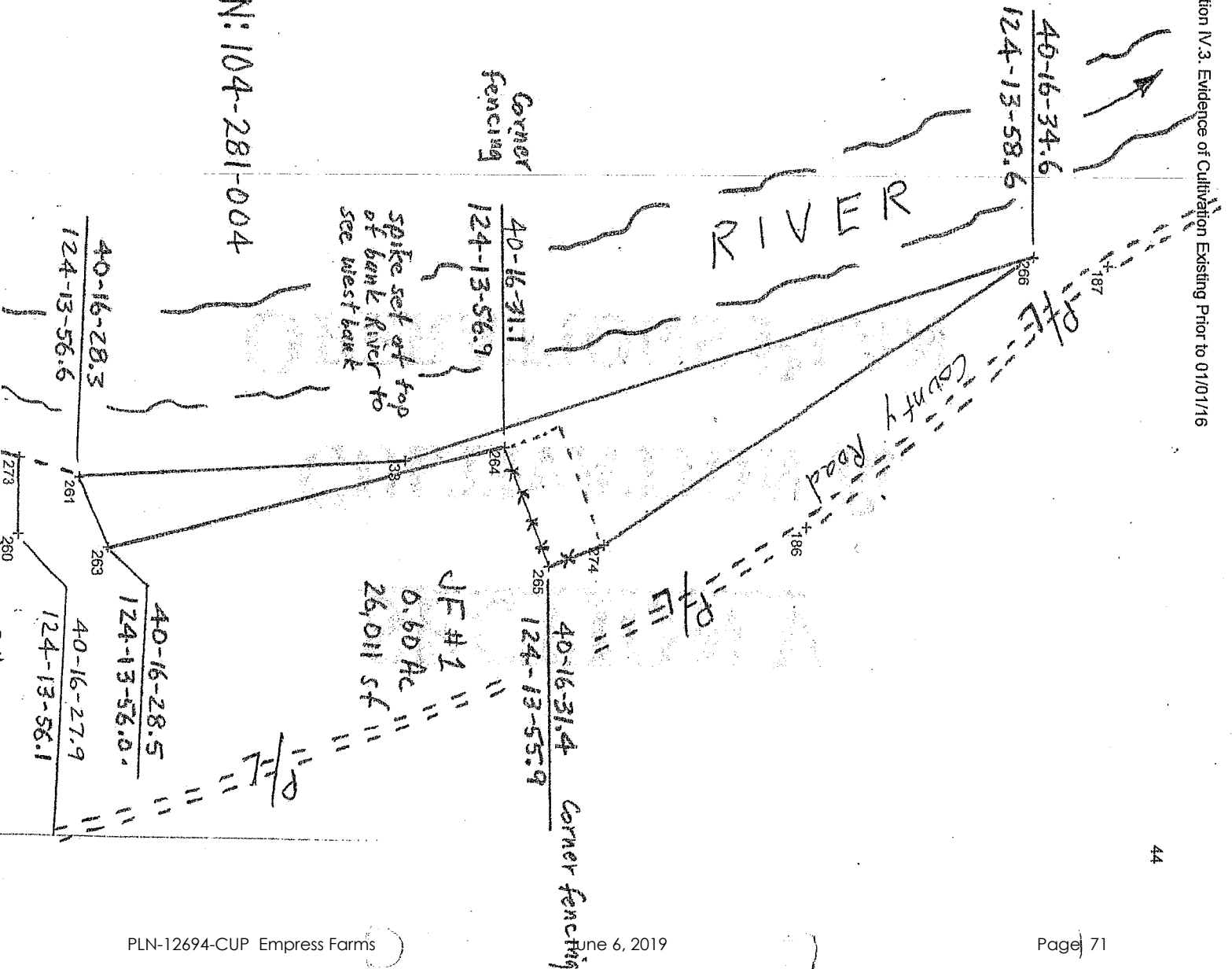
Sheet 2 of 2

Section Line North

P/L

P/L

APN: 104-281-004





**ON-SITE RELOCATION & CONSOLIDATION OF PRE-EXISTING CULTIVATION AREA  
EMPRESS FARMS  
APPS# 12694, APN 104-311-019**



*Background*

In 2017, there was an on-site relocation of existing cultivation. This was due to the fact that multiple smaller garden sites existed on the property, some of which were within the Streamside Management Area of the Mattole River and NCRWQCB Order No. R1-2015-0023 riparian and wetland buffers. Please see the attached map, *104-311-019\_2014 Pre-existing*, for reference.

In consult with the County of Humboldt Planning Department (Department) staff in March 2016, and then later in an Application Assistance meeting on 05/09/2016 (Case Number AA16-170), Mr. Free was advised by Department staff that a move and consolidation of his garden sites *could and should occur* for three main reasons:

- 1) to be out of the Streamside Management Area (SMA) for the Mattole River, in accordance with HCC §314.61.1;
- 2) to be out of the wetland and riparian buffer zones required by NCRWQCB Order No. R1-2015-0023 (100 feet from Class I for Tier 2 dischargers; §I.A.3.a), and
- 3) to minimize ongoing environmental impacts and disturbance associated with having multiple gardens sites on the parcel.

Mr. Free was also assured during this time that with the consolidation/move, he would still meet eligibility requirements for existing cultivation on the parcel, and additionally he did not need to propose the site move as an RRR project, as the move was within the same parcel. The Department was officially made aware that this consolidation/move occurred when complete application materials were submitted for the project on 06/29/17. (Please see *Section II: Project Description, 3. Site Background, E. Land Use, ii. Current* in the original application materials.)

*Pre-existing cultivation areas*

2014 represents the largest annual cumulative cultivation area. Thus, aerial imagery was gathered from this year, and surveys were conducted by Mr. Wallace E. Wright (June 6, 2017) to measure and record other areas of cultivation that were not evident in aerial imagery. The areas that were not evident on aerial imagery were those that had occurred under tree canopy cover, so as to avoid detection by law enforcement. The bulk of tree canopy cover on the property is found along the Mattole River, in the Streamside Management Area (SMA). Imagery and survey maps were submitted to the Department with application materials on 06/29/17.

It has become apparent that clarification is needed in regard to the evidence submitted for pre-existing cultivation area. Please reference the application submitted on 06/29/17, Section IV.3 for aerial imagery. It should be explained that dates given in relation to the polygons shown are *establishment* dates (e.g. "est. 2012"), and all sites, once established, were continuously

cultivated through 2014. The available aerial imagery for 2014 is limited, so multiple years were shown in order to most accurately capture the area of each garden.

Mr. Wright's survey maps show three (3) areas of cultivation, labeled "JF #1", "JF #2", and "JF #3". These areas were measured to be 26,011 ft<sup>2</sup>, 9,651 ft<sup>2</sup>, and 19,724 ft<sup>2</sup>, respectively. These same areas have been overlaid with aerial imagery polygons from 2014 on the map *104-311-019\_2014 Pre-existing*. Some of Mr. Wright's mapped areas do include areas that were shown as other pre-existing polygons in original application materials, and this totals to 8,750 ft<sup>2</sup>. However, given that a total of 70,162 ft<sup>2</sup> was cultivated in 2014, there remains more than enough pre-existing area so that Empress Farms can currently cultivate 38,440 ft<sup>2</sup>.

On the map *104-311-019\_2014 Pre-existing*, the evidence provided in the original application materials has been consolidated so that the aforementioned areas (aerial imagery polygons and Mr. Wright's survey areas) do not overlap and 70,162 ft<sup>2</sup> reflects the actual area cultivated in 2014. In all, there were seven (7) cultivation areas in 2014, labeled for ease of reference on the map with associated areas in square feet.

#### *On-site relocation & consolidation*

The 7 areas were consolidated and moved to the agricultural field on the same property (2017 and current 2018 location). Sites 1 – 4 were completely within the SMA, while sites 5 – 7 were in the residential area of the property. The distances (nearest corner/edge to nearest corner/edge) from each site to the current cultivation area are as follows:

- #1: 820 ft.
- #2: 608 ft.
- #3: 141 ft.
- #4: 272 ft.
- #5: 273 ft.
- #6: 173 ft.
- #7: 87 ft.

This consolidation and moved happened during the planting season in 2017, which means it technically occurred in mid-June 2017. The logistics of the move were simple – plants were planted in the agricultural field instead of the previous garden locations.

#### *Remediation*

The nature and type of pre-existing cultivation on the parcel was very low-impact. No grading was done. No chemicals or fuels were stored within the riparian zone, and trash and other disposable items were regularly removed. The cultivator (now Empress Farms CEO) was (and is) adamant about using OMRI listed products and only organic farming methods, and was especially mindful of any products used within the riparian zone.

It should be noted that following 2014, not all of the garden areas were utilized – especially those in the residential zone of the parcel – and not all concurrently. In the more residential

areas, other crops (vegetable) were planted, or the ground was allowed to reseed with pasture grasses. There was little needed to do to remediate these areas.

Along the riparian corridor, plants had been growth both in the ground, and in pots. Following the relocation in mid-June, pots, water lines, and other miscellaneous items and trash were removed from areas 1 – 4, and the existing vegetation was allowed to re-colonize.

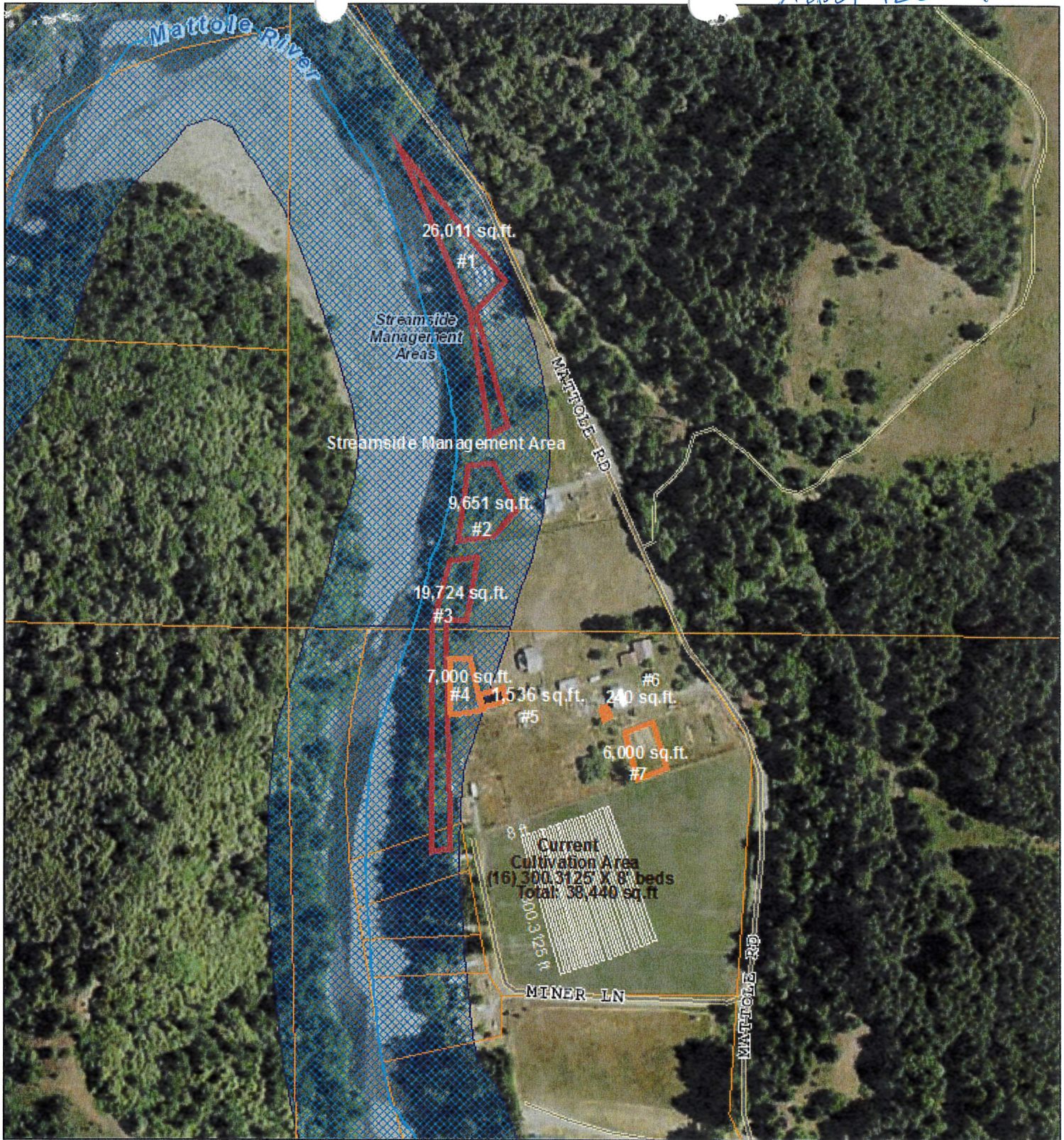
At this time, we question the necessity of a Remediation Plan report, for four reasons:

- a) Mr. Free, in good faith, followed the advice given by Department staff in 2016 and also followed requirements of HCC §314.61.1 and the NCRWQCB Order;
- b) Ordinance 1.0 does not expressly prohibit a cultivation site from moving or reconfiguring within the same parcel, so long as the area of existing cultivation is not expanded §55.4.8.2.2.
- c) The garden site was moved *in accordance* with Ordinance 1.0 §55.4.8.2.2 in an effort to “bring ... [the site] into compliance with all applicable standards”;
- d) The garden site was already moved for the 2017 season and the multiple older grow sites have already been remediated. All cultivation materials were removed, no re-grading was necessary as none was done, and natural, native or pre-existing vegetation to was allowed to re-colonize.

Please accept the argument presented above as sufficient to meet Department standards and guidelines present during the initial phases of Ordinance 1.0, thus consequently relieving the Department of any liability associated with the move. If it is determined more remediation is necessary of cultivation areas that were located within the SMA (1-4) we will of course undertake such actions proposed by an RRR Planner/Biologist.



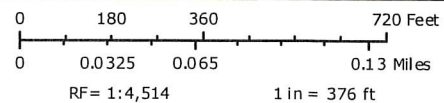
A205#12694



## Pre-existing 2014 all

Humboldt County Planning and Building Department

- Cultivation areas mapped by Wallace E. Wright on June 6, 2017
- Cultivation areas shown on aerial imagery in application



Printed: June 30, 2018

Web AppBuilder 2.0 for ArcGIS

### Map Disclaimer:

While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Source: Humboldt County GIS, California Coastal Commission GIS/Mapping Unit, 2014, Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, FRAP, FEMA, USGS





# STRUCTURAL CALCULATIONS

11 sheets calculations, 2 construction figures

## Water Tank

36332 Mattole Road  
Petrolia, CA 9558  
APN 104-311-019

Project number 1668.03  
May 29, 2018

### Prepared for:

Joshua Free  
PO Box 7  
Petrolia, CA 95558

### Prepared by:

Nathan Toews, PE  
350 E Street, Suite 302  
Eureka, CA 95501  
nkt-pe@outlook.com



# USGS Design Maps Summary Report

## User-Specified Input

**Report Title** Josh Free Water Tank

Tue May 29, 2018 15:10:23 UTC

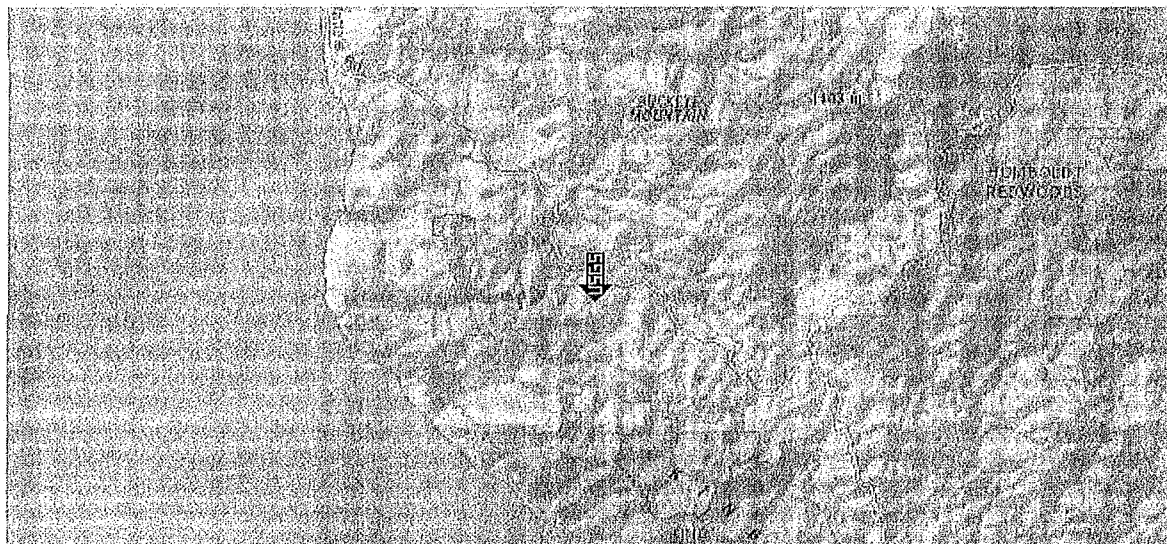
**Building Code Reference Document** ASCE 7-10 Standard

(which utilizes USGS hazard data available in 2008)

**Site Coordinates** 40.27251°N, 124.23159°W

**Site Soil Classification** Site Class D - "Stiff Soil"

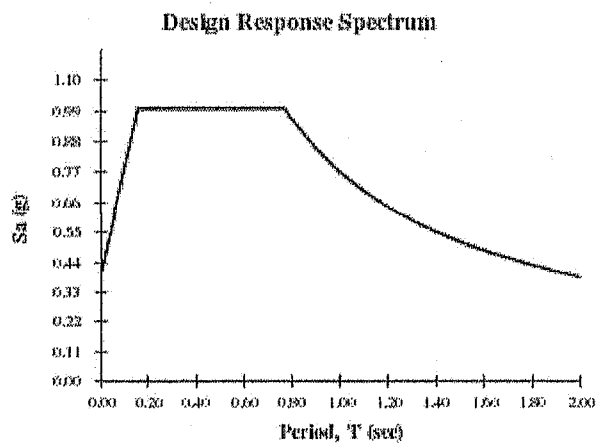
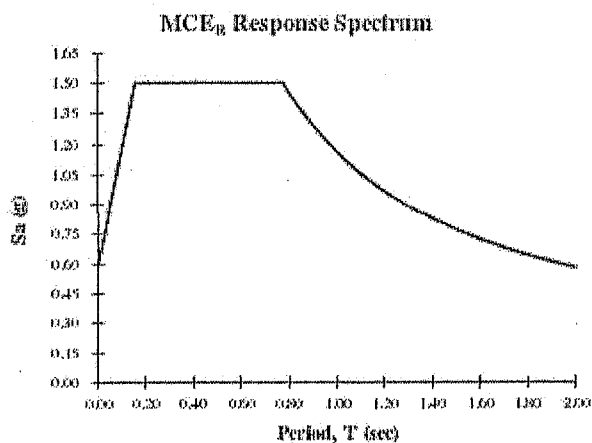
**Risk Category** I/II/III



## USGS-Provided Output

$S_s = 1.500 \text{ g}$	$S_{MS} = 1.500 \text{ g}$	$S_{DS} = 1.000 \text{ g}$
$S_1 = 0.773 \text{ g}$	$S_{M1} = 1.159 \text{ g}$	$S_{D1} = 0.773 \text{ g}$

For information on how the  $S_s$  and  $S_1$  values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.



For  $PGA_M$ ,  $T_L$ ,  $C_{RS}$ , and  $C_{R1}$  values, please [view the detailed report](#).

Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.

<b>Nathan K. Toews, P.E.</b> California Civil Engineer 70251 nkt-pe@outlook.com	PROJECT	Water Tank	BY	AD	2
	LOCATION	36332 Mattole Road, Petrolia CA	DATE		
	CLIENT	Josh Free	CHECKED		1668.03
	Water Tank Design			DATE	

Bolted Water Tank Design per AWWA D103-09

anchors: **mechanically-anchored**  
 site class: **D**

$S_s = 1.5$  g mapped spectral response coefficient (0.2s)  
 $S_1 = 0.773$  g mapped spectral response coefficient (1.0s)  
 $S_{aM} = 0.773$  g max considered earthquake spectral response acceleration  
 $T_L = 8$  sec transition period for longer-period ground motion (fig 17)

$g = 32.2$  ft/s<sup>2</sup> gravitational acceleration

$I_E = 1.00$  seismic importance factor

$w_r = 5$  psf roof weight

$W_f = 0$  lb weight of the bottom of the tank

$F_y = 30000$  psi yield stress of tank material

$F_u = 50000$  psi ultimate strength of tank shell material

$N = 36$  number of holdowns

$G = 1$  specific gravity of tank contents

bolts

$F_u = 150000$  psi bolt shear strength

bottom ring:

$d_1 = 0.375$  in bolt diameter

$S_{h1} = 9.5$  in horiz bolt spacing

$S_{v1} = 2$  in vertical bolt spacing

second ring up:

$d_2 = 0.375$  in

$S_{h2} = 9.5$  in

$S_{v2} = 2$  in

third ring up:

$d_3 = 0.3125$  in

$S_{h3} = 9.5$  in

$S_{v3} = 2$  in

tank geometry

hoop number (i)	hoop height (H <sub>i</sub> ft)	hoop gage	area (ft <sup>2</sup> )	w (psf)	weight (lb)	centroid height (h, ft)	w·h	t (in)
1	4.00	13	452	3.78	1710	2.00	3420	0.09375
2	4.00	15	452	2.97	1344	6.00	8062	0.0703
3	4.00	17	452	2.3	1040	10.00	10405	0.0563
				Σ =	4094		21887	

$$X_s = \frac{\sum w \cdot h}{\sum w} = 5.35 \text{ ft} \quad \text{height to the center of gravity of the tank shell}$$

$H = 12.00$  ft tank liquid height

$D = 36$  ft tank diameter

Nathan K. Toews, P.E. California Civil Engineer 70251 nkt-pe@outlook.com	PROJECT	Water Tank	BY	AD	3
	LOCATION	36332 Mattole Road, Petrolia CA	DATE		SHEET NO.
	CLIENT	Josh Free	CHECKED		1668.03
		Water Tank Design	DATE		JOB NO.

seismic design parameters

$$S_s > 1.25$$

$$S_1 > 0.5$$

$$F_a = 1 \quad \text{table 4}$$

$$S_{MS} = F_a S_s = 1.500 \quad \text{eq 14-5}$$

$$F_v = 1.5 \quad \text{table 5}$$

$$S_{M1} = F_v S_1 = 1.160 \quad \text{eq 14-6}$$

$$S_{DS} = \frac{2}{3} S_{MS} = 1.000 \quad \text{design spectral response acceleration (0.2s)} \quad \text{eq 14-7}$$

$$S_{D1} = \frac{2}{3} S_{M1} = 0.773 \quad \text{design spectral response acceleration (1.0s)} \quad \text{eq 14-8}$$

design response spectrum for impulsive components:

$$S_{al} = S_{DS} = 1.000 \quad 14.2.9.1$$

design response spectrum for convective components:

$$K = 1.5 \quad \text{scaling factor to convert 5\% to 0.5\% damping}$$

$$T_c = 2\pi \sqrt{\frac{D}{3.68g \tanh\left(\frac{3.68H}{D}\right)}} \quad 3.78 \text{ sec} \quad \text{first-mode sloshing wave period} \quad \text{eq 14-18}$$

$$\text{for } T_c \leq T_L \quad S_{ac} = \frac{KS_{D1}}{T_c} \leq S_{DS} = 0.307 \quad \text{eq 14-12}$$

$$\text{for } T_c > T_L \quad S_{ac} = \frac{KT_L S_{D1}}{T_c^2} = (\text{not applicable}) \quad \text{eq 14-13}$$

$$S_{ac} = 0.307$$



Nathan K. Toews, P.E. California Civil Engineer 70251 nkt-pe@outlook.com	PROJECT	Water Tank	BY	4
	LOCATION	36332 Mattole Road, Petrolia CA	DATE	SHEET NO.
	CLIENT	Josh Free	CHECKED	1668.03
		Water Tank Design	DATE	JOB NO.

design overturning moment

$$S_{al} = 1.000 \text{ g}$$

$$S_{ac} = 0.307 \text{ g}$$

eq 4-15

$$R_1 = 3$$

impulsive response modification factor

Table 6

$$R_o = 1.5$$

convective response modification factor

Table 6

$$A_i = \left[ \frac{S_{al} I_E}{1.4 R_1} \geq \frac{0.36 S_1 I_E}{R_1} \right] = 0.238$$

eq 14-16

$$A_c = \frac{S_{ac} I_E}{1.4 R_o} = 0.146$$

eq 14-17

$$W_s = 4094 \text{ lb}$$

weight of tank shell

$$W_r = 5089 \text{ lb}$$

weight of tank roof

$$W_T = 49 G H D^2 = 762048 \text{ lb}$$

weight of tank contents

eq 14-23

$$\text{for } D/H \geq 1.33 \quad W_i = \frac{\tanh\left(0.866 \frac{D}{H}\right)}{0.866 \frac{D}{H}} W_T = 290090 \text{ lb}$$

eq 14-20

$$\text{for } D/H < 1.33 \quad W_i = \left[ 1.0 - 0.218 \frac{D}{H} \right] W_T = (\text{not applicable})$$

eq 14-21

$$W_i = 290090 \text{ lb}$$

effective impulsive weight

$$W_c = 0.230 \frac{D}{H} \tanh\left[\frac{3.67 H}{D}\right] W_T = 442017 \text{ lb}$$

effective convective weight

eq 14-22

effective heights to impulsive and convective weights:

$$\text{for } D/H \geq 1.33 \quad X_i = 0.375 H = 4.50 \text{ ft}$$

eq 14-24

$$\text{for } D/H < 1.33 \quad X_i = \left[ 0.5 - 0.094 \frac{D}{H} \right] H = (\text{not applicable})$$

eq 14-25

$$X_i = 4.50 \text{ ft}$$

$$X_c = \left[ 1.0 - \frac{\cosh\left(\frac{3.67 H}{D}\right) - 1}{\frac{3.67 H}{D} \sinh\left[\frac{3.67 H}{D}\right]} \right] H = 6.65 \text{ ft}$$

eq 14-26

Nathan K. Toews, P.E. California Civil Engineer 70251 nkt-pe@outlook.com	PROJECT	Water Tank	BY	AD 5
	LOCATION	36332 Mattole Road, Petrolia CA	DATE	
	CLIENT	Josh Free	CHECKED	1668.03
		Water Tank Design	DATE	JOB NO.

design overturning moment at the bottom of the shell

$$M_s = \sqrt{[A_i(W_s X_s + W_r H_i + W_l X_l)]^2 + [A_c W_c X_c]^2} = 542365 \text{ lb-ft} \quad \text{overturning moment} \quad \text{eq 14-19}$$

design shear at the top of the foundation

$$V_f = \sqrt{[A_i(W_s + W_r + W_f + W_l)]^2 + [A_c W_c]^2} = 96213 \text{ lb} \quad \text{base shear} \quad \text{eq 14-27}$$

overturning ratio

$$w_L = (7.9 t_b \sqrt{F_y H G} \leq 1.28 H D G) \quad 444 \text{ plf} \quad \text{annulus weight} \quad \text{eq 14-33}$$

$$w_t = \frac{W_s}{\pi D} + w_{rs} \quad 81 \text{ plf} \quad \text{tank shell weight} \quad \text{eq 14-37}$$

$$A_v = 0.2 S_{DS} = 0.20 \quad \text{ASCE 7-10 eq 12.4-4}$$

$$J = \frac{M_s}{D^2 (w_t (1 - 0.4 A_v) + w_L)} \quad 0.81 < 1.54 \text{ ... self anchored} \quad \text{eq 14-32}$$

shell stresses

longitudinal shell compression

$$t_s = 0.09375 \text{ in} \quad \text{shell 1 thickness}$$

$$w_t = (\Sigma w_i H_i) + w_r D / 4 = 81.2 \text{ plf} \quad \text{shell and roof weight}$$

$$A_v = 0.14 S_{DS} = 0.14 g \quad \text{vertical design acceleration} \quad 14.3.4.3$$

$$\sigma_c = \left[ w_t (1 + 0.4 A_v) + \frac{1.273 M_s}{D^2} \right] \frac{1}{12 t_s} = 550 \text{ psi} \quad \text{longitudinal shell compressive stress} \quad \text{eq 14-35} \quad \text{per 14.3.4.2.2}$$

<b>Nathan K. Toews, P.E.</b> California Civil Engineer 70251 nkt-pe@outlook.com	PROJECT	Water Tank	BY	<i>[Signature]</i>
	LOCATION	36332 Mattole Road, Petrolia CA	DATE	6
	CLIENT	Josh Free	CHECKED	1668.03
		Water Tank Design	DATE	JOB NO.

hoop tensile stress

for  $D/H < 1.333$ :  $N_i = 4.5 A_i G D H \left[ \frac{Y}{H} - 0.5 \left[ \frac{Y}{H} \right]^2 \right] \tanh \left[ 0.866 \frac{D}{H} \right]$  eq 14-39

for  $D/H > 1.333$  and  $Y < 0.75D$ :  $N_i = 2.77 A_i G D^2 \left[ \frac{Y}{0.75D} - 0.5 \left( \frac{Y}{0.75D} \right)^2 \right]$

for  $D/H > 1.333$  and  $Y > 0.75D$ :  $N_i = 1.39 A_i G D^2$

for all  $D/H$ :

$$N_c = \frac{0.98 A_c G D^2 \cosh \left( \frac{3.68(H-Y)}{D} \right)}{\cosh \left( \frac{3.68H}{D} \right)} \quad (\text{convective component}) \quad \text{eq 14-42}$$

$$N_h = 2.6 G Y D \quad (\text{hydrostatic hoop force})$$

$$\sigma_s = \frac{\sqrt{N_i^2 + N_c^2 + (N_h A_v)^2}}{t_s} \quad (\text{hydrodynamic hoop tensile stress}) \quad \text{eq 14-38}$$

$$n_h = \frac{N_h}{t_s} \quad (\text{hydrodynamic hoop tensile stress})$$

$$\sigma_{tot} = \sigma_s + N_h / t_s \quad (\text{total hoop tensile stress})$$

Nathan K. Toews, P.E.  
California Civil Engineer 70251  
nkt-pe@outlook.com

PROJECT *Water Tank*

BY *AD* *7*

LOCATION *36332 Mattole Road, Petrolia CA*

DATE

SHEET NO.

CLIENT *Josh Free*

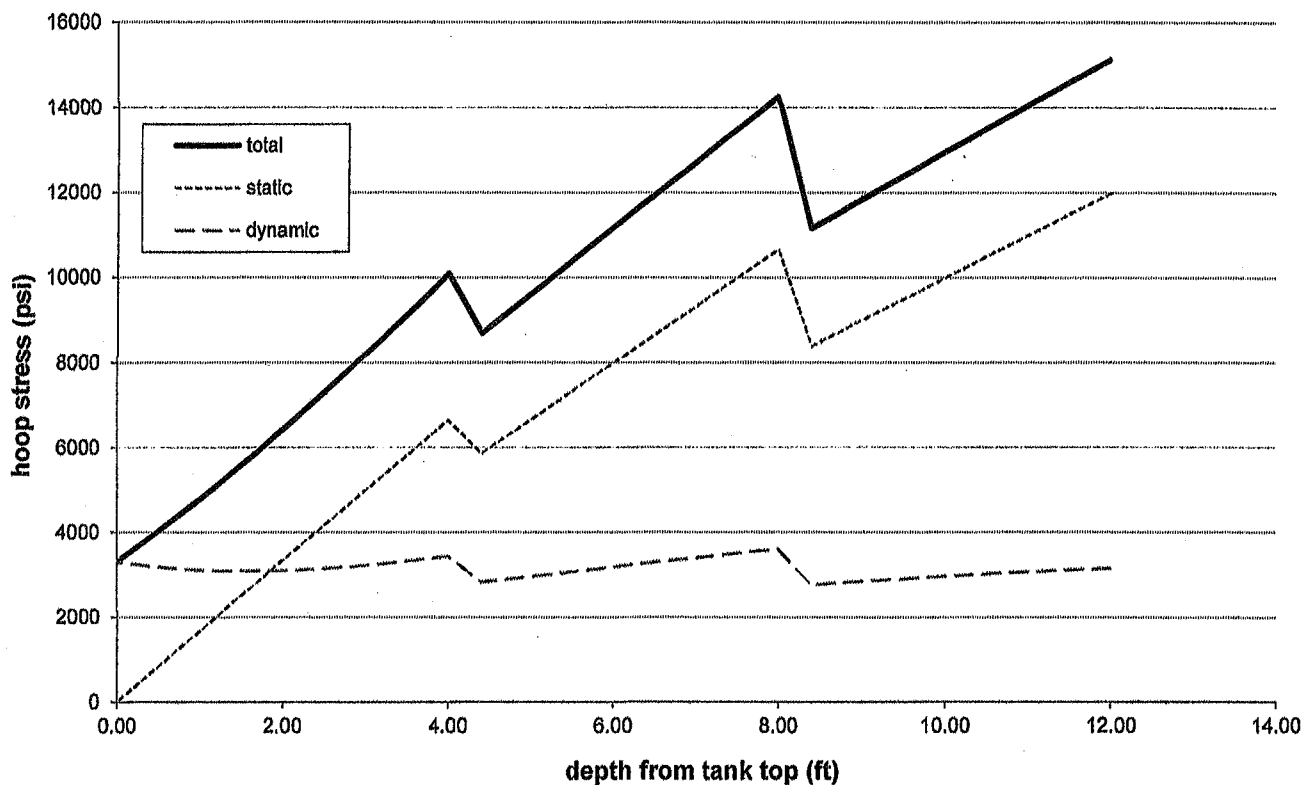
CHECKED *1668.03*

*Water Tank Design*

DATE

JOB NO.

### hoop tensile stress vs depth



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	LOCATION	36332 Mattole Road, Petrolia CA	DATE		SHEET NO.
	CLIENT	Josh Free	CHECKED		1668.03
		Water Tank Design	DATE		JOB NO.

tank shell analysis

tensile stresses

$$f_t = \min \left( \frac{0.6F_y}{0.4F_u} \right) \quad 18000 \text{ psi} \quad \text{allowable tensile stress}$$

Tensile stress check	
F <sub>1</sub> =	15130 psi < allowable ... OK
F <sub>2</sub> =	14256 psi < allowable ... OK
F <sub>3</sub> =	10083 psi < allowable ... OK

compressive stress

R =	216 in	shell radius
t <sub>1</sub> =	0.09375 in	hoop 1 thickness
t <sub>2</sub> =	0.0703 in	hoop 2 thickness
t <sub>3</sub> =	0.0563 in	hoop 3 thickness

$$\sigma_e = 1.333\sigma_a = (1.333)15000 \left( \frac{2}{3} \right) \left( 100 \frac{t}{R} \right) \left( 2 - \left( \frac{2}{3} \right) \left( 100 \frac{t}{R} \right) \right) \leq (1.333)15000 \quad \text{eqs 5-2 and 14-44}$$

allowable tensile stress

Compressive stress check:			
Hoop	allowable	actual	
1	1140	550	< allowable ... OK
2	858	367	< allowable ... OK
3	689	183	< allowable ... OK

Nathan K. Toews, P.E. California Civil Engineer 70251 nkt-pe@outlook.com	PROJECT	Water Tank	BY	<i>AT</i> 9
	LOCATION	36332 Mattole Road, Petrolia CA	DATE	
	CLIENT	Josh Free	CHECKED	1668.03
		Water Tank Design	DATE	JOB NO.

tension on the net section

$r =$  0.5 force transferred by bolt divided by total force at the section

$$f_t = \min \left( \frac{0.6F_y(1.0 - 0.9r + 3rd/s) \leq 0.6F_y}{0.40F_u} \right) = 14963 \text{ psi - allowable tensile stress} \quad \text{eq 5-4}$$

bolted connections

$A = d \cdot t =$  0.035 in<sup>2</sup> - bolt bearing area for hoop 1  
0.026 in<sup>2</sup> - bolt bearing area for hoop 2  
0.018 in<sup>2</sup> - bolt bearing area for hoop 3  
 $A_{\text{bolt}} =$  0.110 in<sup>2</sup> - bolt area

$F_v = 0.25F_u =$  37500 psi - allowable shear stress on bolt

$F_{\text{bearing}} = 1.35F_y =$  40500 psi - allowable bearing stress 5.5.4

$P = \sigma_s t_s S_v =$  2837 lb - max bolt load for hoop 1  
1418 lb - transferred in bearing  
40347 psi - bearing stress < allowable ... OK  
12843 shear stress on bolt < allowable ... OK

$P = \sigma_s t_s S_v =$  2004 lb - max bolt load for hoop 2  
1002 lb - transferred in bearing  
38017 psi - bearing stress < allowable ... OK  
9074 shear stress on bolt < allowable ... OK


$P = \sigma_s t_s S_v =$  1135 lb - max bolt load for hoop 3  
568 lb - transferred in bearing  
32266 psi - bearing stress < allowable ... OK  
5140 shear stress on bolt < allowable ... OK

<b>Nathan K. Toews, P.E.</b> California Civil Engineer 70251 nkt-pe@outlook.com	PROJECT	Water Tank	BY	<i>AT</i>	10
	LOCATION	36332 Mattole Road, Petrolia CA	DATE		SHEET NO.
	CLIENT	Josh Free	CHECKED		1668.03
		Water Tank Design	DATE		JOB NO.

anchorage and uplift resistance

$$S_{HD} = \frac{\pi D}{N} = 3.14 \text{ ft} \quad \text{holdown spacing}$$

$$F_{HD} = S_{HD} \left( \frac{1.273M}{D^2} - w_t \right) = 1419 \text{ lb} \quad \text{holdown tension}$$

Nathan K. Toews, P.E. California Civil Engineer 70251 nkt-pe@outlook.com	PROJECT	Water Tank	BY 	11
	LOCATION	36332 Mattole Road, Petrolia CA	DATE	
	CLIENT	Josh Free	CHECKED	1338.03
			DATE	JOB NO.

### Anchor Bolt

per ACI 318

no supplemental reinforcement across failure surface  
post-installed anchors with Simpson SET-XP  
uncracked concrete  
ductile steel

$c_{min}$ =	12 in	minimum edge distance
$h$ =	6 in	embedment height
$h_{ef}$ =	6 in	effective embedment height for tension loads
$e_N$ =	0 in	eccentricity of the normal force from the anchor bolt group centroid
$f'_c$ =	2500 psi	concrete strength
$f_{ut}$ =	51000 psi	tension strength of anchor steel
$d$ =	0.75 in	anchor diameter
$n$ =	1	number of anchors

### Tension Strength Analysis

$$A_{se} = 0.40 \text{ in}^2 \quad \text{total effective anchor area}$$

$$\Psi_1 = \frac{1}{\left(1 + \frac{2e'_N}{3h_{ef}}\right)} = 1 \leq 1.0 \quad \text{ACI 318.D.5.2.4}$$

$$c_{min} = 12$$

$$\Psi_2 = 0.7 + 0.3 \frac{c_{min}}{1.5h_{ef}} = 1.00 = 1.00 \text{ if } c_{min} \geq 1.5h_{ef} \quad \text{ACI 318.D.5.2.5}$$

$$\Psi_3 = 1.4 \quad \text{ACI 318.D.5.2.6}$$

$$\Psi_4 = 1.4 \quad \text{ACI 318.D.5.3.6}$$

$$k = 24 \quad \text{ACI 318.D.5.2.2}$$

$$N_b = k\sqrt{f'_c}h_{ef}^{1.5} = 17636 \text{ lb} \quad \text{ACI 318.D.5.2.2}$$

$$A_{No} = 9h_{ef}^2 = 324 \text{ in}^2 \quad \text{nominal tensile strength for a single anchor}$$

$$A_N = 324 \text{ in}^2 \quad \text{ACI 318.D.0}$$

$$N_{cb} = \frac{A_N}{A_{No}} \Psi_2 \Psi_3 N_b = 24691 \text{ lb} \quad \text{ACI 318.D.5.2.1}$$

nominal tensile strength based on concrete failure

$$\phi N_{cb} = 17284$$

$$N_s = nA_{se}f_{ut} = 20278 \text{ lb} \quad \text{ACI 318.D.5.1.2}$$

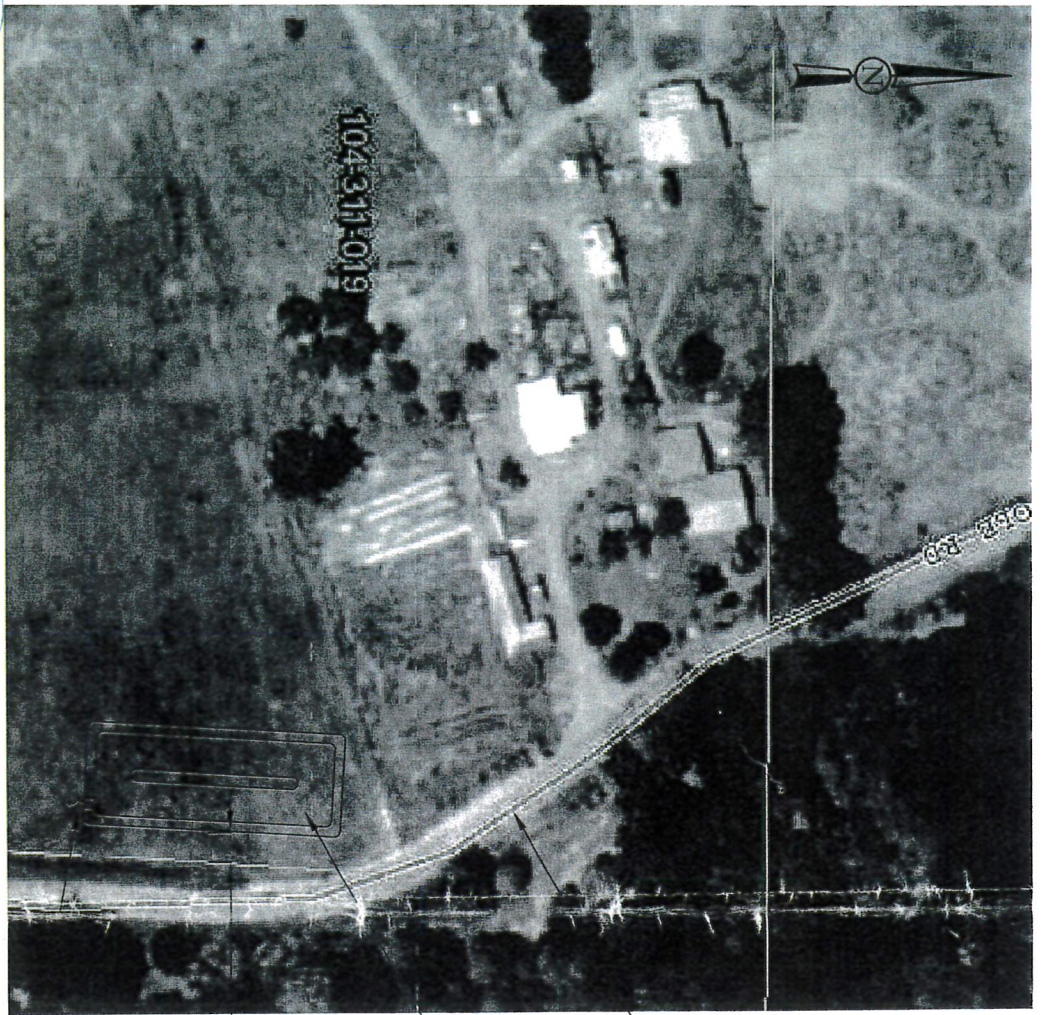
nominal tensile strength based on steel failure

$$\phi N_s = 15208 \text{ (tension)} \quad \text{ACI 318.D.4.4}$$





IRRIGATION POND GRADING PLAN - APN 104-311-019  
SCALE: 1"=100'



- GENERAL GRADING AND EROSION CONTROL NOTES:**
1. PROPOSED IRRIGATION POND TO BE 200 FT X 70 FT X 20 FT DEEP WITH 1 FT FREEBOARD. POND VOLUME = 960,447 GALLONS
  2. POND CUT AND FILL SLOPES SHALL BE 1.5 HORIZONTAL TO 1 VERTICAL.
  3. POND LINER SHALL BE EPDM OR EQUIVALENT AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
  4. EXCAVATED NATIVE SOILS FROM POND EXCAVATION SHALL BE USED TO CONSTRUCT POND PERIMETER BERM. EXCESS SOILS MAY BE SPREAD OR STOCKPILED ON THE PROPERTY PROVIDED THEY ARE PROPERLY PROTECTED FROM EROSION. SEE ADDITIONAL NOTES ON DRAWING 2 REGARDING EROSION CONTROL.
  5. PROPOSED GRADING VOLUME = 4,756 CUBIC YARDS.

MATTOLE ROAD

PROPOSED 200' X 70' X 20' DEEP IRRIGATION POND

20 FT SETBACK FROM PROPERTY LINE

8' WIDE BY 1' DEEP ROCK LINED SPILLWAY

REVISIONS			
REV	DESCRIPTION	BY	DATE

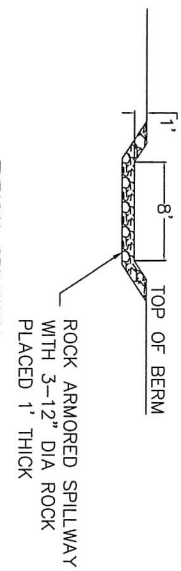
JOB NUMBER DRAWING 1 OF 3	POND GRADING EROSION & SEDIMENT CONTROL PLAN APN: 104-311-019
	EMPRESS FARMS PO BOX 7 PETROLIA, CA 95558

REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA No. 70375 Exp. 09-30-18 CIVIL
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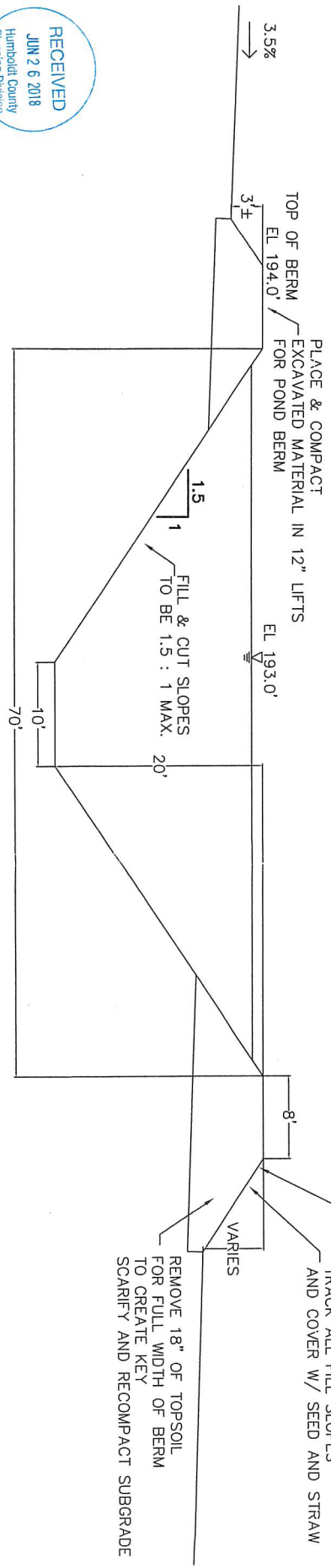
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1. ALL GRADING AND EROSION CONTROL SHALL BE IN ACCORDANCE WITH COUNTY OF HUMBOLDT STANDARDS.
2. MINIMIZE SOIL EXPOSURE DURING RAINY SEASON BY PROPER TIMING OF GRADING AND CONSTRUCTION.
3. DIVERT RUNOFF AWAY FROM STEEP, DENUDED SLOPES OR OTHER CRITICAL AREAS WITH BARRIERS, BERMS, DITCHES OR OTHER FACILITIES.
4. DESIGN GRADING TO BE COMPATIBLE WITH ADJACENT AREAS AND RESULT IN MINIMAL DISTURBANCE OF THE TERRAIN AND NATURAL LAND FEATURES.

5. LIMIT CONSTRUCTION, CLEARING OF VEGETATION AND DISTURBANCE OF THE SOIL TO AREAS OF PROVEN STABILITY.
6. CONDUCT FREQUENT SITE INSPECTIONS (BEFORE AND AFTER SIGNIFICANT STORM EVENTS) TO ENSURE THAT CONTROL MEASURES ARE WORKING PROPERLY AND TO CORRECT PROBLEMS AS NEEDED.
7. ELIMINATE SEDIMENT TRANSPORT OFF THE SITE TO THE MAXIMUM EXTENT FEASIBLE THROUGH THE USE OF PUBLISHED BEST MANAGEMENT PRACTICES (BMPs).
8. USE MATES, STRAW BALE BARRIERS OR SIMILAR MEASURES TO RETAIN SEDIMENT TRANSPORTED BY RUNOFF WATER ON-SITE.
9. COLLECT AND DIRECT SURFACE RUNOFF AT NON-EROSIVE VELOCITIES TO THE COMMON DRAINAGE COURSES.
10. PREVENT MUD FROM BEING TRACKED ONTO THE PUBLIC ROADWAY WITH GRAVEL DRIVEWAYS, ENTRANCES OR TRUCK TIRE WASHING.



**TYPICAL SPILLWAY**  
SCALE: 1"=10'

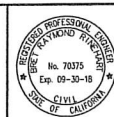


**IRRIGATION POND ELEVATION - APN 104-311-019**  
SCALE: 1"=10'

11. DEPOSIT OR STORE EXCAVATED MATERIALS AWAY FROM DRAINAGE COURSES.
12. STOCKPILE TOPSOIL ON THE SITE FOR USE ON AREAS TO BE REVEGETATED.
13. PLACE STOCKPILED SOIL IN LOCATIONS, SO THAT IF EROSION OCCURS, IT WILL NOT CONTRIBUTE TO OFFSITE SEDIMENT DISCHARGE.
14. DISPOSE OF EXCAVATED MATERIAL NOT USED AT THE SITE AT A LOCATION APPROVED BY THE COUNTY.
15. ALL CONSTRUCTION AREAS AND ACCESS ROADS SHALL BE TREATED AND MAINTAINED AS NECESSARY TO MINIMIZE THE EMISSION OF DUST AND NUISANCE TO OFFSITE PROPERTIES.
16. APPLY TEMPORARY SEEDING OR MULCHING TO DENUDED AREAS FOR STORM PROTECTION.
17. ESTABLISH A PERMANENT VEGETATIVE COVER ON DENUDED AREAS AS SOON AS POSSIBLE. PERMANENT VEGETATION GROUND COVER MUST CONTROL EROSION AND SURVIVE SEVERE WEATHER CONDITIONS.
18. RETAIN A VEGETATIVE BARRIER WHENEVER POSSIBLE AROUND PROPERTY BOUNDARIES.
19. USE SELF-SUSTAINING, NON-INVASIVE PLANTS THAT REQUIRE LITTLE OR NO MAINTENANCE AND DO NOT CREATE AN EXTREME FIRE HAZARD.
20. USE NATIVE PLANT SPECIES WHENEVER FEASIBLE.

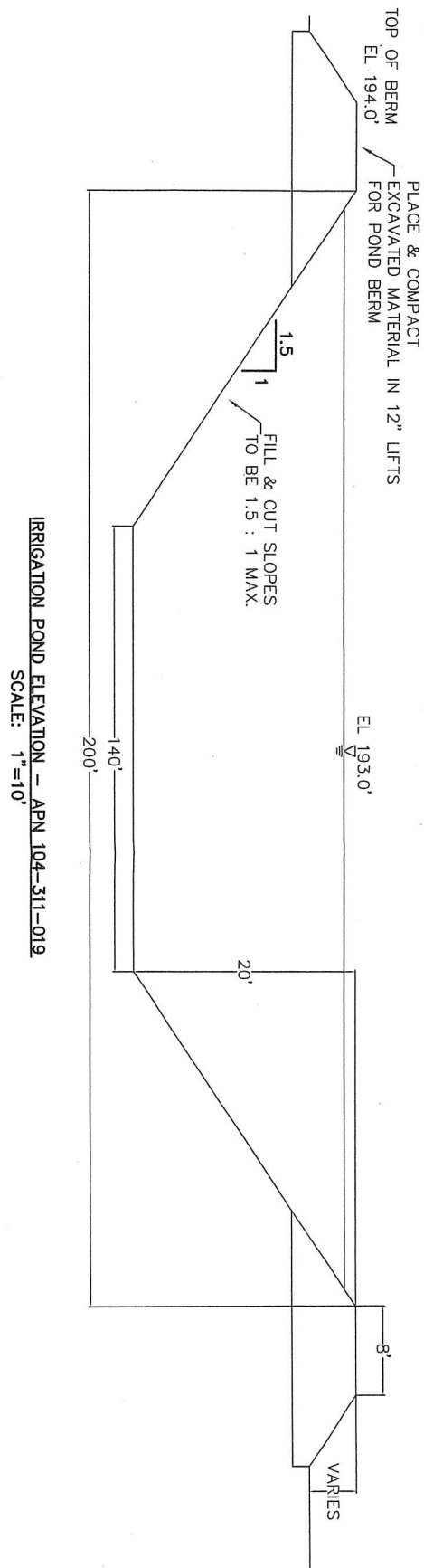
**REVISIONS**

REV	DESCRIPTION	BY	DATE



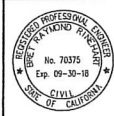
JOB NUMBER DRAWING 2 OF 3	POND GRADING EROSION & SEDIMENT CONTROL PLAN APN: 104-311-019	
	EMPRESS FARMS PO BOX 7 PETROLIA, CA 95558	





IRRIGATION POND ELEVATION - APN 104-311-019  
SCALE: 1"=10'

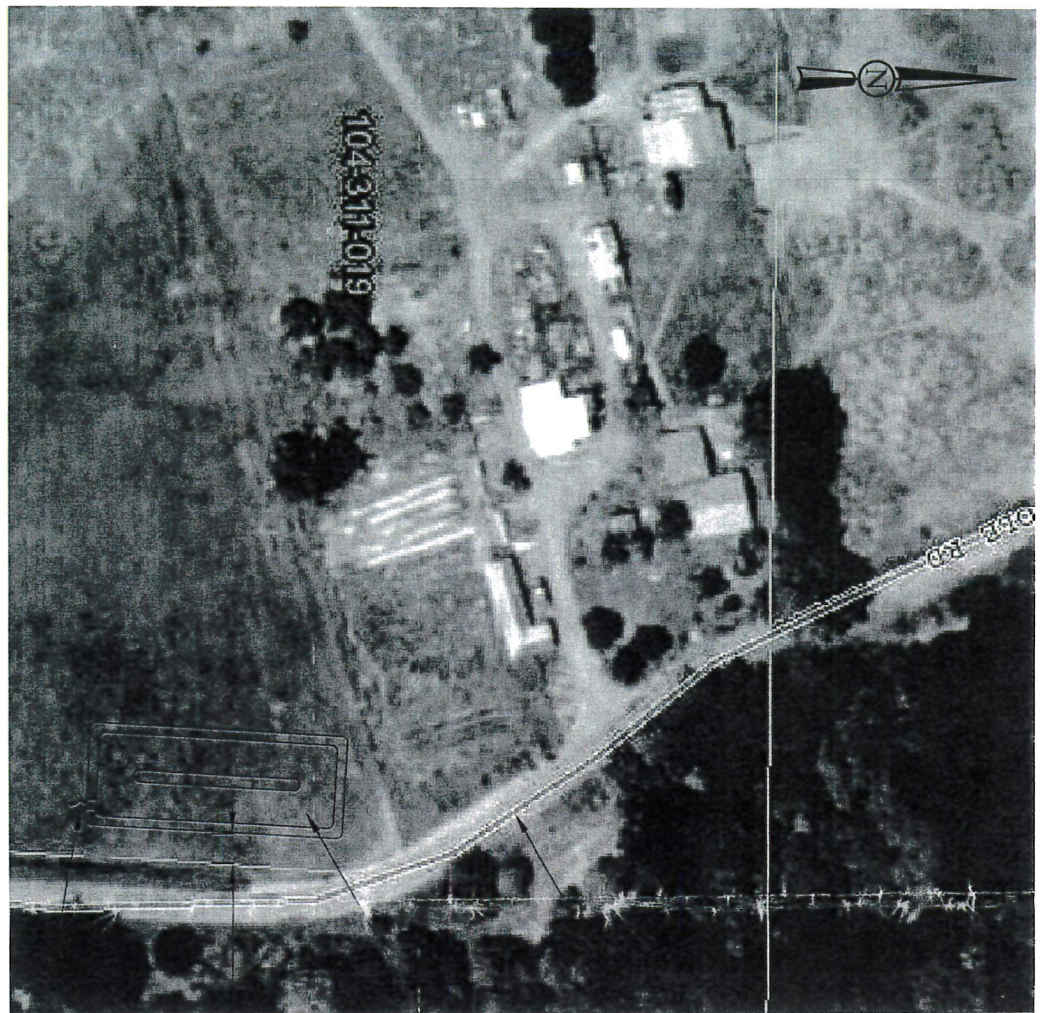
REVISIONS			
REV	DESCRIPTION	BY	DATE



DRAWING 3 OF 3	JOB NUMBER	POND GRADING EROSION & SEDIMENT CONTROL PLAN APN: 104-311-019
		EMPRESS FARMS PO BOX 7 PETROLIA, CA 95558

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JUN 26 2018  
Humboldt County  
Planning Department

IRRIGATION POND GRADING PLAN - APN 104-311-019  
SCALE: 1"=100'



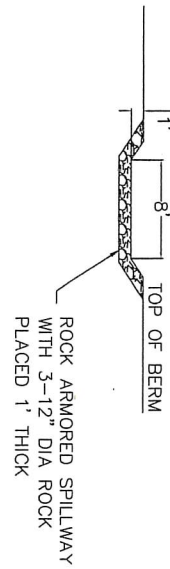
- MATTOL ROAD
- PROPOSED 200' X 70' X 20' DEEP IRRIGATION POND
- 20 FT SETBACK FROM PROPERTY LINE
- 8' WIDE BY 1' DEEP ROCK LINED SPILLWAY

- GENERAL GRADING AND EROSION CONTROL NOTES.**
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POND GRADING EROSION & SEDIMENT CONTROL PLAN		REVISIONS			
JOB NUMBER		REV	DESCRIPTION	BY	DATE
EMPRESS FARMS PO BOX 7 PETROLIA, CA 95555					
POND GRADING EROSION & SEDIMENT CONTROL PLAN APN: 104-311-019					
DRAWING 1 OF 3					

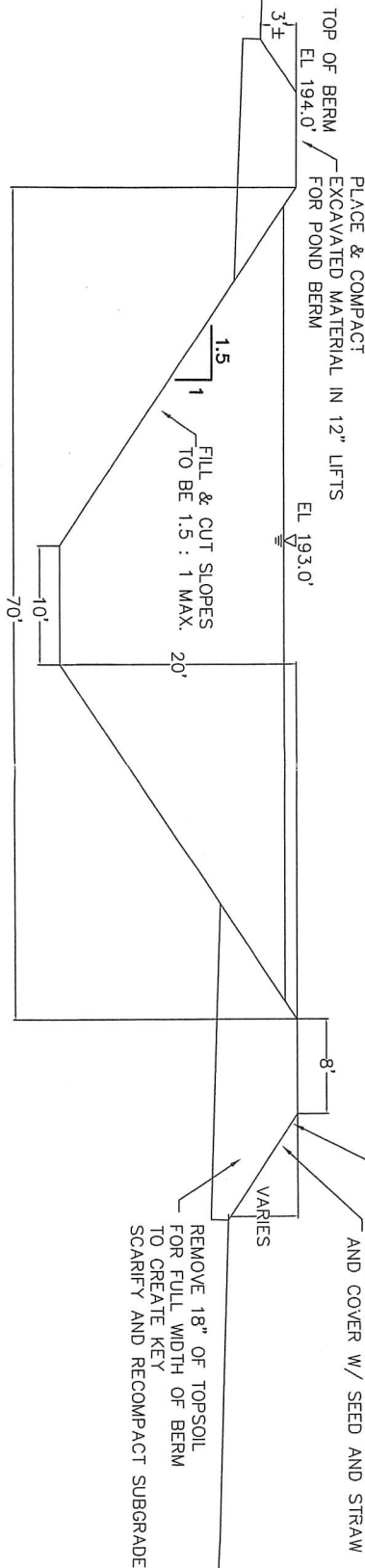
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**TYPICAL SPILLWAY**  
SCALE: 1"=10'

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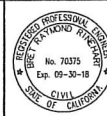
**IRRIGATION POND ELEVATION - APN 104-311-019**  
SCALE: 1"=10'



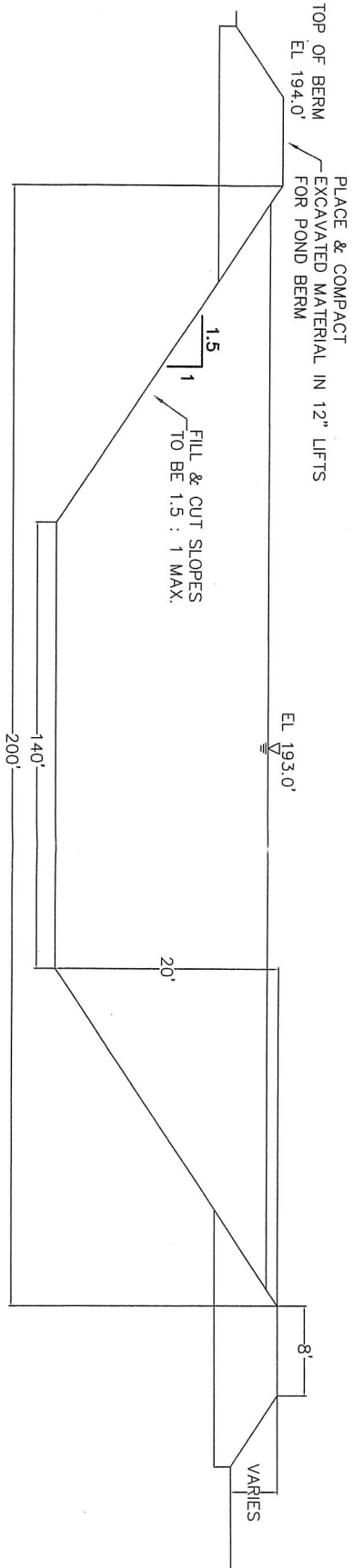
REVISIONS			
REV	DESCRIPTION	BY	DATE

POND GRADING EROSION & SEDIMENT CONTROL PLAN APN: 104-311-019		EMPRESS FARMS PO BOX 7 PETROLIA, CA 95558
JOB NUMBER	DRAWING 2 OF 3	








IRRIGATION POND ELEVATION - APN 104-311-019

SCALE: 1"=10'

DRAWING 3 OF 3	JOB NUMBER	POND GRADING EROSION & SEDIMENT CONTROL PLAN APN: 104-311-019		REVISIONS			
				REV	DESCRIPTION	BY	DATE
		EMPRESS FARMS PO BOX 7 PETROLIA, CA 95558					



## e-WRIMS Water Right Search Results

**Criteria:** Displaying Water Rights where Application Number like "S024676".

Search Results: previous 1-1 of 1

Appl ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source	View Reports	Water Right	Open in GIS	Export to Excel
<a href="#">S024676</a>			Statement of Div and Use	Claimed	JOSH FREE	09/16/2014	0 acre-ft/yr	Humboldt	MINER'S RANCH SPRING	<a href="#">View Reports</a>	<a href="#">View Statement</a>	<a href="#">Open in GIS</a>	<a href="#">Download to Excel</a>
Return to Water Right Public Search Form												Download to Excel	

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APP# 12694



State Water Resources Control Board  
DIVISION OF WATER RIGHTS  
INITIAL STATEMENT OF WATER DIVERSION AND USE

NOTE: A Statement is not a Water Right  
READ THE ATTACHED INFORMATION AND INSTRUCTION SHEET BEFORE COMPLETING THIS FORM

STATEMENT COVER PAGE

Information provided by water diverters on this page will be for office use only.  
For your privacy, this cover page will not be made available for public online viewing.

COVER PAGE: INITIAL STATEMENT OF WATER DIVERSION AND USE CLAIMANT NAME Josh Free  
SOURCE/TRIBUTARY Miner's Ranch Spring DIVERSION WORKS NAME Un-named

A. Claimant Information (required)			
Claimant Name(s): <u>Josh Free</u>			
Mailing Address <u>PO Box 7</u>	City <u>Petrolia</u>	State <u>CA</u>	Zip <u>95558</u>
Phone number <u>707-599-8865</u>	Email Address (if available) <u>JF6400@gmail.com</u>		
Agent Name (if applicable) <u>Hollie Hall</u>			
Mailing Address City State Zip <u>PO Box 5306 Arcata CA 95518</u>			
Phone Number <u>707-502-4870</u>	Email Address (if available) <u>HollieRHall@gmail.com</u>		
Land Owner Name (if different from claimant) <u>same as claimant</u>			
Mailing Address City State Zip <u>same as claimant</u>			
B. Certification of Statement (required)			
I declare under penalty of perjury that the information in this statement of water diversion and use is true to the best of my knowledge and belief.			
DATE: <u>9/11/14</u> at <u>Humboldt</u> , California (county)			
SIGNATURE: <u>Hollie Hall</u> 			
PRINTED NAME: <u>Hollie R. Hall</u> (first name) (middle name) (last name)			
COMPANY NAME: <u>Hollie Hall &amp; Associates Watershed Resources Consulting</u>			
 <a href="#">Submit Form Electronically</a>			

UPON COMPLETION OF THIS STATEMENT, ATTACH ALL SUPPORTING DOCUMENTATION AND MAPS AND MAIL TO:

State Water Resources Control Board  
Division of Water Rights  
PO Box 2000  
Sacramento, CA 95812-2000

Additional copies of this form, instructions on how to complete this form and water right information can be obtained at  
[http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/diversion\\_use/](http://www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/). Revised Jan. 1, 2013.



**State Water Resources Control Board  
DIVISION OF WATER RIGHTS  
INITIAL STATEMENT OF WATER DIVERSION AND USE**

**NOTE: A Statement is not a Water Right**

READ THE ATTACHED INFORMATION AND INSTRUCTION SHEET BEFORE COMPLETING THIS FORM

PAGE 1 OF 1: INITIAL STATEMENT OF WATER DIVERSION AND USE CLAIMANT NAME Josh Free  
SOURCE/TRIBUTARY Miner's Ranch Spring DIVERSION WORKS NAME Un-named

<b>1. Type of Claim</b>													
Check the box(es) which describe the type of claim(s) under which you are diverting water.													
<input type="checkbox"/> Riparian	<input checked="" type="checkbox"/> Pre-1914	<input type="checkbox"/> Court Decree	<input type="checkbox"/> Pending Appropriative Application	<input checked="" type="checkbox"/> Other									
If you checked yes for Court Decree, Pending Appropriative Application or other, list the decree number, application ID or explanation: <b>Deeded access to spring's water.</b>													
<b>2. Water Course Description (required)</b>													
Source Name at the point of diversion <b>Miner's Ranch Spring</b>							Tributary to <b>not applicable</b>						
<b>3. Legal Land Description (required)</b>													
Provide the location of the Point of Diversion using one of the following methods (check one box and enter coordinates, if applicable)													
<input checked="" type="checkbox"/> Latitude/Longitude Measurements:	<b>n 40 16.396, w 124 13.859</b>												
<input type="checkbox"/> California Coordinate System (NAD 1983):													
<input type="checkbox"/> USGS Topographic Map with point of diversion labeled on map (if checked yes, please attach map)													
County (required) <b>Humboldt</b>	Assessor's Parcel Number(s), if assigned <b>104-311-020</b>												
Provide Public Land Description to nearest 40 acres (if assigned) ____ 1/4 of the ____ 1/4 of Section ____, Township ____, Range ____, B&M ____													
<b>4. Place of Use Description (required)</b>													
Provide a general description of the area in which the water was used <b>Diverted water is used to supply domestic use &amp; fire protection needs.</b>													
Provide an outline of the Place of Use using one or both of the following methods (check box indicating each map attached)													
<input type="checkbox"/> USGS Topographic Map	<input checked="" type="checkbox"/> County Assessor's parcel map												
<b>5. Purpose of Use Description (required)</b>													
Provide a listing of use types (see instructions for a listing of water uses) <b>Domestic use &amp; fire protection.</b>													
Number of Acres (if applicable) <b>~13</b>				Persons Served (if applicable) <b>5</b>				Stock Watered (if applicable) <b>2 horses, 2 dogs, 4 cats, 10 chickens.</b>					
<b>6. Diversion Works Description (required)</b>													
Name of Diversion Works, if named <b>Un-named</b>							Year in which diversion commenced (or specify nearest known year) <b>1868</b>						
List any related existing water rights, if applicable, (for example, an appropriative right using the same diversion works) <b>Deeded water rights to spring water.</b>													
Type of Diversion Facility (select one)													
<input checked="" type="checkbox"/> Gravity	<input type="checkbox"/> Creek Pump	<input type="checkbox"/> Well Pump	<input type="checkbox"/> Other (please specify) _____										
Capacity of Diversion Works (specify unit of measure) <b>10</b>							Capacity of Storage Tank or Reservoir (if applicable) <b>11,000</b>						
<input type="checkbox"/> cfs	<input checked="" type="checkbox"/> gpm	<input type="checkbox"/> gpd					<input checked="" type="checkbox"/> Gallons	<input type="checkbox"/> Acre-feet					
<b>7. Quantity of Water Diverted (required)</b> Note: Measurements must be made using "best available technology" and "best professional practices". If "best technology available" is not used to measure diversions, explain in section 8b below.													
Provide the quantity of water diverted each month in the table below as a measured in (check one box) <input type="checkbox"/> Gallons <input checked="" type="checkbox"/> Acre-feet													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2013	0.03	0.03	0.03	0.03	0.3	0.4	0.4	0.4	0.3	0.03	0.03	0.03	1.326

CONTINUE TO PAGE 2

8. Measurement Device Description (required)												
Method used to measure water diverted (select one) <input type="checkbox"/> Water directly diverted and/or diverted to storage was measured with a measuring device. <i>(if checked, proceed to section 8a and skip section 8b)</i> <input checked="" type="checkbox"/> Direct measurement using a device listed in Section 8a is not "locally cost effective" for water directly diverted and/or diverted to storage. <i>(If checked, skip section 8a and proceed to section 8b).</i>												
8a. Measuring Device												
Indicate the types of measuring devices used (check all that apply): <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> Propeller Meter</div> <div style="width: 50%;"><input type="checkbox"/> Sluice/Slide Gate</div> <div style="width: 50%;"><input type="checkbox"/> Acoustic Meter</div> <div style="width: 50%;"><input type="checkbox"/> Weir</div> <div style="width: 50%;"><input type="checkbox"/> Staff gage and storage capacity curve</div> <div style="width: 50%;"><input type="checkbox"/> Staff gage and floodable acreage</div> <div style="width: 50%;"><input type="checkbox"/> Pressure transducer and storage capacity curve</div> <div style="width: 50%;"><input type="checkbox"/> Other: _____</div> </div>												
Indicate any additional technology used (check all that apply and explain below): <input type="checkbox"/> Flow totalizer <input type="checkbox"/> Data Logger <input type="checkbox"/> Telemetry <input type="checkbox"/> Other: _____												
Indicate who installed your measuring device(s) (check all that apply): <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> Representative using manufacturer's recommendations</div> <div style="width: 50%;"><input type="checkbox"/> Licensed Civil or Agricultural Engineer</div> <div style="width: 50%;"><input type="checkbox"/> Representative who is American Water Works Association (AWWA)-certified</div> <div style="width: 50%;"><input type="checkbox"/> Hydrographer</div> <div style="width: 50%;"><input type="checkbox"/> Representative using United States Geological Survey (USGS) techniques</div> <div style="width: 50%;"><input type="checkbox"/> Other/Unknown: _____</div> </div>												
List the make, model number, and last calibration date of your measuring device(s), if available:												
8b. Explanation of why use of a measuring device is "not locally cost effective"												
Indicate why you concluded that direct measurement using a device listed in Section 8a is not locally cost effective (check all that apply) <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> Diversion is small or minimal in size</div> <div style="width: 50%;"><input type="checkbox"/> Diversions are infrequent</div> <div style="width: 50%;"><input checked="" type="checkbox"/> No power at diversion point</div> <div style="width: 50%;"><input type="checkbox"/> Other: _____</div> </div>												
Indicate method(s) used as an alternative to direct measurement in order to complete this report (check all that apply) <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> Electricity records dedicated to the pump</div> <div style="width: 50%;"><input type="checkbox"/> Total facility electricity records minus estimated non-pump electricity</div> <div style="width: 50%;"><input type="checkbox"/> Engine fuel use or hour meter records</div> <div style="width: 50%;"><input type="checkbox"/> Crop duty estimates/consumptive use estimates</div> <div style="width: 50%;"><input type="checkbox"/> Power generation estimates</div> <div style="width: 50%;"><input type="checkbox"/> Other water duty estimates other than for crops</div> <div style="width: 50%;"><input type="checkbox"/> Modeled/estimated flows</div> <div style="width: 50%;"><input type="checkbox"/> Remote satellite imaging</div> <div style="width: 50%;"><input type="checkbox"/> Pipe/trajectory method</div> <div style="width: 50%;"><input checked="" type="checkbox"/> Bucket and stopwatch</div> <div style="width: 50%;"><input type="checkbox"/> Float and stopwatch</div> <div style="width: 50%;"><input type="checkbox"/> Other: _____</div> </div>												
Explain your measurement alternatives:												
9. Maximum Rate of Diversion (if available)												
Provide the maximum rate of diversion achieved in each month as measured in (check one box) <input type="checkbox"/> cfs <input checked="" type="checkbox"/> gpm <input type="checkbox"/> gpd												
Year	10 Jan	10 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	10 Oct	10 Nov	10 Dec
2013												
10. Recent Water Use												
Provide the annual water use in recent years:		Maximum ~ 720,000				<input checked="" type="checkbox"/> Gallons		<input type="checkbox"/> Acre Feet				
		Minimum ~ 650,000				<input checked="" type="checkbox"/> Gallons		<input type="checkbox"/> Acre Feet				
11. Water Conservation Efforts (answer only sections applicable to your diversion)												
<u>Water Conservation:</u> Are you currently employing any methods of water conservation?										<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
If yes, describe any water conservation efforts in use: <u>Drip irrigation where feasible.</u>												
<u>Water Quality and Wastewater Reclamation:</u> Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility or water polluted by waste to a degree that unreasonably affects such water for other beneficial uses?												
										<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<u>Conjunctive use of surface water and groundwater:</u> Are you using groundwater in lieu of surface water?												
										<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

END OF INITIAL STATEMENT FORM

Sign and Submit Form

Save form (submit later)

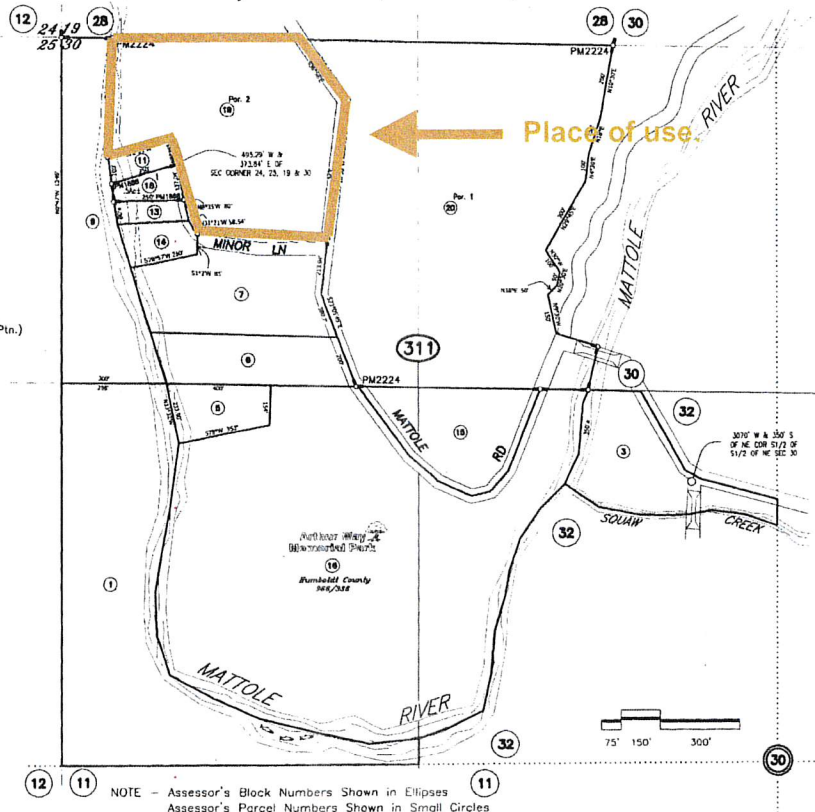
**S024676**

Assessor's Map Bk. 104, Pg. 31  
County of Humboldt, CA.

PTN NW1/4 SEC 30, T2S R1W, H.B. & M.

104-31

PM1888, Bk.16 of Parcel Maps, Pg.110  
PM2224, Bk.19 of Parcel Maps, Pg.115-116 (Pln.)  
RS, Bk.65 of Surveys, Pg.49-50



**ASSESSOR'S PARCEL MAP**  
1. THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY.  
2. NO LIABILITY IS ASSIGNED FOR THE ACCURACY OF THE DATA SHOWN.  
3. ADJACENT PARCELS MAY NOT COMPLY WITH LOCAL LOT/SPLIT OR BUILDING SITE ORDINANCES.

EC Apr 1, 2014

## WB-DWR-Statements

---

**From:** Hollie Hall <hollierhall@gmail.com>  
**Sent:** Tuesday, September 16, 2014 2:21 PM  
**To:** WB-DWR-Statements  
**Subject:** Josh Free Initial Statement of Water Use and Diversion paperwork  
**Attachments:** Josh Free Statement of Water Diversion and Use pdf.pdf

Hello,  
Attached is the Initial Statement of Water Use and Diversion paperwork for claimant Josh Free.  
Please let me know if you have any questions.

Thank-you and have a nice day,  
Hollie

~~~~~  
Hollie Hall, PhD  
Watershed Resources Specialist  
Hollie Hall & Associates Watershed Resources Consulting  
[www.HollieHall.com](http://www.HollieHall.com) (updated 4/22/14)

Conservation Planning Director  
Mad River Alliance  
[www.madriveralliance.org](http://www.madriveralliance.org)

1-707-502-4870

PO Box 5306  
Arcata, CA  
95518  
~~~~~

"Anyone who can solve the problems of water will be worthy of two Nobel prizes - one for peace and one for science." John F. Kennedy



# Contact Report

A. Diverter/Responsible Party: Initial report

B. Contact #: 707-599-8865

C. Temporary statement # (if applicable; i.e. 2012-206): 2014-0365

**D. Contact Attempts:**

Date/ Time	Contacted By	Person Contacted	Reason for Contact	Result of Contact
---------------	-----------------	---------------------	-----------------------	----------------------

10/10/2014 2:09pm

Initial form

**Conversions:**

E. Cycle: ☒ 1    ☐ 2    ☐ 3    F: Year POD Commenced: 1868

G. Diversion Works Name: 104-311-020

H. Capacity of diversion works: 10gpm.    *LSAA says max = 5gpm*

I. Capacity of storage: 11,000gal.

J. Latitude/Longitude: 124deg. 13'48.18 40deg. 16'22.851

**Statement Processing:**

	Date	Completed by
K. Entered into eWRIMS:	<u>10/10/2014</u>	<u>DCC</u>

L. Plotted:	<u>10/10/2014</u>	<u>DCC</u>
-------------	-------------------	------------

M. POD ID#: 63388    *APPL ID 5024676*

**N. Additional Comments:**

S024676

**O. Missing Information**

- |   |  |
|---|--|
| <input type="checkbox"/> Name/Address       | <input type="checkbox"/> Source/Tributary                          |
| <input type="checkbox"/> POD/Map Info       | <input type="checkbox"/> Capacity of<br>Diversion<br>Works/Storage |
| <input type="checkbox"/> Purpose of Use     |  |
| <input type="checkbox"/> Year Commenced     | <input type="checkbox"/> Place of Use                              |
| <input type="checkbox"/> Qty Water Diverted | <input type="checkbox"/> Measurements                              |

**[SUMMARY OF FINAL SUBMITTED VERSION]****SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2017**

Primary Owner: JOSH FREE

Statement Number: S024676

Date Submitted: 06/15/2018

1. Water is used under	Riparian Claim Pre-1914 Claim
2. Year diversion commenced	1868

3. Purpose of Use	
Fire Protection	4 x 2,500 gal tanks
Irrigation	

Irrigated Crops			
	Multiple Crops	Area Irrigated (Acres)	Primary Irrigation Method
Cannabis	No	0.8825	

4. Changes in Method of Diversion

Special Use Categories	
C1. Are you using any water diverted under this right for the cultivation of cannabis?	Yes
C2. Total amount of water used under this water right for cannabis cultivation	0.608693 acre-feet
C3. Total irrigated acreage of cannabis cultivated	0.8825 square feet
C4. Amount of cannabis cultivated by lighting condition type	
Outdoor Cultivated Canopy Size	38440 square feet
Outdoor Total Number of Plants Harvested	1600
Outdoor Number of Harvests	
Indoor Cultivated Canopy Size	
Indoor Total Number of Plants Harvested	
Indoor Number of Harvests	
Mixed Light Cultivated Canopy Size	
Mixed Light Total Number of Plants Harvested	
Mixed Light Number of Harvests	
C5. Irrigation methods that are used to cultivate cannabis	Drip/micro spray irrigation
C6. Is your cultivation of cannabis a commercial cannabis activity?	Yes

5-6. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used				
Month	Rate of diversion (GPD)	Amount directly diverted (Acre-Feet)	Amount diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		0	0.017	0
February		0	0.017	0
March		0	0.017	0
April		0	0	0

May		0.039942	0	0.039942
June		0.117572	0	0.117572
July		0.118935	0	0.118935
August		0.156553	0	0.156553
September		0.0829	0	0.1198
October		0.055891	0	0.055891
November		0	0	0
December		0	0.017	0
Total		0.571793	0.068	0.608693
Type of Diversion	Both Direct Diversion and Diversion to Storage			
Comments				

#### Water Transfers

6d. Water transferred	No
6e. Quantity transferred (Acre-Feet)	
6f. Dates which transfer occurred	/ to /
6g. Transfer approved by	

#### Water Supply Contracts

6h. Water supply contract	No
6i. Contract with	
6j. Other provider	
6k. Contract number	
6l. Source from which contract water was diverted	
6m. Point of diversion same as identified water right	
6n. Amount (Acre-Feet) authorized to divert under this contract	
6o. Amount (Acre-Feet) authorized to be diverted in 2017	
6p. Amount (Acre-Feet) projected for 2018	
6q. Exchange or settlement of prior rights	
6r. All monthly reported diversion claimed under the prior rights	
6s. Amount (Acre-Feet) of reported diversion solely under contract	

#### 7. Water Diversion Measurement

a. Required to measure as of the date this report is submitted	Yes
b. Is diversion measured?	Yes
c. An alternative compliance plan was submitted to the division of water rights on	
d. A request for additional time was submitted to the division of water rights on	

Measurement ID number	M009409
This Device/Method was used to measure water during the current reporting period	Yes
M1. Briefly describe the measurement device or method	Bucket & stopwatch
M2. Nickname	2016
M3. Type of device / method	Other: Bucket & Stopwatch
M4. Device make	
M5. Serial number	
M6. Model number	
M7. Approximate date of installation	
M8. Additional info	

M9. Approximate date the measuring device was last calibrated or the measurement method was updated	
M10. Estimated accuracy of measurement	
M11. Description of calibration method	
M12. Describe the maintenance schedule for the device/method	
Information for the person who last calibrated the device or designed the measurement method	
M13. Name	
M14. Phone number	
M15. Email	
M16. Qualifications of the individual	
M17. License number and type for the qualified individual above and/or any other relevant explanation	
M18. Type of data recorder device / method	
M19. Data recorder device make	
M20. Data recorder serial number	
M21. Data recorder model number	
M22. Data recorder units of measurement	
M23. Frequency of data recording	
M24. Additional data recorder info	
M25. I am required to report my diversion or storage data by telemetry as of the date this report is submitted	
M26. I report my diversion or storage data by telemetry to the following website	
M27. I have attached additional information on the method I used to calculate the volume of water	
M28. Describe any documents related to this measurement device or method that are attached to this water use report	

Measurement ID number	M009411
This Device/Method was used to measure water during the current reporting period	Yes
M1. Briefly describe the measurement device or method	Drip Irrigation Rates
M2. Nickname	Drip
M3. Type of device / method	Other: Drip rating
M4. Device make	
M5. Serial number	
M6. Model number	
M7. Approximate date of installation	
M8. Additional info	
M9. Approximate date the measuring device was last calibrated or the measurement method was updated	
M10. Estimated accuracy of measurement	
M11. Description of calibration method	
M12. Describe the maintenance schedule for the device/method	
Information for the person who last calibrated the device or designed the measurement method	
M13. Name	
M14. Phone number	
M15. Email	
M16. Qualifications of the individual	
M17. License number and type for the qualified individual above and/or any other relevant explanation	



M18. Type of data recorder device / method	
M19. Data recorder device make	
M20. Data recorder serial number	
M21. Data recorder model number	
M22. Data recorder units of measurement	
M23. Frequency of data recording	
M24. Additional data recorder info	
M25. I am required to report my diversion or storage data by telemetry as of the date this report is submitted	
M26. I report my diversion or storage data by telemetry to the following website	
M27. I have attached additional information on the method I used to calculate the volume of water	
M28. Describe any documents related to this measurement device or method that are attached to this water use report	

8. Conservation of Water	
a.	Are you now employing water conservation efforts?
	Yes
	Describe any water conservation efforts you have initiated
	Drip Irrigation, float valves
	Amount of water conserved
b.	I have data to support the above surface water use reductions due to conservation efforts.
	No

9. Water Quality and Wastewater Reclamation	
a.	Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?
	No
	Amount of reduced diversion
	Type of substitute water supply
b.	Amount of substitute water supply used
	I have data to support the above surface water use reductions due to the use of a substitute water supply

10. Conjunctive Use of Surface Water and Groundwater	
a.	Are you now using groundwater in lieu of surface water?
	No
b.	Amount of groundwater used
	I have data to support the above surface water use reductions due to the use of groundwater.

Additional Remarks

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	Josh
Last Name	Free
Relation to Water Right	Diverter of Record
The information in the report is true to the best of his/her knowledge and belief	Yes

RECEIVED

DEC 20 2017

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
REGION 1 – NORTHERN REGION  
619 Second Street  
Eureka, CA 95501

CDFW - EUREKA



**STREAMBED ALTERATION AGREEMENT**

NOTIFICATION No. 1600-2017-0404-R1

Unnamed Tributary to the Mattole River and the Pacific Ocean

Mr. Joshua Free  
Free Water Diversion Project  
1 Encroachment

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and Mr. Joshua Free (Permittee).

**RECITALS**

WHEREAS, pursuant to Fish and Game Code (FGC) Section 1602, the Permittee initially notified CDFW on June 29, 2017, that the Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, the Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, the Permittee agrees to complete the project in accordance with the Agreement.

**PROJECT LOCATION**

The project to be completed is located within the Mattole River watershed, approximately 6.5 miles south of the town of Petrolia, County of Humboldt, State of California. The project is located in Section 19, T2S, R1W, Humboldt Base and Meridian; in the Petrolia U.S. Geological Survey 7.5-minute quadrangle; Assessor's Parcel Number's 104-281-004, 104-311-019, and 104-281-005; latitude 40.2739 N and longitude 124.2294 W at the point of diversion (POD).

**PROJECT DESCRIPTION**

The project is limited to one encroachment (Table 1). One encroachment is for water diversion from an unnamed tributary to the Mattole River. Water is diverted for domestic use and irrigation. Work for the water diversion will include use and maintenance of the water diversion infrastructure.

Table 1. Project Encroachments with Description

ID	Latitude/Longitude	Description
POD	40.2739, -124.2294	Water diversion/facility retrofit from a Class II watercourse

## PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include Chinook Salmon (*Oncorhynchus tshawytscha*), Coho Salmon (*O. kisutch*), Steelhead Trout (*O. mykiss*), Western Brook Lamprey (*Lampetra richardsoni*), Pacific Lamprey (*Entosphenus tridentata*), Southern Torrent Salamander (*Rhyacotriton variegatus*), Pacific Giant Salamander (*Dicamptodon tenebrosus*), Foothill Yellow-Legged Frog (*Rana boylei*), Coastal Tailed Frog (*Ascaphus truei*), Western Pond Turtle (*Actinemys marmorata marmorata*) amphibians, reptiles, aquatic invertebrates, mammals, birds, and other aquatic and riparian species.

The adverse effects the project could have on the fish or wildlife resources identified above include:

### Impacts to water quality:

increased water temperature;  
reduced instream flow;

### Impacts to bed, channel, or bank and direct effects on fish, wildlife, and their habitat:

loss or decline of riparian habitat;  
direct impacts on benthic organisms;

### Impacts to natural flow and effects on habitat structure and process:

cumulative effect when other diversions on the same stream are considered;  
diversion of flow from activity site;  
direct and/or incidental take;  
indirect impacts;  
impediment of up- or down-stream migration;  
water quality degradation; and  
damage to aquatic habitat and function.

## MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

### 1. Administrative Measures

The Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. The Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily



available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.

- 1.2 Providing Agreement to Persons at Project Site. The Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of the Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Adherence to Existing Authorizations. All water diversion facilities that the Permittee owns, operates, or controls shall be operated and maintained in accordance with current law and applicable water rights.
- 1.4 Change of Conditions and Need to Cease Operations. If conditions arise, or change, in such a manner as to be considered deleterious by CDFW to the stream or wildlife, operations shall cease until corrective measures approved by CDFW are taken. This includes new information becoming available that indicates that the bypass flows and diversion rates provided in this agreement are not providing adequate protection to keep aquatic life downstream in good condition or to avoid "take" or "incidental take" of federal or State listed species.
- 1.5 Notification of Conflicting Provisions. The Permittee shall notify CDFW if the Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact the Permittee to resolve any conflict.
- 1.6 Project Site Entry. The Permittee agrees to allow CDFW employees access to any property it owns and/or manages for the purpose of inspecting and/or monitoring the activities covered by this Agreement, provided CDFW: a) provides 24 hours advance notice; and b) allows the Permittee or representatives to participate in the inspection and/or monitoring. This condition does not apply to CDFW enforcement personnel.

## **2. Avoidance and Minimization Measures**

To avoid or minimize adverse impacts to fish and wildlife resources identified above, the Permittee shall implement each measure listed below.

- 2.1 Permitted Project Activities. Except where otherwise stipulated in this Agreement, all work shall be in accordance with the Permittee Notification received on June 29, 2017, with revisions received on August 25, 2017, together with all maps, BMP's, photographs, drawings, and other supporting documents submitted with the Notification.

## **Water Diversion and Facility Retrofit**

- 2.2 Work Period. All work, not including water diversion, shall be confined to the period **June 15 through October 1** of each year. Work within the active channel of a stream shall be restricted to periods of **dry weather**. Precipitation forecasts and potential increases in stream flow shall be considered when planning construction activities. Construction activities shall cease and all necessary erosion control measures shall be implemented prior to the onset of precipitation.
- 2.3 Work Completion. The proposed work shall be completed by no later than **July 15, 2018**. A notice of completed work, with supplemental photos, shall be submitted to CDFW **within seven (7) days** of project completion.
- 2.4 Maximum Diversion Rate. The maximum instantaneous diversion rate from the water intake shall not exceed **5 gallons per minute (gpm)** at any time.
- 2.5 Bypass Flow. The Permittee shall **pass 90% of flow** at all times to keep all aquatic species including fish and other aquatic life in good condition below the point of diversion.
- 2.6 Seasonal Diversion Minimization. No more than **250 gallons per day** shall be diverted during the low flow season from **May 15 to October 30** of any year. Water shall be diverted only if the Permittee can adhere to conditions 2.3 and 2.4 of this Agreement.
- 2.7 Measurement of Diverted Flow. The Permittee shall install a device acceptable to CDFW for measuring the quantity of water diverted to and from the POD. This measurement shall begin as soon as this Agreement is signed by the Permittee. The Permittee shall record the quantity of water diverted on a weekly basis.
- 2.8 Water Management Plan. The Permittee shall submit a Water Management Plan no later than **sixty days** from the time this Agreement is made final that describes how compliance will be achieved under this Agreement. The Water Management Plan shall include details on water storage, water conservation, or other relevant material to maintain water needs in coordination with forbearance and bypass flow requirements. The Water Management Plan shall include a brief narrative describing water use on the property, photographs to support the narrative, and water use calculations to ensure compliance with this Agreement. The Water Management Plan shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501.
- 2.9 Intake Structure. No polluting materials (e.g., particle board, plastic sheeting, bentonite) shall be used to construct or screen, or cover the diversion intake structure.



- 2.10 Intake Screening. The Permittee shall regularly inspect, clean, and maintain screens in good condition.
- 2.10.1 The water intake screens shall be securely attached (e.g., threaded or clamped) to the intake line and have a minimum wetted area of 0.25 square feet and a minimum open area of 27%.
- 2.10.2 A water intake screen with round openings shall not exceed 3/32-inch diameter; a screen with square openings shall not exceed 3/32-inch measured diagonally; and a screen with slotted openings shall not exceed 0.069 inches in width. Slots must be evenly distributed on the screen area.
- 2.10.3 The water intake screen may be constructed of any rigid material, perforated, woven, or slotted. Stainless steel or other corrosion-resistant material is recommended to reduce clogging due to corrosion. Care should be taken not to use materials deemed deleterious to aquatic species.
- 2.10.4 The water intake screen shall be placed in fast moving water with the long axis of the screen parallel to the streamflow. The water intake shall not be placed in pool habitat.
- 2.11 Intake Shall Not Impede Aquatic Species Passage. The water diversion structures shall be designed, constructed, and maintained such that they do not constitute a barrier to upstream or downstream movement of aquatic life.
- 2.12 Water Conservation. The Permittee shall make best efforts to minimize water use, and to follow best practices for water conservation and management.
- 2.13 Water Storage Maintenance. Storage tanks shall have a float valve to shut off the diversion when tanks are full to prevent overflow from being diverted when not needed. The Permittee shall install any other measures necessary to prevent overflow of tanks resulting in more water being diverted than is used.
- 2.14 State Water Code. This Agreement does not constitute a valid water right. The Permittee shall comply with State Water Code sections 5100 and 1200 et seq. as appropriate for the water diversion and water storage. The application for this registration is found at [http://www.swrcb.ca.gov/waterrights/publications\\_forms/forms/docs/sdu\\_registration.pdf](http://www.swrcb.ca.gov/waterrights/publications_forms/forms/docs/sdu_registration.pdf).

### **Invasive Species**

- 2.15 Bullfrog Management Plan. Following pond construction, the Permittee shall comply with the **Bullfrog Management Plan** (Exhibit A). All reporting requirements shall be submitted no later than **December 31** of each year.

### 3. Reporting Measures

- 3.1 Work Completion. The proposed work shall be completed by no later than **July 15, 2018**. A notice of completed work (condition 2.3), with supplemental photos, shall be submitted to CDFW **within seven (7) days** of project completion.
- 3.2 Measurement of Diverted Flow. Copies of the **Water Diversion Records** (condition 2.7) shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501 no later than **December 31** of each year beginning in **2017**.
- 3.3 Water Management Plan. The Permittee shall submit a **Water Management Plan** (condition 2.8) no later than **sixty days** from the time this Agreement is made final that describes how compliance will be achieved under this Agreement. The Water Management Plan shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501.
- 3.4 Bullfrog Management Plan. Following pond construction, the Permittee shall submit all required documents described in the **Bullfrog Management Plan** (condition 2.15) no later than **December 31** of each year. The Bullfrog Management Plan shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501.

### CONTACT INFORMATION

Written communication that the Permittee or CDFW submits to the other shall be delivered to the address below unless the Permittee or CDFW specifies otherwise.

To Permittee:

Mr. Joshua Free  
PO Box 7  
Petrolia, California 95558  
707-629-4136  
josh@empressfarms.com

To CDFW:

Department of Fish and Wildlife  
Northern Region  
619 Second Street  
Eureka, California 95501  
Attn: Lake and Streambed Alteration Program  
Notification #1600-2017-0404-R1



## **LIABILITY**

The Permittee shall be solely liable for any violation of the Agreement, whether committed by the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require the Permittee to proceed with the project. The decision to proceed with the project is the Permittee's alone.

## **SUSPENSION AND REVOCATION**

CDFW may suspend or revoke in its entirety this Agreement if it determines that the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide the Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide the Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to the Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

## **ENFORCEMENT**

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against the Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

## **OTHER LEGAL OBLIGATIONS**

This Agreement does not relieve the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and



subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 *et seq.* (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

## **AMENDMENT**

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

The Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and the Permittee. To request an amendment, the Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

## **TRANSFER AND ASSIGNMENT**

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by the Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, the Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

## **EXTENSIONS**

In accordance with FGC section 1605(b), the Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, the Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

If the Permittee fails to submit a request to extend the Agreement prior to its expiration, the Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (FGC section 1605(f)).

## **EFFECTIVE DATE**

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after the Permittee signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at [http://www.wildlife.ca.gov/habcon/ceqa/ceqa\\_changes.html](http://www.wildlife.ca.gov/habcon/ceqa/ceqa_changes.html).

## **TERM**

This Agreement shall **expire five years** from date of execution, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. The Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

## **AUTHORITY**

If the person signing the Agreement (signatory) is doing so as a representative of the Permittee, the signatory hereby acknowledges that he or she is doing so on the Permittee's behalf and represents and warrants that he or she has the authority to legally bind the Permittee to the provisions herein.

## **AUTHORIZATION**

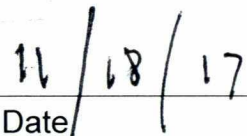
This Agreement authorizes only the project described herein. If the Permittee begins or completes a project different from the project the Agreement authorizes, the Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

## CONCURRENCE

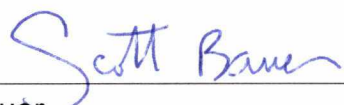
The undersigned accepts and agrees to comply with all provisions contained herein.

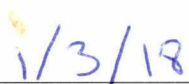
**FOR Mr. Joshua Free**

  
\_\_\_\_\_  
Joshua Free

  
\_\_\_\_\_  
Date

**FOR DEPARTMENT OF FISH AND WILDLIFE**

  
\_\_\_\_\_  
Scott Bauer  
Senior Environmental Scientist Supervisor

  
\_\_\_\_\_  
Date

Prepared by: Kalyn Bocast, Environmental Scientist, October 3, 2017



## **EXHIBIT A.**

### **BULLFROG MONITORING AND MANAGEMENT PLAN FOR 1600-2017-0404-R1**

#### **GENERAL BULLFROG INFORMATION**

The American bullfrog (*Lithobates catesbeianus* = *Rana catesbeiana*); hereafter bullfrog, is an invasive non-native species in California and poses a significant threat to California's native fish and wildlife resources. Bullfrogs were introduced in California over 100 years ago from eastern parts of the United States as a food supply, but have since caused substantial ecological consequences. Bullfrogs are considered highly invasive and are well documented to be prey upon a variety of fish and wildlife species, including some that are rare, threatened, and endangered. Human modifications to the environment provide favorable condition to bullfrogs such as artificially created agricultural ponds, canals and ditches where warm still water occurs. As a result bullfrogs have spread throughout California.

Efforts to control bullfrogs have been met with varying degrees of success because: 1) bullfrogs can be difficult to detect and go dormant from fall through winter, 2) bullfrogs often take cover in difficult areas to manage (e.g. dense vegetation), 3) they can travel long distances to colonize and re-colonize areas, 4) they have high reproductive output, 5) they are weary and readily flee perceived threats, and 6) they can survive physical trauma remarkably well. CDFW scientific staff recognizes there is an urgent and immediate need to develop improved bullfrog management strategies to protect California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. Public support and implementation of bullfrog control in California is an important conservation strategy that will help protect natural resources for future generations.

#### **MONITORING**

The Project reservoir(s) shall be monitored for bullfrog presence on an annual basis with a minimum of five total surveys, no less than two weeks apart, throughout the months of May-July

- All pond survey effort must be made by a person knowledgeable in bullfrog identification (see Appendix A for reference photos);
- Survey efforts shall include listening for bullfrog calls and slowly walking the complete perimeter of the pond at night\* (dusk or later) while shining a flashlight to detect movement and eye-shine

If bullfrogs are not detected upon completion of five total surveys, or at any other time of the year incidentally, removal efforts are not required that year.

\*Day time monitoring can also be conducted to aid detection but is not required under this plan.

#### **SUCCESS CRITERIA**

The level of effort needed to successfully manage bullfrog populations varies with infestation levels. This plan shall be considered successfully implemented if sufficient effort is provided to prevent adult bullfrogs from reproducing in the reservoir(s) each year, and no bullfrog life-stages can be detected. Bullfrogs are capable of traveling long distances over-land, and on-going

efforts will be required to ensure dispersing bullfrogs do not colonize the reservoir(s) at a future time.

## OPTIONS FOR MANAGEMENT

Two removal methods may be employed for controlling bullfrogs under this plan and include:

- Manual direct removal
- Reservoir de-watering (Hydro-modification)

Implementing both reservoir de-watering and manual direct removal is currently believed to be the most effective method of managing bullfrog infestations. For reservoirs that are heavily infested with juvenile bullfrogs and/or tadpoles, reservoir dewatering may be necessary to break the bullfrog's life cycle and prevent on-going reproduction. Prior to conducting reservoir dewatering activities, please coordinate with CDFW Environmental Scientist Kalyn Bocast by phone at (707) 441-2077 or by email at [kalyn.bocast@wildlife.ca.gov](mailto:kalyn.bocast@wildlife.ca.gov).

### Direct Removal

All direct removal efforts must be made by a person knowledgeable in bullfrog identification.

- Removal efforts must occur during, but are not be limited to the active/breeding season, occurring May – July;
- A minimum of **two** efforts throughout the season are considered necessary;
- Direct removal efforts are typically most effective when conducted at night with use of lights but can also be conducted during the day;
- Direct removal must include working the entire perimeter of the reservoir;
- A rubber raft or small boat may be necessary to successfully remove some individuals;
- A team of two individuals or more is often helpful, one person for shining lights and/or operating a boat and the other person to perform removal efforts;
- Bullfrog tadpoles must be removed and dispatched and must not be relocated or kept as pets.

### Management Authorization

Take of bullfrogs is specifically allowed in the California Code of Regulations (CCR), Title 14 (T-14) section 5.05(a)(28), under the authority of a sport fishing license. There is no daily bag limit, possession limit or hour restriction, but bullfrogs can only be taken by hand, hand-held dip net, hook and line, lights, spears, gigs, grabs, paddles, bow and arrow or fish tackle.

Alternatively, FGC Section 5501 allows CDFW, as limited by the commission, to issue a permit to destroy fish that are harmful to other wildlife. The regulations have addressed this under Section CCR T-14 226.5 Issuance of Permits to Destroy Harmful Species of Fish in Private Waters for Management Purposes. This allows the CDFW to issue free permits to destroy harmful aquatic species by seining and draining.



## **Pond Dewatering**

Pond dewatering may be appropriate if the reservoir can be successfully dewatered without adversely affecting stream resources. Careful planning and coordination with CDFW, is necessary to ensure potential impacts to stream resources can be addressed, prior to commencing with pond draining. Discharge of polluted water to waters of the state may require permitting from other agencies with permitting authority, such as the Regional Water Quality Control Board.

In general, bullfrog tadpoles require two years to develop into frogs, whereas native amphibians only require one year. Therefore, draining a reservoir every year is intended to interrupt bullfrog tadpole development, dramatically decrease bullfrog populations and allow for reduced efforts as a measure of adaptive management. Typically in Northern California, reservoir draining should occur in September through October to avoid impacts to sensitive native amphibian and fishery resources. While draining occurs, direct removal efforts should be employed as described above if possible.

## **REPORTING**

A written log shall be kept of monitoring and management efforts and shall be provided to CDFW **each year** by December 31. The written log shall include: 1) date and time of each monitoring and management effort, 2) approximate number of each bullfrog life stage detected and/or removed per effort, and 3) amount of time spent for each monitoring and management effort.

## **APPENDIX A. BULLFROG REFERENCE PHOTOS**



This is a photo of a Bullfrog tadpole. (Photo taken by Mike van Hattem).



The photos shown in this Appendix demonstrate a medium sized adult bullfrog that was removed from Ten Mile Creek, Mendocino County. Note the bullfrog has a large tympanum, (circular ear drum shown with an arrow) and **does not** have distinct ridges along its back (dorsolateral folds). Photo taken by Wes Stokes.



The bullfrog has somewhat distinct mottling and the underside of the bullfrogs hind legs are not shaded pink or red.



## **WATER RESOURCES PROTECTION PLAN**

**FOR**

**HUMBOLDT COUNTY PARCEL: 104-311-019**

**PREPARED IN ACCORDANCE WITH NORTHCOAST REGIONAL WATER QUALITY CONTROL BOARD (NCRWQCB)**

**ORDER NO. R1-2015-0023**



## I. INTRODUCTION

This Water Resources Protection Plan (Plan; WRPP) was developed to satisfy conditions of the Tier 2 enrollment requirements in the Northcoast Regional Water Quality Control Board (NCRWQCB) Order No. R1-2015-0023 (Order). This Plan includes measures and Best Management Practices (BMPs; Appendix B of the Order) to be implemented to meet the "Standard Conditions" specified in the Order § I.A.

### A. Individual Discharger / Property Owner

Josh Free  
PO Box 7  
Petrolia, CA 95558

### B. Cultivation Operator

Empress Farms  
36332 Mattole Road  
Petrolia, CA 95558

### C. Project Site Address

36332 Mattole Road  
Petrolia, CA 95558

Humboldt County APN 104-311-019

## II. PROJECT SITE LOCATION

### A. Location

The Project is located at 36332 Mattole Road, Petrolia, CA 95558 in southwest Humboldt County, in the inland zone between the unincorporated communities of Honeydew and Petrolia. Petrolia is located approximately 6 miles northwest of the Project site and Honeydew is located approximately 8.3 miles east of the Project site. The Project is entirely located within the *Cape Mendocino* Watershed (USGS HUC-8 *Mattole*) and the *Lower Mattole River* USGS HUC-12 subwatershed.

### B. Land Use

#### 1. *Historical*

The property is one of the older developed properties in the Petrolia Area, and was at one time part of the H.A. Miner Ranch (circa 1890's) and later the George Miner Ranch (circa 1920's).

Since its development, the Property has been used for residential and agricultural uses, including grazing, and corn and orchard fruits production. With the passage of California Proposition 215 in 1996, the agricultural focus turned to medical cannabis and has been ever since.

## *2. Current*

The Site is currently being used as a single-family residence with cannabis cultivation. The Project site is designated RA (Residential Agriculture) under the County's current General Plan and the current zoning is U (Unclassified). Medical cannabis has been cultivated in various locations throughout the property prior to January 1, 2016. Prior to recent years, most cultivation occurred within or adjacent to riparian tree cover on the property in order to avoid detection by law enforcement personnel. Much of the pre-existing garden areas are located within the Streamside Management Area and within 100 feet of the Mattole River.

## *3. Proposed future activities*

The following infrastructure will be constructed in 2017-2019, following approval and applicable permitting by Humboldt County. All construction activities will follow guidelines and BMPs set forth in the Order. Please see Attachment A: WRPP Map 1 for exact location.

- An agricultural water storage pond will be constructed
- A metal agricultural water storage tank will be installed
- An additional 20,000 ft<sup>2</sup> of outdoor cannabis cultivation is also proposed through Humboldt County's Retirement, Remediation, and Relocation (RRR) Program, bringing the total cultivation area on the parcel to 55,560 ft<sup>2</sup>.

## **III. PROJECT SITE DESCRIPTION**

The Project occurs on Humboldt County APN 104-311-019, which is 12 acres in size. The Mattole River forms the western property boundary, while Mattole Road runs along the eastern edge. The property can generally be characterized by low gradient, historically cleared slopes (<3.5%) toward the Mattole River, featuring flat, open agricultural and grazing land with a handful of cultivated redwood and Douglas fir trees. This area is bordered by a strip of riparian habitat running in a north-south direction through the property along the Mattole River. Several residential-related structures exist on the property. Slopes within the property range from 0.5% to 6.5%. The climate is characterized by a pattern of high-intensity rainfall in winter and warm, dry summers.

Access to the Project Site is served by Mattole Road, a paved county-maintained road and also by Miner Lane, a native surface, low-gradient road which is 0.16 miles in length. Miner Lane also serves as an access road for several neighboring parcels and receives moderate to minimal use.

The Project is located in a larger area of agricultural, residential, and forestry uses. Surrounding landscapes are characterized by low-gradient agricultural lands along the Mattole River valley floor, and steeper wooded slopes higher in elevation above the river. No schools, places of religious worship, or tribal cultural resources are located within one quarter mile of the Project.

#### **IV. PROJECT SUMMARY – CANNABIS CULTIVATION**

A total of 55,560 ft<sup>2</sup> of cannabis is proposed for cultivation. Plants will be obtained from an off-site non-commercial (i.e. “in-house”) nursery facility owned by Empress Farms on a nearby property leased. Plants will either be sourced from seed or clones. Propagation will occur in an indoor setting followed by vegetative growth in a greenhouse (nursery) under natural light. Immature plants will remain at the nursery facility until they are ready to be planted in the cultivation/canopy area at the Project Site (104-311-019).

Cultivation will occur out-of-doors in full sun. Plants will be planted in native soil supplemented with soil amendments and fertilizers (see section VI.G). Watering via timed drip irrigation will occur twice per week and compost tea applications will also occur twice per week. Upon harvest, plant material will be moved to a nearby facility at a different location for drying and further processing.

#### **V. SITE ASSESSMENT**

An initial survey was conducted of the Project Site to assess the property for compliance with the Standard Conditions as listed in the Order § I.A. Water systems were evaluated for their source, storage, and use. Elements of the water storage system were mapped, and data collected on the number and size of tanks and ponds. All aspects of the water system were evaluated for existing erosion and the potential for sediment delivery to the stream network.

Cannabis cultivation sites and access roads were evaluated for controllable sediment delivery sites, irrigation runoff, waste disposal, and storage of petroleum, fertilizers, and other chemicals used in the cultivation process. Proximity of cultivation areas to riparian zones, wetlands, and streams was measured. The Discharger was consulted for information on the rate and application method of fertilizers and amendments used in cultivation.

Overall, the property is in good shape and does not pose significant threat to water quality. The main concern for the property is relocating the garden areas outside of the stream and riparian buffer zones, building water storage capacity, and properly covering bulk fuel storage. (See details in the following section.)

## VI. PROJECT SITE CHARACTERISTICS & MEASURES TO MEET STANDARD CONDITIONS

### A. Site maintenance, erosion control, and drainage features

#### 1. *Site drainage & runoff*

An existing Class II stream channel facilitates overall parcel drainage during the wet season. As the slope of the garden site is 3.5% or less in (many) places, surface water is naturally absorbed and recharged back into the existing landscape without channelization. The access road is a native surface and relatively low gradient with indistinct drainage patterns. No evidence of erosion or sediment contribution to surface water was present during the initial Site survey or subsequent monitoring events.

Runoff will be minimized during the growing season by applying irrigation at agronomic rates via timed drip irrigation (i.e. there will be no runoff from irrigation). Any detected leaks in the irrigation system/s shall be fixed immediately so as to reduce runoff from such incidents.

Pond overflow shall be consistent with engineering professional standards and relevant local and state guidelines. The pond shall be constructed so that overflow either recharges the natural landscape, bioswales, and/or redirected back into a watercourse. The pond will be engineered and constructed by an appropriate licensed geologist and contractor in accordance with Humboldt County Planning & Building codes and regulations.

All runoff from soil and garden wastes shall be minimized by storing such wastes on low-gradient slopes in distinct compost bins and/or areas. Straw and/or mycoremediated straw baffles shall surround compost bins, areas, and piles, as may be deemed necessary. Drainage and potential runoff associated with fertilizer, amendment, and fuel storage shall be minimized through proper covered, off-the ground storage and secondary containment systems.

#### 2. *Erosion control measures*

Topsoil preservation measures include planting cover crop (clover and other species) during the fallow season, followed by minimal tilling on calm days during planting, and mulching or utilizing weed mats where appropriate.

For minimizing erosion relating to roads and driveways, road conditions shall be inspected on a weekly basis during the year, and after major storm events during the wet season. All culvert road improvements in the future shall utilize angular rock, outsloping, rolling dips, and water bars, as appropriate.

To minimize erosion and dust resulting from construction activities (e.g. pond and tank/s); all construction shall take place between May 1 – October 15 in periods of dry weather in accordance with provisions set forth in the Order. All ground disturbance that may take place during construction will be mulched with native grass straw/hay at a rate of 2 tons/acre, which shall not only reduce erosion, but also provide a mechanism for reseeding during the following

wet season. These same areas may also be planted during the wet season with native bunch grass species acquired from a local watershed restoration group or broadcast seeded with native flower and forb mix.

B. Stream crossing maintenance and improvement

There are no stream crossings on the property.

C. Stream and wetland protection and buffers

During the enrollment of the Discharger in the Order and development of this Plan, it became apparent that the pre-existing (pre-2016) cultivation areas would need to be resituated on the property. This was an area requiring immediate corrective action. Upon consult with Humboldt County Planning officials in March 2016, the areas/s of cultivation were consolidated and positioned so as to be at least 150 ft from the Mattole River stream channel and in an already-existing cultivated field (wheat, rye, barley, and grass hay have been cultivated in this location for the past 4 years). This consolidation and move of the garden areas to an already-cultivated field allows for the least environmentally impactful farming methods on the property. Please see Attachment A: WRPP Map 1 for location. Current cultivation activities and associated structures are now 332 ft from the Mattole River and 165 ft from the drip edge of the riparian zone (WRPP Map 1).

No construction is proposed within the riparian zone and no removal of trees is proposed.

No wetlands have been identified at the Site.

D. Spoils management

There are no dirt spoil piles currently existing at the site. Future spoils will be placed in designated area where they cannot be transported to surface water. Spoils from pond construction will be used in berm construction and also be compacted and contoured to mimic the natural slope contours and drainage patterns at the Site to prevent sediment mobilization and potential delivery to surface waters.

E. Water source, storage, and use

1. *Water Source*

The current water source for cultivation and domestic water is a perennial Class II stream with a pre-1914 water right claim on an adjacent property that is an un-named tributary to the Mattole River. A Statement of Water Diversion and Use (SDU) was registered for the point of diversion (POD) with the SWRCB (SDU-S024676) in 2014, and subsequent yearly reports have been filed thereafter. A Final Lake and Streambed Alteration Agreement (LSAA) has been secured with the California Department of Fish & Wildlife for the stream diversion and associated pond (1600-2017-0404-R1). Please see Attachment B: WRPP Map 2 for location of the POD and streamcourse.

In future years, the Discharger will install an off-stream water storage pond and large-capacity steel water storage tank, both of which will utilize rainwater catchment. The pond and tank will provide irrigation water during the forbearance season. Irrigation water will be collected via passive collection methods during rain events. Water will also be collected from the stream diversion during the non-forbearance period of November 1 – March 31, or as adjusted by updated local and state regulations. Up to 10% of the stream at the POD (but in no event greater than 5 gallons/minute) may be diverted to fill the storage tank(s) and ponds. No water will be diverted during the low flow/forbearance period from April 1 – Oct 31. A Cannabis Small Irrigation Use Registration (SIUR) will be filed with the State Water Resources Control Board – Division of Water Rights for the water storage for cannabis irrigation since it will partially be sourced from the stream diversion.

The Mattole basin receives 80 – 100 inches of rainfall each year, on average.<sup>1</sup> The footprint of the proposed pond is 7,000 ft<sup>2</sup>. This translates to 348,880 – 436,100 gal of harvested rainwater. If 94.77 inches of precipitation is received, then the tank will be full. If less than this amount is received, then the pond will be filled with water from the stream diversion during permitted times of diversion, as determined by guidelines set forth by the Order. The footprint of the steel water storage tank is 962 ft<sup>2</sup> (circular). This translates to 47,969 – 59,961 gal of harvested rainwater. The remainder will be filled via the stream diversion during permitted times of diversion, as determined by guidelines set forth by the Order.

No hauled/trucked water shall be used.

## 2. Water storage

In the initial site survey, the Discharger did not have adequate water storage infrastructure (a total of 10,000 gallons for cultivation and domestic needs). This has been identified as an area requiring corrective action.

In total, 503,285 gallons of water storage is proposed. Projected use is 475,424 gallons (see 3. *Projected water usage* below). Thus, there is more-than-enough proposed water storage to accommodate existing cultivation areas and relocated RRR cultivation areas.

Rainwater catchment will occur into one agricultural pond (proposed) with a capacity of 413,285 gallons and a 90,000-gallon steel agricultural tank. Water sourced from the stream diversion will be used to fill remainder of the pond and fill additional water storage tanks as may be added. The pond will be constructed upon approval by Humboldt County during dry conditions, in accordance with the Order. The pond has been engineered to allow for overflow into a bioswale, and will also be constructed or finished so as to allow escapement by wildlife.

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<sup>1</sup> Source: [https://www.wrh.noaa.gov/eka/climate/annual\\_rain.gif](https://www.wrh.noaa.gov/eka/climate/annual_rain.gif)



Domestic water is stored in four (4) 2,500-gallon plastic tanks for temporary storage (used within 30 days of diversion). These tanks are located on a neighboring parcel within a deeded easement to the stream diversion (see Attachment B: WRPP Map 2).

### 3. Projected water usage

In total, 475,424 gallons of water will be used. A maximum of 125.1 gallons per plant are anticipated with a maximum total of approximately 2,400 plants for existing cultivation and 125.1 gallons per plant for 1,200 plants from anticipated RRR relocation. Additionally, 200 gallons per week for 25 weeks (May 1 – mid-October) for compost teas, which are then sprayed onto the soil pre-planting, and then also onto plants post-planting.

Water usage is primarily based on drip irrigation rates show in the following table:

**Table 1. Drip Irrigation Rates for Empress Farms**

DATES	WATER AMOUNT (GAL/PLANT/WEEK)	TOTAL (PER PLANT)
Jun 1 – 14	2.5	5
Jun 15 - 30	4	8.6
Jul 1 - 14	6	12
Jul 15 – Sep 30	8	82.5
Oct 1 - 30	4	17

In addition to water use from irrigation, there is also water use from compost tea applications and some overhand watering. These two additional waterings combined average 200 gallons/week beginning in May (to inoculate the native soil) and continuing throughout the growing season. Table 2 shows water use in gallons by month and a yearly total. This is broken down by the use from the existing cultivation area (38,440 ft<sup>2</sup>; 2,400 plants) and use by the additional RRR relocated area (20,000 ft<sup>2</sup>; 1,200 plants). The addition of the RRR area will increase the water use at the cultivation site by approximately 50%.

Table 2. Water Use in Gallons by Month at 104-311-019, Displayed by Type of Cultivation Area & Other Uses

Month	Pre-existing 38,440 sqft	RRR Relocation 20,000 sqft	Compost Teas & Overhand Watering	Total by Month
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	886	886
June	32,640	16,320	857	49,817
July	72,687	36,344	886	109,917
August	85,029	42,515	886	128,430
September	82,287	41,144	857	124,288
October	40,800	20,400	886	62,086
November	0	0	0	0
December	0	0	0	0
<b>TOTAL BY YEAR</b>	<b>313,443</b>	<b>156,723</b>	<b>5,258</b>	<b>475,424</b>

The water storage amounts proposed herein accommodate this measure of water usage for the size of the gardens, as shown on the associated WRRP Map 1. If garden size/s increase in the future or the number of plants increase, the water storage amount will increase accordingly and proportionately, unless other farming practices (i.e. dry farming) or cultivation of specific drought-tolerant strains are pursued.

With a project planting date of early to mid-June, water usage will be minimal to none prior to this date, depending on the timing of spring rains as it pertains to soil conditioning. Water use shall increase in late June through July with the planting and irrigation of full season plants. Water use will remain relatively steady in July through August and will decrease in September with the onset of harvest, as well as reduced evapo-transpiration due to reduced daylight hours. All exposed soils in garden beds shall be mulched or cover-cropped so as a means to reduce evaporative loss and conserve water.

#### F. Irrigation runoff

No evidence of water movement and erosion in the cultivation area was observed during the initial or subsequent site surveys. Water conservation and containment measures will prevent irrigation runoff from leaving the cultivation area. Crop irrigation will occur via a timed drip irrigation system. Full season plants received 2.5 - 8 gal per plant per week, depending on plant maturity and weather conditions. These amounts may be adjusted based on weather, site-specific microclimates, plant maturity and strain, and soil composition. Irrigation shall be applied at agronomic rates so that runoff does not occur.

A limited amount of hand-watering will be done at time of transplant and during any top-dress fertilization or amendment (which will be applied only if plant exhibit nutrient stress).

Water meters will be installed at all exit points from storage facilities, to account for and report actual water used, which will be recorded weekly and reported in accordance to local and state guidelines. The water level in all storage facilities will be monitored once per week during the forbearance period and at least 2 times per month during other times; it shall be recorded at least once per month. Safety valves (volume or time oriented) shall exist at pond and tanks so that in the event of a leak, only a limited amount of water can be lost.

During the forbearance period, leaks will be monitored for at least once per week in all lines and fittings or more frequently after wind events. During other times of the year, leaks will be checked for through regular visual inspection of storage facilities and irrigation lines conducted at least 2 times per month, or after large storm events.

#### G. Fertilizer and soil amendments

Empress Farms exclusively uses organic farming practices, and as such, no synthetic fertilizers are used. To enhance soil health, fertility, and naturally boost nitrogen, all garden plots are cover-cropped the previous winter. To supplement natural soil health compost, bat guano, trace minerals (Azomite), cal-phos, kelp & seaweed, worm castings, crushed oyster shell, crab shell meal, and bio-char are used (Table 3). Compost teas and beneficial bacteria solutions are used during the growing season to maintain and enhance plant vitality and vigor. All fertilizers and amendments are applied per packaging instructions and/or at proper agronomic rates. All applications of fertilizer are recorded, and monthly amounts are reported with annual monitoring reports.

All unused fertilizers and amendments are stored in a mobile, locked, enclosed trailer during the growing season, and moved to an approved off-site storage facility (also leased by Empress Farms) at a nearby location. Fertilizer and amendment containers are stored in secondary containment vessels (bins and/or totes). Spill kits are available at the trailer should an emergency arise.

**Table 3. Fertilizer & Soil Amendments for APN 104-311-019**

PRODUCT	ACTIVE INGREDIENT	USE
Sparetime Nitro Bat Guano	Nitrogen, Phosphorous, Potassium (NPK 7-3-1)	Fertilizer
Sparetime Mocha Bat Guano	NPK 4-6-1	Fertilizer, compost tea
Krazy Kelp Seaweed	NPK 1-0-17	Fertilizer, compost tea
Green Bicycles "Ocean Bounty"	NPK 3-9-1	Fertilizer, compost tea
Green Bicycles "Happy Endings" Tea Mix	NPK 1-5-2	Fertilizer, compost tea
Worm Castings	N/A	Compost tea, soil conditioner
Azomite	Trace minerals	Soil amendment
Oyster Shell (Pacific Pearl or similar brand)	Calcium	Soil amendment
Crab Shell Meal	NPK 4-2-0, Calcium	Soil amendment
Bio-Char	N/A	Soil conditioner

#### H. Pesticides

No synthetic pesticides are used. Compost teas and beneficial bacteria solutions are used during the growing season to maintain and enhance plant vitality and vigor, and also to prevent and combat pests (Table 4). Integrated pest management strategies that include chemical, biological, and cultural controls are used so that only affected areas are treated when there is an economic benefit. Pests and diseases are controlled with OMRI-certified products that utilize plant essential oils and/or beneficial bacteria. All products are applied according to label instructions. Please see Attachment C for an Integrated Pest Management (IPM) Plan.

All of the compost tea ingredients are stored within totes or bins in the locked trailer mentioned above. When the growing season is complete, all unused supplies will be stored off-site at an additional location leased by Empress Farms.

**Table 4. Pesticides Used for Preventatives & Treatments for APN 104-311-019**

PRODUCT	ACTIVE INGREDIENT	USE
Safer Brand Garden Fungicide	Sulfur	Fungicide
Triact 70, Neem (Natural Guard Brand), TerraNeemEC, or Triple Action Neem Oil	Neem Oil	Mite preventative & treatment
Pest Out by SaferGro	Cottonseed Oil, Clove Oil, Garlic Oil, Oleic Acid, Lauric Acid, Sodium Bicarbonate	Mildew & mite preventative & treatment
Green Cure	Potassium bicarbonate	Mildew preventative & treatment
Biobit HP, Crymax, Gnatrol, Javelin, Xentari, or Foray XG	Bacillus thuringiensis	Mildew & mite preventative & treatment
Preferal, or Ancora Microbial Insecticide	Isaria fumosorosea	Insecticide
Dr. Zymes	Citric acid	Mildew preventative & treatment

**I. Petroleum products and other chemicals**

The site is grid tied which reduces the amount of petroleum used and stored on the property. A ~ 300-gallon fuel tank for domestic use is located on the property, near the residence. In the initial assessment, the fuel tank did not have the proper enclosure. This has been identified as an area requiring corrective action.

Additional petroleum products are limited to oil and other chemicals commonly used on vehicles and machinery. All petroleum products for domestic use will be stored in the shop near the

residence in plastic totes for secondary containment to prevent spillage, discharge, or seepage into receiving waters (Attachment A: WRPP Map 1). Preventative measures for chemical storage will include secondary containment, following fueling and application BMPs, and have appropriate cleanup materials available on site (i.e. spill kits).

J. Cultivation-related wastes

Vegetation matter such as root balls, branches, and leaves will be composted on-site in the designated compost area (Attachment A: WRPP Map 1).

Other cultivation-related wastes, such as pots, fertilizer and amendment bags, etc., shall be disposed of as described under K.1. *Refuse*, below. It is anticipated no spent potting soil will be generated at the Site.

K. Refuse and human waste

1. *Refuse*

All other wastes, including cultivation-related (non-plant material) and household refuse & recycling, plastics, packaging shall be collected in designated trash and recycling containers also located with the locked trailer, mentioned previously. The trash and recycling containers will be in a separate section than the fertilizers and pesticides. The containers will be covered and stored within the trailer in order to prevent discharge to receiving waters and to prevent any leachate or contact water from entering or percolating to receiving waters. Additionally, since the trailer can be locked, it will prevent animals from gaining access. The solid waste and recycling will be hauled off-site by the Discharger to an approved waste management facility at least once per week, or as necessary. Please see Attachment A: WRPP Map 1 for container location.

2. *Human Waste*

A portable toilet/s will be available for employee use. Empress Farms will utilize the services of a licensed company that services such facilities. The toilet will be positioned to limit smell and visual pollution from Mattole Road and nearby residences. Hand washing facilities will be available adjacent to the toilet site. A gray-water system will be used for hand washing effluent.

L. Remediation, Cleanup, and Restoration Activities

Some minor amounts of irrigation need to be removed from the old cultivation sites within the riparian zone and some old evidence of minor ground disturbance (e.g. holes and trenches where plants were grown) needs to be remediated. These items have been identified as requiring minor corrective action. Other than these items, there is no other restoration or remediation required of this property.



## **VII. CORRECTIVE ACTIONS**

Based on the Site assessment, corrective actions were developed to treat areas and features on the property that were not compliant with the Standard Conditions as listed in the Order § I.A (Table 5). Each location was recorded on the WRPP Map (Attachment A) with a unique Map ID that relates back to Table 5. The current condition was evaluated, and an appropriate treatment selected based on BMPs outlined in Appendix B of the Order. A priority was attached to each corrective action based on threat to water quality and multi-year treatment planning. Some treatments will require the issuance of permits before work can commence. Areas that receive corrective actions will be monitored to evaluate the success of the treatment.

Table 5. Identified Sites for Corrective Action, APN 104-311-019

MAP ID	DESCRIPTION	ASSOCIATED STANDARD CONDITION	CURRENT CONDITION	CORRECTIVE ACTION	PRIORITY FOR ACTION (1=HIGH)	COMPLETION SCHEDULE	PERMANENT BMP COMPLETION DATE
RP-1	Riparian Protection	I.A.3.a	Cultivation site is <100 ft from Mattole River within riparian zone	Move cultivation area to location >200 ft from edge of Mattole River	1	January 2017	January 2017
CW-1	Cultivation-related wastes	I.A.3.a I.A.10 I.A.12	Old irrigation line within riparian buffer	Remove all irrigation materials and dispose of properly	3	January 2017	
RP-2	Riparian Protection	I.A.3.b I.A.12	Remnants of holes & trenches from old garden	Fill in holes and trenches by hand & reseed	3	January 2017	
FS-1	Fuel Storage	I.A.9.a. I.A.9.b	Storage tank is uncovered on bare ground with no secondary containment	Site storage tank on cement pad and build housing with roof	1	July 2016	July 2017
WS-1	Water Storage	I.A.5.c I.A.5.e	Inadequate water storage for size of proposed cultivation	Install rainwater catchment water storage pond	1	2018	

## **VIII. MONITORING & REPORTING**

### **A. Monitoring**

Monitoring will be conducted to confirm the effectiveness of corrected measures listed in this Plan and determine if the site meets all Standard Conditions. Visual inspection will occur at those locations on the Project Site where pollutants or wastes, if uncontained, could be transported into receiving waters, and those locations where runoff from roads or developed areas has the potential to drain into or towards surface water. The inspection will also document the progress of any Plan element subject to a time schedule, or in the process of being implemented.

Monitoring shall occur according to the following schedule:

- Before and after any significant alteration or upgrade to a road segment, water storage infrastructure, cultivation area expansion, or other controllable sediment discharge site. Inspection should include photographic documentation, with photo records to be kept on site.
- Prior to October 15 to evaluate site preparedness for winterization and storm events
- Following any rainfall event with an intensity of 3 inches precipitation in 24 hours

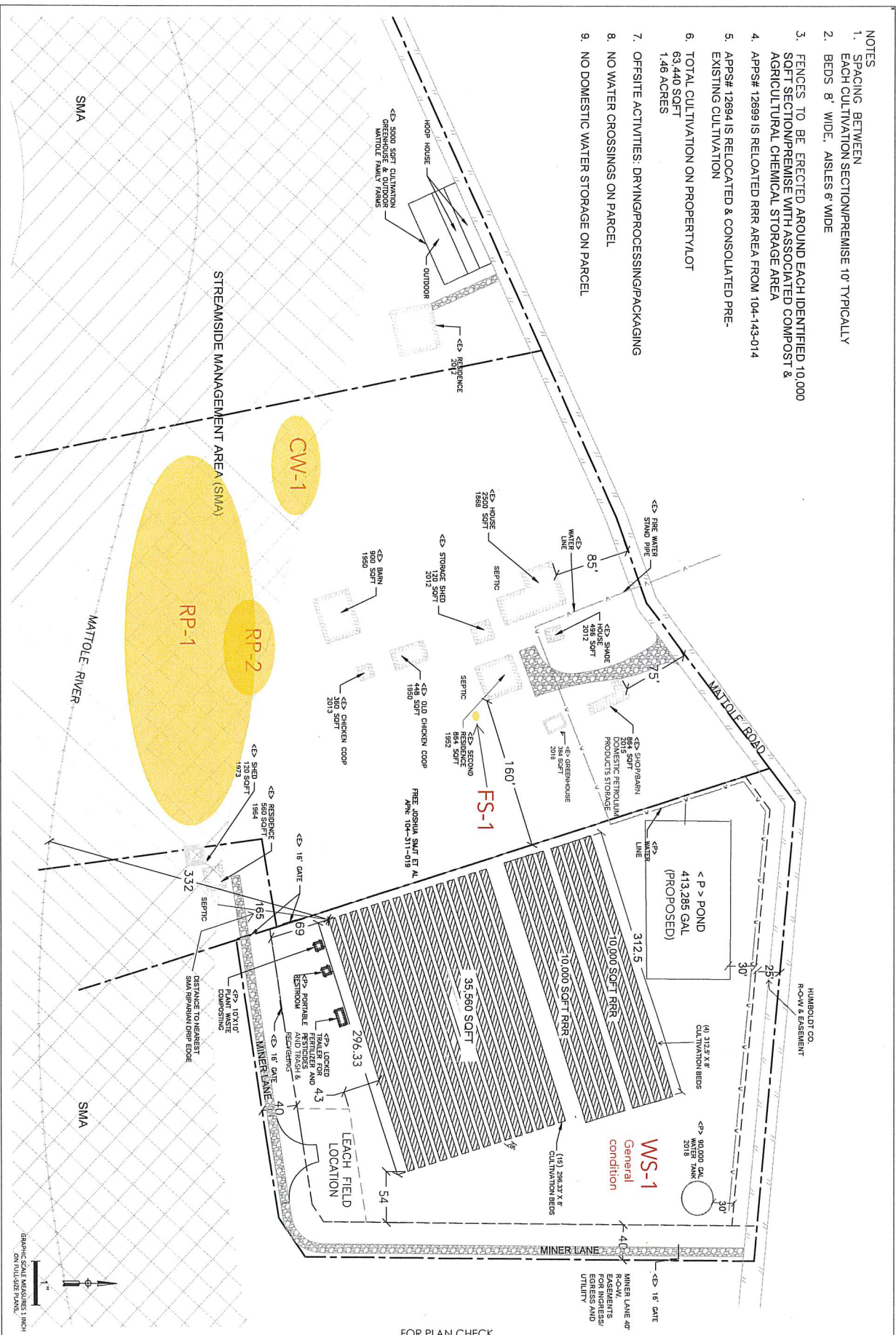
### **B. Reporting**

A Monitoring and Reporting Form (Order, Appendix C) will be submitted annually by March 31 to the NCRWQCB.

# Attachment A: WRPP Map 1

## NOTES

1. SPACING BETWEEN EACH CULTIVATION SECTION/PREMISE 10' TYPICALLY
2. BEDS 8' WIDE, AISLES 6' WIDE
3. FENCES TO BE ERRECTED AROUND EACH IDENTIFIED 10,000 SOFT SECTION/PREMISE WITH ASSOCIATED COMPOST & AGRICULTURAL CHEMICAL STORAGE AREA
4. APPS# 12699 IS RELOCATED RRR AREA FROM 104-143-014
5. APPS# 12694 IS RELOCATED & CONSOLIDATED PRE-EXISTING CULTIVATION
6. TOTAL CULTIVATION ON PROPERTY/LOT 63,440 SOFT 1.46 ACRES
7. OFFSITE ACTIVITIES: DRYING/PROCESSING/PACKAGING
8. NO WATER CROSSINGS ON PARCEL
9. NO DOMESTIC WATER STORAGE ON PARCEL



DRAWN		CHECKED		DATE		FIGURE	
AW	AW	IC	IC	5/24/2018	5/24/2018	EMPR	2

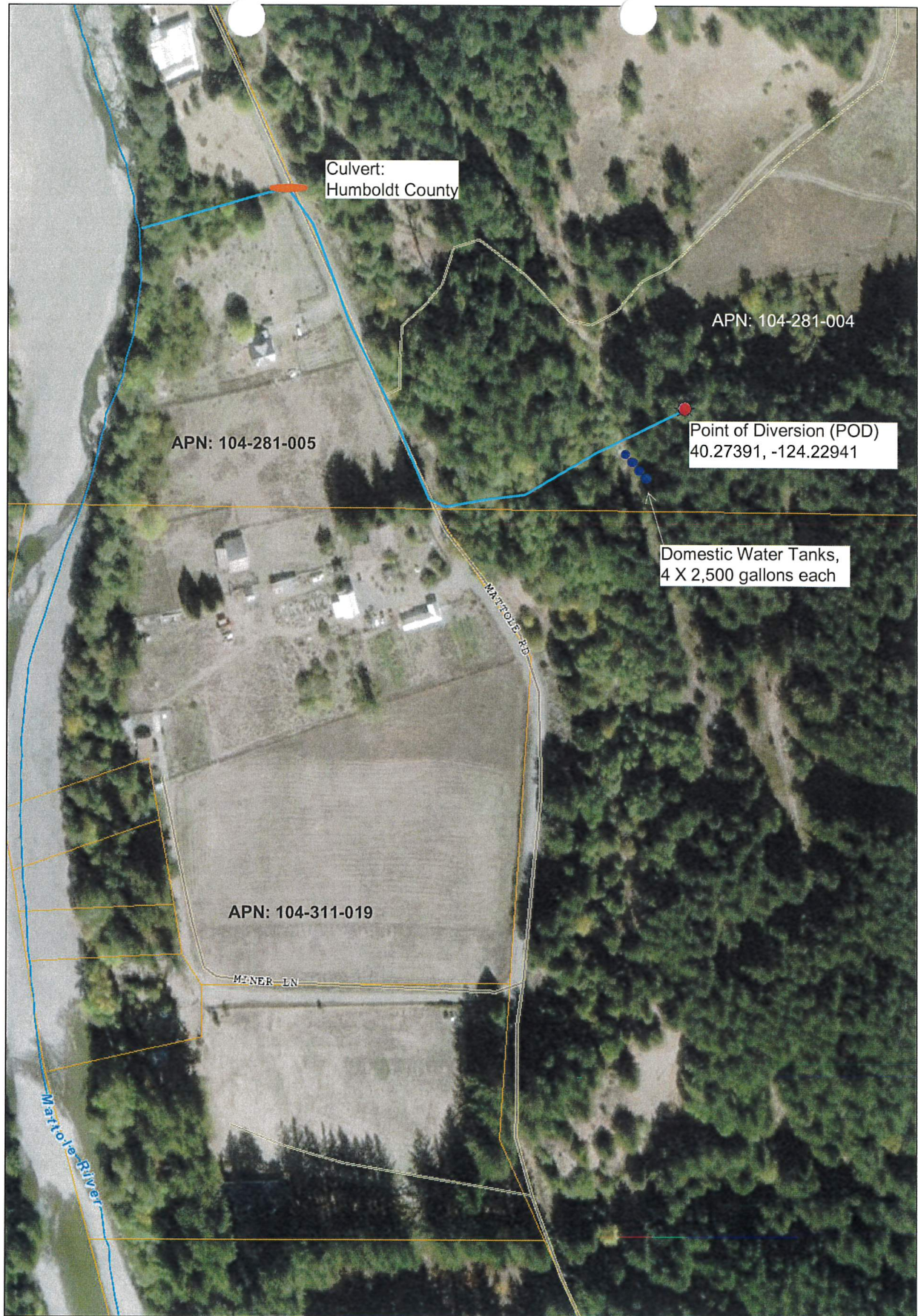
EMPRESS FARMS - WATERFALL RANCH  
104-311-019  
SITE PLAN

EMPRESS F  
P.O. BOX 7, PETRC  
95558

NO.	HISTORY / REVISION	BY	CHK.	DATE

**EMPRESS FARMS**  
WATERFALL RANCH  
104-311-019





### WRPP Map 2, 104-311-019

Humboldt County Planning and Building Department

Web AppBuilder 2.0 for ArcGIS

**Map Disclaimer:**  
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

PLN-12694-CUP Empress Farms

#### Highways and Roads

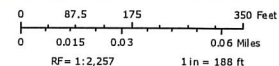
- Minor Collectors
- Local Roads

#### Blue Line Streams

- Perennial 1-3
- Perennial >4

- Culvert
- Point of Diversion for 104-311-019

● Domestic Water Tanks,  
Total storage: 10,000 gal



Sources: Humboldt County GIS  
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community  
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



## ATTACHMENT C: IPM REPORT

Dirty Business Soil Consulting & Analysis

1185 11th Street, Arcata, CA 95521

707.633.8885

DBSanalytics.com

Date: February 23, 2018

Client: Sarah Vroom

Farm Name: Empress Farms

Phone: 7076293498

Email: svroom@gmail.com

Project Site Address: 36332 Mattole Rd, Petrolia, CA

Re: Sarah Vroom Pest Management Plan for CalCannabis Cultivation Licensing

This report was prepared using information self-reported by Sarah Vroom of Empress Farms and fulfills the pest management planning requirements, as presented in the California Code of Regulations for Cannabis Cultivation (Cal Code Regs. tit. 3 § 8106, a.3, b.2).

The attached pest management plan is written for a 120,000 sqft Outdoor cultivation grown in holes in native soil.

Please let us know if any further information is needed.

Sincerely,

A handwritten signature in black ink, reading 'Lauren Quackenbush'. The signature is fluid and cursive, with the first name 'Lauren' and last name 'Quackenbush' clearly distinguishable.

Lauren Quackenbush, PCA #: 145110

Agricultural Consultant & Pest Control Advisor

Dirty Business Soil Consulting & Analysis, LLC

1185 11<sup>th</sup> Street, Arcata, CA 95521





## **Pest Management Plan for CalCannabis Cultivation Licensing**

**Prepared For:  
Sarah Vroom  
Empress Farms**

**Prepared By:  
Dirty Business Soil Consulting & Analysis, LLC  
1185 11<sup>th</sup> Street Arcata, CA 95521**

**Lauren Quackenbush, PCA Lic. #145110**

**February 23, 2018**

## Table of Contents

1.0 Introduction	4
2.0 Overview	4
2.1 Pests & Diseases of Concern	5
3.0 Monitoring	5
3.1 Monitoring for Pests	5
3.2 Monitoring pH & Electrical Conductivity (EC)	6
4.0 Physical Control	6
4.1 Exclusion	7
4.2 Mulching	7
4.3 Cover Cropping	8
4.4 Companion Planting	8
5.0 Environmental Control	8
5.1 Nutrient Management	9
5.2 Irrigation Management	9
5.3 Humidity & Temperature Management	10
6.0 Biological Control	10
6.1 Beneficial Insects	11
6.2 Beneficial Microbes	11
6.3 Compost Tea	11
7.0 Chemical Control	12
7.1 Pesticide Management	12
7.2 County, State and EPA Requirements	13
7.3 Intended Use Pesticide Products	13
<b>Appendix A – Monitoring Sheets</b>	<b>15</b>

## 1.0 INTRODUCTION

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The State of California has required all applicants for cannabis cultivation licensing to submit a pest management plan as part of their cultivation plan. The following plan fulfills pest management planning requirements, as presented in the California Code of Regulations for Cannabis Cultivation (Cal Code Regs. tit. 3 § 8106, a.3, b.2)

*“A pest management plan that shall include, but not be limited to, the following:*

*(A) Product name and active ingredient(s) of all pesticides to be applied to cannabis during any stage of plant growth; and*

*(B) Integrated pest management protocols, including chemical, biological and cultural methods the applicant anticipates using to control or prevent the introduction of pests on the cultivation site.” (Cal Code Regs. tit. 3 § 8106)*

This pest management plan was prepared for Sarah Vroom, of Empress Farms at 36330 Mattole Rd, Petrolia, CA and serves as a required pest management planning document for CalCannabis cultivation licensing. The following plan is written for a 120,000sqft Outdoor cultivation site grown in holes in native soil.

## 2.0 OVERVIEW

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This pest management plan is an integrated ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of management techniques. This integrated pest management (IPM) plan contains five primary components listed below. These identify protocols for individual pest, noxious weeds, and plant disease management. The practices herein are designed to pro-actively respond to the threat of pests and disease in the agricultural system.

**The IPM plan has five primary components:**

- 1) Monitoring
- 2) Physical Control\*
- 3) Environmental Control\*
- 4) Biological Control
- 5) Chemical Control

*\* Physical and environmental controls are combined and referred to as “cultural controls.”*

This report summarizes the management tactics within these five components which Sarah Vroom of Empress Farms has identified as their farm IPM protocols. Each section contains a description of the activity and definitions of any important terms, followed by a list of protocols in that category that will be used.

## 2.1 PESTS & DISEASES OF CONCERN

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Below is a comprehensive list of pests and diseases of concern that the following IPM plan addresses.

<b>Large Mammals</b>
Rodents (mice, rats, moles, voles)
<b>Mites and Insects</b>
Broad mites - <i>Polyphagotarsonemus latus</i>
Cucumber Beetle
Fungus Gnat (Diptera)
Root Feeding Nematodes
Russet Mites - <i>Aculops</i> spp.
Thrips ( <i>Heliothrips haemorrhoidalis</i> , <i>Frankliniella occidentalis</i> , <i>Thrips tabaci</i> )
Two-spotted spider mites, <i>Tetranychus urticae</i> , (and other Tetranychidae)
<b>Disease</b>
Powdery Mildew (fungal disease)

## 3.0 MONITORING

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There are two principal areas that require monitoring:

- Pests
- pH and Electrical Conductivity (EC)

### 3.1 MONITORING FOR PESTS

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Pest monitoring protocols are stated below. A sample pest monitoring sheet is provided in Appendix A.

- **"Scouting"** is defined as: "Walking around each growing area once a week and recording pest and pathology observations in a pest monitoring sheet."
- **"Hot spot"** is defined as: "A sub-section of the larger growing area where pests are either first observed, or where pest numbers are observed to be increasing to threatening levels."

### **Pest Monitoring Protocols**

<b>Pest Monitoring</b>
Daily to Weekly scouting of growing areas for pests and pathology.
Records pest / pathology on monitoring sheets during scouting.
Maintain a seasonal record of pest monitoring sheets.
Use data from pest monitoring sheets to make early pest management decisions.
Random sampling of leaves for microscope monitoring.
Monitor for broad mites, spider mites, and russet mites using a microscope.
Use sticky cards to monitor for aphids, thrips, fungus gnats, and whiteflies.
For early detection and intervention of pests, "hot spots" will be flagged in the field.

## **3.2 MONITORING PH & ELECTRICAL CONDUCTIVITY (EC)**

Regular field and lab testing will be used to determine nutrient availability. Protocols listed below.

### **pH and EC Protocols**

<b>Monitoring pH &amp; Electrical Conductivity (EC)</b>
pH will be checked on irrigation water and recorded.
All synthetic mixes and biological teas will have the pH monitored before being applied to the crop.
Shall maintain an annual record of soil test results.
Monitor pH weekly or monthly, or as needed.
Monitor EC weekly or monthly, or as needed.
All pH and EC meters will be cleaned between usage and calibration maintained and checked on a consistent basis.
pH and EC will be recorded using a calibrated meter on the farm.
Keep a seasonal record of pH and EC measurements.

## **4.0 PHYSICAL CONTROL**

Physical controls, for the purposes of this plan, are grouped into the following four categories:

- Exclusion
- Mulching
- Cover crop
- Companion plants

## 4.1 EXCLUSION

Exclusion means any tactic that works to keep pests *out* of your garden. These practices are grouped by their approach:

- Quarantine
- Sanitation
- Pruning
- Weeding
- Removal of plant residue
- Screens and air filters

### Exclusion Protocols

Exclusion
Clones and new plant material will be quarantined for at least two weeks.
All personnel must clean hands after (or use disposable gloves while,) handling diseased or infested plant material.
Growing areas will be kept pet free.
All tools and equipment will be sanitized after handling diseased or infested plant material.
To avoid spreading contamination healthy plants will be worked on before sick or diseased plants.
Not handle any non-infected plants after handling diseased or infested plants.
Plants will be pruned to improve air circulation.
Yellowing and injured plant leaves will be pruned.
Pruned plant material will be removed from the growing area to a designated waste area or facility by following the cannabis waste management plan described in the California Code of Regulations for Cannabis Cultivation (Cal Code Regs. tit. 3 § 8108)
Maintain weeds around plants and beds.
All crop residues will be removed after harvest.
All compost piles and plant residues will be kept 30' or more from growing areas.
Greenhouse doors and sides will be kept closed when possible. (Pests are least active during hot afternoon hours.)
Use screens or netting to keep pests out of greenhouses or growing areas.
Proper removal and handling of sick and diseased plants to a separate designated waste site or off-site facility.
Trap (minus rodenticides)

## 4.2 MULCHING

The State Water Resources Control Board requires that all mulch be weed-free and the following practices will comply with that requirement. Mulching protocols listed below.



## Mulching Protocols

Mulching
Use a compost mulch.
Mulch will be maintained and replaced as needed.
A space will be left between mulch and the plant base to prevent moisture and molds.

## 4.3 COVER CROPPING

Cover crop protocols stated below.

### Cover Cropping Protocols

Cover Cropping
A winter cover crop will be planted to maintain soil health during non-production months.
A spring cover crop will be planted once temperatures are warm enough and maintained for soil health during non-production months.
Legumes (nitrogen-fixers) will be part of the cover crop to help provide nitrogen back in the soil.

## 4.4 COMPANION PLANTING

Companion planting protocols listed below.

### Companion Planting Protocols

Companion Planting
Companion plants will be used to repel pests.
Plant perennial companion plants.

## 5.0 ENVIRONMENTAL CONTROL

Environmental controls make changes to the plant environment and fall into the following three categories:

- Nutrient management
- Irrigation
- Humidity and temperature

## 5.1 NUTRIENT MANAGEMENT

Nitrogen Management Plans will be recorded monthly and submitted annually per the State Water Board Regulations (State Water Resources Control Board, 2017.) SWRCB requirements are summarized below:

- Provide site description(s).
- List the sources of nitrogen used (bulk materials, dry fertilizers, and liquid fertilizers).
- Calculate monthly nitrogen use per canopy acre (dissolved in irrigation water, originating in soil amendments, and applied fertilizers).
- Describe nitrogen storage, use, and disposal practices; and procedures to limit excessive fertilizer application.

Regular field and lab nutrient management protocols stated below.

### Nutrient Management Protocols

Nutrient Management
Soil samples will be submitted to an agricultural testing laboratory for nutrient testing at least once per production cycle.
Use lab nutrient results to inform pre-production amendment decisions.
Use lab nutrient results to inform mid-cycle amendment decisions.
Keep and maintain a annual record of soil test results.
Monitor pH weekly or monthly.
Monitor EC weekly or monthly.
Use pH and EC to inform fertilization decisions.
Keep and maintain a seasonal record of pH and EC measurements.
Exact fertilizer need is calculated based on lab nutrient results.
Use organic (non-synthetic) bulk amendments.
Actively amend or manage the soil to improve soil nutrient holding capacity.
Maintain a record of all fertilizer inputs used.
Maintain an annual record of nitrogen fertilizer use.

## 5.2 IRRIGATION MANAGEMENT

The State Water Resources Control Board requires that you:

- Record daily water amounts used for irrigation.

- These will be calculated using a measuring device, or by calculating the irrigation system rates and duration of time watered.

Moisture monitoring should follow all irrigation activities, as well as any precipitation events. Monitoring should determine the depth and uniformity of wetness and track the soil as it dries to an appropriate point. Listed below are irrigation management and moisture monitoring protocols.

#### **Irrigation Management Protocols**

<b>Irrigation Management</b>
Monitor soil moisture content daily or as needed.
Soil probes will be used to monitor soil moisture.
Soil moisture sensors will be used to monitor soil moisture.
Irrigation decisions will be made based on soil moisture content and climate.
Maintain a written / physical irrigation schedule and update as needed.
Be responsive to plant biological factors by watering more when the plant is young.
Actively amend or manage the soil to improve soil water retention and drainage.
Irrigation monitoring device(s) will be installed to monitor daily water use.

### **5.3 HUMIDITY & TEMPERATURE MANAGEMENT**

Humidity and Temperature management protocols listed below.

#### **Humidity & Temperature Management Protocols**

<b>Humidity &amp; Temperature Management</b>
Use fans to stimulate air flow.
Use the principles of horizontal air flow to optimize fungal and pathogen prevention in greenhouses and grow rooms.

### **6.0 BIOLOGICAL CONTROL**

Biocontrol practices intentionally increase the populations of predators to combat pests and diseases. For the purposes of this plan, they are grouped into the following categories:

- Beneficial Insects
- Beneficial Microbes
- Compost Tea

## 6.1 BENEFICIAL INSECTS

---

Beneficial insects will be used throughout the growing cycle per protocols stated below.

### Beneficial Insects Protocols

Beneficial Insects
Use beneficial insects on crops.
Release beneficial insects on nursery crops.
Use preventative early-season releases.
Utilize and maintain a season-long preventative release schedule.
Refrain from preventative pesticide spraying.
Use beneficial insects as a first response to pest detection.
Monitor for beneficial insects as part of a regular pest scouting program.
Plant companion plants to attract beneficial insects.
Refrain from spraying any pesticide product for at least a week prior to beginning beneficial insect releases.
Determine degree-days required for emergence of problem pests.

## 6.2 BENEFICIAL MICROBES

---

Beneficial microbes will be used throughout the season per protocols stated below.

### Beneficial Microbes Protocols

Beneficial Microbes
Inoculate growing media with mycorrhizae ( <i>Glomus</i> sp.).
Use nematodes ( <i>Steinernema</i> sp.) preventatively as a cutting/clone dunk, soil drench, or spray.
Use microbial sprays to prevent fungal or bacterial diseases ( <i>Bacillus subtilis</i> , <i>Reynoutria sachalinensis</i> , <i>Bacillus amyloliquefaciens</i> , <i>Gliocladium virens</i> , <i>Trichoderma harzianum</i> ).
Use beneficial microbe products (bio-fungicides) as a first response to pathogen detection.
Use beneficial microbe products (bio-pesticides or bio-fungicides) to address pest or pathogen problems before attempting to use a traditional pesticide product (i.e. horticultural oils, neem, insecticidal soaps, sulfur, etc.).

## 6.3 COMPOST TEA

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There are two types of compost tea applications: a tea extract for soil drenching, and an aerated tea for foliar spraying. Compost teas will be used based on the protocols stated below.

### Compost Tea Protocols

Compost Tea
Foliar spray compost tea weekly to monthly as needed throughout season.
Soil drench compost tea weekly to monthly as needed throughout season.
Maintain separate compost tea brewing equipment (tanks, pumps, etc.).
Maintain separate compost tea / biological spraying equipment (tanks, pumps, etc.).

## 7.0 CHEMICAL CONTROL

Chemical controls are products classified as pesticides or fungicides. Products used will follow all guidelines from the California Department of Pesticide Regulation (CA-DPR) document “Legal Pest Management Practices for Cannabis Growers in California” (CA-DPR, 9 October 2017). The DPR document lists 36 active ingredients that are acceptable for use on cannabis, in addition the product must be listed for use on “Flowers & Flowering Plants” (i.e. ornamental plants, many nursery plants, cut flowers, etc.).

### 7.1 PESTICIDE MANAGEMENT

For the purposes of this document:

- ‘Economic thresholds’ (“ETs” and “action thresholds”) are identified as pest or disease population levels at which the cost of applying pesticides is less than the value of the crop loss they prevent.

Pesticide protocols stated below.

#### Pesticide Management Protocols

Management Tactics
Develop and use economic thresholds for managing and making chemical control decisions.
Maintain separate spraying equipment for non-biological chemical pesticide products.
First use beneficial microbe products (bio-pesticides or bio-fungicides) to address pest or pathogen problems before attempting to use a traditional pesticide product (i.e. horticultural oils, neem, insecticidal soaps, sulfur, etc.).
Only spray pesticide products when wind speed is under 10 mph.
All employees who will be applying pesticides will have protective gear available.
All labels and safety data sheets for products used will be made available to employees.

## 7.2 COUNTY, STATE AND EPA REQUIREMENTS

The CA-DPR and other regulatory agencies including the Environmental Protection Agency (EPA) have mandated certain practices that reduce the risks inherent with pesticide use. These practices are listed below:

### Required Protocols for Chemical Control

County, State, and EPA Requirements
Adhere to the CA-DPR and CAC guidelines of approved chemical pesticide products.
Adhere to the labeled instructions on all pesticide products.
Store all pesticide products together in a secure location that meets storage guidelines.
Contain any chemical leaks and immediately clean up any spills.
Apply the minimum amount of product necessary to control the target pest.
Prevent offsite drift.
Not apply pesticides when pollinators are present.
Not allow drift to reach flowering plants attractive to pollinators.
Not spray directly onto surface water or allow pesticides to drift to surface water by spraying only when wind is blowing away from surface water bodies.
Not apply pesticides when they may reach surface water or ground water (for example, before a rain event).
Only use properly labeled pesticides. If no label is available consult the CAC or CA-DPR.
Maintain a record of all products used (including biopesticides and biofungicides); the areas that were treated, and the volume of product used.
Submit pesticide use records to the county (CalAgPermits).

## 7.3 INTENDED USE PESTICIDE PRODUCTS

The following products were identified by the producer as those that will most likely be used. The producer understands that pesticide use must be reported to the state monthly, and that all products must meet the standards identified by the CA-DPR.

Product Name	Active Ingredient
Garden Fungicide (Safer Brand)	Sulfur
Triact 70, Neem (Natural Guard Brand), TerraNeemEC, or Triple Action Neem Oil	Neem Oil
Pest Out by SaferGro	Cottonseed Oil, Clove Oil, Garlic Oil, Oleic Acid, Lauric Acid, Sodium Bicarbonate



Green Cure	Potassium bicarbonate
Green Cleaner	Soybean Oil, Sodium lauryl sulfate, Citric acid
AzaGuard, Azapro, or Azasol	Azadirachtin
Biobit HP, Crymax, Gnatrol, Javelin, Xentari, or Foray XG	Bacillus thuringiensis
Preferal, or Ancora Microbial Insecticide	Isaria fumosorosea
Dr Zymes	Citric acid

## **Appendix A – Monitoring Sheets**

### pH & EC (TDS) Measurements

[illegible]

## IPM Monitoring Sheet

Date	Site Name	Time	Crop	Growth Stage							
Weather / field observations:											
Growing Section	1	2	3	4	5	6	7	8	9	10	Total
Pests											
Aphids											
Larva											
Adults											
Fungus Gnats											
Root Aphid											
Thrips											
Larva											
Adults											
Whiteflies											
Larva											
Adults											
Notes:											
Growing Section	1	2	3	4	5	6	7	8	9	10	Total
Pests for the Microscope											
Broad Mite											
Russet Mite											
Spider Mites											
Notes:											
Growing Section	1	2	3	4	5	6	7	8	9	10	Total
Beneficial Insects											
Rove Beetle											
Predator Mite: _____											
Predator Mite: _____											
Other: _____											
Notes:											

HUMBOLDT COUNTY DEPARTMENT OF PUBLIC WORKS  
ROAD EVALUATION REPORT



**PART A:** *Part A may be completed by the applicant*

Applicant Name: Empress Farms APN: 104-311-019

Planning & Building Department Case/File No.: 12694

Road Name: Mattole Road (complete a separate form for each road)

From Road (Cross street): Cooskie Ridge Road

To Road (Cross street): A.W. Way Park Drive

Length of road segment: 1.2 miles Date Inspected: 04/16/18

Road is maintained by: ☒ County ☐ Other \_\_\_\_\_  
(State, Forest Service, National Park, State Park, BLM, Private, Tribal, etc)

Check one of the following:

**Box 1** ☒ The entire road segment is developed to Category 4 road standards (20 feet wide) or better. If checked, then the road is adequate for the proposed use without further review by the applicant.

**Box 2** ☐ The entire road segment is developed to the equivalent of a road category 4 standard. If checked, then the road is adequate for the proposed use without further review by the applicant.

*An equivalent road category 4 standard is defined as a roadway that is generally 20 feet in width, but has pinch points which narrow the road. Pinch points include, but are not limited to, one-lane bridges, trees, large rock outcroppings, culverts, etc. Pinch points must provide visibility where a driver can see oncoming vehicles through the pinch point which allows the oncoming vehicle to stop and wait in a 20 foot wide section of the road for the other vehicle to pass.*

**Box 3** ☐ The entire road segment is not developed to the equivalent of road category 4 or better. The road may or may not be able to accommodate the proposed use and further evaluation is necessary. Part B is to be completed by a Civil Engineer licensed by the State of California.

The statements in PART A are true and correct and have been made by me after personally inspecting and measuring the road.

Signature

04/16/18  
Date

Joshua Free

Name Printed

**Important: Read the instructions before using this form. If you have questions, please call the Dept. of Public Works Land Use Division at 707.445.7205.**

## ATTACHMENT 5

### Referral Agency Comments and Recommendation

Referral Agency	Response	Recommendation	Location
Public Works, Land Use Division	✓	Conditional Approval	Attached
Division of Environmental Health	✓	Conditional Approval	Attached
California Department of Fish and Wildlife	✓	Conditional Approval	Attached
Building Inspection Division	✓	Other Comments	Attached
Sheriff's Office	✓	Other Comments	Attached
Mattole Unified School District	✓	Other Comments	Attached
Northwest Information Center	✓	Further Study	On file
Bear River Band of the Rohnerville Rancheria	✓	Other Comments	On file
CALFIRE		No Response	
County Counsel		No Response	
RWQCB		No Response	
District Attorney		No Response	
Agriculture Commissioner		No Response	
Intertribal Sinkyone Wilderness Council		No Response	





DEPARTMENT OF PUBLIC WORKS  
**COUNTY OF HUMBOLDT**

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

ARCATA-EUREKA AIRPORT TERMINAL  
McKINLEYVILLE  
FAX 839-3596

AVIATION

839-5401

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

ADMINISTRATION  
BUSINESS  
ENGINEERING  
FACILITY MAINTENANCE

445-7491  
445-7652  
445-7377  
445-7453

NATURAL RESOURCES  
NATURAL RESOURCES PLANNING  
PARKS  
ROADS & EQUIPMENT MAINTENANCE

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

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

LAND USE

445-7205

**LAND USE DIVISION INTEROFFICE MEMORANDUM**

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

FROM: Kenneth M. Freed, Assistant Engineer

DATE: 03-02-2018

RE:

Applicant Name	EMPRESS FARM
APN	104-311-019
APPS#	12694 CUP16-806

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

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

\*Note: Exhibits are attached as necessary.

Additional comments/notes:

Review item 4 on Exhibit "C"

// END //

## Exhibit "A"

### Public Works Recommended Conditions of Approval

(All checked boxes apply)

APPS # 12694

☒ **COUNTY ROADS- FENCES & ENCROACHMENTS:**

All fences and gates shall be relocated out of the County right of way. All gates shall be setback sufficiently from the County road so that vehicles will not block traffic when staging to open/close the gate. In addition, no materials shall be stored or placed in the County right of way.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

☐ **COUNTY ROADS- DRIVEWAY (PART 1):**

The submitted site plan is unclear and/or shows improvements that are inconsistent with County Code and/or Department of Public Works policies. The applicant is advised that these discrepancies will be addressed at the time that the applicant applies to the Department of Public Works for an Encroachment Permit. If the applicant wishes to resolve these issues prior to approval of the Planning & Building permit for this project, the applicant should contact the Department to discuss how to modify the site plan for conformance with County Code and or Department of Public Works policies. Notes:

☒ **COUNTY ROADS- DRIVEWAY (PART 2):**

Any existing or proposed driveways that will serve as access for the proposed project that connect to a county maintained road shall be improved to current standards for a commercial driveway. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way. This also includes installing or replacing driveway culverts; minimum size is typically 18 inches.

- If the County road has a paved surface at the location of the driveway, the driveway apron shall be paved for a minimum width of 18 feet and a length of 50 feet.
- If the County road has a gravel surface at the location of the driveway, the driveway apron shall be rocked for a minimum width of 18 feet and a length of 50 feet.
- If the County road is an urban road, frontage improvements (curb, gutter, and sidewalk) shall also be constructed to the satisfaction of the Department. Any existing curb, gutter or sidewalk that is damaged shall be replaced.

The exact location and quantity of driveways shall be approved by the Department at the time the applicant applies to the Department of Public Works for an Encroachment Permit.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

☐ **COUNTY ROADS- DRIVEWAY (PART 3):**

The existing driveway will require substantial modification in order to comply with County Code. The applicant may wish to consider relocating the driveway apron if a more suitable location is available.

☐ **COUNTY ROADS-PARKING LOT- STORM WATER RUNOFF:**

Surfaced parking lots shall have an oil-water filtration system prior to discharge into any County maintained facility.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

☒ **COUNTY ROADS- DRIVEWAY & PRIVATE ROAD INTERSECTION VISIBILITY:**

All driveways and private road intersections onto the County Road shall be maintained in accordance with County Code Section 341-1 (Sight Visibility Ordinance).

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

☒ **COUNTY ROADS- PRIVATE ROAD INTERSECTION:** MINER LN

Any existing or proposed non-county maintained access roads that will serve as access for the proposed project that connect to a county maintained road shall be improved to current standards for a commercial driveway. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way.

- If the County road has a paved surface at the location of the access road, the access road shall be paved for a minimum width of 20 feet and a length of 50 feet where it intersects the County road.
- If the County road has a gravel surface at the location of the access road, the access road shall be rocked for a minimum width of 20 feet and a length of 50 feet where it intersects the County road.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

☐ **COUNTY ROADS- ROAD EVALUATION REPORT(S):**

All recommendations in the *Road Evaluation Report(s)* for County maintained road(s) shall be constructed/implemented to the satisfaction of the Public Works Department prior to commencing operations, final sign-off for a building permit, or approval for a business license. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way.

// END //



## Exhibit "C"

### Additional Review is Required by Planning & Building Staff

APPS # 12694

**All of the following questions are to be answered by Planning and Building Department staff.**

No further involvement with the Department of Public Works is required for these items; however Public Works staff is available to answer any questions that may arise.

1. **ROADS – PART 1.** Does the project takes access from a series of non-county maintained roads that connect directly to a State Highway (36, 96, 101, 255, 299, etc...)?  
☐ YES ☐ NO

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

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

2. **ROADS – PART 2.** Does the project takes access from a series of non-county maintained roads that connect directly to a Caltrans State Highway, US Forest Service Road, BLM Road, or a City road?  
☐ YES ☐ NO

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

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

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

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

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

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

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

If YES, include the following requirement:

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

## Exhibit "C"

### Additional Review is Required by Planning & Building Staff

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

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

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

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

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

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

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

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

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

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

// END //



## Exhibit "D"

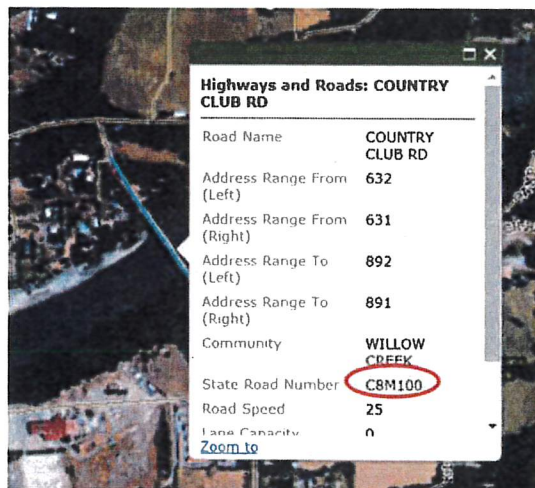
### Road Evaluation Reports

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

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

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

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



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

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

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

Examples:

#### ABCDDD

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



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

RECEIVED

17/18-0560

SEP 05 2017

9/5/2017

PROJECT REFERRAL TO: Health and Human Services Environmental  
Health Division

HUMBOLDT CO. DIVISION  
OF ENVIRONMENTAL HEALTH

**Project Referred To The Following Agencies:**

Building Inspection Division, Public Works Land Use Division, Health and Human Services Environmental Health Division, County Counsel, CalFire, California Department of Fish And Wildlife, Northwest Information Center, Bear River Band Rohnerville Rancheria, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, Intertribal Sinkyone Wilderness Council, Humboldt County Sheriff, Mattole Union Unified School District School District

**Applicant Name** Empress Farms **Key Parcel Number** 104-311-019-000

**Application (APPS#)** 12694 **Assigned Planner** Cannabis Planner (CPOD) (707) 445-7541 **Case Number(s)** CUP16-806

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

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

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

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

**Return Response No Later Than 9/20/2017**

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

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

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

☒ Recommend Conditional Approval. Suggested Conditions Attached. *-see response is On Track*

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

☐ Recommend Denial. Attach reasons for recommended denial.

☐ Other Comments: \_\_\_\_\_

DISTRIBUTED

3-15-18

DATE:

3/14/18

PRINT NAME:

Ben Dolt





DEH recommends approval with the following condition:

A permitted onsite wastewater treatment system must be installed and approved by DEH to support onsite processing within 2 years of the date of approval of the CUP.

**Division of Environmental Health**

100 H Street - Suite 100 - Eureka, CA 95501

Phone: 707-445-6215 - Toll Free: 800-963-9241

Fax: 707-441-5699

[envhealth@co.humboldt.ca.us](mailto:envhealth@co.humboldt.ca.us)**Attachment for Commercial Medical Marijuana (CMM) Clearances/Permits**

Applications for CMM Clearances and/or Permits are reviewed by the Division of Environmental Health (DEH) for compliance with regulations intended to protect public health and the environment. Individuals preparing a CMM Permit Application are encouraged to provide information addressing the items listed below, as applicable, to assist DEH with a timely review. If the requested information is already provided in a complete operations manual submitted to the Planning Division, provide the page and section numbers where it is located.

Name of Business: EMPRESS FARMSSite Address: 36330 Mattole Rd.APN: 104-311-019Primary Contact Person: Joshua Free, Kate CenciPhone: 707-629-4136Email: josh@empressfarms.com, kate@empressfarms.com

General Project Description (cultivation, processing, manufacturing; seasonal vs year round etc.)  
Seasonal cultivation of outdoor medical marijuana, ancillary processing and nursery.

**Wastewater** (page 6 section V.6.f.)

- Connected to public sewer \_\_\_\_\_ Onsite waste water system ☒ \_\_\_\_\_
- Number of Employees: average <sup>4</sup> \_\_\_\_\_ peak operations: <sup>10</sup> \_\_\_\_\_
- Hours of Operation/shifts per day: average <sup>8 hr/day</sup> \_\_\_\_\_ peak operations: <sup>8 hr/day</sup> \_\_\_\_\_
- Additional flow from processing: <sup>10</sup> \_\_\_\_\_ GPD. Description of effluent Gray water
- Describe the proposed and existing wastewater generating structures and method(s) of effluent disposal.  
 Gray water: Handwashing & drinking water station/s for employees; gray water effluent disposal is via gravel percolation.

Portable toilet will be available at this site. It will be serviced as necessary by licensed professionals.

**Water Source** (page 1,6 section V.1.a.) V.6.

- Describe and show the water source(s) available on the property and what they serve.
 

<input type="checkbox"/> Public Water System	<input checked="" type="checkbox"/> Approved Surface
<input type="checkbox"/> Well Permit Number(s): _____	Water/Description <u>Unnamed Stream</u>
<input type="checkbox"/> Unpermitted Well	<input type="checkbox"/> Unapproved Surface
<input type="checkbox"/> No Existing Water Source	Water/Description _____
<input type="checkbox"/> Spring	<input type="checkbox"/> Other: _____
- Describe the approximate daily water demand for the current and projected uses on the property and method used to calculate demand: current: 2,590 gpd; projected: 2,590 gpd.  
 This includes crop irrigation, drinking water, hand washing.

**Consumer Protection** (page N/A section \_\_\_\_\_)

- List/Describe any food production or service: N/A
- Describe and show on site plan, any existing or proposed kitchen infrastructure: N/A

Note: DEH does not currently regulate edible cannabis products. Any other food production may require a Plan Check and permitting.

**Hazardous Materials** (page V section 4)

- List/describe production/cultivation machinery (e.g. generator, tractor, OHV, trimmer, heaters etc.): Tractor, generator, trimming machine, wood and/or propane and/or electric heaters
- Equipment Maintenance/Service (e.g., changing oil, antifreeze, etc.): Onsite or Offsite
- List/describe fuel/oil(s) used or produced onsite (e.g. gasoline, diesel, propane, other?); Provide amounts and storage method(s): Gasoline: <10 gal, Diesel: < 50 gal  
Propane: TBD
- List/describe all compressed gases, cleaners, solvents and sanitizers (including, but not limited to, household chemicals, bleach and alcohol). Provide amounts and storage method(s):  
General cleansers: Castile soaps (e.g. Dr. Bronner's), 16 oz, general storage  
Solvents: Isopropyl Alcohol 95%, 10 gal, see Section V.4 for storage
- List/describe fertilizers, soil amendments and biocides (including organic ones). Provide amounts and storage method/area(s): See Section V.4

\*Attach Safety Data Sheets (SDS)

**Solid Waste/Recycling** (page N/A section     )

- List/describe the different anticipated solid waste/recycling, composting products and anticipated amounts: Plant wastes to compost on site: 3-5 cubic yds.  
Trash & recycling average 30 gal/wk each from May - October
- Describe, and show on the site plan, the designated area for storage of recycling and solid waste (containers stored outside must be covered): Designated area on site plan identified as materials storage (inside).
- Describe waste removal plan including frequency and destination
  - Garbage (1x/week) 2 x per month
  - Recycling(x/month) 2 x per month (avoid nuisances including odors and vermin.)
  - Hauling via Garbage/Recycling Service:      or Self Haul X
- Preferred permitted solid waste/recycling facility: Eel River Disposal - Petrolia Facility

Note: Spent growth medium with no further agricultural use is considered solid waste. It must be stored under cover until it can be hauled to a waste facility.



## California Department of Fish and Wildlife CEQA: Project Referral Comments

Applicant: Empress farms		Date: 3-11-19	
APPS No.: 12694	APN: 104-311-019	DFW CEQA No.: 2017-0689	Case No.: CUP16-806
<input checked="" type="checkbox"/> New <input checked="" type="checkbox"/> Existing		Proposed: <input checked="" type="checkbox"/> Mixed-light (SF): 4,000 <input checked="" type="checkbox"/> Outdoor (SF): 38,440	

Thank you for referring this application to the California Department of Fish and Wildlife (CDFW) for review and comment.

CDFW offers the following comments on the Project in our role as a Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code Section 21000 *et seq.*). These comments are intended to assist the Lead Agency in making informed decisions early in the planning process.

- ☐ Recommend Approval. The Department has no comment at this time.
- ☒ Recommend Conditional Approval. Suggested conditions below.
- ☐ Applicant needs to submit additional information. Please see the list of items below.
- ☐ Recommend Denial. See comments below.

**Please note the following information and/or requested standard conditions of Project approval:**

- ☒ A Final Lake or Streambed Alteration Agreement (1600-2017-0404-R1) has been issued to the applicant.
- ☒ All artificial light used for cannabis cultivation, including indoor and mixed-light cultivation, shall be fully contained within structures such that no light escapes (e.g., through blackout curtains). Structures shall be enclosed between 30 minutes prior to sunset and 30 minutes after sunrise to prevent disruption to crepuscular wildlife. Security lighting shall be motion activated and comply with the International Dark-Sky Association standards and Fixture Seal of Approval Program; see: <https://www.darksky.org/our-work/lighting/lighting-for-citizens/lighting-basics/>. Standards include but are not limited to the following, 1) light shall be shielded and downward facing, 2) shall consist of Low Pressure Sodium (LPS) light or low spectrum Light Emitting Diodes (LED) with a color temperature of 3000 kelvins or less and 3) only placed where needed.
- ☒ Floodplains are an important physical and biological part of riverine ecosystems. All rivers flood, and flooding is a natural and recurring event in river systems. Development in floodplains often eliminates benefits of natural flooding regimes such as deposition of river silts on valley floor soils, and recharging of wetlands. Allowing non-essential development and habitat conversion in floodplains will result in degradation of riverine and riparian habitats and negatively impact the fish and wildlife species that depend upon them. To best protect California's riverine and riparian habitats, CDFW believes it is wise public policy to maintain and restore floodplain functions and to prevent, whenever practicable, the development of residential and commercial structures in areas that are not already protected by existing levee systems. CDFW recommends the project be redesigned to keep permanent structures out of the 100-year floodplain.
- ☒ The referral materials state that there is a plan to construct a rainwater catchment pond(s) onsite. CDFW requests:
  - That the pond be designed to hold no more than the necessary volume of water needed for the project, with consideration to evaporative loss and designed in such a way to



accommodate annual pond dewatering. The volume of water contained within the pond should be based on the square footage and method of cultivation in use prior to January 1, 2016.

- That the applicant install an overflow spillway that will withstand a 100-year flood event, designed with a dispersal mechanism, or low-impact design, that discourages channelization and promotes dispersal and infiltration of flows to prevent surface overflow from reaching waters of the State. CDFW recommends the spillway be designed and placed to allow for a minimum of two-feet of freeboard.
  - That the applicant install several exit ramps to prevent wildlife entrapment. Exit ramps shall meet the following requirements: installed at no greater than 2:1 slope, securely fixed, and made of solid material (e.g. wood).
  - That the applicant comply with the attached CDFW Bullfrog Management Plan (**Exhibit A**). Reporting requirements shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501, no later than December 31 of each year.
  - That fish stocking be prohibited without written permission from the Department pursuant to Section 6400 of the Fish and Game Code.
- ☒ Prohibition on use of synthetic netting. To minimize the risk of wildlife entrapment, Permittee shall not use any erosion control and/or cultivation materials that contain synthetic (e.g., plastic or nylon) netting, including photo- or biodegradable plastic netting. Geotextiles, fiber rolls, and other erosion control measures shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves.
- ☒ Leave wildlife unharmed. If any wildlife is encountered during the Authorized Activity, Permittee shall not disturb the wildlife and shall allow wildlife to leave the work site unharmed.
- ☒ The environmental impacts of improper waste disposal are significant and well documented. CDFW requests, as a condition of Project approval, that all refuse be contained in wildlife proof storage containers, at all times, and disposed of at an authorized waste management facility.
- ☒ Human induced noise pollution may adversely affect wildlife species in several ways including abandonment of territory, loss of reproduction, auditory masking (inability to hear important cues and signals in the environment), hindrance to navigation, and physiological impacts such as stress, increased blood pressure, and respiration. To avoid disturbance, CDFW requests, as a condition of project approval, the construction of noise containment structures for all generators parcel; noise released shall be no more than 50 decibels measured from 100ft.
- ☒ This project has the potential to affect sensitive fish and wildlife resources such as Chinook Salmon (*Oncorhynchus tshawytscha*), Coho Salmon (*O. kisutch*), Steelhead Trout (*O. mykiss*), Foothill Yellow-legged Frog (*Rana boylei*), Pacific Giant Salamander (*Dicamptodon tenebrosus*), Southern Torrent Salamander (*Rhyacotriton variegatus*), Northern Red-legged Frog (*Rana aurora*), Tailed Frog (*Ascaphus truei*), Boreal Toad (*Anaxyrus boreas boreas*), Western Pond Turtle (*Actinemys marmorata marmorata*), and amphibians, reptiles, aquatic invertebrates, mammals, birds, and other aquatic and riparian species.

Thank you for the opportunity to comment on this Project. Please send all inquiries regarding these comments to [david.manthorne@wildlife.ca.gov](mailto:david.manthorne@wildlife.ca.gov).

Sincerely,

California Department of Fish and Wildlife  
619 2nd Street  
Eureka, CA 95501



**Welsh, Liza**

---

**From:** Welsh, Liza  
**Sent:** Thursday, May 09, 2019 10:27 AM  
**To:** Manthorne, David@Wildlife  
**Cc:** Bocast, Kalyn@Wildlife; Ryan, Meghan  
**Subject:** CDFW Referral Comments - Empress Farms - CUP-161-806 - #12694 - APNs 104-311-019, 104-281-005, and 104-281-004

Greetings Dave,

Thank you for providing comments on the Empress Farms Conditional Use Permit (#12694) on APNs 104-311-019, 104-281-005, and 104-281-004. We anticipate that we will notice this project for a June hearing.

We have integrated your suggested conditions into the project as follows:

1. The applicant is required to adhere to the terms and reporting requirements of their Final Lake and Streambed Alteration Agreement (1600-2017-0404-R1).
2. No mixed light is proposed at this location. Cannabis is cultivated outdoors in full sun in a field historically used for agriculture. There is no nursery or propagation facility at this location.
3. There are no components of this project within the 100-year flood plain except for the historic cultivation areas in the Streamside Management Area of the Mattole River, which shall be restored (removal of all cultivation-related materials and refuse, filling in of any holes or trenches, and replanting with native species if necessary).
4. All suggestions for construction of the rainwater catchment pond are integrated.
5. The prohibition on synthetic netting is included as an ongoing condition of approval.
6. The applicant is required to leave wildlife unharmed as an ongoing condition of approval.
7. Wildlife proof storage containers are required for all refuse and all refuse shall be disposed of at an authorized waste management facility. This is an ongoing condition of approval.
8. The power sources are PG&E and solar. No generators or fans are proposed for this parcel. The CNNDDB shows no mapped owl activity centers for 2 miles. We believe that 60 decibels is an appropriate noise threshold for this project.

Please let me know if you have any other questions or comments on this project.

Best wishes,

Liza



*Liza Welsh*

Planner / Cannabis Services Division  
Planning and Building Department  
[lwelsh@co.humboldt.ca.us](mailto:lwelsh@co.humboldt.ca.us)  
707.445.7541



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



9/5/2017

**PROJECT REFERRAL TO: Building Inspection Division**

**Project Referred To The Following Agencies:**

Building Inspection Division, Public Works Land Use Division, Health and Human Services Environmental Health Division, County Counsel, CalFire, California Department of Fish And Wildlife, Northwest Information Center, Bear River Band Rohnerville Rancheria, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, Intertribal Sinkyone Wilderness Council, Humboldt County Sheriff, Mattole Union Unified School District School District

104-311-019

**Applicant Name** Empress Farms **Key Parcel Number** 104-311-019-000

**Application (APPS#)** 12694 **Assigned Planner** Cannabis Planner (CPOD) (707) 445-7541 **Case Number(s)** CUP16-806

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

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

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

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

**Return Response No Later Than 9/20/2017** Planning Commission Clerk  
County of Humboldt Planning and Building Department  
3015 H Street  
Eureka, CA 95501  
**E-mail:** PlanningClerk@co.humboldt.ca.us **Fax:** (707) 268-3792

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

- ☐ Recommend Approval. The Department has no comment at this time.
- ☐ Recommend Conditional Approval. Suggested Conditions Attached.
- ☐ Applicant needs to submit additional information. List of items attached.
- ☐ Recommend Denial. Attach reasons for recommended denial.

☒ Other Comments: \_\_\_\_\_

DATE: 11/29/17

PRINT NAME: MARC PHIPPEN



COUNTY OF HUMBOLDT  
PLANNING AND BUILDING DEPARTMENT  
BUILDING DIVISION

3015 H STREET EUREKA CA 95501  
PHONE: (707) 445-7245 FAX: (707) 445-7446

## Building Division's Referral Comments for Cannabis Operations:

Application No.: 45149 / 12694  
Parcel No.: 104-311-019  
Case No.: CUP16-806

The following comments apply to the proposed project, (check all that apply).

- ☒ Site/plot plan appears to be accurate.
- ☐ Submit revised site/plot plan showing all of the following items: all grading including ponds and roads, location of any water course including springs, all structure including size and use and all setbacks from the above stated to each other and property lines.
- ☐ Existing operation appears to have expanded, see comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- ☒ Existing structures used in the cannabis operation shall not to be used/occupied until all required permits have been obtained.
- ☐ Proposed new operation has already started.
- ☐ Recommend approval based on the condition that all required grading, building, plumbing electrical and mechanical permits and or Agricultural Exemption are obtained.
- ☒ Other Comments: RECOMMEND APPROVAL. SEE PHOTOS  
ATTACHED TO FILE UNDER AP#.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name: MARC PHIPPEN

Date: 11/29/17

Note: Remember to take photographs and then save them to the Planning's case number. File location J, Current Planning, Projects, (CUP, SP, ZCC) Case number.









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



9/5/2017

**PROJECT REFERRAL TO: Humboldt County Sheriff**

**Project Referred To The Following Agencies:**

Building Inspection Division, Public Works Land Use Division, Health and Human Services Environmental Health Division, County Counsel, CalFire, California Department of Fish And Wildlife, Northwest Information Center, Bear River Band Rohnerville Rancheria, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, Intertribal Sinkyone Wilderness Council, Humboldt County Sheriff, Mattole Union Unified School District School District

**Applicant Name** Empress Farms **Key Parcel Number** 104-311-019-000

**Application (APPS#)** 12694 **Assigned Planner** Cannabis Planner (CPOD) (707) 445-7541 **Case Number(s)** CUP16-806

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

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

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

**Return Response No Later Than 9/20/2017**

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

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

- ☐ Recommend Approval. The Department has no comment at this time.
- ☐ Recommend Conditional Approval. Suggested Conditions Attached.
- ☐ Applicant needs to submit additional information. List of items attached.
- ☐ Recommend Denial. Attach reasons for recommended denial.

☒ Other Comments: NOT WITHIN 600' OF SCHOOL NO RMS CONTACT WITH APPLICANT

DATE: 09-11-17

PRINT NAME: MIFNIOLE



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



9/5/2017

**PROJECT REFERRAL TO: Mattole Union Unified School District School District**

**Project Referred To The Following Agencies:**

Building Inspection Division, Public Works Land Use Division, Health and Human Services Environmental Health Division, County Counsel, CalFire, California Department of Fish And Wildlife, Northwest Information Center, Bear River Band Rohnerville Rancheria, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, Intertribal Sinkyone Wilderness Council, Humboldt County Sheriff, Mattole Union Unified School District School District

**Applicant Name** Empress Farms **Key Parcel Number** 104-311-019-000

**Application (APPS#)** 12694 **Assigned Planner** Cannabis Planner (CPOD) (707) 445-7541 **Case Number(s)** CUP16-806

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**Return Response No Later Than 9/20/2017**

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

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- ☐ Recommend Approval. The Department has no comment at this time.
- ☐ Recommend Conditional Approval. Suggested Conditions Attached.
- ☐ Applicant needs to submit additional information. List of items attached.
- ☐ Recommend Denial. Attach reasons for recommended denial.

☒ Other Comments: \_\_\_\_\_

DATE: 9/6/17 PRINT NAME: Sharon Lovett





## **Mattole Unified School District**

P.O. Box 211, 29289 Chambers Road

Petrolia, CA. 95558

Phone# (707) 629-3311

Fax# (707) 629-3575

**TO:** Humboldt County Planning and Building Department

**FROM:** Board of Trustees of Mattole Unified School District

**SUBJECT:** APPS#12694

**DATE:** September 6, 2017

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Mattole Unified School District desires to promote a safe, drug-free environment for our students and staff. In our attempts to ensure drug-free campuses, we have adopted board policy 4020 Alcohol-Free Workplace and board policy 5131.6 Alcohol and Other drugs (attached). These policies are maintained and strictly enforced. Mattole Unified School District does not condone any illegal activity and endeavors to promote a safe and healthy lifestyle.

With this said, upon inspection and in accord with Ordinance 2559, Section 313 of Chapter 3, Division 1 of Title III of the Humboldt County Code, at this time, the proposed project's cultivation area does not appear to be within 600 feet of a school or school bus stop. The need to add bus stops is subject to change, and it is possible the District may need to add a bus stop at some point which would violate this provision of the County Code. However, at this time, there is no conflict.

## DRUG AND ALCOHOL-FREE WORKPLACE

The Governing Board believes that the maintenance of drug and alcohol-free workplaces is essential to school and district operations.

No employee shall unlawfully manufacture, distribute, dispense, possess, use or be under the influence of any alcoholic beverage, drug or controlled substance as defined in the Controlled Substances Act and Code of Federal Regulations before, during or after school hours at school or in any other district workplace.

The Superintendent or designee shall:

1. Publish and give to each employee a notification of the above prohibitions. The notification shall specify the actions that will be taken against employees who violate these prohibitions. The notification shall also state that as a condition of employment, the employee will abide by the terms of this policy and notify the employer, within five days, of any criminal drug or alcohol statute conviction which he/she receives for a violation occurring in the workplace.

For the purpose of this policy, "conviction" shall mean a finding of guilt, including a plea of nolo contendere, or imposition of sentence, or both, by any judicial body charged to determine violations of federal or state criminal drug or alcohol statutes.

2. Establish a drug and alcohol-free awareness program to inform employees about:
  - a. The dangers of drug and alcohol abuse in the workplace
  - b. The district policy of maintaining drug and alcohol-free workplaces
  - c. Any available drug and alcohol counseling, rehabilitation, and employee assistance programs and
  - d. The penalties that may be imposed on employees for drug and alcohol abuse violations
3. Notify the appropriate federal granting or contracting agencies within 10 days after receiving notification, from an employee or otherwise, of any conviction for a violation occurring in the workplace.
4. Initiate disciplinary action within 30 days after receiving notice of a conviction for a violation in the workplace from an employee or otherwise. Such action shall be consistent with state and federal law, the appropriate employment contract, the applicable collective bargaining agreement and district policy and practices.

**DRUG AND ALCOHOL-FREE WORKPLACE (continued)**

5. Make a good faith effort to continue maintaining a drug and alcohol-free workplace through implementation of Board policy.

In taking disciplinary action, the Board shall require termination when termination is required by law. When termination is not required by law, the Board shall either take disciplinary action, up to and including termination, or shall require the employee to satisfactorily participate in and complete a drug assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency. The Board's decision shall be made in accordance with relevant state and federal laws, employment contracts, collective bargaining agreements and district policies and practices.

(cf. 4117.4 - Dismissal)

(cf. 4118 - Suspension/Disciplinary Action)

(cf. 4159/4258/4359 - Employee Assistance Programs)

(cf. 4218 - Dismissal/Suspension/Disciplinary Action)

*Legal Reference:*

EDUCATION CODE

44011 Controlled substance offense

44065 Issuance of credentials

44425 Conviction of controlled substance offenses as grounds for revocation of credential

44836 Employment of certificated persons convicted of controlled substance offenses

44940 Compulsory leave of absence for certificated persons

44940.5 Procedures when employees are placed on compulsory leave of absence

45123 Employment after conviction of controlled substance offense

45304 Compulsory leave of absence for classified persons

GOVERNMENT CODE

8350-8357 Drug-free workplace

THE DRUG-FREE WORKPLACE ACT OF 1988

Public Law 100-690, 5151-5160

DRUG-FREE SCHOOLS AND COMMUNITIES ACT AMENDMENT OF 1989

H.R. 3614

UNITED STATES CODE, TITLE 21

202 schedules I-V

812 Controlled Substances Act

CODE OF FEDERAL REGULATIONS, TITLE 21

1300.1-1300.15 Definitions relating to controlled substances

Policy  
adopted: April 3, 3003

**MATTOLE UNIFIED SCHOOL DISTRICT**  
Petrolia, California

**DRUG AND ALCOHOL-FREE WORKPLACE  
NOTICE TO EMPLOYEES**

YOU ARE HEREBY NOTIFIED that it is a violation of Board policy for any employee at a school district workplace to unlawfully manufacture, distribute, dispense, possess, use or be under the influence of any alcoholic beverage, drug or controlled substance as defined in the Controlled Substances Act and Code of Federal Regulations.

"School district workplace" is defined as any place where school district work is performed, including a school building or other school premises; any school-owned or school-approved vehicle used to transport students to and from school or school activities; any off-school sites when accommodating a school-sponsored or school-approved activity or function, such as a field trip or athletic event, where students are under district jurisdiction; or during any period of time when an employee is supervising students on behalf of the district or otherwise engaged in district business.

As a condition of your continued employment with the district, you will comply with the district's policy on Drug and Alcohol-Free Workplace and will, any time you are convicted of any criminal drug or alcohol statute violation occurring in the workplace, notify your supervisor of this conviction no later than five days after such conviction.

Pursuant to the federal Omnibus Transportation Employee Testing Act of 1991, school bus drivers shall be subject to a drug and alcohol testing program that fulfills the requirements of the Code of Federal Regulations, Title 49, Part 382.

*(cf. 4112.42/4212.42/4312.42 - Drug and Alcohol Testing for School Bus Drivers)*

Pursuant to California Education Code 44836 and 45123, the Board may not employ or retain in employment persons convicted of a controlled substance offense as defined in Education Code 44011. If any such conviction is reversed and the person acquitted in a new trial or the charges dismissed, his/her employment is no longer prohibited.

Pursuant to Education Code 45123, the district may employ for classified service a person who has been convicted of a controlled substance offense only if it determines, from evidence presented, that the person has been rehabilitated for at least five years. The Board shall determine the type and manner of presentation of the evidence, and the Board's determination as to whether or not the person has been rehabilitated is final.

Pursuant to Education Code 44425, whenever the holder of any credential issued by the State Board of Education or the Commission for Teacher Preparation and Licensing has been convicted of a controlled substance offense as defined in Education Code 44011, the commission shall forthwith suspend the credential. When the conviction becomes final or when imposition of sentence is suspended, the commission shall revoke the credential. (Education Code 44425)

**DRUG AND ALCOHOL-FREE WORKPLACE NOTICE TO EMPLOYEES**  
(continued)

Pursuant to Education Code 44940, the district must immediately place on compulsory leave of absence any certificated employee charged with involvement in the sale, use or exchange to minors of certain controlled substances.

Pursuant to Education Code 44940, the district may immediately place on compulsory leave of absence any certificated employee charged with certain controlled substance offenses.

Exhibit  
version: April 3, 3003

**MATTOLE UNIFIED SCHOOL DISTRICT**  
Petroia, California



## ALCOHOL AND OTHER DRUGS

The Governing Board believes that the use of alcohol or other drugs adversely affects a student's ability to achieve academic success, is physically and emotionally harmful, and has serious social and legal consequences. The Board desires to keep district schools free of alcohol and other drugs and desires that every effort be made to reduce student use of these substances. The Board perceives this effort as an important step towards preventing violence, promoting school safety and creating a disciplined environment conducive to learning.

The Superintendent or designee shall develop a comprehensive prevention and intervention program that includes instruction, referral to a rehabilitation program, enforcement/ discipline, activities that promote the involvement of parents/guardians and coordination with appropriate community agencies and organizations.

*(cf. 0450 - Comprehensive Safety Plan)*  
*(cf. 1020 - Youth Services)*  
*(cf. 4020 - Drug and Alcohol-Free Workplace)*  
*(cf. 6020 - Parent Involvement)*

The Superintendent or designee shall clearly communicate to all students, staff and parents/guardians the district's policies, regulations and school rules related to the use of alcohol and other drugs on school campuses or at school activities. Information about program needs and goals shall be widely distributed in the community.

*(cf. 1100 - Communication with the Public)*  
*(cf. 5131.61 - Drug Testing)*  
*(cf. 5131.62 - Tobacco)*  
*(cf. 5144.1 - Suspension and Expulsion/Due Process)*

The Board expects staff to conduct themselves in accordance with the district's philosophy related to alcohol and other drugs. Staff should help students see themselves as responsible partners in efforts to maintain a safe, constructive school climate.

*(cf. 5137 - Positive School Climate)*

The Board also encourages the establishment of site-level advisory groups to assist in promoting alcohol- and drug-free schools.

*(cf. 1220 - Citizen Advisory Committees)*

### Instruction

The district shall provide preventative instruction which helps students avoid the use of alcohol and other drugs. Comprehensive, age-appropriate K-12 instruction shall address the legal, social, personal and health consequences of drug and alcohol use, promote a sense of individual responsibility, and inform students about effective techniques for resisting peer pressure to use alcohol and other drugs.

BP 5131.6(b)

## ALCOHOL AND OTHER DRUGS (continued)

All instruction and related materials shall consistently state that unlawful use of alcohol or other drugs is wrong and harmful. Instruction shall not include the concept of responsible use when such use is illegal.

Teachers shall be trained to answer students' questions related to alcohol and drugs and to help students obtain and use current and accurate information, develop and maintain a positive self-concept, take positive actions to cope with stress, and use appropriate social and personal skills to resist involvement with alcohol and other drugs.

*(cf. 4131 - Staff Development)*

*(cf. 6142.2 - AIDS Prevention Instruction)*

*(cf. 6142.8 - Comprehensive Health Education)*

*(cf. 6143 - Courses of Study)*

#### **Intervention, Referral and Recovering Student Support**

The Board believes that effective interventions should be available to assist students who use alcohol or other drugs. School staff, students and parents/guardians shall be informed about signs and symptoms which may indicate alcohol and other drug use and about appropriate agencies offering intervention programs, counseling and rehabilitation for students and their family members. The district shall help recovering students to avoid reinvolverment with alcohol and other drugs by providing school and/or community service activities designed to increase students' sense of community.

*(cf. 6142.4 - Learning Through Community Service)*

The Board strongly encourages any student who is using alcohol or drugs to discuss the matter with his/her parent/guardian or with any staff member. Students who disclose their use of alcohol or other drugs when seeking help from an intervention or recovery program shall not be disciplined for such use.

#### **Enforcement/Discipline**

The Superintendent or designee shall take appropriate action to eliminate possession, use or sale of alcohol and other drugs and related paraphernalia on school grounds, at school events, or in any situation in which the school is responsible for the conduct and well-being of students. School authorities may search students and school properties for the possession of alcohol and other drugs in accordance with law, Board policy and administrative regulations.

*(cf. 5145.11 - Questioning and Apprehension)*

*(cf. 5145.12 - Search and Seizure)*

BP 5131.6(c)

#### **ALCOHOL AND OTHER DRUGS (continued)**

Students possessing, using or selling alcohol or other drugs or related paraphernalia at school or at a school event shall be subject to disciplinary procedures including suspension or expulsion in accordance with law, Board policy and administrative regulations. Such students also may be referred to an appropriate rehabilitation program.

*(cf. 5144.1 - Suspension and Expulsion/Due Process)*

*Legal Reference:*

EDUCATION CODE

44049 Known or suspected alcohol or drug abuse by student  
48900 Suspension or expulsion (grounds)  
48900.5 Suspension, limitation on imposition; exception  
48901 Smoking or use of tobacco prohibited  
48901.5 Prohibition of electronic signaling devices  
48902 Notification of law enforcement authorities; civil or criminal immunity  
48909 Narcotics or other hallucinogenic drugs  
48915 Expulsion; particular circumstances  
49423 Administration of prescribed medication  
49480 Notice to school by parent or guardian; consultation with physician  
49602 Confidentiality of pupil information  
51202 Instruction in personal and public health and safety  
51203 Instruction on alcohol, narcotics and restricted dangerous drugs  
51210 Areas of study  
51220 Areas of study, grades 7 to 12  
51260 Elementary and secondary school instruction in drug education by appropriately trained instructors  
51262 Use of anabolic steroids; legislative finding and declaration  
51264 CDE assistance for inservice training  
51265 Gang violence and drug and alcohol abuse prevention inservice  
51268 Collaboration to avoid duplication of effort

BUSINESS AND PROFESSIONS CODE

25608 Alcohol on school property; use in connection with instruction

HEALTH AND SAFETY CODE

11032 Narcotics, restricted dangerous drugs and marijuana; construction of terms used in other divisions  
11053-11058 Standards and schedules  
11353.6 Juvenile Drug Trafficking and Schoolyard Act  
11357 Unauthorized possession of marijuana; punishment; prior conviction; possession in school or on school grounds  
11361.5 Destruction of arrest or conviction records  
11372.7 Drug program fund; uses  
11802 Joint school-community alcohol abuse primary education and prevention program

*Legal Reference continued: (see next page)*

BP 5131.6(d)

**ALCOHOL AND OTHER DRUGS (continued)**

*Legal Reference: (continued)*

11965-11969 The School-Community Primary Prevention Program  
11998-11998.3 Drug and Alcohol Abuse Master Plans  
11999-11999.3 Alcohol and drug program funding; no unlawful use  
124175-124200 Adolescent family life program (Department of Health Services)

PENAL CODE

13864 Comprehensive alcohol and drug prevention education

VEHICLE CODE

13202.5 Drug and alcohol related offenses by person under age of 21, but aged 13 or over; suspension, delay, or restriction of driving privileges

WELFARE AND INSTITUTIONS CODE

828 *Disclosure of information re minors*

828.1 *Disclosure of criminal records; protection of vulnerable staff & students*

UNITED STATES CODE, TITLE 20

5812 *National education goals*

7101-7143 *Safe and Drug-Free Schools and Communities Act of 1994*

Policy  
adopted: January 10, 2004  
Students

MATTOLE UNIFIED SCHOOL DISTRICT  
Petroliia, California  
AR 5131.6(a)

## ALCOHOL AND OTHER DRUGS

### Instruction

Students shall receive instruction by appropriately trained instructors about the nature and effects of alcohol and other drugs, including dangerous drugs defined by Health and Safety Code 11032. (Education Code 51260)

Site administrators shall determine that drug education instructors possess: (Education Code 51260)

1. The ability to interact with students in a positive way
2. Knowledge of the properties and effects of tobacco, alcohol, narcotics, dangerous drugs, and shared drug apparatus
3. Effective teaching skills and competency in helping students to express opinions responsibly and to become aware of their values as they affect drug-use decisions

At all grade levels, instruction shall include a study of the effects of alcohol and other drugs upon the human system, as determined by science. Instruction shall be sequential in nature and suited to meet the needs of students at their respective grade level. (Education Code 51203, 51260)

In grades 1 through 6, instruction in drug education should be given in health courses required by Education Code 51210. (Education Code 51260)

In grades 7 through 12, instruction in drug education shall be conducted in health courses and in any other appropriate area of study required by Education Code 51220. (Education Code 51260)

Secondary school instruction shall include a study of the effects of alcohol and other drugs upon prenatal development. (Education Code 51203)

*(cf. 6143 - Courses of Study)*

The district drug education program shall augment county drug education services, if any. District staff shall take every opportunity to cooperate with county office of education staff in planning and implementing collaborative alcohol and drug prevention programs. (Education Code 51260, 51268)

### Intervention

The staff shall intervene whenever students use alcohol or other illegal drugs while on school property or under school jurisdiction. Staff members who believe that a student may be under the influence of alcohol or drugs shall immediately notify the principal or designee.

AR 5131.6(b)

## ALCOHOL AND OTHER DRUGS (continued)

If the principal or designee knows, observes or suspects that a student may be under the influence of alcohol or drugs, he/she may notify the parent/guardian. (Education Code 44049)

However, school staff shall not disclose confidential information provided during counseling by a student 12 years of age or older. School counselors may report such information to the principal or parent/guardian only

when they believe that disclosure is necessary to avert a clear and present danger to the health, safety or welfare of the student or other persons living in the school community. They shall not disclose such information to the parent/guardian if they believe that the disclosure would result in a clear and present danger to the student's health, safety or welfare. (Education Code 44049, 49602)

*(cf. 5145.1 - Privacy)*

In cases of medical emergency, the principal is authorized to call an ambulance to remove the student to a hospital. Parents/guardians will be notified of this action and shall be responsible for the incurred expenses.

*(cf. 5141 - Health Care and Emergencies)*

#### **Confiscation of Electronic Signaling Devices**

Because electronic signaling devices (beepers, cellular telephones, etc.) are sometimes used to facilitate illegal drug transactions, the possession or use of such devices by students is prohibited on school premises, at all school-sponsored activities, and at any time while students are under the supervision and control of district employees. An exception shall be made only when the principal or designee has determined that the device is essential for the student's health and then shall be used only for health purposes. (Education Code 48901.5)

The Superintendent or designee shall confiscate these devices from students.

*(cf. 5144 - Discipline)*

#### **Enforcement/Discipline**

Staff shall notify the principal or designee immediately upon suspecting a student is selling, providing or using alcohol or other drugs.

When any student uses, possesses or sells alcohol or illegal drugs at school or while under school jurisdiction, the following shall result:

1. Parent/guardian contact

AR 5131.6(c)

#### **ALCOHOL AND OTHER DRUGS (continued)**

2. Suspension or expulsion in accordance with law or Board policy

*(cf. 5144.1 - Suspension and Expulsion/Due Process)*

3. Contact with law enforcement authority within one school day of the suspension (Education Code 48902)

In addition, the following actions may be taken:

1. Referral to an appropriate counseling program
2. Transfer/alternative placement
3. Restriction from all extracurricular activities, including athletics, for the length of the semester

*(cf. 6145 - Extracurricular and Cocurricular Activities)*



## Reports

Upon request, the Superintendent or designee shall submit alcohol and drug prevention program information to the California Department of Education, including information on the prevalence of drug use and violence by youth in the schools and community. Such information shall also be made readily available to the public. (20 USC 7117)