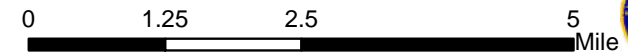


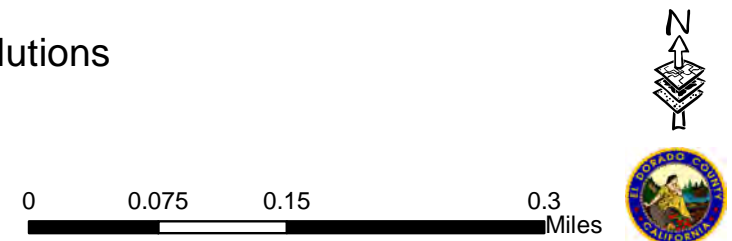
CCUP21-0004/Single Source Solutions  
Vicinity Map  
Exhibit A







CCUP21-0004/Single Source Solutions  
Aerial Map  
Exhibit B







This is a detailed plat map of Section 10, Township 10N, Range 18E. The map shows 22 numbered lots, each with its area in acres (A) and its boundaries defined by bearings and distances. The lots are arranged in a grid-like pattern, with some irregular shapes. Key features include Rabbit Ridge, Squirrel Hollow, and a red line outlining a specific area on the right side of the section. The map also shows the section's location relative to adjacent sections (P.08, P.07, P.09, P.06) and the center of the section (CTR. SEC. 10).

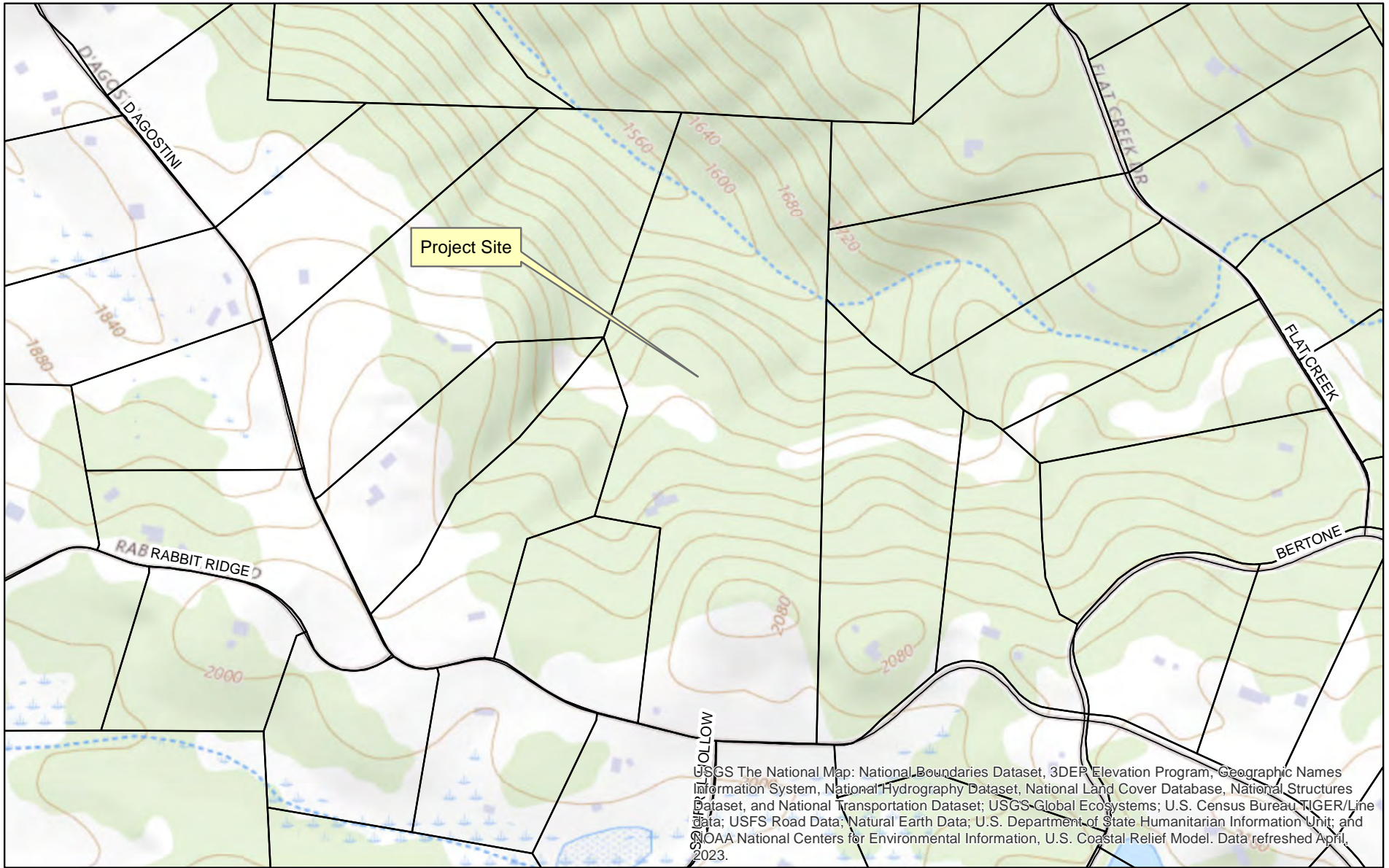
**Lot Details:**

Lot Number	Area (A)	Approximate Location
1	10.44 A	Bottom right
2	12.46 A	Bottom right
3	10.06 A	Bottom center
4	10.10 A	Bottom center
5	11.06 A	Bottom center
6	10.00 A	Bottom center
7	10.00 A	Bottom center
8	10.00 A	Bottom center
9	10.12 A	Bottom center
10	11.57 A	Bottom left
11	10.29 A	Bottom left
12	12.44 A	Bottom center
13	10.23 A	Bottom center
14	12.89 A	Bottom center
15	12.91 A	Bottom left
16	19.49 A	Right side
17	46.53 A	Right side
18	10.00 A	Bottom center
19	13.59 A	Bottom center
20	11.47 A	Bottom center
21	29.56 A	Bottom center
22	12.95 A	Bottom center

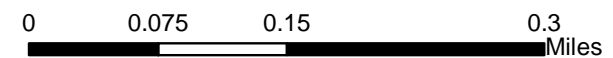
**Key Features and Boundaries:**

- Rabbit Ridge:** A dashed line running across the bottom center of the section.
- Squirrel Hollow:** A dashed line running across the bottom right of the section.
- Red Line:** A solid red line outlining a specific area on the right side of the section, encompassing lots 16, 17, and 18.
- Section 10:** The central area of the map, labeled "CTR. SEC. 10".
- Adjacent Sections:** P.08 (top, bottom, left), P.07 (top left), P.09 (top right), P.06 (right).

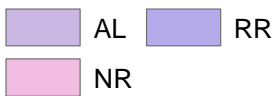
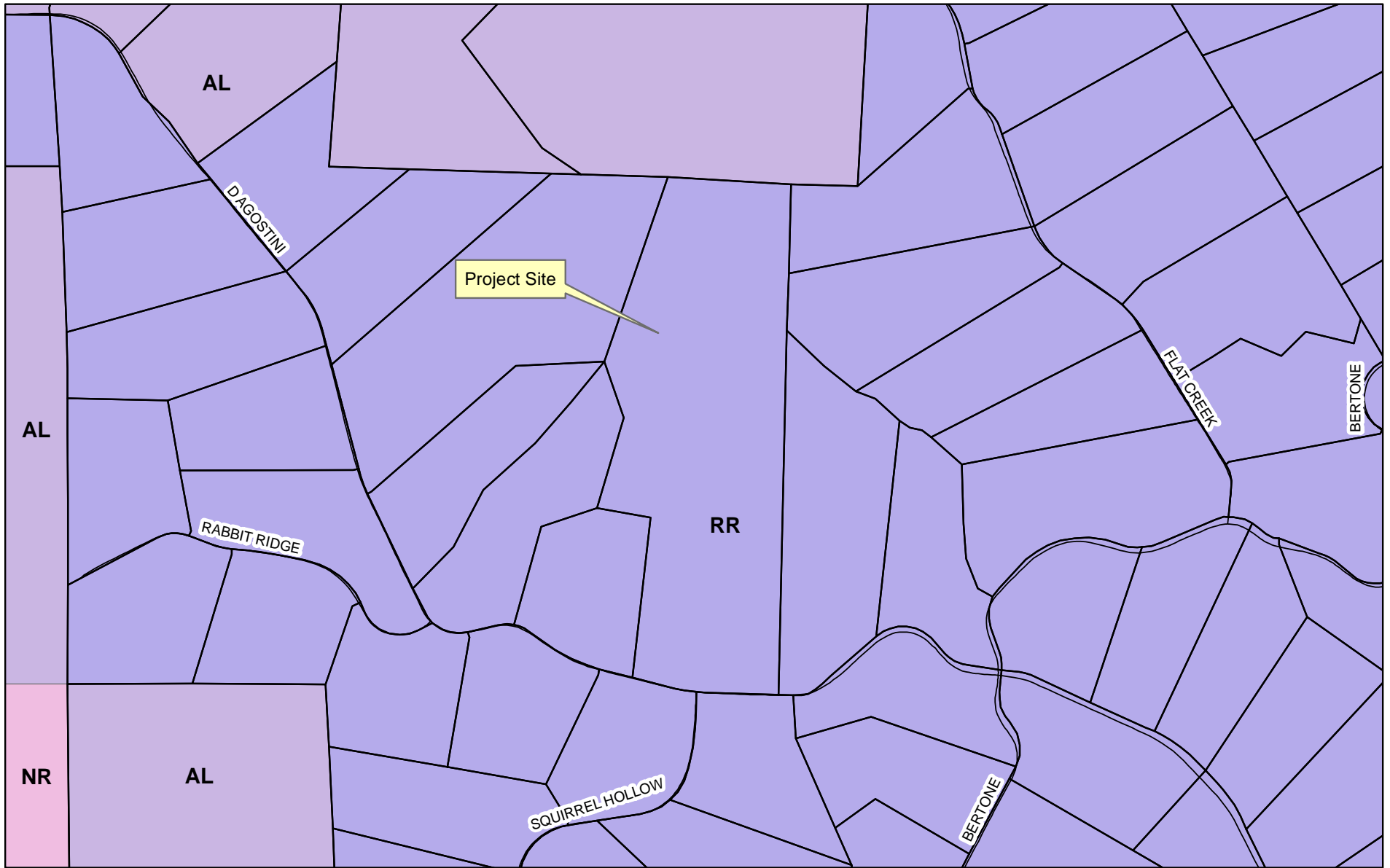
Assessor's Map Bk. 46 — Pg. 71  
County of El Dorado, California



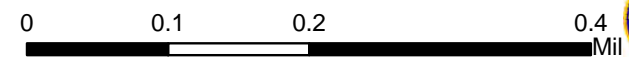
CCUP21-0004/Single Source Solutions  
Topography Map  
Exhibit D

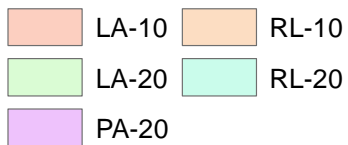
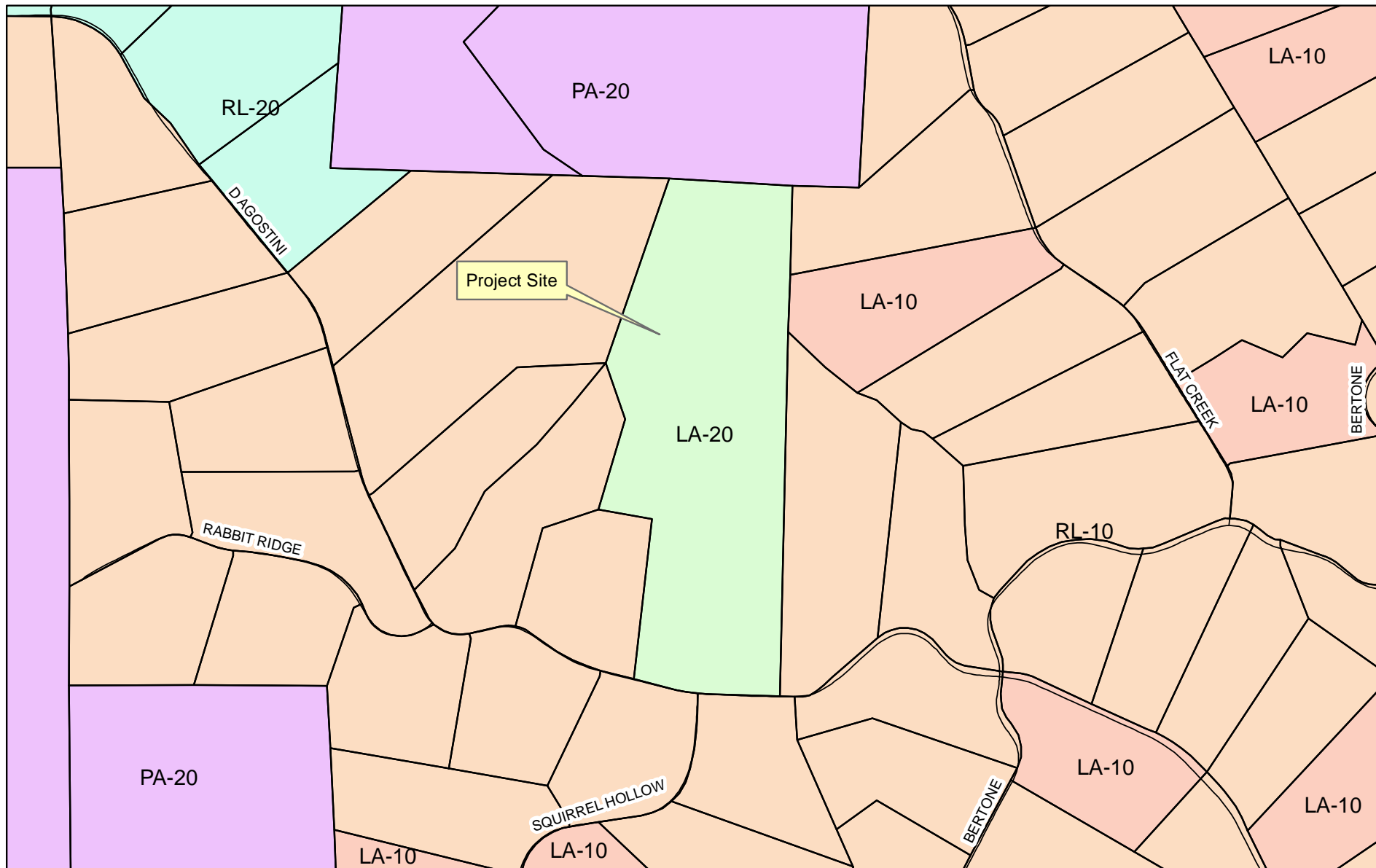




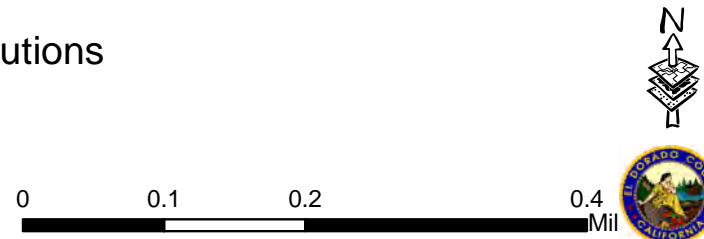


CCUP21-0004/Single Source Solutions  
General Plan Land Use Designation Map  
Exhibit E



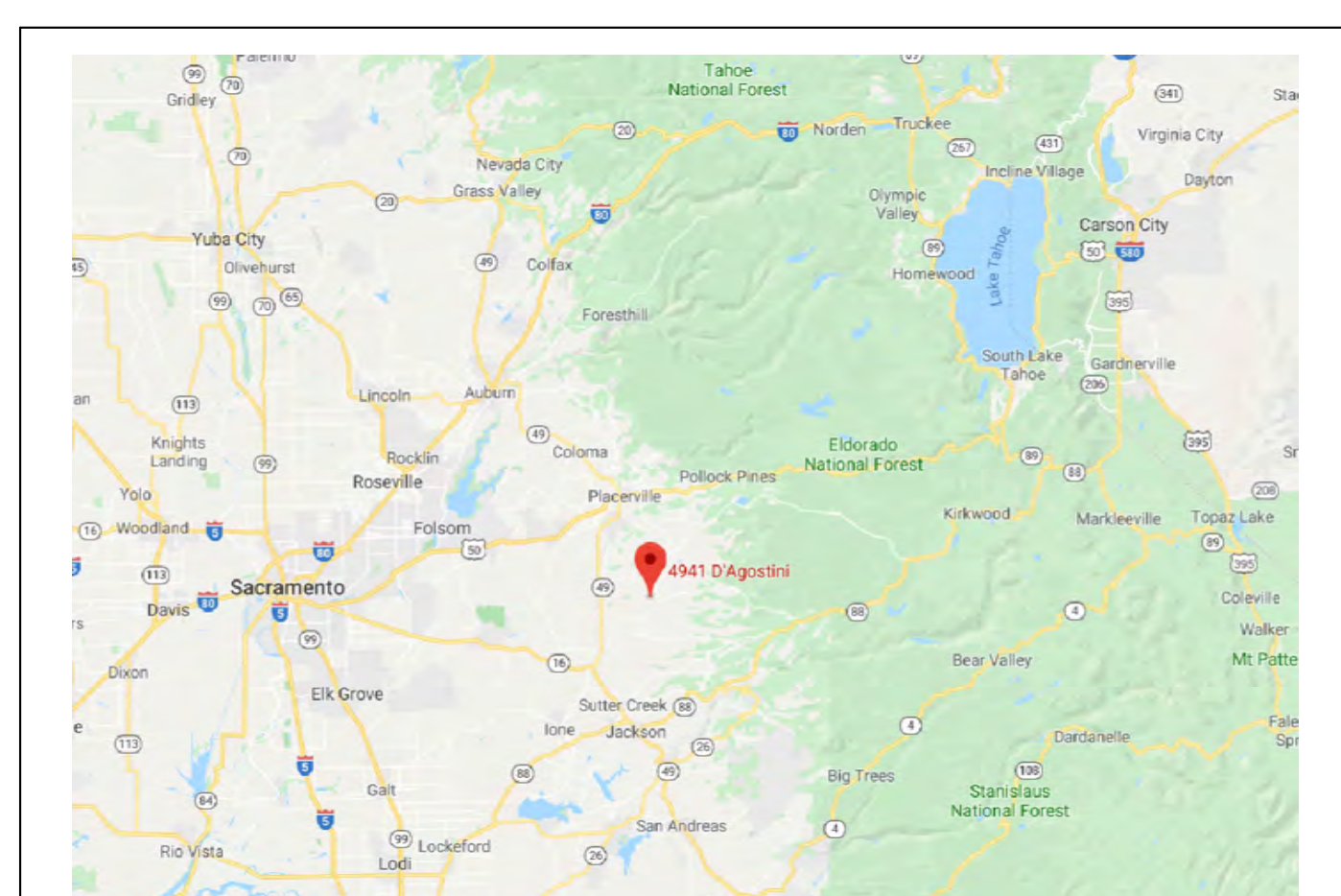
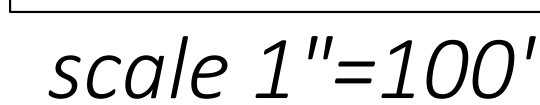


CCUP21-0004/Single Source Solutions  
Zoning Designation Map  
Exhibit F





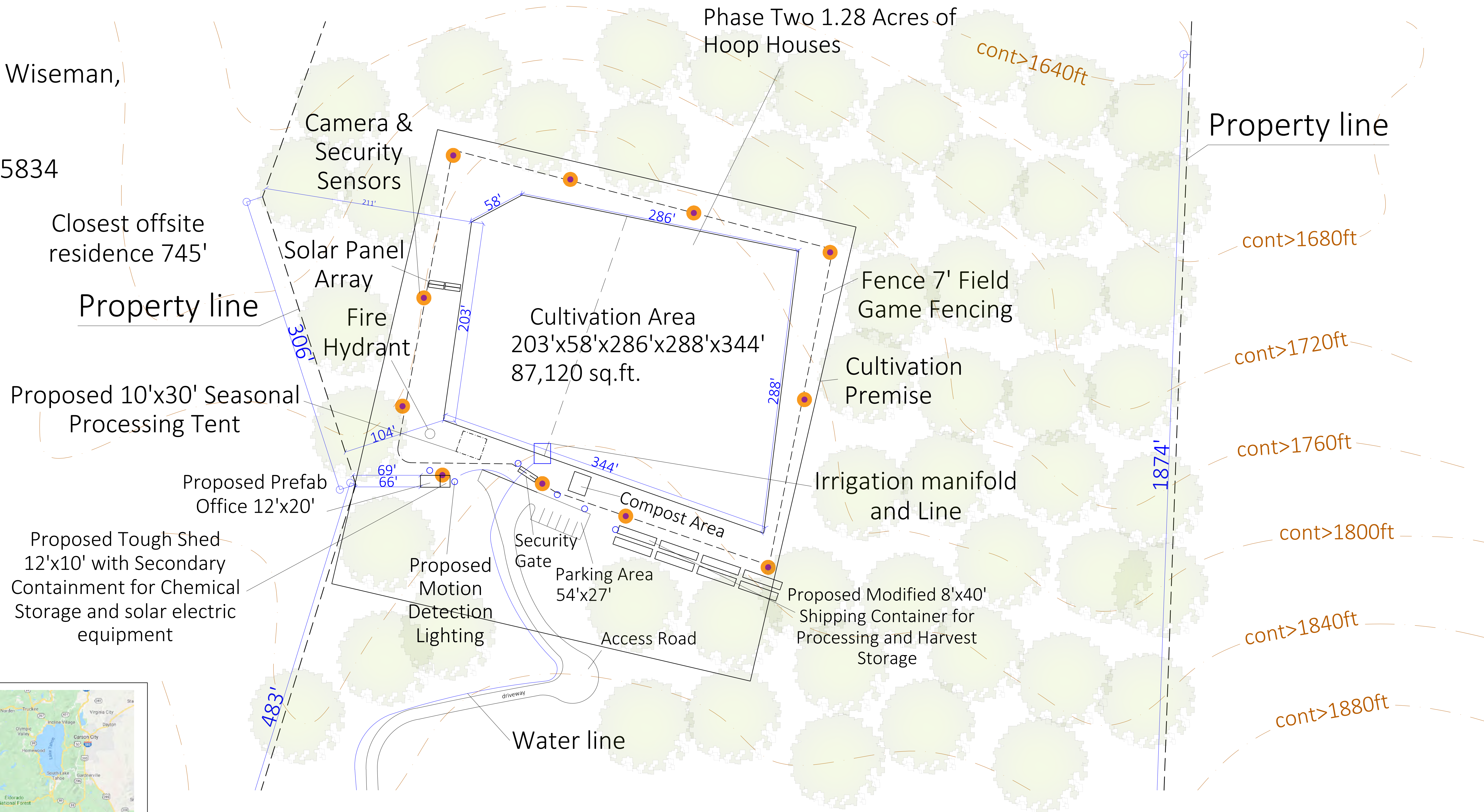
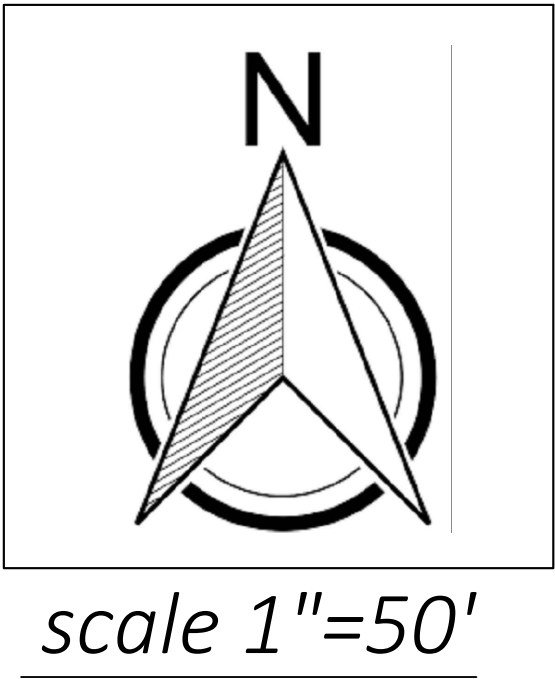
Sacramento, CA 95834





PREMISE DIAGRAM SITE PLAN

Pioneer Fire District.  
4941 D'agostini Dr.  
Somerset, CA 95684  
Parcel ID: 046-710-17-100  
Lot area: 46.53 Acres  
Plot Size: 24"x36"  
Owners:  
John Muraco, Joe Wiseman,  
Michael Pinette  
338 Olivadi Way,  
Sacramento, CA 95834



CCUP21-0004/Single Source Solutions  
Preliminary Site Plan  
Exhibit G

Created by:

WITH BEST QUALITY IN SHORT TIME





## DRAFT TECHNICAL MEMORANDUM

---

**To:** Rodney Miller

**Date:** July 21, 2021

**From:** Ray Kapahi *RK*

Tel: 916-687-8352

Tel: 916-687-8352

E-Mail: [ray.kapahi@gmail.com](mailto:ray.kapahi@gmail.com)

**Subject:** Analysis of Odor at the Proposed Outdoor Cannabis Cultivation Located at 4941 D'Agostini Drive in Somerset (El Dorado County), California

---

### INTRODUCTION AND SUMMARY

Environmental Permitting Specialists (EPS) has completed its review of potential odors at your proposed outdoor cannabis cultivation site in Somerset. It is our understanding the outdoor cultivation site would be located at 5840 Stephanie Court in Somerset. The maximum area for cultivation will be 87,120 square feet. The cultivation area would be located between 104 feet and 981 feet from the nearest property lines. A site map showing the cultivation area and distances to the property lines is shown in Figure 1.

EPS used an air dispersion model, 1 year (2019) of hourly wind and temperature data at Somerset and on-site measurements of odor intensity at other locations to conduct this analysis. Data from 4 other outdoor cannabis and hemp cultivation facilities and one Tedlar bag sample were reviewed as part of the current analysis. Odor measurements taken at 0.75 acre outdoor cultivation site in Yolo County were used as baseline odors to predict odors for the D'Agostini property lines.

The results of our analysis indicate that maximum odor intensity along the property lines would range from below 1 DT to 14.97 DT. The highest odor intensity occurs along the Southwest portion of the property where the separation between the cultivation area and the property lines range from 104 to 208 feet.

Since there is a potential for odor intensity exceeding El Dorado County's limit of 7 DT, EPS recommends the installation of an odor control system along a portion of the Southwestern property line to mitigate the odors.

This Technical Memorandum presents the methodology, data and assumptions used in this analysis. These are described in detail below.

## SCOPE AND METHODOLOGY OF ODOR ANALYSIS

The overall methodology used in this analysis is to use an atmospheric dispersion model to predict the dilution of odors as they migrate away from the outdoor cultivation area. By calculating the relative concentration of odors adjacent to the cultivation area and at the property line(s), we can determine the dilution ratio defined as odor concentration at the cultivation area divided by concentration at the property line(s).

For example, if the maximum concentration at the cultivation area is 5,000 micrograms per cubic meter (ug/m<sup>3</sup>) and the relative concentration at the property line 2,000 ug/m<sup>3</sup>, the dilution ratio would equal:

$$\text{Dilution Ratio} = \frac{5,000 \text{ ug/m}^3}{2,000 \text{ ug/m}^3} = 2.5$$

In other words, the odors would be diluted by a factor of 2.5 as they migrate from the cultivation area towards the property line.

The dilution factor is used along with measurements at other outdoor cannabis cultivation sites to predict odor intensity at the D'Agostini property lines. This methodology was reviewed by the staff at El Dorado County Air Quality Management District (AQMD) to confirm that this approach would be acceptable. The District agreed with this approach as noted in their August 28, 2020 letter to Aaron Mount at El Dorado County Planning.

## Modeling Methodology

We used the EPA and AQMD recommended AERMOD dispersion model (Version 19191) along with one year (2019) of hourly wind data for Somerset. The data (known as MM5) is derived from weather satellites to calculate winds and other parameters for all locations in the continental US. The data used was prepared by Lakes Environmental (Waterloo, Canada)<sup>1</sup>.

The cultivation site was modeled as a single ground based area source. Concentrations were calculated using a 10 meter grid using an emission rate of  $1.00 \times 10^{-4}$  grams/sec-square meter. See Figure 2.

---

<sup>1</sup> Lakes Environmental. Waterloo, Canada. Information on the development of local wind data based on the MM5 for Somerset can be found at: [https://www.weblakes.com/services/met\\_data.html#aermetmm5](https://www.weblakes.com/services/met_data.html#aermetmm5)



The model results are concentrations in terms of micrograms per cubic meter at each grid location averaged over an 1-hour. These concentrations are meaningful only in a relative sense to help establish the dilution pattern. It is recognized that the averaging time for odors is a few minutes, not 1 hour. Typically, peak concentrations over a few minutes are many times greater than those over 1 hour. However, the ratio of concentrations and the dilution factor will remain the same whether averaged over a few minutes or 1 hour averaging time.

Finally, we note that the maximum predicted concentration varies with both the distance and the direction from the cultivation site. Generally, the concentration decreases with distance from the cultivation site. Figures 4 and 5 illustrate the spatial distribution of 1-hour relative concentration. These figures show that the highest 1-hour relative concentration (based on 8,760 hours that were modeled) occur East of the property.

### Baseline Odor Used in the Analysis

We used odor measurements taken at a Yolo County outdoor cannabis site. This outdoor site covers 0.75 acres and is located at 22945 County Road 23, Esparto. At the time the measurements were taken, the plants were 2 weeks away from harvesting. Odor measurements were taken September 22, 2020 that indicated odor intensity of 15 DT. However, we noted that there were brief periods when odor intensity was above 15 but were not fully captured by the Nasal Ranger. We estimated the odor intensity to be closer to 20 DT and this is the value used in the current analysis. A complete documentation of the September 22<sup>nd</sup> odor survey is attached.

### CALCULATION OF ODOR INTENSITY AND RESULTS

The calculation of odor intensity at the property lines is as follows:

$$\text{Odor Intensity at Property Line} = \frac{\text{Baseline Odor Intensity (DT)}}{\text{Dilution Factor}}$$

For example, the odor intensity at the Southwestern property line (See Figure 6) would equal:

$$\frac{20 \text{ DT}}{1.34} = 14.97 \text{ DT}$$

The results for the closest property lines is summarized on the next page.

Location	Distance to Property Line		Maximum Conc.	Conc. At Property Line	Lowest Dilution Ratio	Fenceline DT
	(ft)	(m)				
South	534	162.8	7,437	361	20.60	0.97
North	981	299.1	57,391	6,500	8.83	2.27
Eastern Property Line	415	126.5	99,624	23,667	4.21	4.75
SW Property Line	104	31.7	65,896	36,397	1.81	11.05
NW Property Line	208	63.4	76,555	32,956	2.32	8.61
Baseline DT	20					

Note: The Northern property line lies outside the modeling grid. The relative odor concentration was estimated based on data at the Northern edge of the modeling grid.

The odor intensity at portions of the Southwestern and Northwestern property lines would exceed the County's threshold of 7 (See Figure 7). As a result, odor mitigation along this property line is recommended.

Once a permit has been issued and cannabis cultivation proceeds, EPS staff will be available to conduct odor monitoring at your property to confirm that odors do not exceed the County limit of 7 DT.



## FIGURES

Figure 1: Site Map

Figure 2: Modeling Grid

Figure 3: Contours of Relative Concentrations

Figure 4: Contours of Relative Concentration (close-up)

Figure 5: Display of Numerical Concentration

Figure 6: Calculation of Dilution Factor

Figure 7: Summary of Results

Figure 1  
Site Map

Figure 2  
Modeling Grid





Figure 3

## Contours of Relative 1-Hour Concentrations

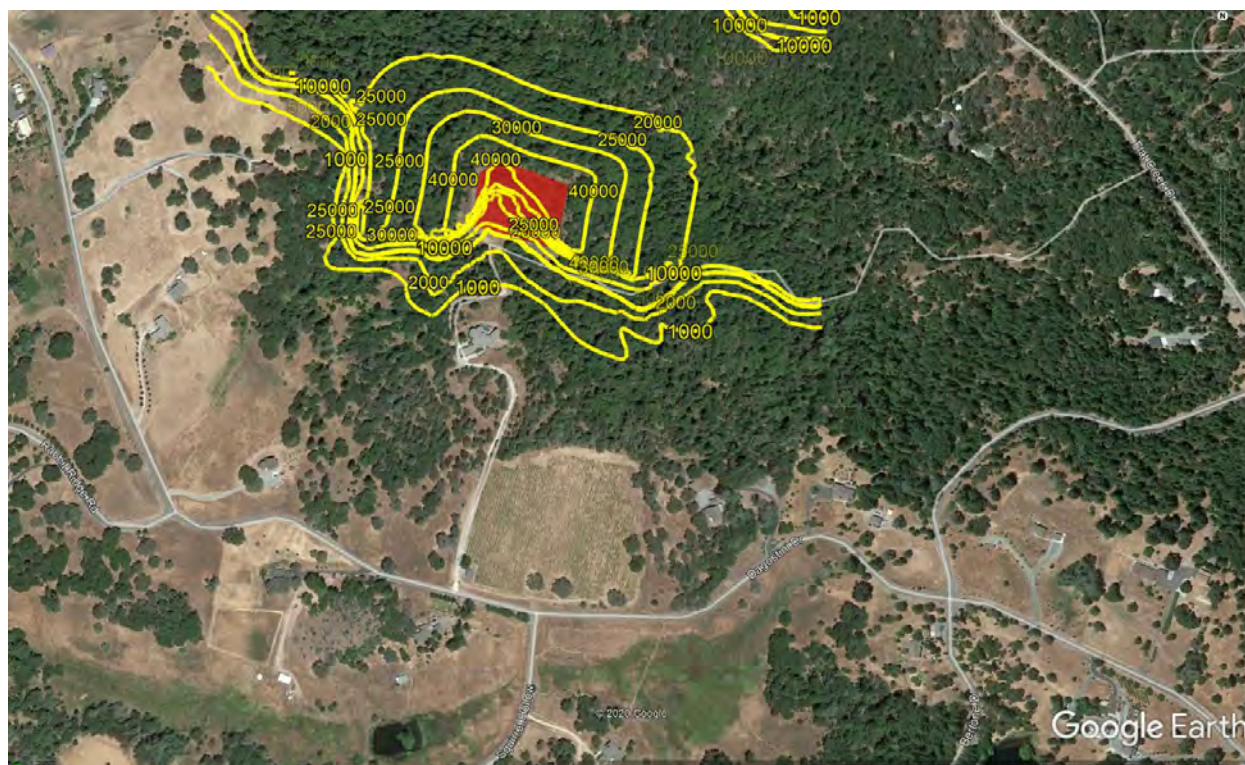


Figure 4

Contours of Relative Concentration (close-up)

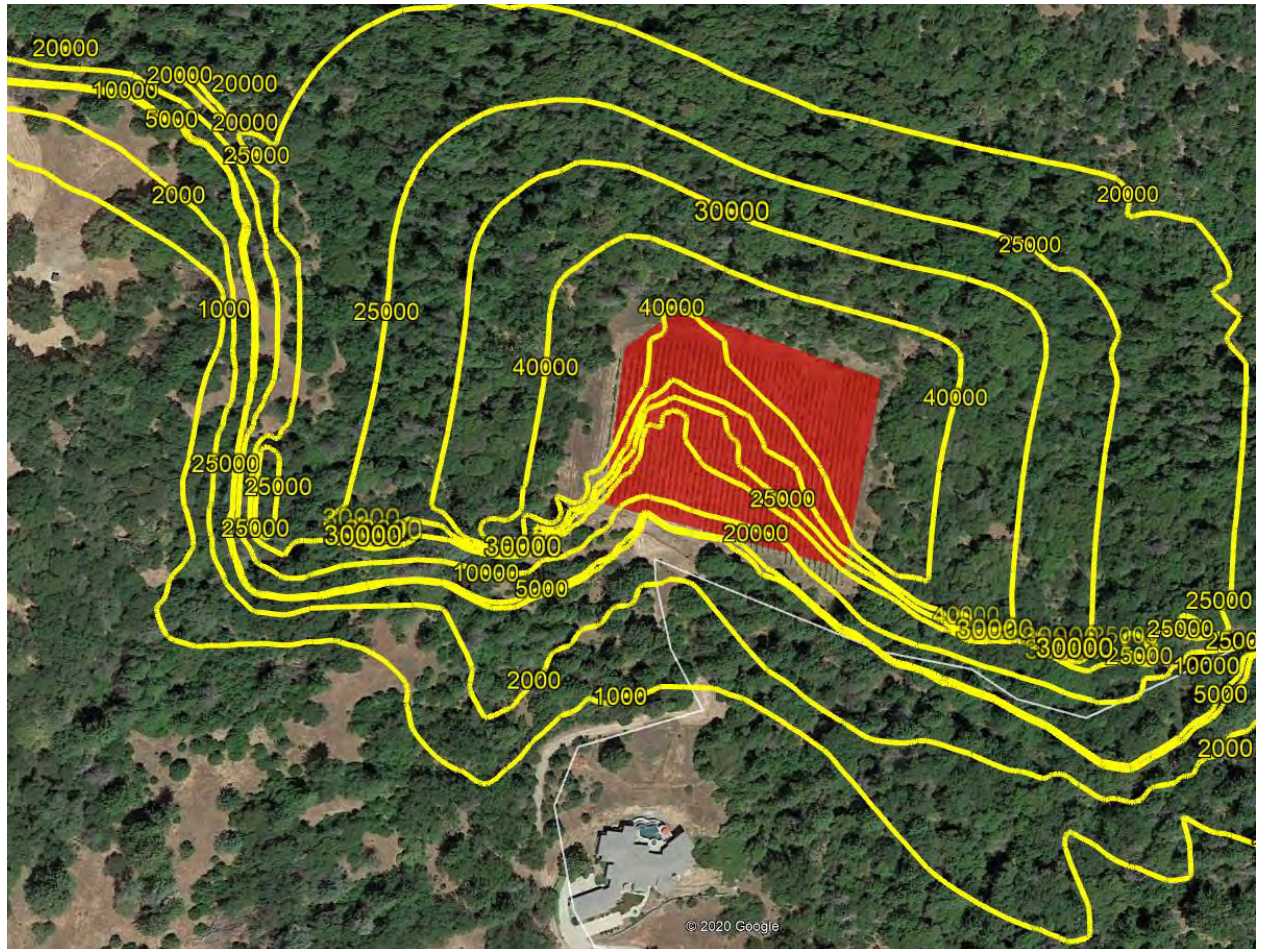




Figure 5

Numerical Values of Relative Concentration

*(in micrograms per cubic meter)*





Figure 6

# Sample Calculation of Dilution Factor at Southwest Property Line (104 feet from Canopy)



Figure 7

## Summary of Results

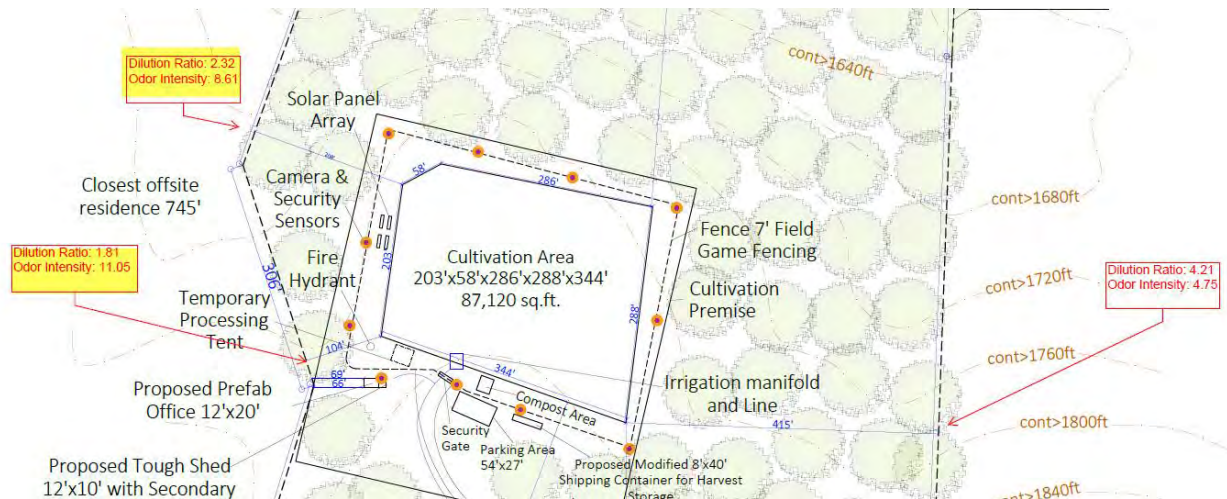


Figure 7...Continued  
Summary of Results

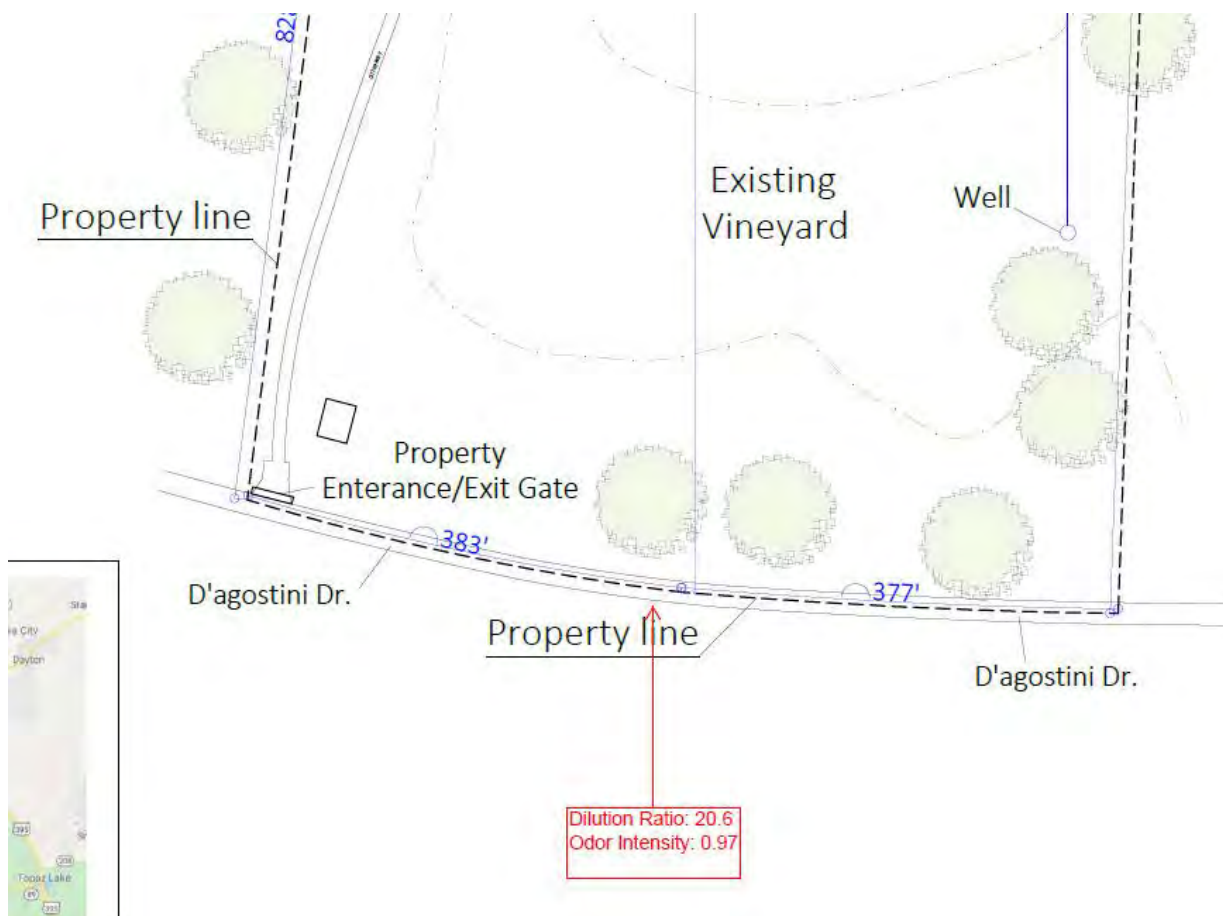
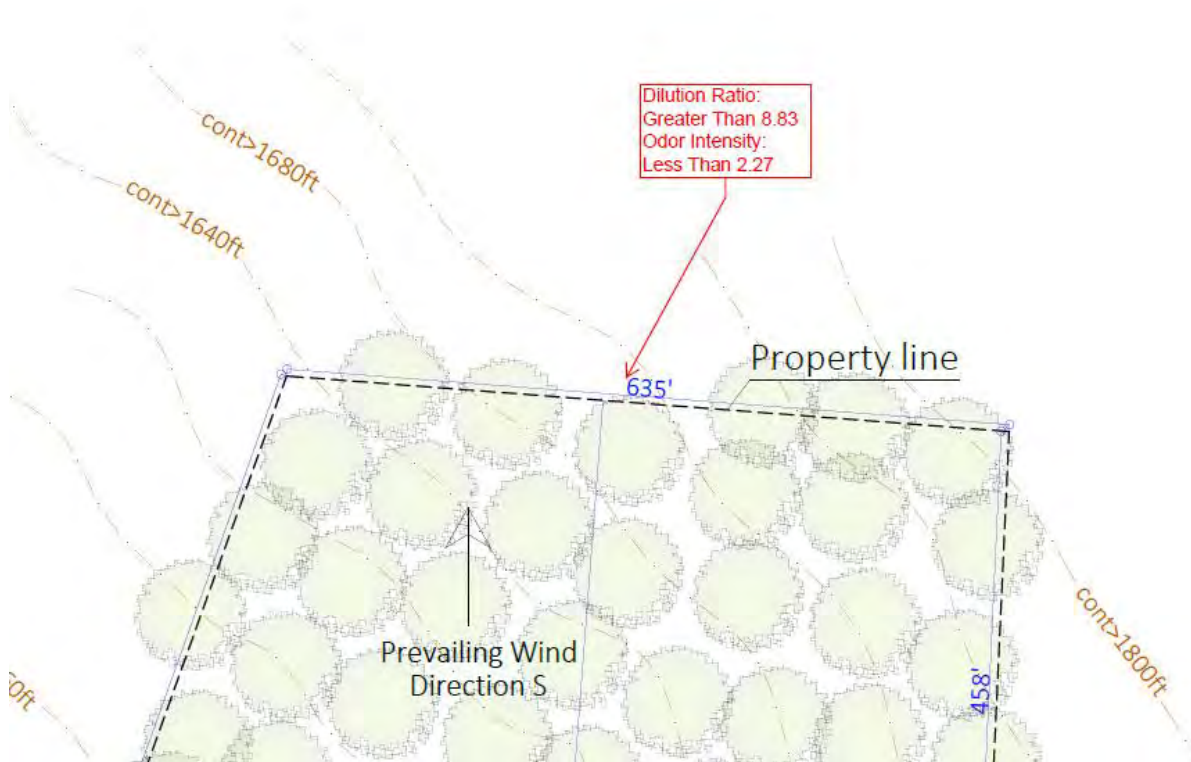


Figure 7...Continued  
Summary of Results





## ATTACHMENT

Yolo County Cannabis Site for Baseline Odor Measurements

September 22, 2020



COUNTY OF YOLO  
CANNABIS TASK FORCE  
120 W. Main Street, Suite C  
Woodland, CA 95695  
Telephone: (530) 406 4800

CULTIVATION LICENSE : PR0063595

LICENSE FOR CANNABIS CULTIVATION  
NON-TRANSFERABLE

SUBJECT TO ALL CONDITIONS OF YOLO COUNTY CODE OF ORDINANCES TITLE 5, CHAPTER 20  
THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE

## CANNABIS CULTIVATION LICENSE

**ISSUED TO:**

CAPAY VALLEY INC

**CONTACT:**

CAPAY VALLEY INC  
430 W CREEKSIDE CIR  
DIXON, CA 95620

DATE OF ISSUE:

2/19/2020

DATE OF EXPIRATION:

12/31/2020

**LOCATED AT:**

22945 CR 23  
ESPARTO, CA 95627

APN: 047-060-006

License Type: YEAR ROUND CULTIVATION LIC 1ST (1/4 ACRE)

Total Cultivation Area: 3/4 ACRE (32,670 sq ft)

**General Conditions of approval of this Cannabis Cultivation License are listed below:**

- Operations must comply with Yolo County's Ordinance on Marijuana Cultivation (Title 5, Chapter 20 of the Yolo County Code).
- This license supersedes Business License #12343 and is issued for cultivation only.
- Use of utilities and structures must be fully permitted under local authority.
- Licensee must maintain compliance with applicable requirements of the State Water Resources Control Board.
- Licensee must obtain and maintain in good standing a State license for cannabis cultivation.
- Licensees shall not commingle product with other cultivators or transfer marijuana to other cultivation sites, including a collocated site.
- This license constitutes a revocable privilege. Licensees have the burden of proving qualifications for a license at all times.
- Licensee shall permit Yolo County Staff the entry and inspection of all areas of the cultivation site.

**Special Conditions:**

Licensee must communicate to anyone coming on-site, including employees and contract labor, verbally and in writing through signage, that safe driving practices while traveling to and from the site must be followed. Verified complaints on reckless driving may result in the issuance of a Notice of Violation.

Susan Strachan  
Cannabis Policy and Enforcement Manager

Under federal and state law, compliance with disability access laws is a serious and significant responsibility that applies to all California building owners and tenants with buildings open to the public. You may obtain information about your legal obligations and how to comply with disability access laws at the following agencies: The Division of the State Architect at [dgs.ca.gov/dsa/Home.aspx](https://dgs.ca.gov/dsa/Home.aspx), The Department of Rehabilitation at [rehab.cahwnet.gov](https://rehab.cahwnet.gov), and The California Commission on Disability Access at [ccda.ca.gov](https://ccda.ca.gov).

Yolo County Dept. of Community Services Code Enforcement Unit 120 W. Main St, Ste. C Woodland, CA 95695 (530) 406-4800









## Odor Measurements

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Date	Time	Wind Speed	Wind Direction	Temp	Relative Humidity		Nasal Ranger Reading							
2	9/22/2020	9:45	(MPH)	(Dir From)	(F)	(%)		60	30	15	7	4	2	<2	ND
3															
4	9/22/2020	9:55	INOP	INOP	79.1	55.6					X				
5	9/22/2020	9:58	INOP	INOP	79.5	54.6							X		
6	9/22/2020	10:00	INOP	INOP	81.3	52.4						X			
7	9/22/2020	10:10	INOP	INOP	80	47.6					X				
8	9/22/2020	10:12	INOP	INOP	78.8	48.7				X					
9	9/22/2020	10:15	INOP	INOP	81.3	45.9						X			
10	9/22/2020	10:16	INOP	INOP	81.3	44.8							X		
11	9/22/2020	10:17	INOP	INOP	81.4	43.5							X		
12	9/22/2020	10:18	INOP	INOP	81.4	42.9						X			
13															
14															
15															



# Excerpts of Weather Data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P		
1	Location	22945 County Road 23, Esparto California																
2	Device Name	Kestrel 5500																
3	Device Model	KESTREL_5500L																
4	Serial Number	2486826																
5	DRMATTED DATE_TIN	Altitude	Dew Point	Density	Altitude	Wind Chill	Direction - True	Headwind	Heat Stress Index	Crosswind	Wind Speed	Relative Humidity	Direction - Mag	Psychro	Wet Bulb Temperature	Station Pressure	Temperature	Barometric Pressur
6	YY-MM-DD HH:MM.S	ft	°F	ft	°F	°	mph	°F	mph	mph	%	°	°F	°F	inHg	°F	inHg	
7	9/22/2020 10:15	291	65	2,057	82.8	***	***	84.9	***	0	55	***	70.5	29.69	82.8	29.69		
8	9/22/2020 10:15	291	65.2	2,067	82.9	***	***	85.3	***	0	55.2	***	70.7	29.69	82.9	29.69		
9	9/22/2020 10:15	291	65.4	2,080	82.9	***	***	85.3	***	0.9	55.2	***	70.7	29.69	83.1	29.69		
10	9/22/2020 10:15	295	65.4	2,090	83.1	***	***	85.6	***	0	55	***	70.9	29.69	83.2	29.68		
11	9/22/2020 10:15	291	65.6	2,095	83.3	***	***	86	***	0	55.4	***	71.1	29.69	83.3	29.68		
12	9/22/2020 10:15	295	65.6	2,092	83.1	***	***	85.6	***	0	55.6	***	71.1	29.68	83.1	29.68		
13	9/22/2020 10:16	295	64.5	2,040	82.4	***	***	84	***	0	54.6	***	70.2	29.69	82.5	29.68		
14	9/22/2020 10:16	296	62.8	1,988	81.9	***	***	82.8	***	0	52.4	***	68.9	29.68	81.9	29.68		
15	9/22/2020 10:16	296	61.3	1,963	81.7	***	***	82.2	***	0	50.1	***	68	29.68	81.7	29.68		
16	9/22/2020 10:16	296	60.2	1,951	81.5	***	***	81.3	***	0	48.3	***	67.3	29.68	81.6	29.68		
17	9/22/2020 10:16	296	59.4	1,928	81.3	***	***	81	***	0	47.4	***	66.9	29.68	81.4	29.68		
18	9/22/2020 10:16	296	58.9	1,894	80.8	***	***	80.4	***	0	47.3	***	66.6	29.68	80.9	29.68		
19	9/22/2020 10:16	295	58.4	1,837	79.9	***	***	79.3	***	0	47.6	***	65.8	29.68	80	29.68		
20	9/22/2020 10:16	295	57.8	1,771	79	***	***	78.1	***	0	48.2	***	65.3	29.68	79.1	29.68		
21	9/22/2020 10:16	296	57.8	1,753	78.6	***	***	77.9	***	0	48.7	***	65.1	29.68	78.8	29.68		
22	9/22/2020 10:16	295	57.8	1,739	78.4	***	***	77.7	***	0	49	***	65.1	29.69	78.6	29.68		
23	9/22/2020 10:16	291	58	1,746	78.6	***	***	77.9	***	0	49	***	65.1	29.69	78.7	29.68		
24	9/22/2020 10:16	291	58.2	1,773	79	***	***	78.3	***	0	48.8	***	65.5	29.69	79.1	29.68		
25	9/22/2020 10:16	291	58.4	1,798	79.5	***	***	79	***	0	48.5	***	65.7	29.69	79.5	29.69		
26	9/22/2020 10:16	291	58.6	1,825	79.9	***	***	79.3	***	0	48.2	***	66	29.69	80	29.69		
27	9/22/2020 10:16	288	58.8	1,852	80.2	***	***	79.7	***	0	47.9	***	66.2	29.69	80.3	29.69		
28	9/22/2020 10:16	291	59	1,874	80.6	***	***	80.2	***	0	47.7	***	66.4	29.69	80.7	29.68		
29	9/22/2020 10:16	295	59.2	1,891	80.8	***	***	80.4	***	0	47.7	***	66.6	29.69	80.9	29.68		
30	9/22/2020 10:16	288	59.3	1,899	81	***	***	80.8	***	0	47.7	***	66.7	29.69	81.1	29.69		
31	9/22/2020 10:16	253	59.5	1,867	81.1	***	***	81	***	0	47.8	***	66.9	29.73	81.2	29.73		
32	9/22/2020 10:16	310	59.6	1,946	81.3	***	***	81.1	***	0	47.7	***	66.9	29.67	81.3	29.67		
33	9/22/2020 12:15	321	59.6	1,963	81.3	***	***	81.1	***	0	47.6	***	66.9	29.66	81.4	29.65		
34	9/22/2020 12:15	81	59.1	1,662	81.3	***	***	81	***	0	46.8	***	66.7	29.91	81.4	29.91		
35	9/22/2020 12:15	56	58.4	1,625	81.3	***	***	80.6	***	0	45.7	***	66.4	29.94	81.4	29.94		

# *Certificate of Completion*

*Richard Ensminger*

Completed the "ODOR SCHOOL"® course

## Nasal Ranger Inspector

Odor Assessment & Measurement for Ambient Odors

This course prepares the individual to make odor observations and investigations, to record pertinent information, and to report the data and findings to management or officials. (3.5TCH)



01/07/2020

[www.fivesenses.com](http://www.fivesenses.com)





## *DRAFT*

# TECHNICAL MEMORANDUM

---

**To:** Michael Pinette  
Single Source Solution, Inc.

**Date:** August 11, 2023

**From:** Ray Kapahi *RK*  
Tel: 916-687-8352  
Tel: 916-687-8352  
E-Mail: [ray.kapahi@gmail.com](mailto:ray.kapahi@gmail.com)

**Subject:** Revised Analysis of Odor at the Proposed Cannabis Cultivation Located at  
4941 D'Agostini Drive in Somerset (El Dorado County), California

---

### INTRODUCTION AND SUMMARY

Environmental Permitting Specialists (EPS) completed an analysis of odors at the proposed cannabis cultivation site located at 4941 D'Agostini Drive, Somerset on July 21, 2021. That analysis was based on an outdoor cannabis cultivation with a maximum area of 87,120 square feet. The analysis indicated that odors at the property lines would range from 1 dilution to threshold (DT) to 14.97 DT. Since the maximum allowable odor intensity under Eldorado County Ordinance 5110 (5)(D) is 7 DT, the proposed project would not comply with the County's odor limits from cannabis cultivation.

Since the 2021 analysis, the project has been revised from outdoor cultivation to cultivation using hoop house and a smaller area of outdoor cultivation. The current project would use eight hoop houses and an outdoor area approximately 100 feet x 240 feet. Each hoop house would be 75 feet x 30 feet and would be equipped with a carbon filtration system that would reduce odor intensity to below 7 DT. Information on the carbon filter is attached. The revised site map showing the location of hoop houses and the outdoor cultivation areas is shown in Figure 1.



As with the 2021 analysis, EPS used an air dispersion model, 1 year (2019) of hourly wind and temperature data at Somerset and on-site measurements of odor intensity at other locations to conduct this analysis as described in the July 21, 2021 Draft Technical Memorandum to M. Rodney Miller.

The results of the current analysis indicate that maximum odor intensity along the property lines would range from below 6.2 DT to 2.81 DT. The highest odor intensity occurs along the Southwest portion of the property where the separation between the outdoor cultivation area and the property lines range is approximately 190 feet.

Since the calculated odor intensity is below El Dorado County's limit of 7 DT, the project would comply with El Dorado County's Ordinance 5110(5)(D).

This Technical Memorandum presents the methodology, data and assumptions used in this analysis. These are described in detail below.

## SCOPE AND METHODOLOGY OF ODOR ANALYSIS

The overall methodology used in this analysis is to use an atmospheric dispersion model to predict the dilution of odors as they migrate away from the outdoor cultivation area. By calculating the relative concentration of odors adjacent to the cultivation area and at the property line(s), we can determine the dilution ratio defined as odor concentration at the cultivation area divided by concentration at the property line(s).

For example, if the maximum concentration at the cultivation area is 5,000 micrograms per cubic meter (ug/m<sup>3</sup>) and the relative concentration at the property line 2,000 ug/m<sup>3</sup>, the dilution ratio would equal:

$$\text{Dilution Ratio} = \frac{5,000 \text{ ug/m}^3}{2,000 \text{ ug/m}^3} = 2.5$$

In other words, the odors would be diluted by a factor of 2.5 as they migrate from the cultivation area towards the property line.

The dilution factor is used along with measurements at other outdoor cannabis cultivation sites to predict odor intensity at the D'Agostini property lines. This methodology was reviewed by the staff at El Dorado County Air Quality Management District (AQMD) to confirm that this approach would be acceptable. The District agreed with this approach as noted in their August 28, 2020 letter to Aaron Mount at El Dorado County Planning.

## Modeling Methodology

As in the 2021 odor analysis, we used the EPA and AQMD recommended AERMOD dispersion model (Version 22112) along with one year (2019) of hourly wind data for Somerset. The data (known as MM5) is derived from weather satellites to calculate winds and other parameters

for all locations in the continental US. The data used was prepared by Lakes Environmental (Waterloo, Canada)<sup>1</sup>.

The cultivation site was modeled as a single ground based area source. Concentrations were calculated using a 10 meter grid using an emission rate of  $1.00 \times 10^{-4}$  grams/sec-square meter. See Figure 2.

The model results are concentrations in terms of micrograms per cubic meter at each grid location averaged over 1-hour. These concentrations are meaningful only in a relative sense to help establish the dilution pattern. It is recognized that the averaging time for odors is a few minutes, not 1 hour. Typically, peak concentrations over a few minutes are many times greater than those over 1 hour. However, the ratio of concentrations and the dilution factor will remain the same whether averaged over a few minutes or 1 hour averaging time.

Finally, we note that the maximum predicted concentration varies with both the distance and the direction from the cultivation site. Generally, the concentration decreases with distance from the cultivation site. Figures 4 and 5 illustrate the spatial distribution of 1-hour relative concentration. These figures show that the highest 1-hour relative concentration (based on 8,760 hours that were modeled) occur East of the property.

### Baseline Odor Used in the Analysis

We used odor measurements taken at a Yolo County outdoor cannabis site. This outdoor site covers 0.75 acres and is located at 22945 County Road 23, Esparto. At the time the measurements were taken, the plants were 2 weeks away from harvesting. Odor measurements were taken September 22, 2020 that indicated odor intensity of 15 DT. However, we noted that there were brief periods when odor intensity was above 15 but were not fully captured by the Nasal Ranger. We estimated the odor intensity to be closer to 20 DT and this is the value used in the current analysis. A complete documentation of the September 22<sup>nd</sup> odor survey is attached.

### CALCULATION OF ODOR INTENSITY AND RESULTS

The calculation of odor intensity at the property lines is as follows:

$$\text{Odor Intensity at Property Line} = \frac{\text{Baseline Odor Intensity (DT)}}{\text{Dilution Factor}}$$

For example, the odor intensity at the Southwestern property line (See Figure 6) would equal:

$$\frac{20 \text{ DT}}{3.24} = 6.17 \text{ DT}$$

---

<sup>1</sup> Lakes Environmental. Waterloo, Canada. Information on the development of local wind data based on the MM5 for Somerset can be found at: [https://www.weblakes.com/services/met\\_data.html#aermetmm5](https://www.weblakes.com/services/met_data.html#aermetmm5)

The results for the closest property lines are summarized below and shown in Figure 7.

Location	Distance to Property Line		Maximum Conc.	Conc. At Property Line	Lowest Dilution Ratio	Fenceline DT
	(ft)	(m)				
North	< 1000	< 300	58,407	> 9738.9	< 6.00	< 3.33
Eastern Property Line	500	152.4	56,441	7,939	7.11	2.81
SW Property Line	190	57.9	64,944	20,043	3.24	6.17
Western Property Line	310	94.5	32,391	10,037	3.23	6.20
Baseline DT	20					

Note: The Northern property line lies outside the modeling grid. The relative odor concentration was estimated based on data at the Northern edge of the modeling grid.

Once a permit has been issued and cannabis cultivation proceeds, EPS staff will be available to conduct odor monitoring at your property to confirm that odors do not exceed the County limit of 7 DT.



Figure 1  
Site Map

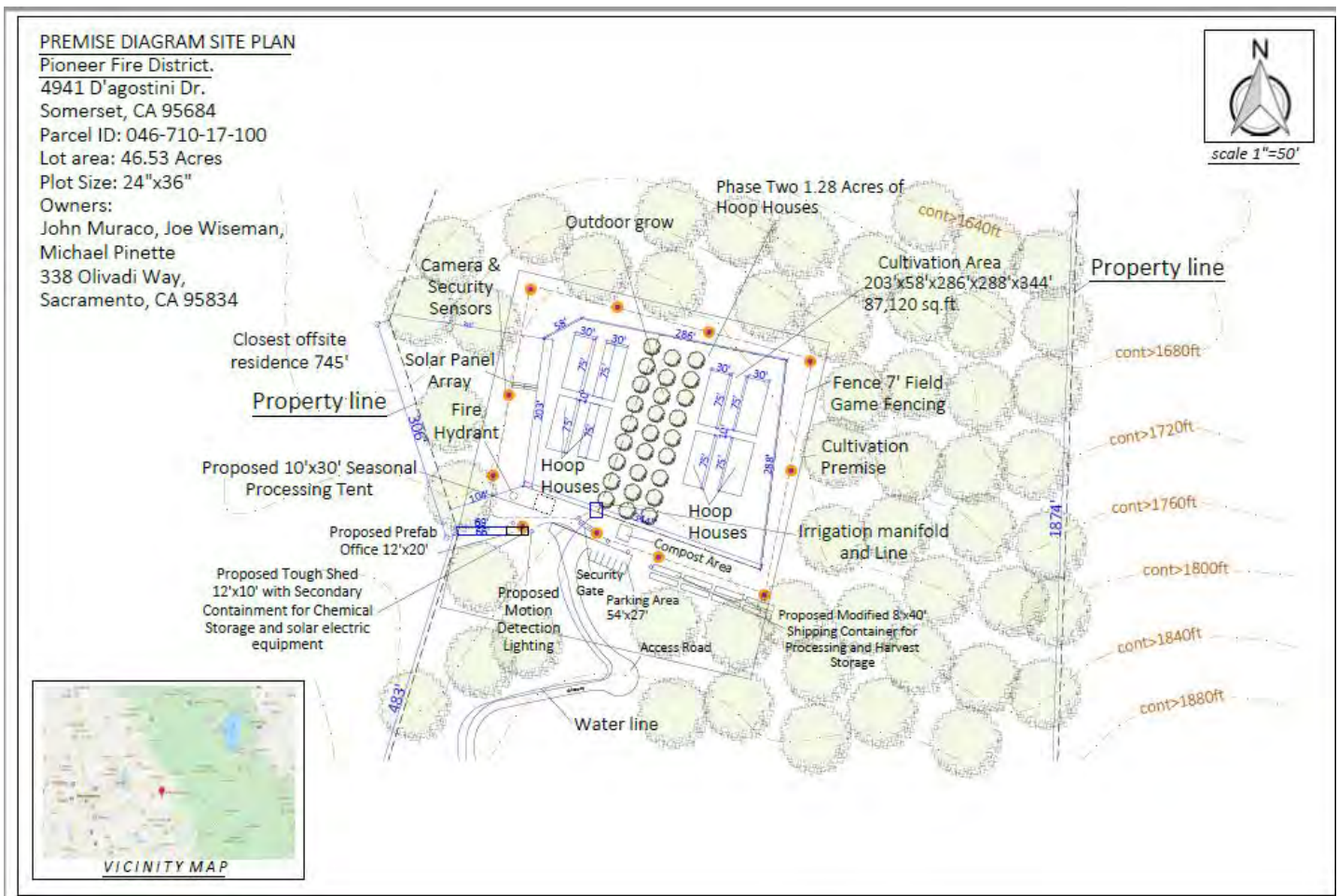


Figure 2

## Modeling Grid

*(The Red Rectangle Represents the Outdoor Canopy)*





Figure 3

Contours of Relative Odor Concentration

*(in micrograms per cubic meter)*



Figure 4

Contours of Relative Concentration (close-up)

*(in micrograms per cubic meter)*

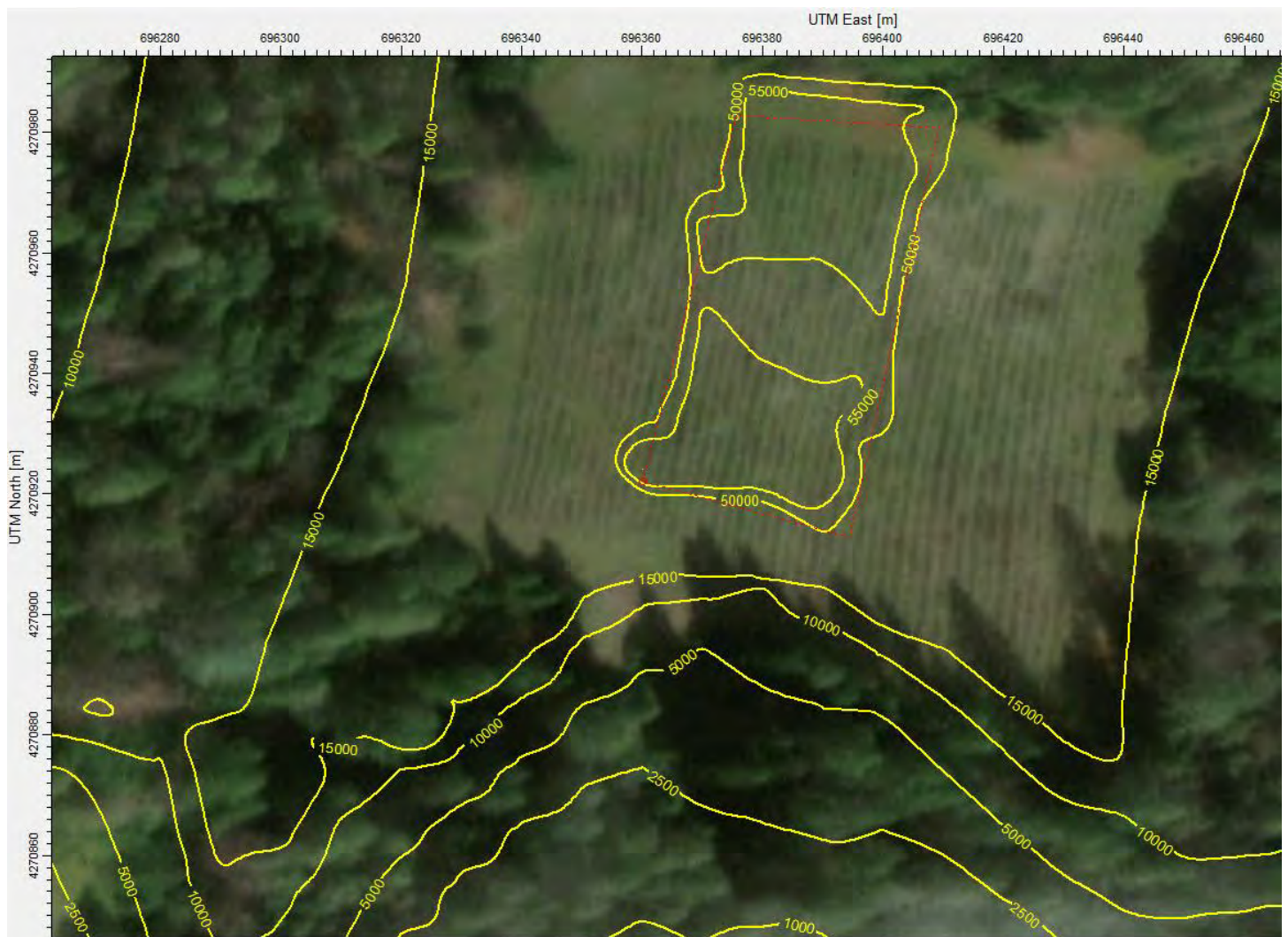
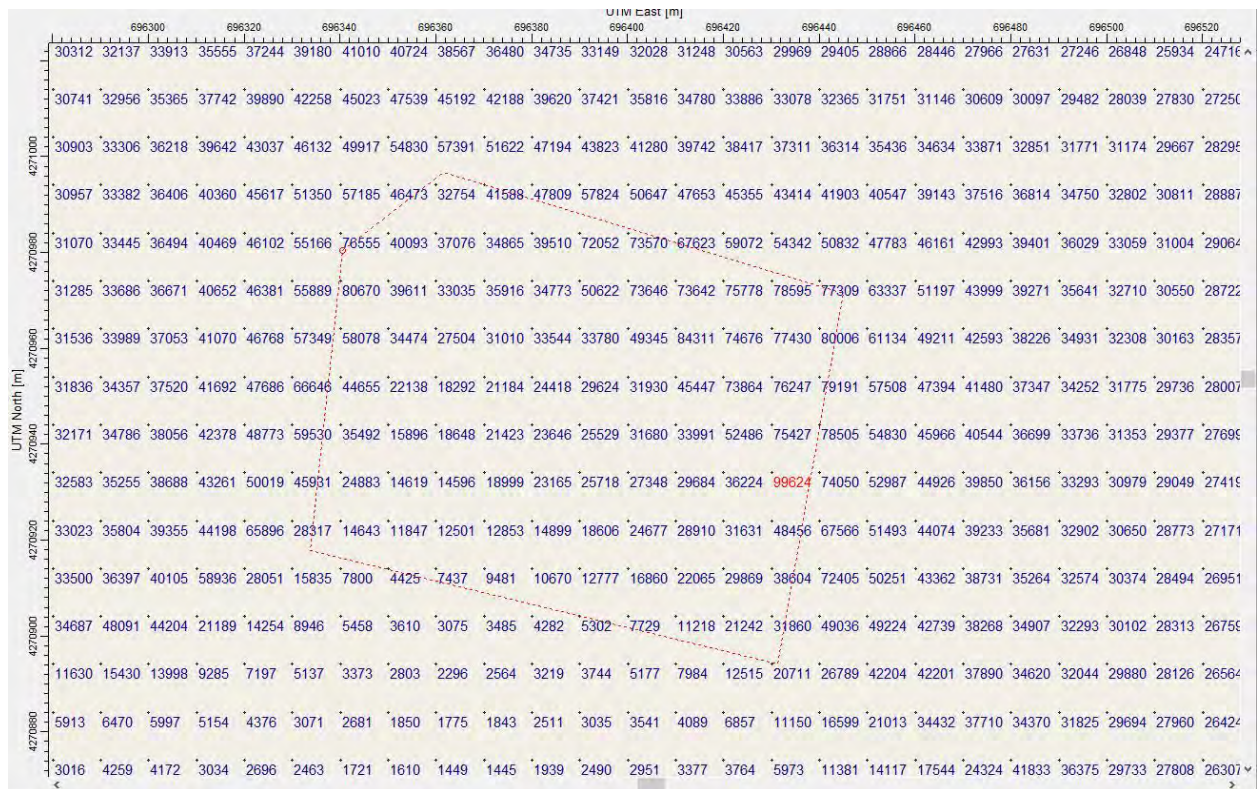




Figure 5

## Numerical Values of Relative Concentration

*(in micrograms per cubic meter)*



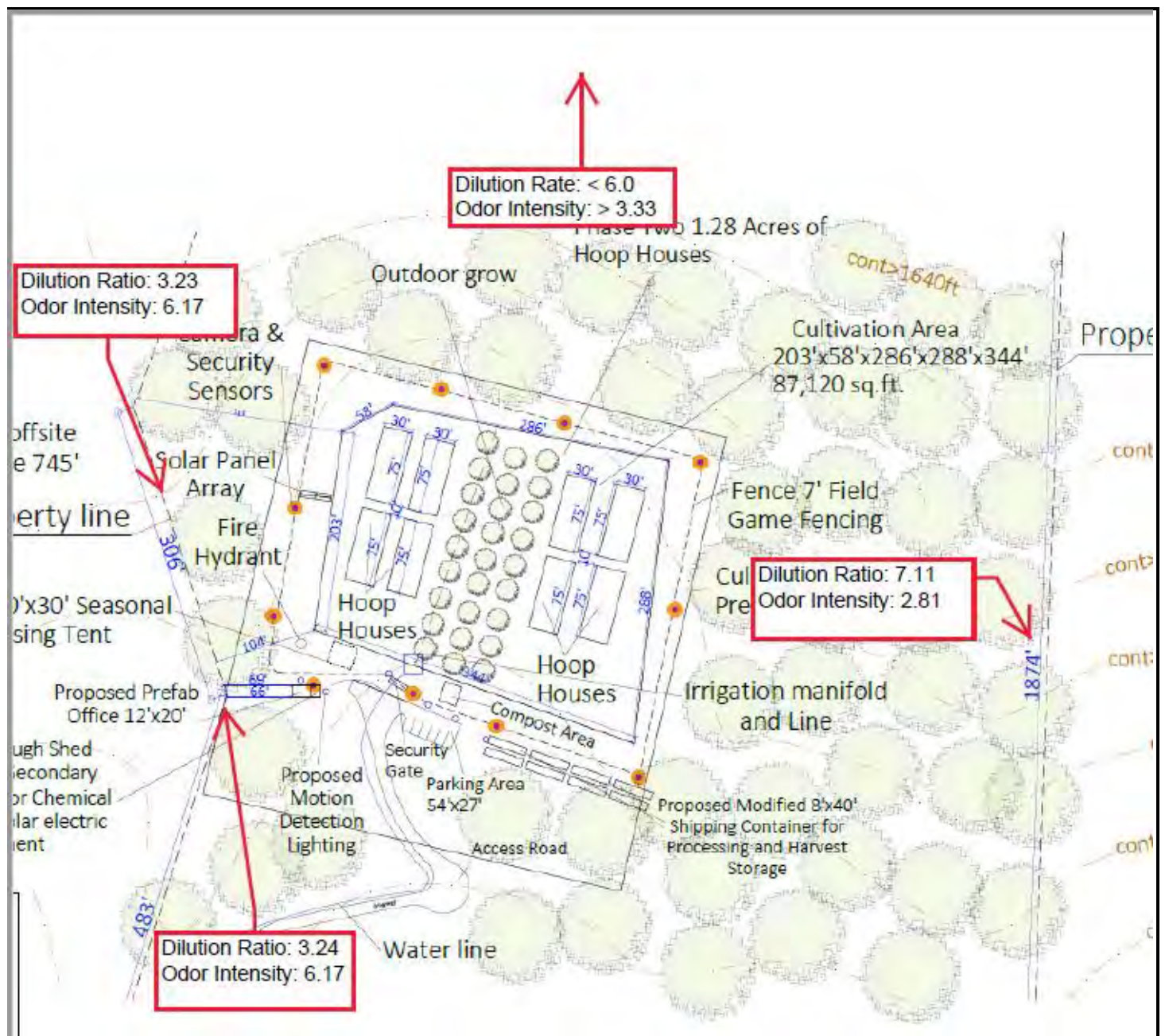
*Property Line (190 feet from outdoor canopy)*





## Figure 7

### Summary of Results



## Attachment

### Description of Filters for odor Control at hoopouses






# 335 208-230V | PN 4042500

## PERFORMANCE

°F   %RH	80   60	75   50
Water Removal (P/Day)	350	233
Efficiency (P/kWh)	9.3	6.7
Energy Factor (L/kWh)	4.3	3.2

## ELECTRICAL

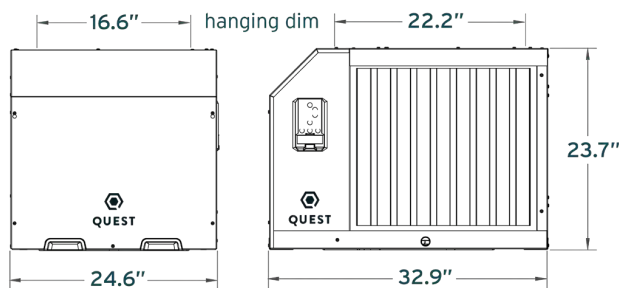
°F   %RH	80   60	80   60
Supply Voltage	230V	208V
Current Draw	6.9A	7.9A
MCA*	15A	15A
MOP*	20A	20A
Recommended Breaker Size	15A	15A
Power	1,565W	
Power Cord	NEMA 6-15P	
CFM	900	
BTU (Total)	20,300	
BTU (Motor Load)	5,100	
BTU (Heat of Condensation)	15,200	

## SPECS

Control Type	Digital Onboard or External
Refrigerant Type	R410a
Refrigerant Amount	4 lb 12 oz
Weight	215 lb
Air Filter MERV Rating	MERV-13
Dimensions	20" x 22" x 2"
Drain Port Connection	3/4 Threaded NPT
Operating Temperature	56 F Min - 95 F Max



## DIMENSIONS



## FEATURES

- + **Patented M-CoRR Technology:** Multi-coil design achieves highest efficiencies available in the market
- + **Digital Onboard Control:** easy operation of your machine, with optional external control
- + **Superior MERV-13 Filtration:** Removes more harmful contaminants from the air, such as mold, bacteria and some viruses
- + **Integrated Hang Points** and handles allows for easy movement and flexible installation
- + **Filter Compensation Technology:** Accounts for static pressure change to ensure consistent, powerful airflow
- + **Easy Access Panel:** removable panel for easier in-place maintenance and serviceability

Specifications are subject to change without notice. Drawings are not to scale. \*See manual for details on MCA/MOP.

QUESTCLIMATE.COM / (877) 420-1330





### Vertical Humidity Distribution Fans

Ventilation plays a vital role in modern greenhouses. The vertical air flow (VAF) fan produces an air current that is forced outward and downward along the roof and walls of the greenhouse, and then is pulled upward through the crop. Using this type of fan can lead to a better and more uniform climate and it can also lead to energy savings. VAF offers growers the opportunity to reduce the negative impacts of humidity in a simple and energy efficient way, and it is also easy to mount in a greenhouse and easy to maintain.

#### Specifications:

- Watts (High): 315
- 1/2 hp
- Width: 22 in. Depth: 26 in. Height: 22 in., Weight: 40 lbs.
- Blade size: 16 in.
- Up to 3,200 CFM
- Single phase



**VOLTS - 115/230**  
**AMPS - 3.9/1.95**



# SPECIFICATIONS

## Hurricane® Pro High Velocity Oscillating Wall Mount Fans - 20 Inch and 16 Inch

Item #736474 & #736484



PART NUMBER	736474	736484
FAN DIAMETER	20 Inch	16 Inch
ETL LISTED	Yes	
Tested to UL Standard No. 507		
Tested to CSA Standard C22.2 No. 113		
VOLTAGE	120	
AMPS	1.20	0.53
WATTAGE	140	60
CFM RATING	4500	2400
RPM	1450	
POWER CORD	Integrated 6 foot	
WEIGHT	17.25 lbs.	14.1 lbs
WARRANTY	1 year	

**Hurricane®**  
**PRO**

Hurricane® Pro High Velocity Oscillating Wall Mount Fans - Spec Sheet - Last Updated 06122017

*This document is not intended to be used for installation purposes. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.*



Job Name/Location:

Tag #:

Date:

For: File Resubmit

PO No.:

Approval Other

Architect:

GC:

Engr:

Mech:

Rep:

(Company)

(Project Manager)

**LS180HEV2**

Single Zone Mega Wall Mounted

Outdoor Unit (ODU) - LSU180HEV2, Indoor Unit (IDU) - LSN180HEV2

**Performance:****Cooling:**

Cooling Capacity (Min~Rated~Max) (Btu/h)	3,685 ~ 18,000 ~ 18,493
SEER2	19
EER2	12

SEER - Seasonal Energy Efficiency Ratio

EER - Energy Efficiency Ratio

**Heating:**

Heating Capacity (Min~Rated~Max) (Btu/h)	3,685 ~ 19,000 ~ 22,997
Max. Heating @ Indoor 70°F DB Outdoor 19°F DB / 17°F WB	15,270
HSPF2	9.4

HSPF - Heating Seasonal Performance Factor

Cooling Nominal Test Conditions:

Indoor: 80°F DB / 67°F WB

Outdoor: 95°F DB / 75°F WB

Heating Nominal Test Conditions:

Indoor: 70°F DB / 60°F WB

Outdoor: 47°F DB / 43°F WB

**Electrical:**

Power Supply (V/Hz/Ø)	208-230/60/1
-----------------------	--------------

**Outdoor Unit:**

MOP (A)	20
MCA (A)	15
Cooling Rated Amps (A)	10.4
Heating Rated Amps (A)	10.4
Compressor (A)	10.0
Fan Motor (A)	0.4

MOP - Maximum Overcurrent Protection

MCA - Minimum Circuit Ampacity

**Total Power Input:**

Cooling Power Input (kW)	1.5
Heating Power Input (kW)	1.583

**Piping:**

Liquid Line (in., O.D.)	1/4
Vapor Line (in., O.D.)	1/2
Additional Refrigerant (oz./ft.)	0.26
Min. / Max. Pipe Length (ft.) <sup>2</sup>	9.8 / 65.6
Piping Length (no add'l refriger., ft.)	24.6
Max. Elevation (ft.)	32.8

**Features:**

- 24-Hour on/off timer
- 2-Way (up / down) auto swing
- Auto changeover
- Auto restart
- Jet cool/Jet heat
- Condensate sensor connection
- Energy saving
- Inverter (variable speed compressor)
- Self-cleaning indoor coil
- Sleep mode
- Ultra quiet operation

**Included Accessories:**

- Wireless Remote Controller — AKB74955602

**Optional Accessories:<sup>10</sup>**

- ☐ MultiSITE™ CRC1 — PREMTBVC0
- ☐ MultiSITE CRC1+ — PREMTBVC1
- ☐ Simple Remote Controller — PREMTCC00U
- ☐ Premium Remote Controller — PREMTA000
- ☐ Dry Contact - PDRYCB100/320/400

For a complete list of available accessories, contact your LG representative.

For continual product development, LG reserves the right to change specifications without notice.

© LG Electronics U.S.A., Inc., Englewood Cliffs, NJ. All rights reserved. "LG Life's Good" is a registered trademark of LG Corp. /www.lghvac.com

**Operating Range:****Outdoor Unit:**

Cooling (°F DB)	14 ~ 118
Heating (°F WB)	14 ~ 65

**Indoor Unit:**

Cooling (°F WB)	53 ~ 75
Heating (°F DB)	60 ~ 86

**System Data:**

Refrigerant Type	R410A
Refrigerant Control	EEV
Refrigerant Charge (lbs.)	2.975
ODU Sound Pressure (Cooling / Heating) (±1 dB[A]) <sup>3</sup>	55 / 55
IDU Sound Pressure	
Cooling (H/M/L/Sleep) (±1 dB[A]) <sup>3</sup>	48 / 43 / 38 / 32
Heating (H/M/L) (±1 dB[A]) <sup>3</sup>	48 / 43 / 38 / 32
ODU Net / Shipping Weight (lbs.)	98.1 / 108
IDU Net / Shipping Weight (lbs.)	26 / 30
Heat Exchanger Coating	GoldFin™

**Fan:**

ODU Type	Propeller
IDU Type	Cross Flow
Fan Speeds (Fan/Cool/Heat)	6 / 6 / 6
Quantity (ODU + IDU)	1 + 1
Motor/Drive	Brushless Digitally Controlled/Direct
ODU Max. Air Flow Rate (CFM)	1,730
IDU Air Flow	
Cooling, Max/H/M/L (CFM)	689 / 512 / 459 / 371
Heating, Max/H/M/L (CFM)	653 / 565 / 477 / 388
Dehumidification (pts./hr.)	3.38

**Notes:**

1. Acceptable operating voltage: 187V-253V.
2. Piping lengths are equivalent.
3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
4. All communication / connection (power) cable from the outdoor unit to the indoor unit is field supplied and must be a minimum of four-conductor, 14 AWG, stranded, shielded or unshielded (if shielded, it must be grounded to the chassis of the outdoor unit only), and must comply with applicable local and national codes.
5. See Engineering Manual for sensible and latent capacities.
6. Power wiring cable size must comply with the applicable local and national code.
7. The indoor unit comes with a dry helium charge.
8. This data is rated 0 ft. above sea level, with 24.6 ft. of refrigerant line and a 0 ft. level difference between outdoor and indoor units.
9. Must follow installation instructions in the applicable LG installation manual.
10. LSN\*\*\*HEV2 9,000 and 12,000 Btu/h Mega indoor units are compatible with wired controllers from July 2019 production; LSN\*\*\*HEV2 18,000 and 24,000 Btu/h Mega indoor units are compatible with wired controllers from January 22, 2020 production. LSN Mega indoor units are compatible with Dry Contacts from August 2019 production.



SB\_SZ\_Mega\_WallMounted\_LS180HEV2\_2022\_11\_03\_151504

Page 1 of 3

24-0520 D 44 of 51

Job Name/Location: \_\_\_\_\_

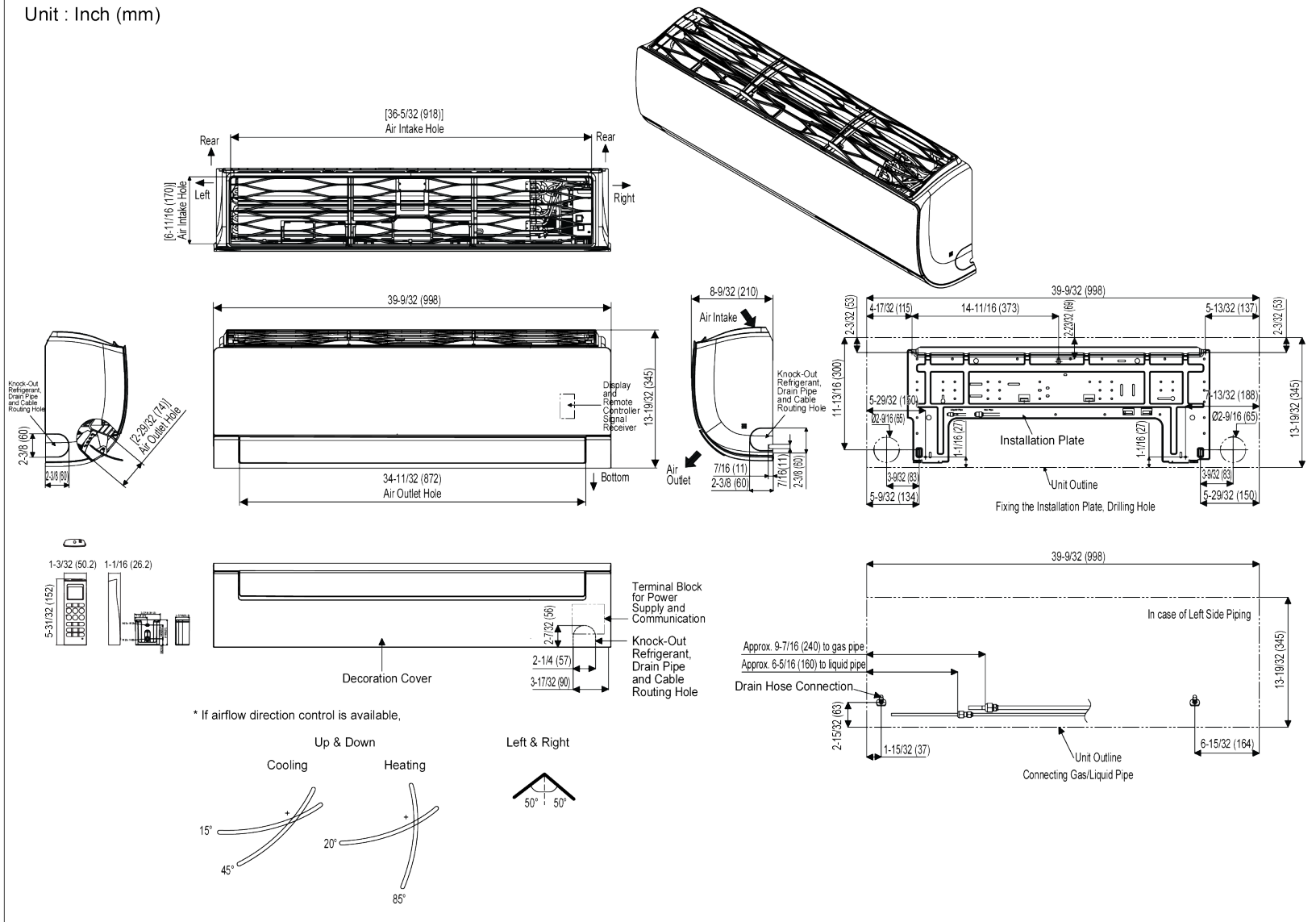
**LS180HEV2**  
Single Zone Mega Wall Mounted  
Outdoor Unit (ODU) - LSU180HEV2, Indoor Unit (IDU) - LSN180HEV2



Tag No.: \_\_\_\_\_  
Date: \_\_\_\_\_  
PO No.: \_\_\_\_\_

24-0520 D 45 of 51

Unit : Inch (mm)



Job Name/Location: \_\_\_\_\_

**LS180HEV2**  
Single Zone Mega Wall Mounted  
Outdoor Unit (ODU) - LSU180HEV2, Indoor Unit (IDU) - LSN180HEV2



**LG**  
Life's Good

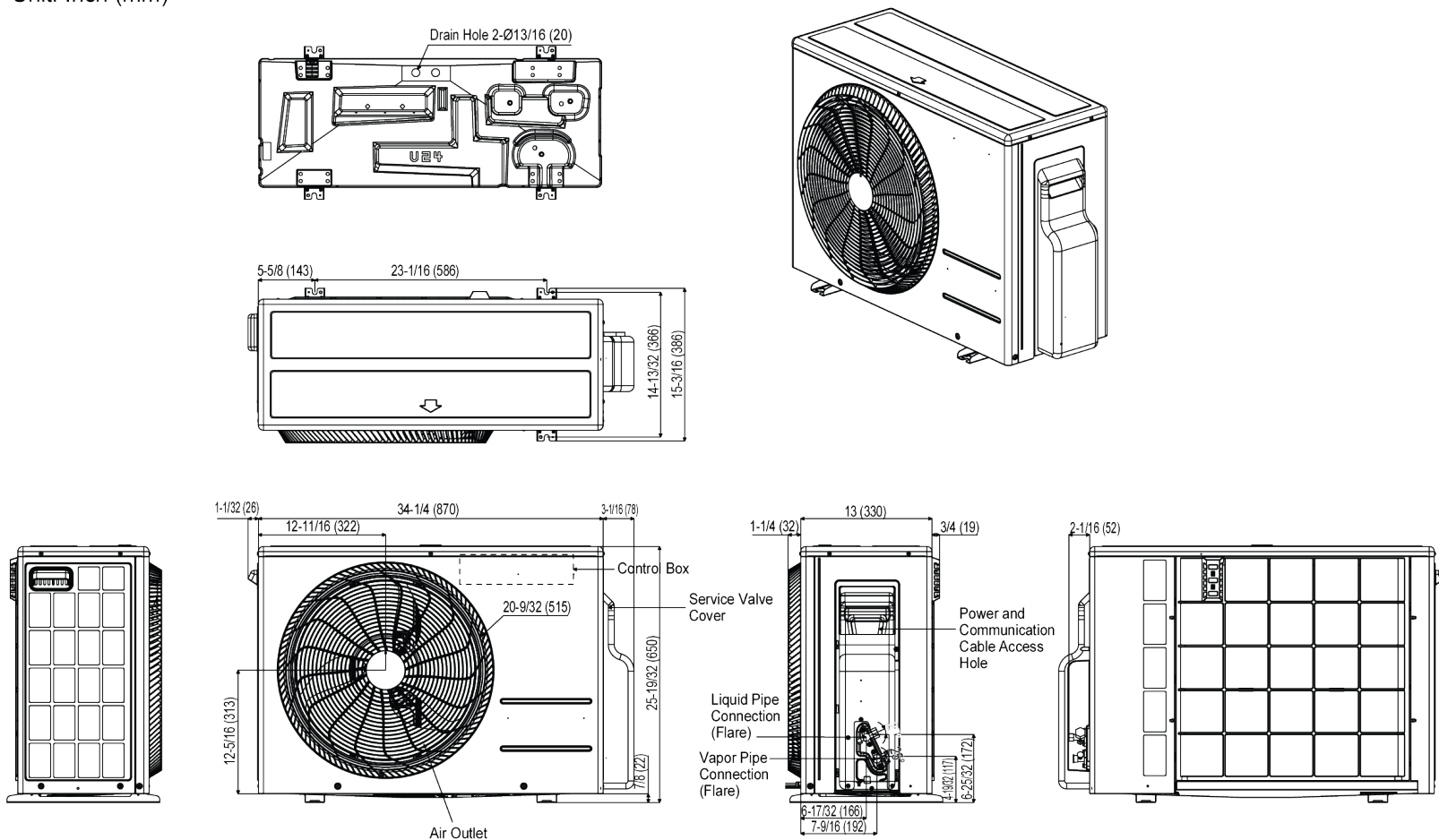
Tag No.: \_\_\_\_\_

Date: \_\_\_\_\_

PO No.: \_\_\_\_\_

24-0520 D 46 of 51

Unit: Inch (mm)







## WELL DRILLING INSPECTION REQUEST

NAME: Shaw Permit # 1745  
LOCATION: D' Agostini  
DATE: 7/8/99 TIME: AM 11 PM  
REQUESTED BY: \_\_\_\_\_  
DRILLER: Dawson

☐ PRELIMINARY SITE

☒ WELL SEAL

☐ DESTRUCTION

☒ APPROVED

☐ DISAPPROVED

CASING DEPTH: 150' SEAL DEPTH: \_\_\_\_\_  
# OF BAGS: trailer load MATERIAL: concrete  
REMARKS: \_\_\_\_\_

will top off 3'

R.E.H.S. CKM DATE: 7-8-99

rev.08/98well.insp

# WELL PERMIT APPLICATION

EL DORADO COUNTY

ENVIRONMENTAL MANAGEMENT DEPT.  
Division of Environmental Health  
2850 Fairlane Ct.  
Placerville, CA 95667 (530)621-5300

PERMIT NO: 1745  
Receipt: 21365 Check 165.00 # 3368  
Amount: 165  
Date: 5/27/99  
By: AL

INSPECTION LINE: (530)621-4257 Prior to 7:00 a.m.

PARCEL NO. 046-710-17

Job Address/Location: D'Agostini & Squirrel Hollow

X Driving Directions: \_\_\_\_\_

Owner: Cliff Shaw Phone: \_\_\_\_\_ Parcel Size: 46.23 ACRES

Applicant (if different): Robert Dawson Drilling & Pumps Lot: #68

Address: \_\_\_\_\_ Subdivision: \_\_\_\_\_

Well Driller: Robert Dawson Drilling Phone: 6775361 Sec \_\_\_\_\_ Twn \_\_\_\_\_ Rng \_\_\_\_\_

Address: P.O. Box 1071 Shing's Springs, CA 95682

TYPE OF WORK (CHECK): New Well ☒ Deepen ☐ Destruction ☐ Reconstruction/Repair ☐

WELL USE (CHECK): Individual/Domestic ☒ Irrigation ☐ Public/Commercial ☐ Other ☐

PERMIT EXPIRES 1 YEAR FROM ISSUE DATE/NON TRANSFERRABLE TO ANOTHER DRILLER

ATTACH A COPY OF ASSESSOR'S PARCEL MAP OR ACCURATE PLOT PLAN:

INDICATE THE EXACT LOCATION OF WELL WITH RESPECT TO PROPERTY LINES, SEWER OR SEPTIC SYSTEMS, WATER COURSES, EXISTING WELLS, ROADS, EXISTING STRUCTURES, AND ADJACENT PROPERTY DEVELOPMENT.

## NOTES:

1. An accurate scaled plot plan must accompany this application.
2. This application becomes a permit when approved by Division of Environmental Health.
3. The location of the well cannot be changed without prior approval of this office.
4. Contact El Dorado County Building Department for plumbing and electrical permits.
5. Drilling fluids shall be disposed of in a safe and sanitary manner.

## DRILLER CERTIFICATION

I hereby certify that the proposed well will be constructed per applicable County and State Code and regulations for water wells, that I notify Environmental Health 24 hours prior to beginning drilling, and that within 30 days of the completion of drilling I will furnish this office a complete well log with accurate well yield.

X Well Driller: Robert Dawson Drilling & Pumps  
State License: 732870 Date: 5/27/99

## DISPOSITION OF APPLICATION

(For Health Officers use Only)

\*\*\*\*\*

APPROVED ☒

DENIED ☐

APPROVED WITH CONDITIONS ☐

BY: C. Mearse DATE: 6-2-99

FINALED BY: CKM DATE: 7-9-99

G:\forms\well.per4-98

CCUP21-0004/Single Source Solutions  
Well Report - Exhibit I



No House  
or septic  
within 100'

well site  
⊙ 50' —

250'

D'Agostini

squirrel  
hollow

**CCUP21-0004/Single Source  
Solutions Exhibit J - Security Plan**

130.41.100.4.F.13 The security plan for the operation that includes adequate lighting, security video cameras with a minimum camera resolution of 1080 pixels and 360 degree coverage, alarm systems, and secure area for cannabis storage. The security plan shall include a requirement that there be at least 90 calendar days of surveillance video (that captures both inside and outside images) stored on an ongoing basis and made available to the County upon request. The County may require real-time access of the surveillance video for the Sheriff's Office. The video system for the security cameras must be located in a locked, tamper-proof compartment. ***The security plan shall remain confidential.***