PLANNING AND BUILDING DEPARTMENT

https://www.edcgov.us/Government/Planning

PLACERVILLE OFFICE:
2850 Fairlane Court, Placerville, CA 95667
BUILDING
(530) 621-5315 / (530) 622-1708 Fax
bldgdept@edcgov.us
PLANNING
(530) 621-5355 / (530) 642-0508 Fax
planning@edcgov.us

LAKE TAHOE OFFICE:
924 B Emerald Bay Rd
South Lake Tahoe, CA 96150
(530) 573-3330
(530) 542-9082 Fax

TO: County of El Dorado Agricultural Commissioner/Commission

FROM: Evan Mattes, Senior Planner

DATE: June 7, 2023

RE: CCUP22-0003/Landrace Commercial Cannabis Cultivation
Commercial Cannabis Use Permit
Assessor's Parcel Number: 088-021-043

Planning Request and Project Description:

Planning Services is processing the attached application for a Commercial Cannabis Use Permit and requests the project be placed on the Agricultural Commission's Agenda. Section 130.41.200.5.N of the Zoning Ordinance states "Recommendation of the Agricultural Commission. An application for a Commercial Cannabis Use Permit for outdoor or mixed-light cultivation must be reviewed by the Agricultural Commission and the recommendation of the Agricultural Commission, including any suggested conditions or restrictions, shall be forwarded to and considered by the Planning Commission."

The applicants are requesting the following:

Commercial Cannabis Use Permit for the cultivation of commercial cannabis located at 5700 Hackomiller Rd. Somerset -APN: 088-021-043, within Board of Supervisor District 4. The project is located on a 61.54-acre parcel zoned Agricultural Grazing 40-Acres (AG-40) within an Agricultural district. This application is for 75,000 square feet of outdoor cannabis cultivation and processing for distribution over three phases. Phase 1 would encompass 30,000 sq ft of canopy space, Phase 2 will consist of 60,000 sq ft of canopy space and Phase 3 will consist of 75,000 sq ft. It is anticipated the operation will employee up to 7 full-time employees and up to 20 seasonal employees. The project site is surrounded on all sides by parcels within an Agricultural district. Properties to the south are zoned AG-40, to the east Planned Agricultural 20-Acres (PA-20) and to the north and west Rural Lands 10-Acres (RL-10) and Rural Lands 20-Acres (RL-20).

RECEIVED

MAY 0 3 2022

EL DORADO COUNTY
PLANNING AND BUILDING DEPARTMENT

CULTIVATION PLAN:

This will be a highly productive biological farm. Zachary Mosier and Michael Ciulla will operate/oversee all cultivation activity on the farm. John Roe and Barbara Thompson will reside on the property.

The farm will encompass approximately 10,000 ft2 in phase 1, expanding to 75,000ft2 of cultivation space in phase 3. The crops will be grown in raised beds covered 16' x 100' gothic caterpillar tunnels compliant with CODE 325-CPS-1 Natural Resources Conservation Service (USDA). The caterpillar tunnels will use using light deprivation to increases to 3 harvests per year (see attached caterpillar tunnel design plans). Immature plants will be maintained in a raised separate nursery caterpillar tunnels. All cultivation areas will be appropriately screened and contained within wildlife exclusionary fencing with locked gates per El Dorado County regulations.

All crops on the property will be organically grown without any chemical fertilizer, pesticides, fungicides or herbicides. All crop waste will be composted.

During the anticipated three harvest periods during the year (June, September, October), crops will be taken down and cured in a shipping container (please see attached Shipping Container design plans). Trimming of the crops will be performed on site in HDX BASE-X 203 Shelter Systems (used by the US military for logistics operations). In between the processing window the structures will be stored. All harvested crops will be kept in a locked shipping container.

The farm will not be open to the public. The farm will be kept in a nondescript condition consistent with the surrounding properties. No signage will be placed. Finished product will be picked up 5-8 times a year by California licensed delivery services.

Due to the scale of the farm, in addition to Zachary, Michael, and Stephen we expect to hire 1 full time employees in phase 1, ramping up

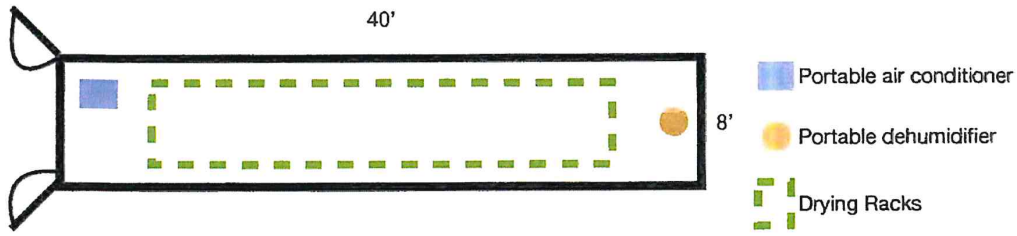
to 7 onsite employees by phase 3 to assist in the day-to-day operations of the farm. We will be hiring a temporary labor

force of 4 to 20 employees approximately 6-10 times a year to assist with harvest/ processing.

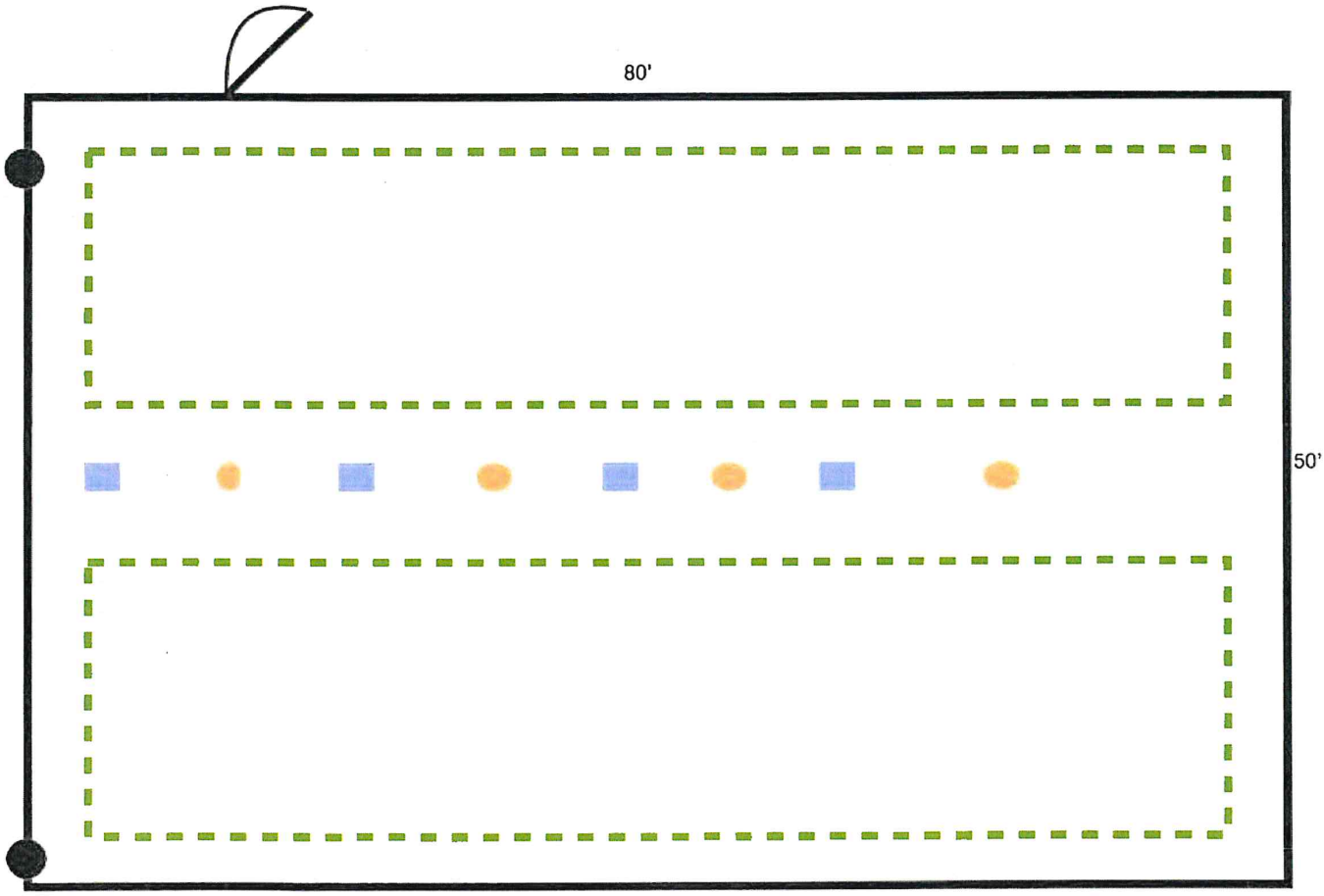
NURSERY PLAN:

We intend to develop the nursery slowly over the first two phases with little, if any, sales to licensed cultivators during this time. The first two years will be dedicated to research and development - carefully identifying and testing select craft cannabis strains through a process of extensive genetic selection of phenotypical expressions adapted to the local environment, aimed to benefit the cultivars in El Dorado County. Once sales begin, there will be a strict "by appointment only" policy to minimize any traffic to the farm. We intend to keep the farm's characteristics nondescript and consistent with the current feel of the area.

Drying Area Shipping Container Diagram
(Phase 1 & 2)



Drying Biulding Diagram
(Phase 3)



Cultivation Area Lighting Plan

Canopy Area One
(identified in premises plan that's a vegetative greenhouses)

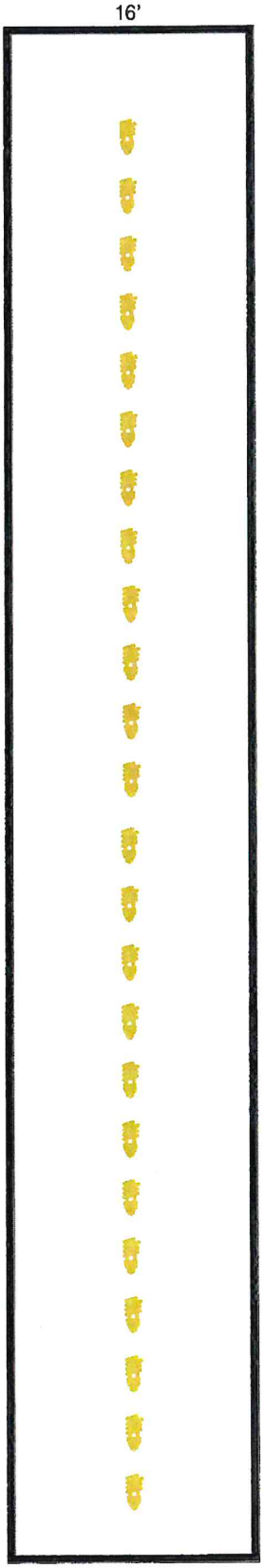
Maximum wattage per each light

=12 watts

Aggregate wattage per Canopy Area
24 x 12 watts per light = 288 watts
Each canopy area(vegetative greenhouse) 1600 Square feet
288 watts / 1600 Square feet.
.18watts per Square foot

16'

100'



Canopy Area One
(identified in premises plan that's a flowering greenhouses)

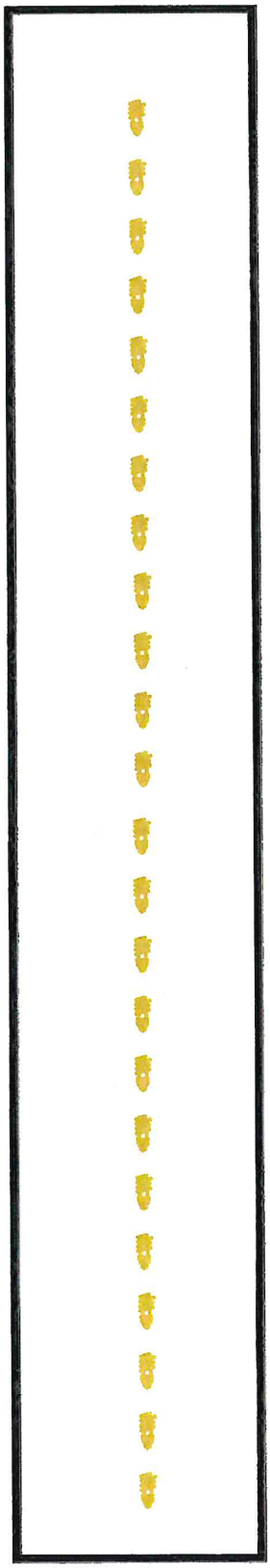
Maximum wattage per each light

=12 watts

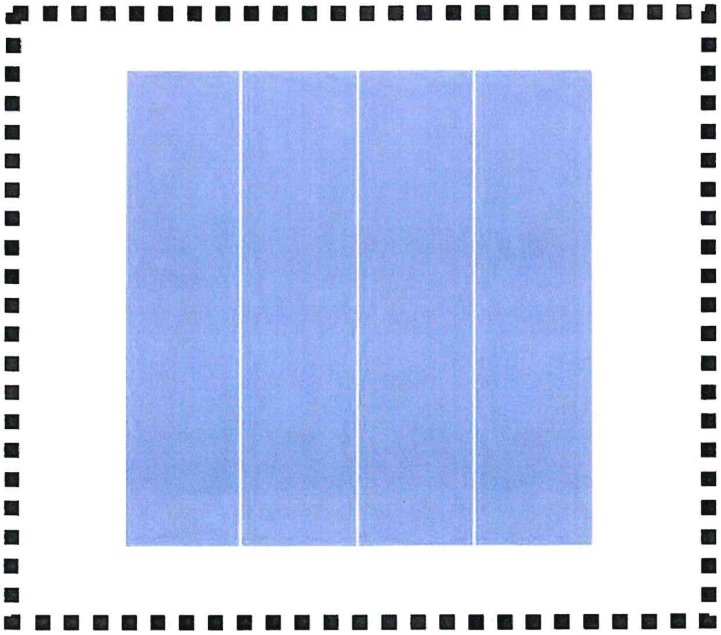
Aggregate wattage per Canopy Area
24 x 12 watts per light = 288 watts
Each canopy area(flowering greenhouse) 1600 Square feet
288 watts / 1600 Square feet.
.18watts per Square foot

16'

100'

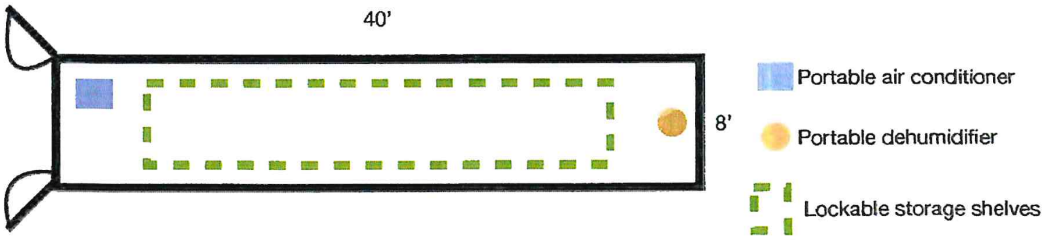


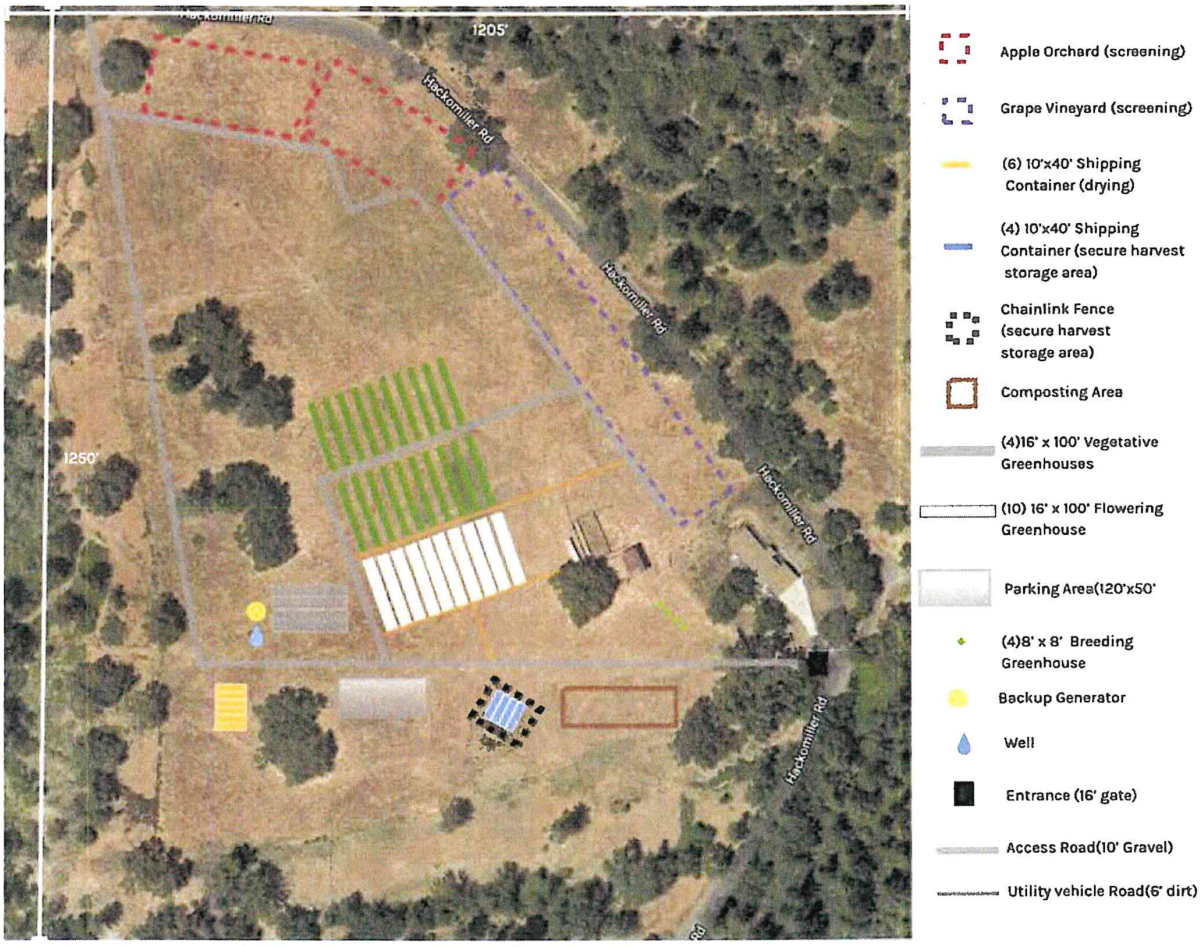
SECURE HARVEST STORAGE DIAGRAM



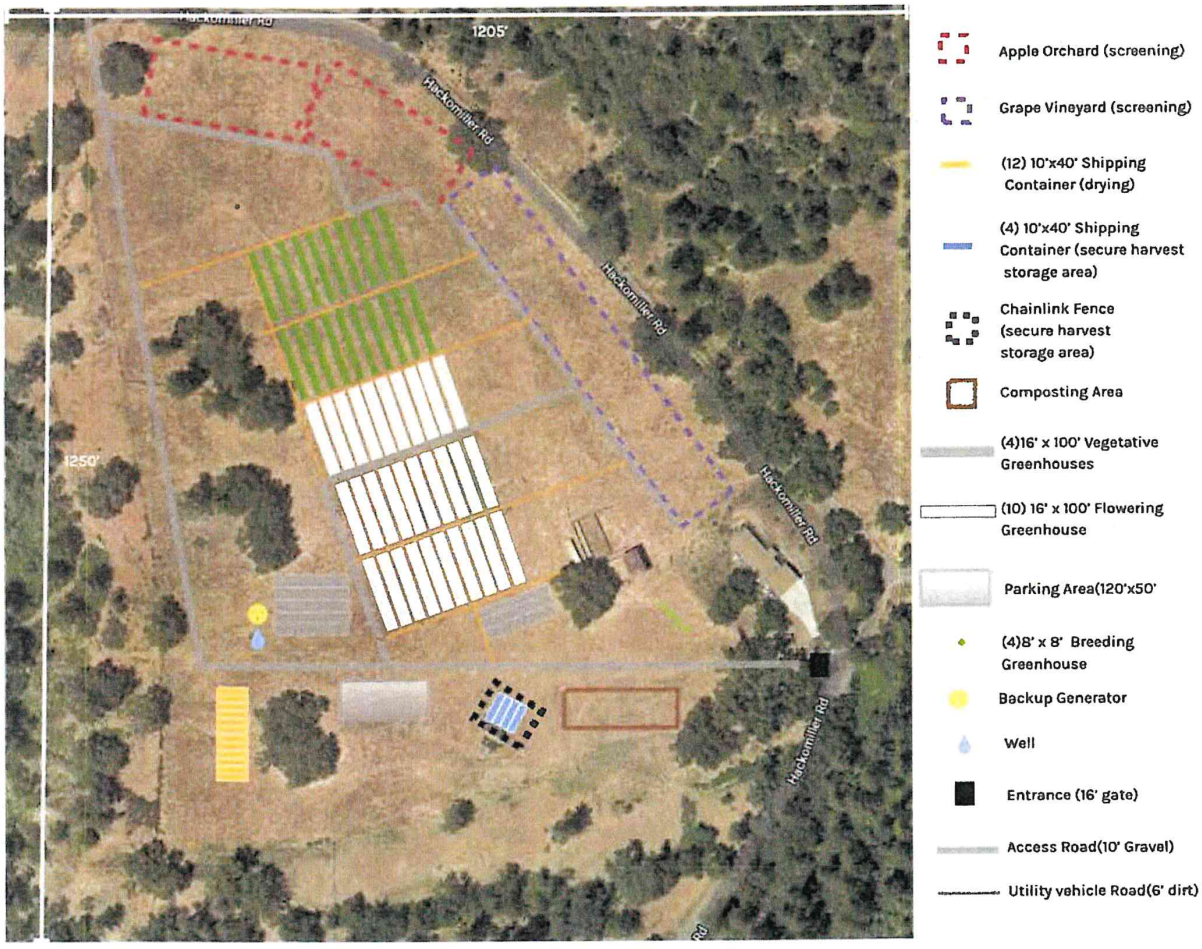
(4) 8'x40' Shipping Container (secure harvest storage area)

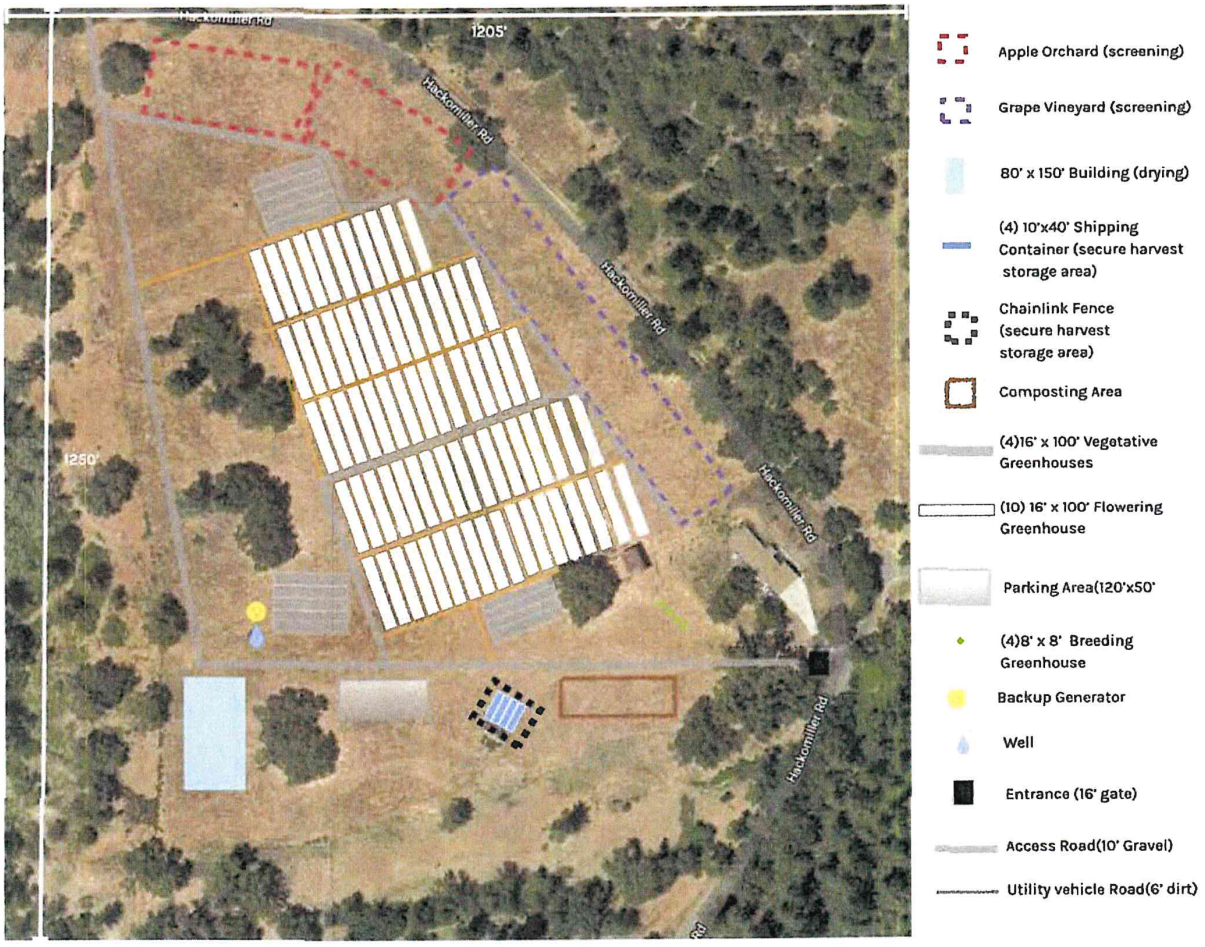
Chainlink Fence (secure harvest storage area)



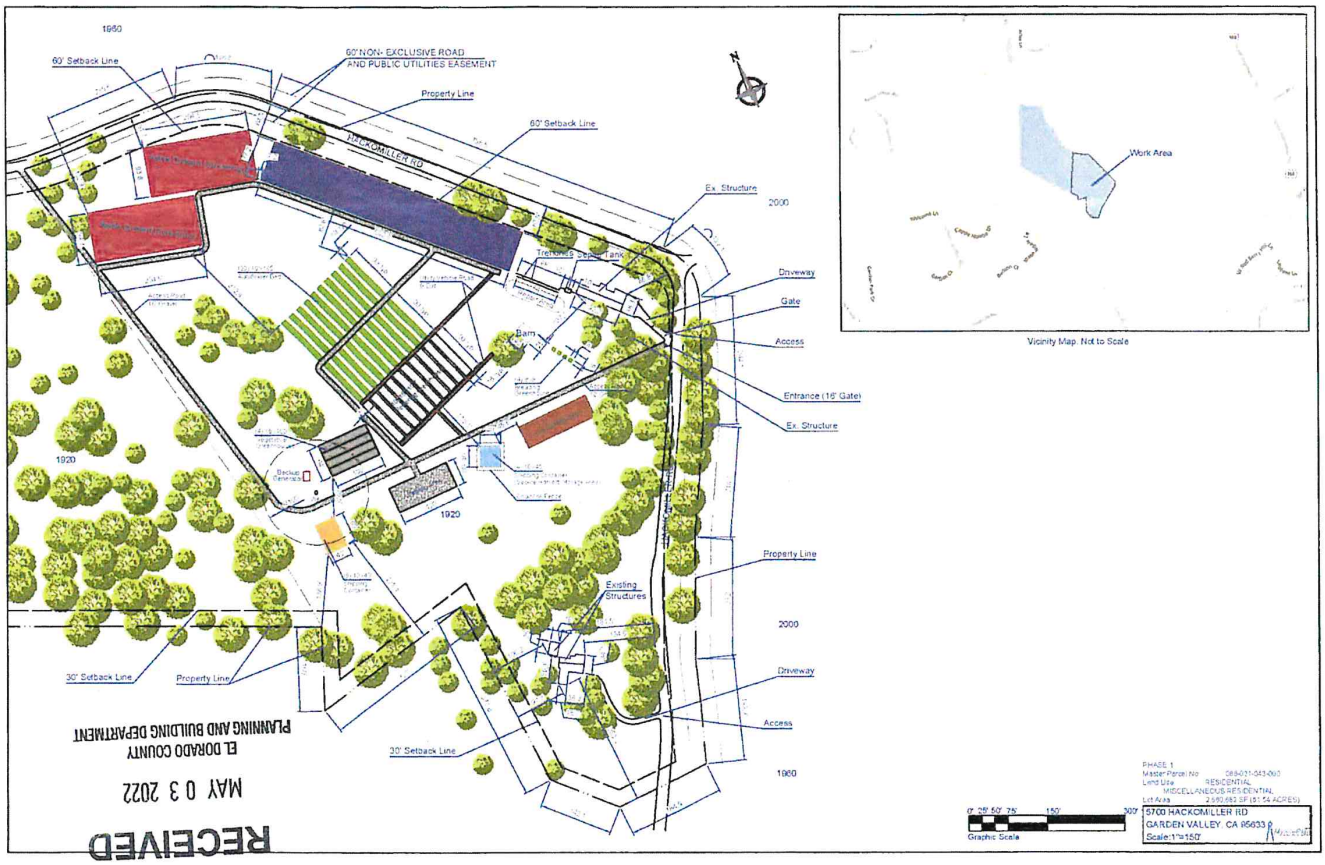


CCUP22-0003

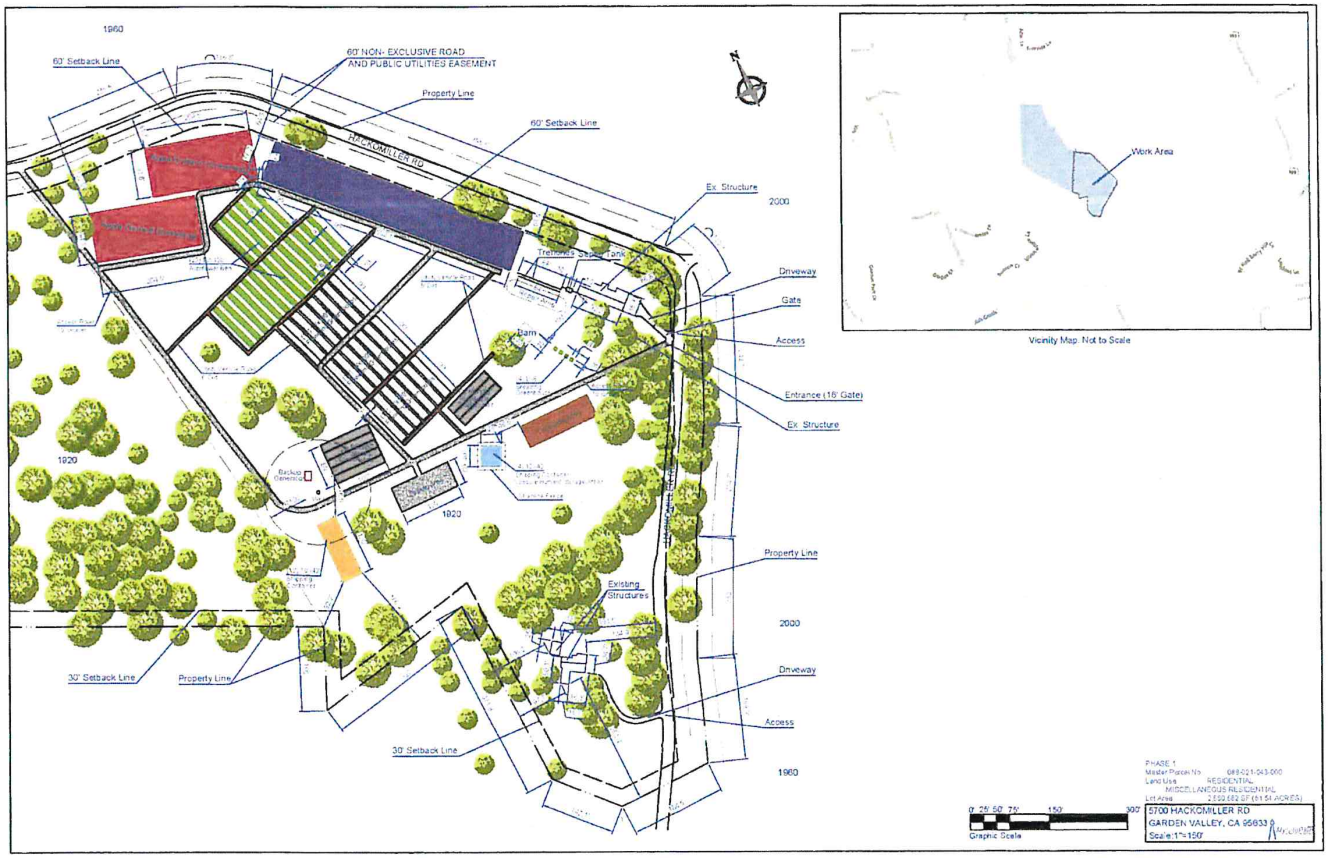

1205'
Hackamiller Rd
1250'
Apple Orchard (screening)
Grape Vineyard (screening)
(12) 10'x40' Shipping Container (drying)
(4) 10'x40' Shipping Container (secure harvest storage area)
Chainlink Fence (secure harvest storage area)
Composting Area
(4)16' x 100' Vegetative Greenhouses
(10) 16' x 100' Flowering Greenhouse
Parking Area(120'x50'
(4)8' x 8' Breeding Greenhouse
Backup Generator
Well
Entrance (16' gate)
Access Road(10' Gravel)
Utility vehicle Road(6' dirt)

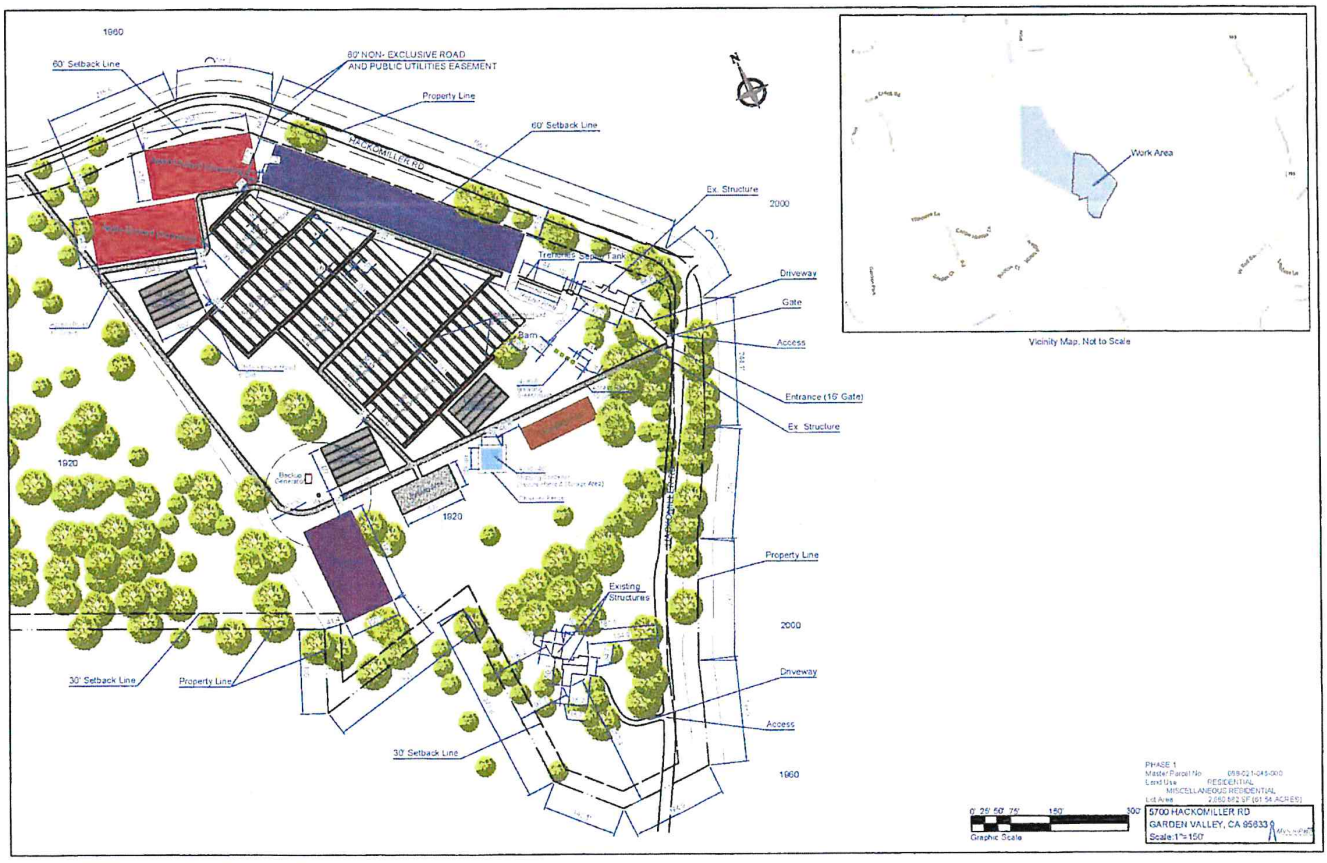

1205'
Hackamiller Rd
1250'
Apple Orchard (screening)
Grape Vineyard (screening)
80' x 150' Building (drying)
(4) 10'x40' Shipping Container (secure harvest storage area)
Chainlink Fence (secure harvest storage area)
Composting Area
(4)16' x 100' Vegetative Greenhouses
(10) 16' x 100' Flowering Greenhouse
Parking Area(120'x50'
(4)8' x 8' Breeding Greenhouse
Backup Generator
Well
Entrance (16' gate)
Access Road(10' Gravel)
Utility vehicle Road(6' dirt)

CCUP22-0003



RECEIVED
MAY 03 2022
EL DORADO COUNTY
PLANNING AND BUILDING DEPARTMENT


1960
60' Setback Line
60' NON- EXCLUSIVE ROAD AND PUBLIC UTILITIES EASEMENT
Property Line
60' Setback Line
HACKAMALLER RD
Ex. Structure
2000
Driveway
Gate
Access
Entrance (16' Gate)
Ex. Structure
Dam
1920
1920
Property Line
Existing Structures
2000
Driveway
Access
30' Setback Line
Property Line
30' Setback Line
1960
Work Area
Vicinity Map. Not to Scale
PHASE 1
Land Use RESIDENTIAL
MISCELLANEOUS RESIDENTIAL
0' 25' 50' 75' 150' 300'
Graphic Scale
5700 HACKAMALLER RD
GARDEN VALLEY, CA 95633
Scale:1"=150'


1960
60' Setback Line
80' NON- EXCLUSIVE ROAD AND PUBLIC UTILITIES EASEMENT
Property Line
60' Setback Line
HACKAMILLER RD
Ex. Structure
2000
Driveway
Gate
Access
Barn
Entrance (16' Gate)
Ex. Structure
1920
1920
Property Line
Existing Structures
2000
Driveway
Access
30' Setback Line
Property Line
30' Setback Line
1960
Work Area
Vicinity Map, Not to Scale
PHASE 1
Land Use RESIDENTIAL
MISCELLANEOUS RESIDENTIAL
5700 HACKAMILLER RD
GARDEN VALLEY, CA 95633
Scale: 1"=150'
Graphic Scale

RECEIVED

MAY 0 3 2022

EL DORADO COUNTY
PLANNING AND BUILDING DEPARTMENT

WASTE MANAGEMENT PLAN:

A. **On-premise composting** - pile method - Appropriate materials are placed in a compost pile with activation materials and allowed to compost over a minimum period of 6 months in designated composting area.

B. **On-premise vermiculture composting** - Appropriate materials are shredded and placed in worm bins for conversion to high quality compost tea and vermicastings.

C. **On-premise feeding** - Appropriate waste products will be fed to domestic farm animals. Appropriate materials such as vegetative leaves can be successfully fed to livestock.

D. **On-premise burn** - Waste may be burned on site during County identified burn days and consistent with all County burn regulations if allowable by the County.

INTEGRATED PEST MANAGEMENT PLAN(IPM):

(LandRace) Farm will follow the University of California Agricultural and Natural Resources Statewide Integrated Pest Management Program and the California Department of Pesticide Regulations for Cannabis.

As defined by the University of California Agricultural and Natural Resources Statewide Integrated Pest Management Program, an IPM is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Only natural based pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non target organisms, and the especially environment.

In regard to cannabis, the California Department of Pesticide Regulations for Cannabis, as updated on October 9, 2017, allows a pesticide product to be legally applied to cannabis under state law if the active ingredients found in the product are exempt from residue tolerance requirements and the product is either exempt from registration requirements or registered for a use that's broad enough to include use on cannabis (See CDPR regulations for cannabis attached hereto; see also 40 C.F.R., § 180, et seq., FIFRA section 25(b) and 3 CCR section 6147).

Residue tolerance requirements are set by U.S. EPA for each pesticide on each food crop and are the amount of pesticide residue allowed to remain in or on each treated crop with "reasonable certainty of no harm." Some pesticides are exempted from the tolerance requirement when they're found to be minimal risk. In the event of biological preventatives failing LandRace will only use these pesticides witch are exempt from the tolerance requirements.

Active ingredients exempt from registration requirements are mostly food-grade essential oils such as peppermint oil or rosemary oil. At all times if feasible, LandRace will us non-pesticide biological methods to combat pests. Only when these non- pesticide methods fail will LandRace use "insecticides" such as food grade peppermint oil, rosemary oil, that are exempt from residue tolerance requirements and either exempt from registration requirements or registered for a use broad enough to include use on cannabis per the California Department of Pesticide Regulations for Cannabis.

LandRace will choose to implement this Integrated Pest Management Plan for reasons that include, but are not limited to:

- Managing pests effectively and economically;
- Minimizing the risk associated with pest suppression;
- Prevent loss or damage to crop or property by pests;
- Producing quality commodities;

- Protection of environmental quality inside and outside our facility;

Zachary A. Mosier shall be LandRace IPM Coordinator and be responsible to implement the IPM plan and maintain records of pest management activities.

GENERAL IPM STRATEGIES

LandRace aims to minimize the use of all pesticides through its biological cultivation methods. By recreating the plants natural successional environment, promoting the colonization of native microbes, and engineering a symbiotic ecosystem below and above the soil. Our goal is to prevent any negative impact on the environment and in turn use these natural processes to work with and benefit the natural ecosystem that is already in place. Pest management strategies will also include education, exclusion, sanitation, maintenance, biological and mechanical controls identified by the University of California Agricultural and Natural Resources Statewide Integrated Pest Management Program and the California Department of Pesticide Regulations for Cannabis. Pest Management decisions shall consist of the following steps:

1. Identify pest species.

2. Estimate pest populations and compare to established action thresholds.

3. Select the appropriate non-pesticide biological management tactics based on current on-site information.

4. Consult with non-pesticide management experts if required.

5. Assess effectiveness of pest management.

6. Select appropriate pest management applications approved by the California Department of Pesticide Regulations for Cannabis should non-pesticide management applications fail.

7. Keep appropriate records.

As set forth in the California Department of Pesticide Regulations for Cannabis, standard practices for pests on plants other than cannabis should be used. Moe's Family Farms will follow the guidelines compiled by the University of California Statewide IPM Program (UCIPM) at www.ipm.ucdavis.edu. Once pest species are identified, Moe's Family Farms will obtain and use recommended IPM practices set forth at www2.ipm.ucanr.edu/agriculture/.

PESTS OF CANNABIS IN CALIFORNIA

Cannabis pests vary according to cultivar (variety), whether the plants are grown indoors or outdoors, and where the plants are grown geographically. The pests included in this review are preliminary and based on the following sources: a presentation given in 2013 by Whitney Cranshaw, an extension entomologist at Colorado State University, and a review article by John M. McPartland, a professor of family medicine at the University of Vermont. We also received input from Kevin Hoffman, former Primary State Entomologist, California Department of Food & Agriculture (CDFA).

PRODUCTS THAT CAN BE LEGALLY APPLIED TO CANNABIS PRODUCTS IN CALIFORNIA

A pesticide product can legally be applied to cannabis under state law if the active ingredients found in the product are exempt from **residue tolerance requirements**[1] *and* the product is either exempt from **registration requirements**[2] or registered for a use that's broad enough to include use on cannabis.

Residue tolerance requirements are set by U.S. EPA for each pesticide on each food crop and are the amount of pesticide residue allowed to remain in or on each treated crop with "reasonable certainty of no harm." Some pesticides are exempted from the tolerance requirement when they're found to be minimal risk.

Active ingredients exempt from registration requirements are mostly food-grade essential oils such as peppermint oil or rosemary oil.

GUIDANCE TABLES

Pages 4-8 include tables that provide guidance to cannabis growers seeking information on legal pest management practices in California.

Table 1 lists examples of active ingredients that fit these criteria. This is *not* an exhaustive list of active ingredients that may fit the legal use criteria. **Note** that DPR does not track products that fit the criteria and the user bears the responsibility for ensuring product labels meet the criteria.

[1] 40 C.F.R., § 180, et seq.
[2] under FIFRA section 25(b) and 3 CCR section 6147.

Tables 2 and 3 list pests of cannabis grown outdoors and indoors, and Table 3 shows pests arranged by the portion of the plant they attack. An explanation of the column labels for Tables 2 and 3 follow.

PESTS. The tables show the most likely pests in California based on Cranshaw's presentation and McPartland's list and gleaned from California-based web sites and blogs. Some pests that drew attention on several blogs (e.g., russet mites) may be worse during drought years. Many pests have cyclic population fluctuations and others are mainstays of general greenhouse cultivation (e.g., whiteflies, thrips, and fungus gnats). We'll add weeds to this compendium when we have more information.

DAMAGE. For damage caused by greenhouse pests, we used information from Cranshaw's presentation; for that of outdoor pests when there wasn't any overlap, we used McPartland's list and information from UC IPM for various crops. Accounts of damage by rodents are anecdotal.

PESTS NOT OFFICIALLY IDENTIFIED IN CALIFORNIA
Several cannabis pests in other states are not yet known in California. These pests would add to the russet mites, aphids, cutworms, budworms, borers, and flea beetles already in California. As more and more cannabis is planted throughout the state, collecting potential pests will enable entomologists to identify new species.

THE IMPORTANCE OF CORRECT IDENTIFICATION. It's essential to identify the potential pest or you may launch a futile program for a mite or insect that isn't a pest. And likewise, you need to know the correct species or you may use the wrong management strategy. For accurate identification, bring specimens to an entomologist.

HOW TO PRESERVE SPECIMENS FOR IDENTIFICATION. If the insect specimen is hard bodied (e.g., a beetle or moth), carefully place it in a small pill vial and cushion with crumpled tissue paper. If your specimen isn't yet dead, put it in a jar and place in a freezer overnight. Do not wrap specimens in tissue and seal them in plastic bags or you'll end up with smashed bug parts.

Place soft-bodied specimens (e.g., mites, leafhoppers, aphids, caterpillars) in a jar filled with rubbing alcohol.

VERSION: October 9, 2017

Include written information such as where on the plant you found the specimen, the general location of the plant, and date captured. Note original color and texture, since these will change once you immerse the specimen in alcohol. Also helpful are photographs of the specimen in its original habitat.

IPM PRACTICES. Most of these are standard practices for pests on plants other than cannabis. For more detailed explanations, see information compiled by the University of California Statewide IPM Program (UC IPM) at www.ipm.ucdavis.edu. You can enter a pest name in the search box (e.g., cutworm) and read about IPM practices for the pest on crops other than cannabis. For cannabis grown indoors, go to the UC IPM home page, click on Agricultural Pests and scroll down the alphabetical list until you reach ornamental nurseries.

Some practices were excluded because they apply to nearly all of the pests. For example, when targeting aphids, whiteflies, and thrips on crops grown outdoors, growers can attract predaceous and parasitic arthropods by planting strips or borders of cover crops (e.g., California buckwheat) and insectary plants—especially those in the carrot, mustard, and sunflower families (Pickett & Bugg, 1998).

LEGAL PESTICIDES. These are covered above in the Table 1 description and are **exempt from residue tolerance requirements** *and* either **exempt from registration requirements** or **registered for a use that is broad enough to include use on cannabis**.

REFERENCES

Cranshaw, Whitney. 2013. Challenges and opportunities for pest management of medical marijuana in Colorado. Presentation.

McPartland, J.M. 1996. *Cannabis* pests. J. Internatl. Hemp Assoc. 3(2): 49, 52–55.

Pickett, C.H. & R.L. Bugg, eds. 1998. Enhancing Biological Control: Habitat management to promote natural enemies of agricultural pests. UC Press, Oakland, Calif.

Table 1. Active ingredients that are exempt from residue tolerance requirements[a] and either exempt from registration requirements[b] or registered for a use broad enough to include use on cannabis. [updated on September 22, 2017]

	ACTIVE INGREDIENT	PEST OR DISEASE
1	azadirachtin[a]	aphids, whiteflies, fungus gnats, leafminers, cutworms
2	*Bacillus amyloliquefaciens* strain D747[a1]	root and crown diseases, powdery mildew, Botrytis
3	*Bacillus subtilis* QST[a1]	root diseases, powdery mildew
4	*Bacillus thuringiensis*[a4] subsp. *kurstaki*	moth larvae (e.g., cutworms, budworms, borers)
5	*Bacillus thuringiensis*[a4] subsp. *israelensis*	fly larvae (e.g., fungus gnats)
6	*Beauveria bassiana*[a5]	whiteflies, aphids, thrips
7	*Burkholderia* spp. strain A396[a4]	mites, leafhoppers, aphids, whiteflies, thrips, moth larvae
8	capsaicin[a] (= capsicum oleoresin)	repellent (insects + vertebrates); mites, leafhoppers, whiteflies, thrips, moth larvae
9	castor oil[b]	repellent (moles, voles, gophers)
10	cinnamon, cinnamon oil[b]	slugs and snails, mites, leafhoppers, aphids, whiteflies, moth larvae
11	citric acid[b]	bacteria, fungi, mites, insects
12	cloves and clove oil[b]	bacteria, fungi
13	corn oil[b]	fungi, mites, insects
14	cottonseed oil[b]	fungi, mites, insects
15	garlic and garlic oil[b]	mites, leafhoppers, aphids, whiteflies, moth larvae
16	geraniol[b]	fungi, rodent repellent, mites, insects
17	*Gliocladium virens*[a2]	root diseases
18	horticultural oils[a] (petroleum oil)	mites, aphids, whiteflies, thrips, powdery mildew
19	insecticidal soaps[a] (potassium salts of fatty acids)	aphids, whiteflies, cutworms, budworms
20	iron phosphate[a], sodium ferric EDTA[a]	slugs and snails
21	*Isaria fumosorosea*[a5]*	mites, aphids, whiteflies, thrips
22	neem oil[a]	mites, powdery mildew
23	peppermint, peppermint oil[b]	bacteria, fungi, mites, leafhoppers, aphids, whiteflies, moth larvae
24	potassium bicarbonate[a]; sodium bicarbonate[a]	powdery mildew
25	potassium silicate[a]	powdery mildew, mites, aphids
26	potassium sorbate[b]	fungi, mites, insects

27	predatory nematodes[a]	fungus gnats
28	putrescent whole egg solids[b]	squirrel, rabbit, and deer repellent
29	rosemary, rosemary oil[b]	bacteria, fungi, leafhoppers, aphids, whiteflies, moth larvae
30	sesame and sesame oil[b]	mites, leafhoppers, aphids, whiteflies, moth larvae
31	sodium chloride[b]	[minor active ingredient in some fungicide and insecticide formulations]
32	soybean oil[b]	mites, insects
33	*Reynoutria sachalinensis* extract[a3]	powdery mildew
34	sulfur[a]	mites, flea beetles
35	*Trichoderma harzianum*[a2]	root diseases
36	thyme oil[b]	mites, leafhoppers, aphids, whiteflies, moth larvae

[a] 40 CFR (Code of Federal Regulations)

[b] FIFRA §25(b) and 3 CCR §6147 [FIFRA = the Federal Insecticide, Fungicide, and Rodenticide Act; CCR = California Code of Regulations]

**Isaria fumosorosea* was formerly *Paecilomyces fumosoroseus*

[1] Bacterial-based fungicide

[2] Fungal-based fungicide

[3] Plant-based fungicide

[4] Bacterial-based insecticide

[5] Fungal-based insecticide

Table 2. PEST MANAGEMENT PRACTICES FOR CANNABIS GROWN OUTDOORS

PEST	DAMAGE	IPM PRACTICES (monitoring; cultural, physical, mechanical, biological)	PESTICIDES
MITES & INSECTS			
two-spotted spider mites *Tetranychus urticae* (and other Tetranychidae)	Suck plant sap; stipple **leaves**	▪ Keep dust down by hosing off plants (if dust is a problem) ▪ Release predatory mites	neem oil, horticultural oil
broad mites *Polyphagotarsonemus latus*	Distort **leaves** and **buds**	▪ Inspect plants; disinfest or dispose of infested plants ▪ Release predatory mites and sixspotted thrips	—
russet mites *Aculops* spp.	Suck plant sap; kill **leaves** and **flowers**	▪ Release predatory mites	neem oil, horticultural oil, sulfur
crickets (field & house)	Eat **seedlings**	▪ Use floating row covers or cones on individual plants	—
termites	Eat **roots**	▪ Flood nests	—
leafhoppers	Suck plant sap; weaken plants	▪ Encourage natural enemies by planting nectar sources	horticultural oil or insecticidal soaps for nymphs
whiteflies *Trialeurodes vaporariorum, Bemisia tabaci, B. argentifolii*	Suck plant sap; weaken plants	▪ Hang up yellow sticky cards ▪ Use reflective plastic mulch	azadirachtin, horticultural oil, insecticidal soaps, rosemary + peppermint oils, *Beauveria bassiana*
thrips *Heliothrips haemorrhoidalis, Frankliniella occidentalis, Thrips tabaci*	Stipple and scar **leaves**; vector viruses	▪ Hang up yellow or blue sticky cards	horticultural oil, insecticidal soaps, rosemary + peppermint oils, *Beauveria bassiana*
aphids *Myzus persicae, Aphis fabae*	Suck plant sap; weaken plants	▪ Hang up yellow sticky cards (alates) ▪ Hose off plants	azadirachtin, horticultural oil, insecticidal soaps, *Beauveria bassiana*
leafminers *Liriomyza* spp.	Bore into **roots** and **leaves**	▪ Remove older infested leaves ▪ Use biocontrol: release *Diglyphus* parasitoids	azadirachtin

PEST		DAMAGE	IPM PRACTICES (monitoring; cultural, physical, mechanical, biological)	PESTICIDES
LEPIDOPTERA	**cutworms** *Agrotis ipsilon, Spodoptera exigua* (Noctuidae)	Eat **seedlings**	▪ Use pheromone traps to detect adults. ▪ Remove weeds, which serve as a reservoir for cutworms and other noctuids	Vegetative stage only: Use *Bacillus thuringiensis kurstaki* if egg-laying adults found, insecticidal soap; azadirachtin
	budworms *Helicoverpa zea* (Noctuidae)	Eat flowering **buds**	▪ Shake plants to dislodge larvae ▪ Remove infested buds ▪ Plant corn as trap crop	Vegetative stage only: Use *Bacillus thuringiensis kurstaki,* insecticidal soap
COLEOPTERA	**flea beetles** (Chrysomelidae)	Bore into **stems** (grubs); feed on seedlings and **leaves** of larger plants (adults)	▪ Use reflective mulches ▪ Plant trap crops (e.g., radish or Chinese mustard)	sulfur
	scarab grubs (Scarabaeidae) possibly other beetles)	Bore into **stems**	▪ Use parasitic nematodes	—
MAMMALS				
mice (e.g., house mice)		Eat **young sprouts** and **seeds**	▪ Double wrap a 3'-tall chicken wire fence around plants ▪ Trap (minus rodenticides) ▪ Mount barn owl boxes	rodenticides*
roof rats, *Rattus rattus* **wood rats,** *Neotoma* spp.		Strip bark from **stems** to build nests		
pocket gophers, *Thomomys* spp.		Tunnel through planting areas; feed on plants; gnaw on irrigation lines	▪ Install underground fencing (hardware cloth or ¾" mesh poultry wire) ▪ Mount barn owl boxes	
Columbian black-tailed deer, *Odocoileus hemionus columbianus*		Knock over plants; leave dander, droppings, and ticks behind	▪ Install deer fencing	—
black bears, *Ursus americana*		Knock over plants	▪ Install electric fencing	—

*** If using a rodenticide always read and follow the label and check to make sure that the target rodent is listed. Second-generation anticoagulant products (contain the active ingredients brodifacoum, bromadiolone, difenacoum, and difethialone) are DPR-restricted materials not labeled for field use and should never be used in or around cannabis cultivation sites. Permits for the use of DPR-restricted materials will not be issued to cannabis cultivators. Any federally restricted use pesticide must be applied by a certified applicator consistent with the registered labeling.**

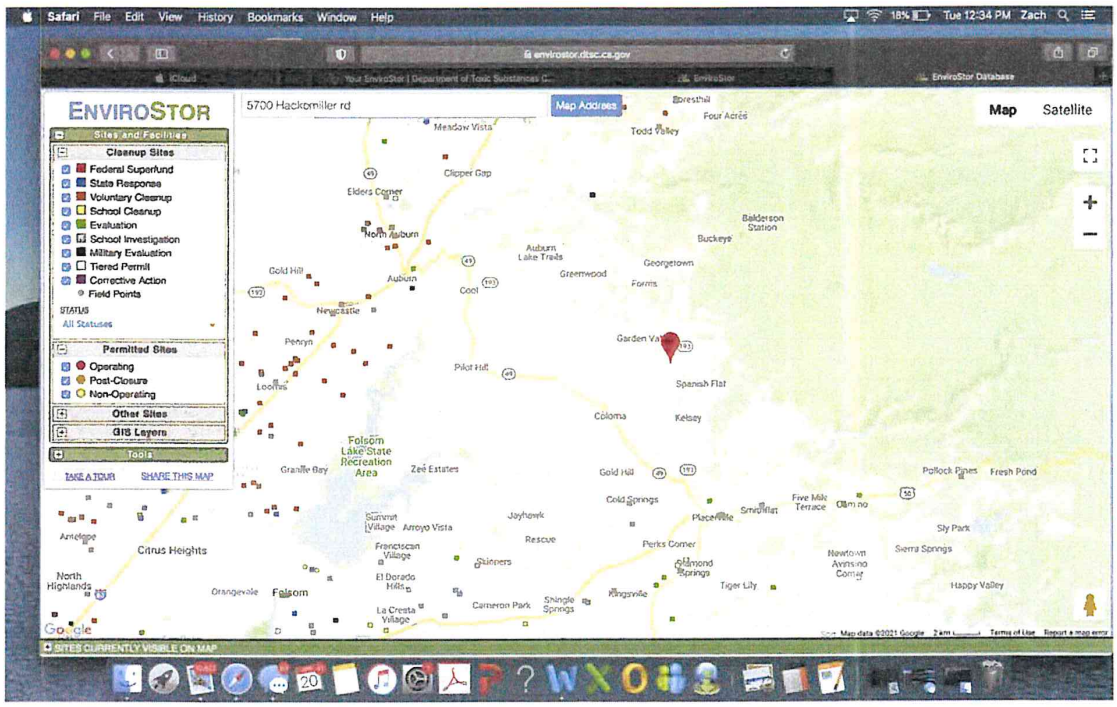
Table 3. PEST MANAGEMENT PRACTICES FOR CANNABIS GROWN INDOORS
(e.g., greenhouses, sheds, and grow rooms)

PEST	DAMAGE	IPM PRACTICES (monitoring; cultural, physical, mechanical, biological)	PESTICIDES
DISEASES			
powdery mildew *Sphaerotheca macularis*	Grow on **leaves** as white and gray powdery patches	▪ Use fans to improve air circulation	horticultural oil; neem oil; sodium bicarbonate, potassium bicarbonate; *Bacillus subtilis*
pythium root rots *Pythium* spp.	Attack root tips and worsens when plants grow in wet soil	▪ Avoid hydroponic production or wet soil conditions	Incorporate biocontrol agents into root-growing media (e.g., *Gliocladium virens, Trichoderma harzianum, Bacillus subtilis*)
MITES & INSECTS			
two-spotted spider mites *Tetranychus urticae* (and other Tetranychidae)	Suck plant sap; stipple **leaves**	▪ Disinfest cuttings before introducing to growing area ▪ Release predatory mites (*Amblyseius* spp., *Phytoseiulus persimilis*), or lacewings (*Chrysoperia* spp.)	neem oil, horticultural oil, sulfur
broad mites	Distort **leaves** and **buds**	▪ Inspect plants; disinfest or dispose of infested plants ▪ Release predatory mites (*Amblyseius* spp.) and six-spotted thrips	
leafhoppers	Suck plant sap; weaken plants	▪ Encourage natural enemies by planting nectar sources	horticultural oil or insecticidal soaps for nymphs
whiteflies *Trialeurodes vaporariorum, Bemisia tabaci, B. argentifolii*	Suck plant sap; weaken plants	▪ Hang up yellow sticky cards ▪ Use biocontrol: Amblyseius swirskii, *Encarsia formosa, Delphastus catalinae, Steinernea feltiae*	azadirachtin, *Beauveria bassiana*, cinnamon oil, horticultural oil
thrips *Heliothrips haemorrhoidalis, Frankliniella occidentalis, Thrips tabaci*	Stipple and scar **leaves**; vector viruses	▪ Sterilize soil and pots before growing ▪ Hang up yellow or blue sticky cards ▪ Use biocontrol *Stratiolaelaps scimitus, Amblyseius cucumeris, Amblyseius swirskii, Orius insidious*	azadirachtin, horticultural oil, insecticidal soaps, rosemary + peppermint oils, *Beauveria bassiana*

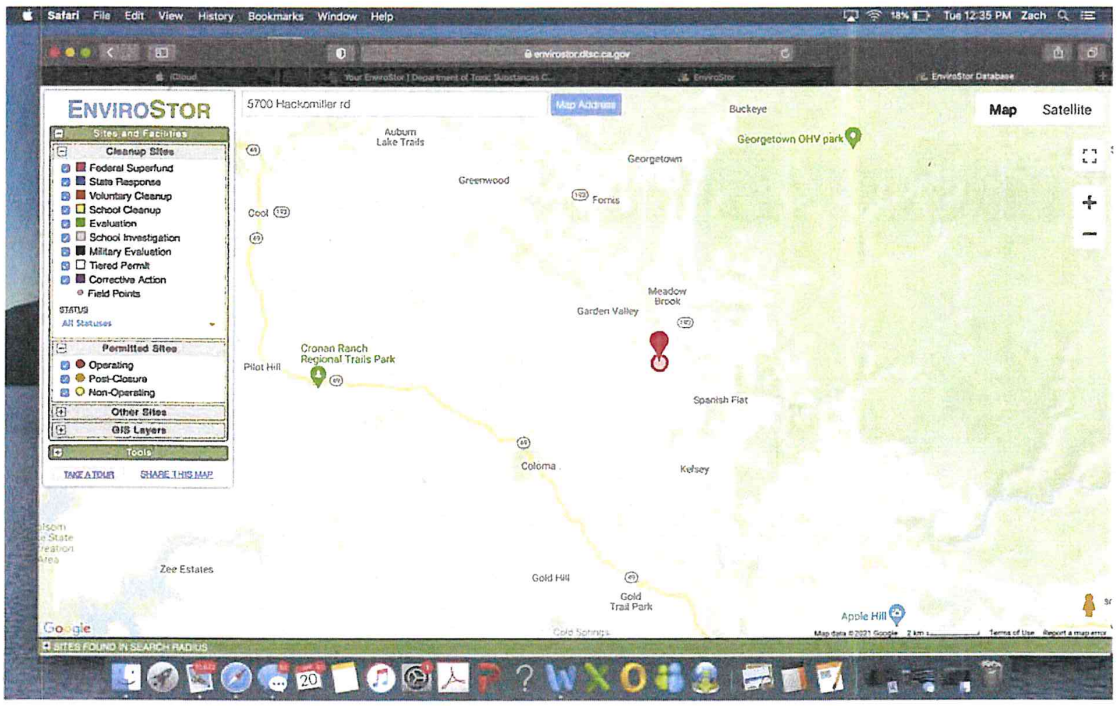
PEST	DAMAGE	IPM PRACTICES (monitoring; cultural, physical, mechanical, biological)	PESTICIDES
rice root aphid *Rhopalosiphum rufiabdominalis*	Feed on roots; stunt and weaken plants	▪ Dispose of weakened infested plants ▪ Mix in sharp soil amendments such as diatomaceous earth ▪ Use biocontrol: *Stratiolaelaps scimitus, Dalotia coriaria, Steinernema feltiae*	*Beauveria bassiana*
dark-winged fungus gnats (Diptera: Sciaridae) *Bradysia* spp.	Damage **roots** and stunt plant growth	▪ Avoid overwatering ▪ Use growing media that deters gnat development ▪ Hang up yellow sticky cards ▪ Use biocontrol: *Stratiolaelaps scimitus, Dalotia coriaria, Steinernema feltiae*	*Bacillus thuringiensis israelensis* (BTI); predatory nematodes; azadirachtin soil drenches

WASTE DISCHARGE PROGRAM ENROLLMENT:

Water discharge program enrollment will take place upon acceptance of application per instructions from the county.



CCUP22-0003


Safari File Edit View History Bookmarks Window Help
Tue 12:35 PM Zach
envirostor.dtsc.ca.gov
ENVIROSTOR
5700 Hackamiller rd
Map Address
Map
Satellite
Sites and Facilities
Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
TAKE A TOUR
SHARE THIS MAP
Auburn
Lake Trails
Buckeye
Georgetown OHV park
Georgetown
Greenwood
Foresta
Cool
Meadow
Brook
Garden Valley
Cronan Ranch
Regional Trails Park
Pilot Hill
Spanish Flat
Coloma
Kelsey
Zee Estates
Gold Hill
Gold
Trail Park
Apple Hill
Google
SITES FOUND IN SEARCH RADIUS

WELL DRILLING INSPECTION REQUEST

PERMIT # 5362

NAME: Roe DATE: 8/21/07

LOCATION: 5700 HACKAMORE RD (PAST ADDRESS @ GATE)

TIME: A.M. _____ OR P.M. 1:00 CELL 957-0219

REQUESTED BY: DAVE DRILLER: ARROW

{ } MOVE-ON { X } WELL SEAL { } DESTRUCTION

{ X } APPROVED { } DISAPPROVED

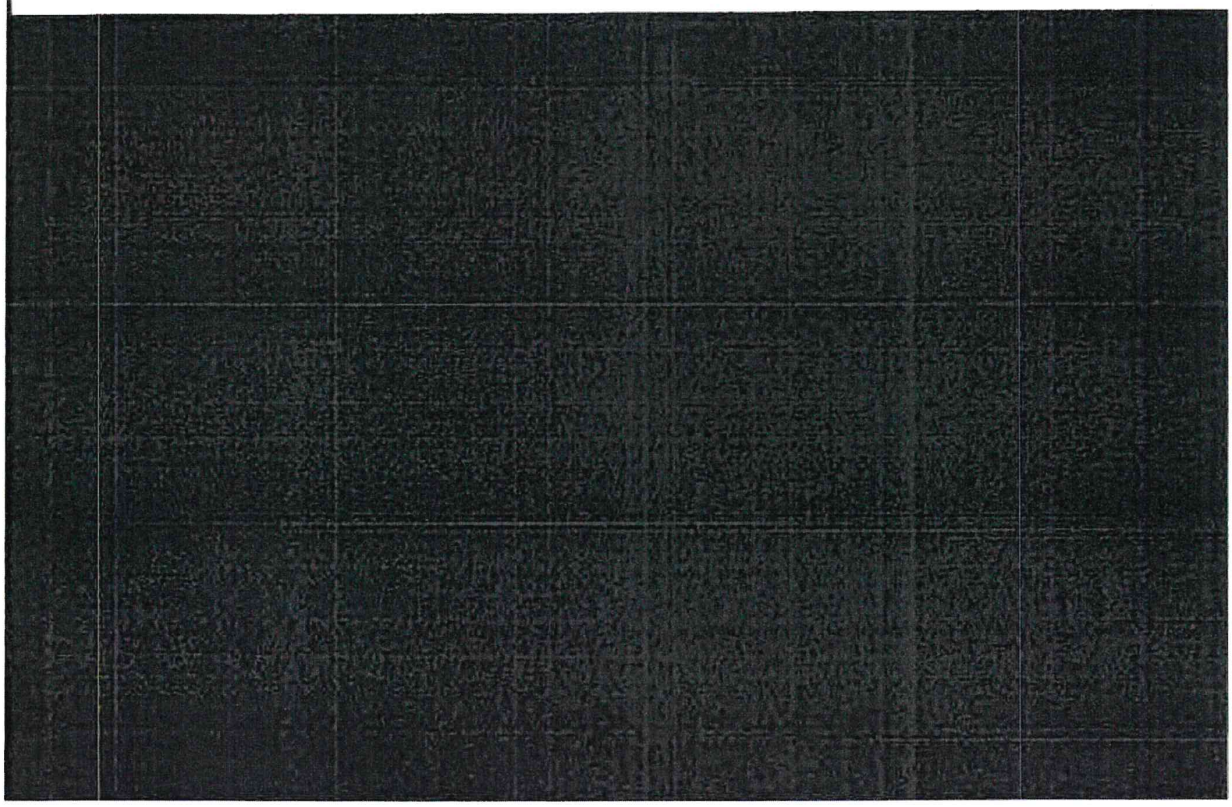
CASING DEPTH: 34' SEAL DEPTH: 25'

OF BAGS & MATERIAL: 1 bag bentonite, 60# bag concrete mix (24 bags)

REMARKS: _____

Latitude 38.83430 Longitude 120.83460 Elevation 1919'

R.E.H.S.: Paul Roberts DATE: 8-21-07



ORIGINAL
File with DWR
Page ___ of ___
Owner's Well No. _____
Date Work Began 8-21-2007 Ended 8-22-2007 No. 0937449
Local Permit Agency EL DORADO
Permit No. 5362 Permit Date 8-13-2007

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY - DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

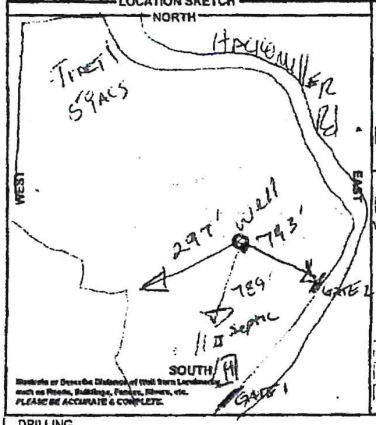
ORIENTATION ☑ VERTICAL ☐ HORIZONTAL ☐ ANGLE ☐ (SPECIFY)

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION Describe material, grain size, color, etc.
0	3	Topsoil
3	19	Brown Slate
19	38	Gray Slate
38	39	FX
39	53	GR Slt
53	54	FX
54	62	GR Slt
62	63	FX
63	124	GR Slt
124	125	FX
125	173	GR Slt
173	174	FX
174	189	GR Slt
189	190	FX
190	251	GR Slt
251	252	FX
252	261	GR Slt
261	262	FX
262	400	Gray Slate
		Total 40 GPM

TOTAL DEPTH OF BORING 400 (Feet)
TOTAL DEPTH OF COMPLETED WELL 400 (Feet)

WELL OWNER
Name John & Dana ROE TRUST 2002
Mailing Address 5700 Hackamiller Rd
CITY Garden Valley STATE CA ZIP 95633

WELL LOCATION
Address 5700 Hackamiller Rd
City Garden Valley
County EL DORADO
APN Book _____ Page _____ Parcel 088-020-64
or Township 11N Range 10E Section 2
or Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH


Sketch or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc.
PLEASE BE ACCURATE & COMPLETE.

ACTIVITY ☑
☑ NEW WELL
MODIFICATION/REPAIR
☐ Deepen
☐ Other (Specify)
☐ DESTROY (Describe Procedure and Materials Under "GEOLOGIC LOG")

PLANNED USE(S) ☑
☐ MONITORING
WATER SUPPLY
☑ Domestic
☐ Public
☐ Irrigation
☐ Industrial
☐ "TEST WELL"
☐ CATHODIC PROTECTION
☐ OTHER (Specify)

DRILLING METHOD ROTARY FLUID WATER

WATER LEVEL & YIELD OF COMPLETED WELL
DEPTH OF STATIC WATER LEVEL 18 (Ft.) & DATE MEASURED 8-22-2007
ESTIMATED YIELD* 40 (GPM) & TEST TYPE AIR LIFT
TEST LENGTH 4 (Hrs.) TOTAL DRAWDOWN 400 (Ft.)
*May not be representative of a well's long-term yield.

CASING(S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA (Inches)	TYPE ☑ Blank	Screen	Casing Sections	Perf.	MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
+1	34	10-5/8	☑	☐	☑	☐	PVC / blank	6	F480	0
0	100	6	☑	☐	☐	☐	PVC / blank	4	F480	0
100	400	6	☐	☑	☐	☐	PVC / screen	4	F480	1/16

DEPTH FROM SURFACE Ft.	to Ft.	ANNULAR MATERIAL TYPE ☑ CEMENT	BENTONITE	FILL	FILTER PACK (TYPE/SIZE)
0	26	☑	☐	☐	

ATTACHMENTS ☑
☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other
ATTACH ADDITIONAL INFORMATION IF IT EXISTS.

CERTIFICATION STATEMENT
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
ARROW WELL DRILLING 4340 Leisure Lane Placerville CA 95667
Signed _____ 8-23-07 453362
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

DWR 188 REV. 7-90 IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT DEPARTMENT
DIVISON OF ENVIRONMENTAL HEALTH
2850 FAIRLANE CT.
PLACERVILLE CA 95667
(530) 621-5300

REPORT OF WELL PRODUCTION

(For Building Permit approvals, form must be original wet stamp)

OWNER OF PROPERTY: John & Dana ROE TRUST 2002

ADDRESS OF OWNER: 5700 Hackomiller Rd

Garden Valley | CA | 95633

LOCATION OF PROPERTY: 5700 Hackomiller Rd

Garden Valley | CA | 95633

ASSESSOR'S PARCEL #: 088-020-84 WELL PERMIT #: 5362

TO BE COMPLETED BY WELL DRILLER OR PUMP CONTRACTOR

Result of four (4) hour well production test: 40 gpm.

Date Performed: 8-22-2007

Was test performed with a pump installed?: Yes _____ or No X

Depth of well: 400 ft. Static water level: 18 ft.

Diameter of well casing: 6 in.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

Test performed by: DAVID DAVIS

ARROW WELL DRILLING
4340 Leisure Lane
Placerville CA 95667-7873
530-621-1666

State License Number: 453362

***WELL DRILLER MUST PROVIDE PLOT PLAN ON NEXT PAGE and COMPLETE BOTTOM PROTION IF WELL PRODUCTION IS LESS THAN 5 GPM.

8-23-07

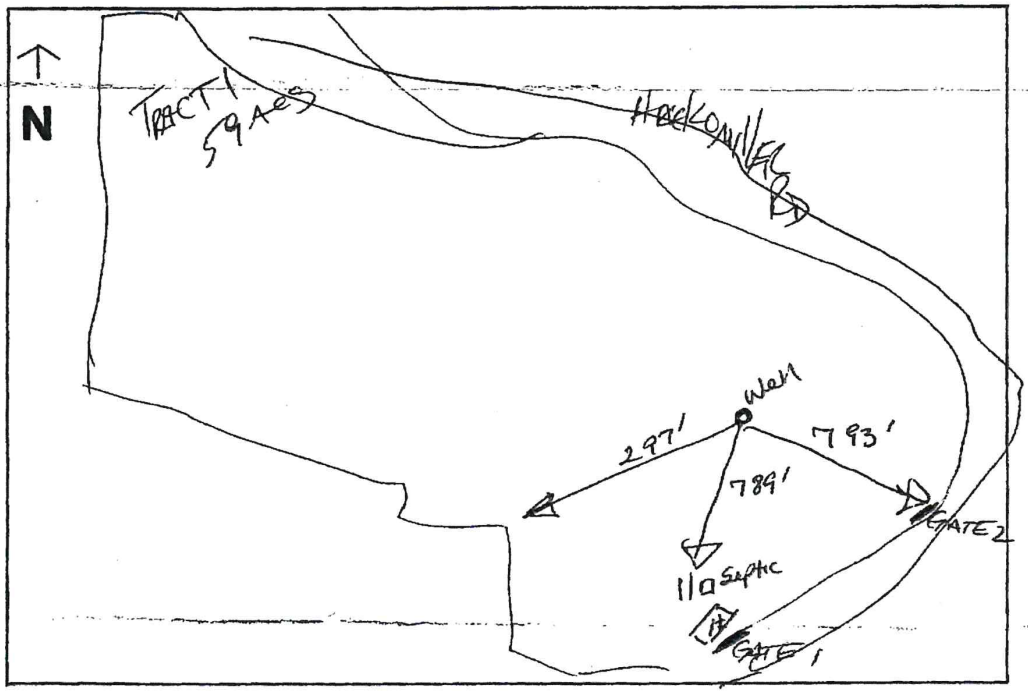
EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT DEPARTMENT

DIVISON OF ENVIRONMENTAL HEALTH
2850 FAIRLANE CT.
PLACERVILLE CA 95667
(530) 621-5300

REPORT OF WELL PRODUCTION

(For Building Permit approvals, form must be original wet stamp)

PLOT PLAN TO BE COMPLETED BY WELL DRILLER



IF WELL PRODUCTION RATE IS LESS THAN 5 GPM:

5 gpm x 240 min. = 1,200 galleons required

40 **Production Rate** **x 240 min. =** 9600 **gallons produced**

Storage credit in well shaft: _____ **gallons (per well driller)**

_____ **gallons of additional storage required.**

for JR

EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT DEPARTMENT

DIVISON OF ENVIRONMENTAL HEALTH
2850 FAIRLANE CT.
PLACERVILLE, CA 95667
(530) 621-5300

REPORT OF WELL PRODUCTION

(For Building Permit approvals, form must be original wet stamp)

OWNER OF PROPERTY: John Roe

ADDRESS OF OWNER: 5700 Hackamiller Rd.
Garden Valley Ca. 95633

LOCATION OF PROPERTY: 5700 Hackamiller Rd
Garden Valley Ca. 95633

ASSESSOR'S PARCEL #: 088-020-84 **Building WELL PERMIT #:** 218467

TO BE COMPLETED BY WELL DRILLER OR PUMP CONTRACTOR

Result of four (4) hour well production test: 35 **gpm.**

Date Performed: 7/30/2013

Was test performed with a pump installed?: Yes X **or No** _____

Depth of well: N/A **ft.** **Static water level** N/A **ft.**

Diameter of well casing: 6 **in.**

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

Test performed by: Dennis L DMT Pump Servic

State License Number: 832719

*****WELL DRILLER MUST PROVIDE PLOT PLAN ON NEXT PAGE and COMPLETE BOTTOM PORTION IF WELL PRODUCTION IS LESS THAN 5 GPM.**

EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT DEPARTMENT

DIVISON OF ENVIRONMENTAL HEALTH
2850 FAIRLANE CT.
PLACERVILLE, CA 95667
(530) 621-5300

REPORT OF WELL PRODUCTION

(For Building Permit approvals, form must be original wet stamp)

OWNER OF PROPERTY: John Roe

ADDRESS OF OWNER: 5700 Hackamiller Rd.
Garden Valley Ca. 95633

LOCATION OF PROPERTY: 5700 Hackamiller Rd
Garden Valley Ca. 95633

ASSESSOR'S PARCEL #: 088-020-84 Building WELL PERMIT #: 218467

TO BE COMPLETED BY WELL DRILLER OR PUMP CONTRACTOR

Result of four (4) hour well production test: 35 gpm.

Date Performed: 7/30/2013

Was test performed with a pump installed?: Yes X or No _____

Depth of well: N/A ft. Static water level N/A ft.

Diameter of well casing: 6 in.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

Test performed by: Dennis (DMT Pump Servi

State License Number: 832719

***WELL DRILLER MUST PROVIDE PLOT PLAN ON NEXT PAGE and COMPLETE BOTTOM PORTION IF WELL PRODUCTION IS LESS THAN 5 GPM.

6207

Deborah Presley <deborah.presley@edcgov.us>

El Dorado County Appointment Confirmation

Message

INVOICE 78993 Pd

noreply@ttmail.timetrade.com <noreply@ttmail.timetrade.com> Mon, Jul 29, 2013 at 12:19 PM
Reply-To: emapptconf@edcgov.us, deborah.presley@edcgov.us, deana.howey@edcgov.us, vicki.hallas@edcgov.us
To: Bill Mitchell <wheeldongeology@gmail.com>

Thank you for booking an appointment with El Dorado County . The details of your appointment are shown below.

Client: Bill Mitchell
Program: Environmental Management
Service: Test Trench
Primary Resource: Environmental Management - Septic/Trench
Date: Thursday, August 01, 2013 - [redacted]AM
Duration: 2 hrs 9:30
Confirmation: VR543P78

Questions

Test Trench: yes
Permit number: 6207
Open Trench or Final : no
APN: 088-020-84-100
Site Location: 5700 HACKOMILLER
Installer Name:
Gate Code:

To return to the El Dorado County appointment book, click the underlined link below. If your email system does not support URL links, you can copy this link and paste it into your web browser.

https://app.timetrade.com/tc/login.do?url=em.eldorado

38.83446
120.83265
1952 ft.

rocky, clay, soil

8 ft.
no water
no rock
no roots

RENEWABLE ENERGY SOURCE:

The property is enrolled in pg&e solar choice program. Additionally rooftop solar will be added to residences located on the property.