

Cultivation and Operations Plan

Applicant

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Parcel: 208-111-029

Agent

n/a

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I. Site Plan Overview

1.0 Project Information

Thomas Morgan ("Applicant") is submitting this application for a Type 2 Special Permit for 10,000 square feet of existing outdoor commercial cannabis cultivation on a 40-acre parcel, located near Bridgeville, CA ("Parcel"), Assessor's Parcel Number 208-111-029.

All water used for cultivation is sourced from a well and one (1) Point of Diversion sourced from a Class II Watercourse. There are eighteen (18) existing HDPE water tanks and the applicant will add (11) eleven more 5,000 gallon tanks for a total of 113,090 gallons of hard tank water storage. The Applicant estimates their annual water use to be 120,000 gallons.

The Applicant has proposed the construction of: a 120 square foot shed to store cultivation equipment and supplies, one (1) Vegging Green House (GH) that is to be 768 square feet, and one (1) Drying Building that is to be 768 square feet. The Vegging (GH) is used to house immature cannabis plans, and not for harvesting. Applicant will apply for building permits for the proposed structures. There is one (1) 1,639 square foot Residence that was built in 2009. It is used as a place of living and is not associated with the cultivation operation. There is one (1) 4'x8' wood shed that was built in 2015, and is used to store firewood for the residence.

The Applicant expects to have two (2) harvests via light deprivation in the greenhouses. All processing is completed by a 3rd party processing company.

This application has been prepared in accordance with Humboldt County's ("County") Commercial Medical Marijuana Land Use Ordinance ("CMMLUO").

The Type 2 Special Permit would achieve the following results for the Applicant:

- a. Permit 12,040 square feet of Outdoor commercial cannabis cultivation activities that were in existence prior to January 1, 2016, in compliance with the County CMMLUO; and
- b. Comply with applicable standards for water quality maintenance and watershed protection through the Waiver of Waste Discharge requirements of the North Coast Regional Water Quality Control Board ("Water Board") and California Department of Fish and Wildlife ("Fish and Wildlife").

2.0 Project Location

The Applicant's Parcel is located in the inland zone of Humboldt County near Bridgeville, CA. Parcel is comprised of 40-acres and is identified by Assessor's Parcel Number ("APN") 208-111-029.

2.1 Zoning Classification

The County's Zoning Classification of the Parcel is FR with a Current General Plan of AL40 (FRWK). The CMMLUO permits existing Outdoor commercial cannabis cultivation on land zoned as FR with cultivation sites over 10,000 square feet with a Use Permit.

2.2 Site Topography

A map of the Parcel's topography is included as Attachment "A."

3.0 Easements

The following information is taken from Exhibit "A" of the recorded Grant Deed, a copy of which is included in the Evidence of Ownership and Authorization section of this Application.

"PARCEL ONE:

That portion of the South Half of Section 7, Township I North, Range 4 East, Humboldt Base and Meridian, described as follows:

BEGINNING at the Southwest corner of Lot 10, as shown on the Record of Survey filed March 26, 1968, in the Office of the Humboldt County Recorder, in Book 23, Page 116 of Surveys.

THENCE, following the center of Little Larabee Creek:

North 44 degrees 26 minutes 01 seconds East, 91.36 feet; North 50 degrees 51 minutes 36 seconds East, 70.92 feet; North 65 degrees 46 minutes 20 seconds East, 21.93 feet; North 85 degrees 36 minutes 05 seconds East, 13.04 feet; South 77 degrees 31 minutes 03 seconds East, 134.17 feet;

South 88 degrees 01 minutes 30 seconds East, 29.02 feet; North 49 degrees 05 minutes 33 seconds East, 8.32 feet; North S3 degrees 23 minutes 46 seconds East, 83.10 feet; North S2 degrees 55 minutes 37 seconds East, 56.40 feet; North 60 degrees 45 minutes 04 seconds East, 57.31 feet; North 82 degrees 52 minutes 30 seconds East, 24.19 feet; South 86 degrees 35 minutes 00 seconds East, 67.12 feet;

South 72 degrees 07 minutes 17 seconds East, 32.57 feet; South 61 degrees 55 minutes 39 seconds East, 34.00 feet; South 46 degrees 06 minutes 06 seconds East 73.55 feet; South S6 degrees 45 minutes 23 seconds East, 43.07 feet; South 85 degrees 47 minutes 06 seconds East, 141.36 feet;

South 78 degrees 00 minutes 32 seconds East, 43.22 feet;

South 65 degrees 59 minutes 27 seconds East, 95.55 feet;

THENCE leaving Little Larabee Creek North 15 degrees 09 minutes 35 seconds East, 974.68 feet; THENCE North 00 degrees 07 minutes 26 seconds West, 486.00 feet;

THENCE North 86 degrees 12 minutes 58 seconds West, 978.00 feet;

THENCE South 00 degrees 07 minutes 26 seconds East, 449.79 feet; THENCE North 86 degrees 12 minutes 58 seconds West, 683.00 feet;

THENCE South 19 degrees 54 minutes 33 seconds East, 1,204.77 feet to the point of beginning. EXCEPTING THEREFROM that portion thereof described as follows:

That portion of the South Half of Section 7, Township 1 North, Range 4 East Humboldt Base and Meridian, described as follows:

BEGINNING at the Northeast corner of Lot 4 as shown on the Record of Survey filed March 26, 1968, in the Office of the Humboldt County Recorder, in Book 23, Pages 116, 117 and 118 of Surveys;

THENCE South 86 degrees 12 minutes 58 seconds East, 483.00 feet to the East line of the West Half of the Southeast Quarter of said Section;

THENCE South 00 degrees 07 minutes 26 seconds East along said subdivision line, 495.34 feet to a point on the centerline of an existing private road;

THENCE Northerly and Westerly along said centerline to a point which bears South 19 degrees 54 minutes 33 seconds East, from the point of beginning;

THENCE North 19 degrees 54 minutes 33 seconds West, 231.73 feet, to the point of beginning. BEING a portion of Lot 10 of said Record of Survey.

PARCEL ONE-A:

TOGETHER WITH and subject to that certain declaration of Grant and Reservation of Easement executed by The Bank of California, a National Association, recorded June 16, 1967, in Book 925, Page 171, Humboldt County Official Records.

PARCEL TWO:

That portion of the South Half of Section 7, Township 1 North, Range 4 East, Humboldt Base and Meridian, described as follows:

BEGINNING at the Southwest Corner of Lot 10 as shown on the Record of Survey filed March 26, 1968, in the Office of the Humboldt County Recorder, in Book 23, Pages 116, 117 and 118 of Surveys;

THENCE North 19 degrees 54 minutes 33 seconds West along the Westerly line of said Lot 10, 973.04 feet to a point on the centerline of an existing private road;

THENCE South 08 degrees 40 minutes 33 seconds West 627.39 feet to the center of Little Larabee Creek; THENCE along the center of said Creek, Southerly and Easterly to the point of beginning.

BEING a portion of Lot 4 of said Record of Survey."

4.0 Natural Waterways

Per the Humboldt County GIS website, Class I Watercourse, Little Larabee Creek passes through the Parcel. The Applicant's well and cultivation is well outside of the 100-foot stream side management area Little Larabee Creek requires.

There is a one (1) Class II Watercourse and two (2) Class III Drainages that pass through the parcel.

Timberland Resource Consultants will prepare a Water Resource Protection Plan in accordance with Order R1-2015-0023 by the North Coast Regional Water Quality Control Board.

5.0 Location and Area of Existing Cultivation

The 12,040 square feet of Outdoor cannabis cultivation occurs in three (3) locations

Outdoor Cultivation

Greenhouses #1 and #3(Proposed)

Greenhouses #1 is located on the eastern section of the parcel on an existing graded flat consists of 3,640 square feet outdoor cannabis cultivation. Proposed greenhouse #3, 3,000 square feet, will be located on the northern side of GH#1.

Greenhouse #2

Greenhouse #2 is located in the northwestern section of the parcel on an existing graded flat. It consists of 5,400 square feet of outdoor cannabis cultivation.

6.0 Setbacks of Cultivation Area

Outdoor Cultivation

Greenhouses #1 and #3

Greenhouses #1 and #3 are setback from the southern parcel line by approximately 400 feet and the western parcel line by approximately 1,800 feet.

Greenhouse #2

Greenhouse #2 is setback from the northern parcel line by approximately 568 feet, the eastern line by more than 768 feet.

7.0 Access Roads

The Parcel is located off State Highway 36, which is maintained by Cal Trans.

8.0 Graded Flats

There are existing flats on the Parcel. They may require permitting with the Humboldt County Building Department.

9.0 Existing and Proposed Buildings

Proposed Shed

The Proposed Shed will be a 10'x12' structure that is used for storing all cultivation related equipment, fertilizers and waste. It will not need a building permit but the applicant will confirm setbacks to SMA and parcel line prior to construction.

Residence

The Residence is an existing 1,639 square foot structure that is not associated with the cultivation operation. The applicant will secure a permit for an on-site wastewater treatment system with the Humboldt County Department of Environmental Health within two years of permit issuance.

Proposed Dry Building

The proposed dry building will be used to dry and store cannabis. It will be 24' x 32' and will require a building permit.

Proposed Vegging GH

The Vegging Greenhouse is 768 square foot structure that is being used to house immature cannabis that are in a vegetative state, and not for harvesting. It was built in 2015 and may require permitting with the Humboldt County Building Department.

10.0 Water Source, Storage, Irrigation Plan and Projected Water Usage

10.1 Water Source

All water used for cultivation is sourced from a permitted well and one (1) Point of Diversion sourced from a Spring.

10.2 Water Storage

There are eighteen (18) existing HDPE tanks and eleven (11) proposed 5000 gallon tanks for a total of 113,090 gallons of hard tank water storage. The individual number and amount of storage is outlined below:

- Five (5) 5,000-gallon HDPE tanks
- One (1) 4,400-gallon HDPE tank
- Two (2) 3,200-gallon HDPE tanks
- One (1) 2,800-gallon HDPE tank
- Eight (8) 2,500-gallon HDPE tanks
- One (1) 350-gallon HDPE tank
- Eleven (11) 5,000-gallon tanks (Proposed)

10.3 Irrigation Plan

All irrigation of cannabis is completed by hand watering at an agronomic rate.

10.4 Projected Water Use

The amount of water used for the cultivation of cannabis will vary throughout the year, with peak periods of water use occurring during the summer months. The Applicant's cultivation and water use is outlined in the Cultivation and Water Usage Chart, attached below. The Applicant estimates their annual water use to be approximately 120,000 gallons.

11.0 Site Drainage, Runoff, Erosion Control Measures and Watershed Protection

Site Drainage, Runoff, Erosion Control Measures

The greenhouses will have proper erosion control (gravel, straw, mulch, etc.) around the base so rain runoff will not cause an erosion issue.

The Applicant will adhere to all best management practices for site drainage, runoff and erosion control set by the North Coast Regional Water Quality Control Board, the California Department of Fish and Wildlife, and the Humboldt County Code section 331-14.

Watershed Protection

The Applicant will be enrolled in the North Coast Regional Water Quality Control Board's Waiver of Waste Discharge program as a Tier II discharger and will have a Water Resource Protection Plan created.

Greenhouses #1, #2, and #3 reside at least 500 feet at its closest point from a Class I Watercourse, Little Larabee Creek. The greenhouses are sited outside the 100-foot streamside management area for a Class II watercourse.

A legacy greenhouse was located in the stream buffer zone of a Class II Watercourse and has been decommissioned. The site will be restored to pre-disturbance conditions within one-year of permit issuance.

12.0 Distances from Significant Landmarks

There are no schools, school bus stops, state parks, places of worship or Tribal Cultural Resources within 600 feet of the cultivation site.

II. Cultivation and Operations Plan

1.0 Materials Storage

Currently, there are no pesticides or herbicides registered specifically for use directly on cannabis. The Applicant will be using items that were accepted under Legal Pest Management Practices for Marijuana Growers in California.

All fertilizers and amendments will be located in the propose storage shed. Fertilizers and amendments are placed on the shelves and floor where any spill will be contained. All labels are kept and directions are followed when nutrients are applied. The storage shed will have posted instructions for storing fertilizers and amendments, instructions for cleaning up spills and a spill kit that contains a container, gloves, towels, absorbent socks and an absorbent material (kitty litter).

The Applicant will use (3) 6.5 KW generators for cultivation operations. All fuel will be stored in the proposed storage shed in secondary containers to prevent any spills.

All cultivation related waste will be stored in water tight trash containers in the proposed storage shed and disposed of weekly.

There is no soil pile on-site. The Applicant brings in soil to fill the beds and pots. The soil is reamended for each cultivation cycle. Once the dirt is no longer viable for cultivation, it is removed and disposed of at Wes Green in Arcata.

2.0 Cultivation Activities

Cultivation activities will typically begin sometime during May when cannabis is distributed to Greenhouse #1, #2 and #3 from the Vegging GH for planting.

The Vegging GH will have string LED lights to keep the cannabis plants from flowering. The Applicant will have blackout tarps over the greenhouses during sunset hours in order to abide by the International Dark Sky Associations Standards.

The applicant will be pulling tarps over the greenhouses in order to have two (2) harvests of cannabis via light deprivation, sometime in July and October. Tarps will be pulled by hand and will not have any negative effects to the surrounding area or the cannabis.

3.0 Processing Practices

Plants will be harvested one at a time using hand shears and taken to the dry building for drying. A 3rd party processing company will prepare the cannabis for sale.

All work surfaces and equipment are maintained in a clean, sanitary condition. Protocols to prevent the spread of mold are strictly followed. The final cannabis product is stored in a secure location.

The Applicant will be utilizing a Track and Trace program implemented by the CA department of Cannabis Control (DCC) and will abide by all appropriate record keeping practices.

4.0 Security Measures

The access to the parcel is gated and locked. There are game cameras placed over the gate, buildings and cultivation areas.

Cultivation and Water Usage

Month	Stage of Cultivation			Cultivation Space per Stage (Square Footage) *	Water Usage (gallons/month)
	Vegging	Flowering	Harvesting		
EXAMPLE	X	X		1,200 sq. ft. – Vegging 1,500 sq. ft. – Flowering	5,000 gal/month
January					
February					
March	X			5,000 square feet – vegging	3,100 gallons
April	X	X		5,000 square feet – vegging 4,480 square feet – flowering	8,532 gallons
May		X		9,480 square feet – flowering	8,816 gallons
June	X		X	5,000 square feet – vegging 9,480 square feet – harvesting	6,000 gallons
July	X	X		5,000 square feet – vegging 4,480 square feet – flowering	14,694 gallons
August		X		9,480 square feet – flowering	20,571 gallons
September		X		10,000 square feet – flowering	19,908 gallons
October			X	10,000 square feet – harvesting	
November					
December					

*with a plant density of 0.85