SLO Cultivation- Carpinteria
Noise Control Plan

Prepared for:

SLO Cultivation
3861 Foothill Road
Carpinteria, CA 93103

Prepared by:

SCS ENGINEERS
2370 Skyway Drive Suite #101
Santa Maria, CA 93455
805-346-6591

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1.0 INTRODUCTION

This study is an analysis of the potential long-term noise impacts on nearby sensitive receptors from operation of new equipment included in the Carpinteria Cannabis Project (Project). The purpose of this study is to analyze the Project's potential impacts from long term operation, specifically concerning sound from newly proposed operating equipment.

The Project Site is located at 3861 Foothill Road also identified as APN 005-310-024. The Site is approximately 13.66 acres in size and contains four (4) existing greenhouse structures and twelve (12) pre-fabricated supporting structures (freezers, equipment and material storage, etc.), totaling approximately 389,800 square feet of development. This existing network of greenhouse and ancillary structures has been historically utilized to cultivate cut flowers (Gerbera daisies). Surrounding land uses include agriculture (predominately greenhouses and orchard) to the North, South, East, and West. Low density residential development exists throughout the area as well.

SLO Cultivation proposes to convert the Project Site to cannabis cultivation, with all cultivation of cut flowers ceasing. The proposed Project would allow for:

1. Utilization of existing **Greenhouse 1 (GH1),** approximately 264,500 square feet in size, for mature mixed-light cannabis cultivation.
2. Demolition of three (3) existing greenhouses, known as **Greenhouse 2 (GH2)**, **Greenhouse (GH3**), and **Greenhouse 4 (GH4),** which are approximately 40,700 square foot each.
3. Development and operation of a 61,840 square foot addition to **GH1** for nursery/juvenile mixed-light cannabis cultivation.
4. Development of a new 24,751 square foot pack house which will be utilized for cannabis processing (bucking, drying, and packaging).
5. The development of seventy-one (71) onsite parking spaces.
6. Expansion of the Project Site's stormwater detention basin system.
7. Minor ancillary improvements to the Project Site including installation of security cameras and lighting, installation and use of irrigation recycling and fertigation equipment, septic waste disposal systems, and placement of cannabis waste storage containers.
8. Removal of twelve (12) pre-fabricated containers, totaling 3,840 square feet, historically used for agricultural and cannabis support activities.

Construction noise was not considered as part of this analysis because construction related noise capable of exceeding the County's 65 dba threshold would be restricted to tree removal and excavation of additional stormwater detention volume. All such work is expected to be completed within a span of 10-20 days and within normal business hours (i.e. Monday through Friday, 8am to 5pm). Due to the short-term, limited nature of construction activity further noise analysis was unnecessary.

2.0 NOISE FUNDAMENTALS IN SANTA BARBARA COUNTY

Noise is generally defined as unwanted or objectionable sound which is measured on a logarithmic scale and expressed in decibels (dBA). The duration of noise and the time period at which it occurs are important values in determining impacts on noise-sensitive land uses. The Community Noise Equivalent Level (CNEL) and Day-Night Average Level (Ldn) are noise indices which account for differences in intrusiveness between day- and night-time noise. Noise-sensitive land uses include: residential dwellings; transient lodging; hospitals and other long-term care facilities; public or private educational facilities; libraries, churches; and places of public assembly. To protect noise-sensitive uses, the County has adopted thresholds.

The Santa Barbara County Environmental Thresholds and Guidelines Manual states:

a. A proposed development that would generate noise levels in excess of 65 dBA CNEL and could affect sensitive receptors would generally be presumed to have a significant impact.

b. Outdoor living areas of noise sensitive uses that are subject to noise levels in excess of 65 dBA CNEL would generally be presumed to be significantly impacted by ambient noise. A significant impact would also generally occur where interior noise levels cannot be reduced to 45 dBA CNEL or less.

c. A project will generally have a significant effect on the environment if it will increase substantially the ambient noise levels for noise-sensitive receptors adjoining areas. Per item a., this may generally be presumed when ambient noise levels affecting sensitive receptors are increased to 65 dBA CNEL or more. However, a significant effect may also occur when ambient noise levels affecting sensitive receptors increase substantially but remain less than 65 dBA CNEL, as determined on a case-by-case level.

d. Noise from grading and construction activity proposed within 1,600 feet of sensitive receptors, including schools, residential development, commercial lodging facilities, hospitals or care facilities, would generally result in a potentially significant impact. According to EPA guidelines average construction noise is 95 dBA at a 50' distance from the source. A 6 dB drop occurs with a doubling of the distance from the source. Therefore, locations, within 1,600 feet of the construction site would be affected by noise levels over 65 dBA. To mitigate this impact, construction within 1,600 feet of sensitive receptors shall be limited to weekdays between the hours of 8 AM to 5 PM only. Noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dBA may require additional mitigation.

3.0 NOISE ENVIRONMENT

Cannabis cultivation activities generally do not generate high levels of noise as compared to other agricultural activities already occurring on the Project Site and within the surrounding rural, agricultural region. Greenhouse cultivation and other indoor cultivation sites can generate noise from agricultural equipment, but noise levels would typically be reduced as activities would occur inside the greenhouse and/or processing building, which would buffer noise levels to some degree. The primary cannabis cultivation related noise sources would be limited to the use of fans or blowers for air circulation and temperature management within the greenhouses (such fans have already been in use on the Project Site to facilitate the cultivation of cut flowers). Cannabis processing would additionally require the use of dehumidifiers and buckers, neither of which produce sound in excess of the 65 dba threshold. Lastly, a Byers Odor Management System will be installed on the Project Site which utilizes a high-pressure, low-volume blower.

A list of noise generating equipment proposed for the Project and the noise levels associated with each piece of equipment are provided in Table 1 below.

Table 1. On Site Equipment

	Quantity	Equipment	dBA
Existing (Baseline)	6	Pedestal Fans	<70
	2	Large Exhaust Fans	<75
	TBD	Interior Air Flow Fans	<70
Proposed	1	Munch Machine Mother Bucker	<50
	1	Byers Odor Management System	<75
	1	30kW Backup Generator	<65
	1	Freezer Compressor	<71

4.0 IMPACT DISCUSSION

The development of the Project will result in the installation of four (4) types of new, noise emitting equipment. The new, noise emitting equipment is as follows:

1. **Bucking Machine:** One (1) Munch Machine Mother Bucker would be utilized to separate cannabis buds from the remainder of the plant. This equipment is anticipated to produce a noise level of approximately 50 dBA. This noise level is below the County's significance threshold of 65 dBA, therefore this piece of equipment was not considered for further analysis.
2. **Byer's Odor Management Systems:** Up to three (3) Byers Odor Management Systems (Byers Units) are also proposed to neutralize the fugitive cannabis odors within the Project Site. The Byers Unit includes operation of a high-pressure, low-volume blower encased within a weatherproof housing. The blower has a noise level of approximately 75 dBA as measured from a distance of thirty (30) feet. The location of the Byers Unit within the Project Site is shown on Figure 1 and will be located approximately 220 feet from the nearest property line. If the noise is reduced by 6 dBA as the distance is doubled from the source, SCS determined that the anticipated noise level will be approximately 57 dBA as measured from the nearest property line. This noise level is below the County's significance threshold of 65 dBA.
3. **30 kW Backup Generator:** One (1) backup generator shall be installed near the southeast corner of the proposed Processing Building, approximately 85 feet from the property line. The generator has an anticipated noise level of approximately 65 dBA as measured from a distance of twenty-five (25) feet. The anticipated noise levels at the property line will be less than 59 dBA and below the County's significance threshold. As a noise reduction measure, installing the backup generator behind an 8ft tall CMU block wall will attenuate the noise with a 20 dBA reduction, from 65 dBA down to 45 dBA at 25ft from the source, therefore it is recommended a CMU block wall be constructed around the facility backup generator.
4. **Freezer Compressors:** Freezer compressors are to be installed just south of the Processing building and are 65 dBA from 100' from the source, which at the proposed installation is approximately 175 feet from the nearest easterly property line. At the property line, the noise level is below the County's significance threshold of 65 dBA.

Table 2 below identifies each new, noise emitting equipment and their noise levels. Refer to Attachments 2 through 4 that display the corresponding location and anticipated noise levels of the proposed equipment.

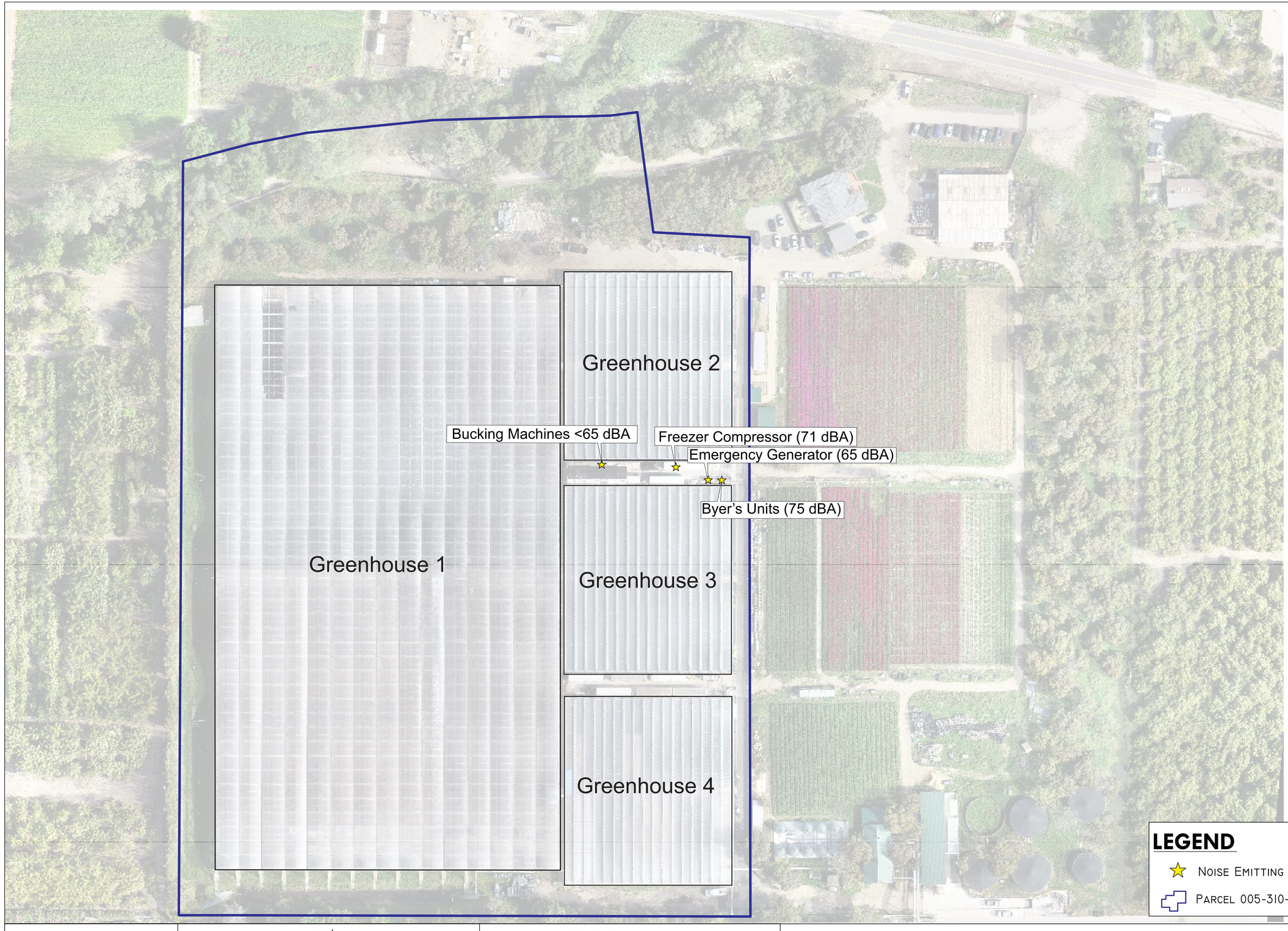
Table 2. Noise Estimates for Equipment

dBA Noise Estimate for Proposed Noise Emitting Equipment				
Equipment	dBA from Noise Source / Distance Feet			
Byers Odor Management System	75 dBA / 30 ft	69 dBA / 60 ft	63 dBA / 120 ft	57 / 240 ft
30kW Backup Generator	65 dBA / 25 ft	59 dBA / 50 ft	53 dBA / 100 ft	47 dBA / 200 ft
Freezer Compressor	71 dBA / 50 ft	65 dBA / 100 ft	59 dBA / 200 ft	53 dBA / 400 ft
Munch Machine Mother Bucker	30 dBA / 5 ft	24 dBA / 10 ft	18 dBA / 20 ft	12 dBA / 40 ft

Therefore it is anticipated that noise impacts from all associated Project equipment will be less than significant.

ATTACHMENTS

Attachment 1 **Noise Plan Existing**
Attachment 2 **Noise Plan Propose Backup Generator**
Attachment 3 **Byer's Unit**
Attachment 4 **Freezer Compressors**



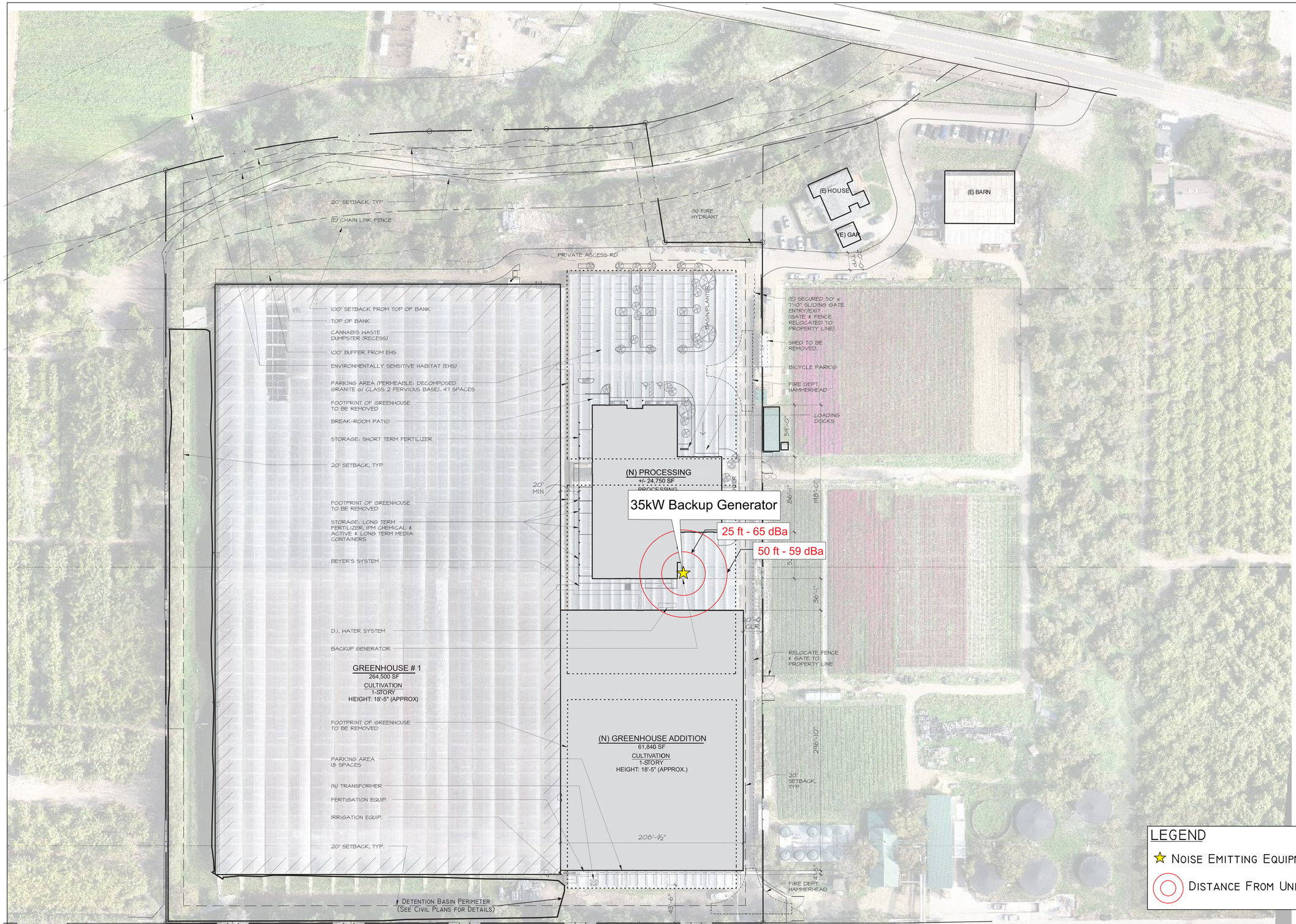
PREPARED BY SCS ENGINEERS
MODIFIED FROM BBP ARCHITECTURE SITE PLAN
SCS ENGINEERS

N

scale
1"=50'
0 50 100 150
Feet

SLO Cultivation
3861 Foothill Road
Santa Barbara County, California

NOISE PLAN EXISTING



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MODIFIED FROM BBP ARCHITECTURE SITE PLAN
SCS ENGINEERS

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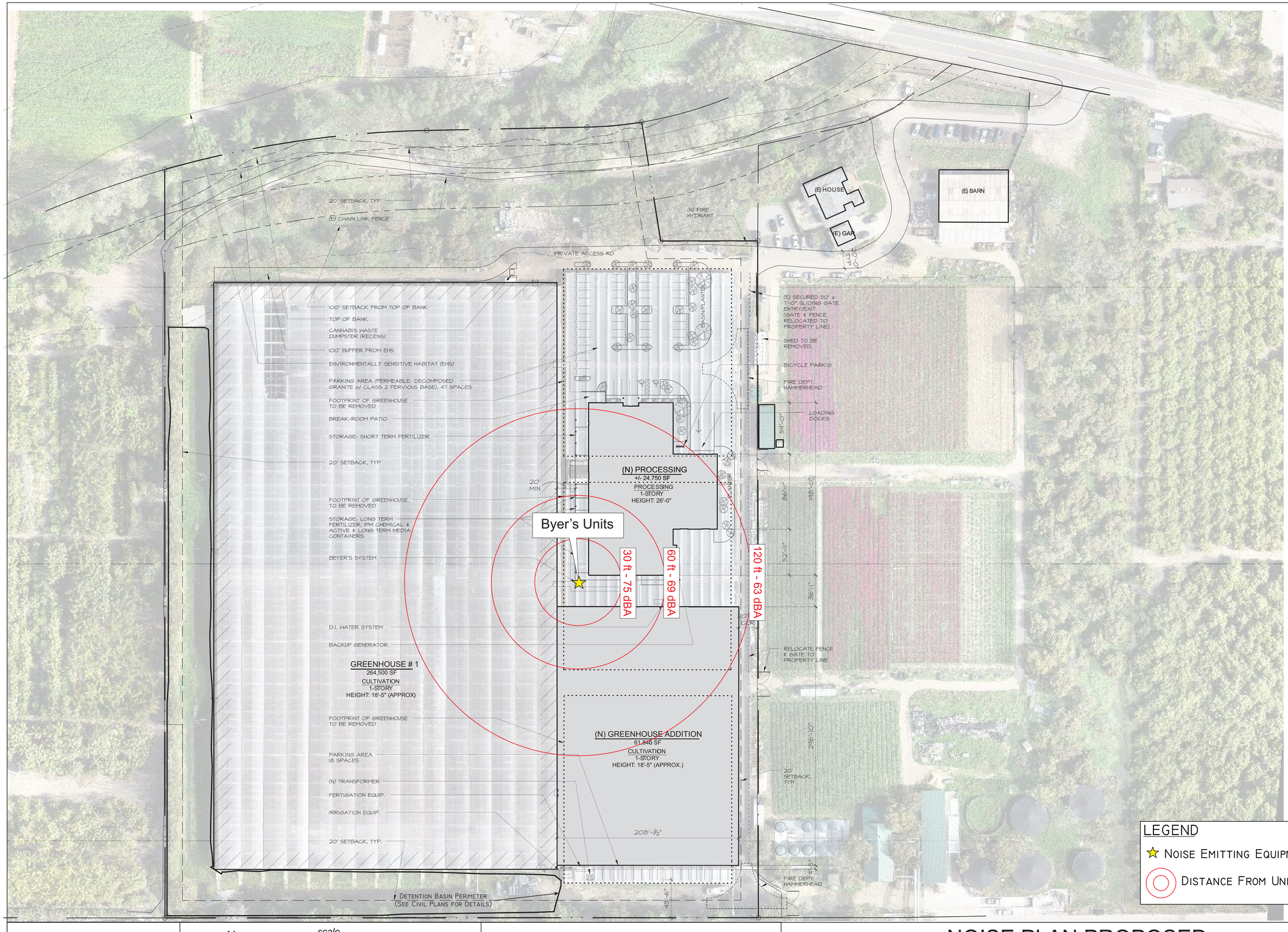
1"=50'
0 50 100 150 Feet

3861 FOOTHILL ROAD
SANTA BARBARA COUNTY, CALIFORNIA

NOISE PLAN PROPOSED
35kW BACKUP GENERATOR



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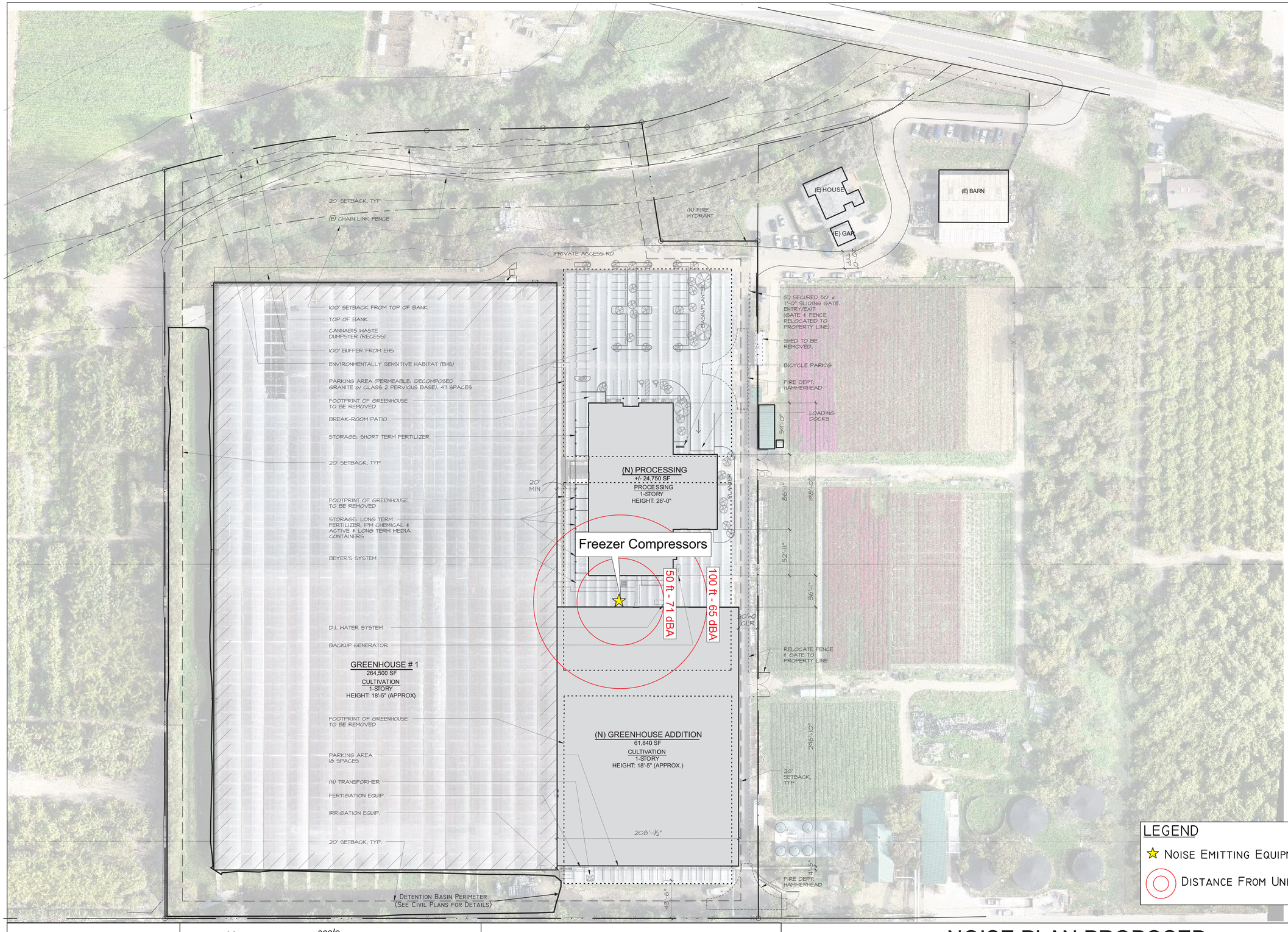
Feet

3861 FOOTHILL ROAD
SANTA BARBARA COUNTY, CALIFORNIA

NOISE PLAN PROPOSED
BYER'S UNITS



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SANTA BARBARA COUNTY, CALIFORNIA

NOISE PLAN PROPOSED FREEZER COMPRESSORS