Property Management Plan

Global Interactive Solutions, LLC
Cannabis Cultivation Facilities
1780 Highway 53, Clearlake, California
APN 010-055-24



Prepared for the
Lake County Community Development Department
255 North Forbes Street
Lakeport, California 95453
707-263-2221

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Global Interactive Solutions LLC Project Description and Property Management Plan

The Global Interactive Solutions LLC Property Management Plan has been prepared in accordance with the requirements of Chapter 21 article 27 of the Lake County Zoning Ordinance pertaining to cannabis cultivation.

"The intent of said plan is to identify and locate all existing cannabis and non-cannabis related uses on the property, identify and locate all proposed cannabis and non-cannabis related uses on the property, and describe how all cannabis and non-cannabis related uses will be managed in the future. The property management plan shall demonstrate how the operation of the commercial cannabis cultivation site will not harm the public health, safety, and welfare or the natural environment of Lake County".

This Property Management Plan may need to be updated and revised over time in accordance with any operational expansion, modification, or other changes that may take place in the future. The applicable sections of this plan may need to be revised to reflect these changes. Weather and climate conditions, geologic/seismic events, and other natural phenomenon that affect project operations could result in a need to modify and or revise this plan as well.

Global Interactive Solutions LLC is seeking a Major Use Permit from the Lake County Community Development Department/Planning Commission for A-Type 3 outdoor cultivation, A-Type 3B Mixed-Light cultivation, A-Type 4 Nursery cultivation, and Type 13 Self-Transport Distribution on the property located at 1780 State Hwy 53, Clearlake, CA - Lake County - APN 010-055-24.

The project site is located on the east side of Highway 53, just north of the Clearlake City Limits, approximately 1 mile south of the intersection between Highway 53 and Highway 29 and lies within the Clear Lake Shoreline Communities Planning Area. The site is accessed by a private driveway off of Hwy 53.

The project site has an existing permitted single-family residence on the north end of the property which will not be used as part of the proposed cultivation project, however it will be used by the property owner and operational staff. The property has existing vineyards that have been actively farmed for several years, the vineyard operations will be continued and enhanced.

The total acreage of the subject parcel is 64.2 acres. The parcel is split zoned A-WW-SC; Agriculture - Waterway - Scenic and CR-DR; Commercial Resort - Design Review. The location for the proposed cannabis project is within the Agriculture Zone.

Phase 1 of the project will include development of three (3) acres of outdoor cultivation as depicted on the project site plans.

Phase 2 of the project will include:

- Reduction of the outdoor cultivation area to two (2) acres.
- Development of 20,736 square feet of mixed light cultivation in greenhouses/hoophouses.

- Development of 20,736 square feet of nursery for germinating and cloning activities related to immature plants in greenhouses/hoophouses.
- Construction of a 50' x 120' (6,000 square feet) processing building for cannabis processing activities such as drying, trimming, curing, packaging, storage areas for fertilizers, pesticides, and gardening tools. The facility will include an office, an employee break room, and restrooms.
- Installation of a 1,000-gallon water storage tank and three 12,000 gallon above ground nutrient pools for Koi fish - to be used for water storage and for the production of organic fertilizer.
- Construction of a 36' x 70' (2,520 square feet) pole barn will be erected over the three 12,000 gallon above ground pools.

The proposal includes the development of facilities appurtenant to outdoor cannabis cultivation, including facilities for drying and curing of harvested cannabis, ancillary nursery, storage sheds, and irrigation infrastructure.

The facility layout will be as follows (see site plans for details):

- Ancillary nursery space will take place in the drying building when drying is not occurring.
- Security fence around the cultivation area, 6-foot-high wire fences, constructed of heavy gauge wire fence (or similar), with steel gates and padlocks.
- Cultivation will be in above-ground raised garden beds.
- Drip irrigation system, consisting of a water storage tank, valves and filters, PVC pipe, black polyvinyl flexible tubes, drip emitters.
- Waterproof storage shed/Conex container or similar for storage of chemicals and hand tools.
- Irrigation water to be supplied via an existing groundwater well.
- Water storage in several 12,000-gallon water tanks.
- Electricity will be supplied by an existing PG&E service and small-scale solar.
- A fire suppression tank.
- A portable restroom is to be located adjacent to the cultivation area.
- Up to 6 parking spaces, including accessible spaces if applicable.
- Trash enclosures, compost piles, and soil piles.

A septic tank and leach field will be installed and utilized to service the building upon the Department of Environmental Health's approval. An existing water well located in the southwest corner of the site will provide both domestic and crop irrigation water.

There is an unnamed ephemeral Class III watercourse indicated on the Federal NWI map layer. This seasonal creek flows from the northwest end of the project property to the south east into Burns Valley Creek. This watercourse is culverted at the beginning of the property along the access driveway. To the east of the seasonal creek is the proposed cultivation area, with setbacks a minimum of 100 feet from the top of the bank. There are no other surface water bodies on the Project property. The past and present land use of the property are residential and agricultural (vineyard).

The property is fairly flat and there is a well vegetated buffer – oak woodland between Hwy 53 and the proposed cultivation areas. This buffer will be maintained between all project areas and the highway.

Due to the parcel topography and location of the stream, straw wattles will be placed along the western outdoor canopy area boundary to further reduce any storm water/sediment runoff into the stream.

The liquid fertilizers being used will be compost tea (organic compost in the form of a liquid) and fish emulsion, which will come from the above ground koi pools which will then be distributed to the cultivation area via drip lines.

The pesticides used for this project will include citric acid oil and Sulphur, both at limited quantities during the growing months and only used when necessary. These substances will be stored in the processing facility within their manufacturer's original containers and placed within secondary containment structures. The proposed cultivation operation will utilize a drip irrigation system, to conserve water resources.

The irrigation system is currently set up as it was previously being used for the existing vineyard. The well in the southwestern corner of the lot is pumped underground to the water storage tank near the home in the northern portion of the property. Water use is projected to be approximately 1.6 million gallons per year.

The proposed project will use existing power supplied by PG&E and may use a solar voltaic power system. The outdoor cultivation areas will have a minimal need for power. The proposed nursery will require power for lighting and climate control. Other uses that would require power include the security system, security lighting, and well pumps.

No generators are proposed, except for backup during power outages or an emergency. A power upgrade is not needed for operations, as the existing PG&E service is sufficient.

Hours/Days of Operation and Number of Employees: Operations will occur up to seven days per week with cultivation operations occurring approximately from March through November.

Hours of operation for the proposed activities would typically be between approximately 6 am and 8 pm daily. The Lake County Zoning Ordinance restricts deliveries and pickups for cannabis cultivation operations from 9 am to 7pm Monday through Saturday and Sunday from 12 pm to 5 pm.

The approximate number of employees for the proposed project are summarized below.

Activity	**Employees**
Full-time Cultivation	1-2
Seasonal Cultivation and Processing	3-5

Access, Parking, and Traffic: The project property is accessed by a private driveway off of Hwy 53. An existing private driveway will be used to access the cultivation area. A total of 5 parking spaces are proposed.

Construction traffic will occur over approximately 1 to 2 months. Larger equipment would be mobilized once at the beginning of the construction season, and will be moved out at the end of construction. During construction, it is expected that there would be approximately 3 to 4 construction employees,

with up to approximately 3 round trips per day. Maximum daily trips during construction would be approximately 6 to 8 trips per day.

During operations, there would be approximately 4 to 6 ADT for full-time employees and 10 to 20 ADT for seasonal employees. Delivery vehicles are expected to number about 1-3 trips monthly.

Site Preparation Activities: The majority of the proposed project cultivation area is part of an existing vineyard operation. The site has already been prepared, tilled, and developed with wine grapes and agricultural support facilities, including the existing single-family residence, septic system, barn, accessory structures, well, and accessory agricultural facilities (e.g., irrigation facilities).

Other land uses on the project site include residential, timberland, grazing land, and open space.

No new grading will be taking place in the proposed planting area.

All existing roads and driveways will be utilized for project access. An erosion and sediment control plan has been created and will be implemented for this project.

Operation Details: Fertilizers, pesticides, and petroleum products will be stored with compatible chemicals in the proposed building. All waste will be kept in the secured cultivation area, and regularly hauled off-site to be disposed of properly at an appropriate waste disposal facility or composted and re-used on site.

City of Clearlake Sphere of Influence Setback

The project site is contiguous to the City of Clearlake (City) sphere of influence. Cannabis cultivation is not allowed within 1,000 feet of an incorporated city sphere of influence unless the applicant can provide a letter of support from the City. A letter of support (March 2024) has been obtained from the City of Clearlake and is submitted as part of the Major Use Permit application package.

Air Quality - According to the Zoning Ordinance, the Property Management Plan must have a section on Air Quality:

(a) Intent: All cannabis permittees shall not degrade the County's air quality as determined by the Lake County Air Quality Management District (LCAQMD).

(b) In this section permittees shall identify any equipment or activity that which may cause, potentially cause the issuance of air contaminants including odor, and shall identify measures to be taken to reduce, control or eliminate the issuance of air contaminants, including odors.

(c) All cannabis permittees shall obtain an Authority to Construct permit pursuant to LCAQMD Rules and Regulations, prior to the construction of the facility described in the Property Management Plan.

(d) All cannabis permittees shall obtain Authority to Construct Permit pursuant to LCAQMD Rules and Regulations, if applicable, to operate any article, machine, equipment or other contrivance which causes or may cause the issuance of an air contaminant.

(e) All permittees shall maintain an Authority to Construct or Permit to Operate for the life of the project, until the operation is closed and equipment is removed.

(f) The applicant shall prepare an odor response program that includes (but is not limited to):

a. Designating an individual(s) who is/are responsible for responding to odor complaints 24 hours per day/seven (7) days a week, including holidays.

b. *Providing property owners and residents of property within a 1,000-foot radius of the cannabis facility, with the contact information of the individual responsible for responding to odor complaints.*
c. *Policies and procedures describing the actions to be taken when an odor complaint is received, including the training provided to the responsible party on how to respond to an odor complaint.*
d. *The description of potential mitigation methods to be implemented for reducing odors, including add-on air pollution control equipment.*
e. *Contingency measures to mitigate/curtail odor and other emissions in the event the methods described above are inadequate to fully prevent offsite nuisance conditions.*

The project site is within the Lake County Air Basin. The Lake County Air Quality Management District (LCAQMD) regulates air quality in Lake County. The U.S. Environmental Protection Agency (EPA) sets acceptable levels for seven air pollutants, and then determines — with the help of states and local air districts — where those standards are or are not met. Lake County is currently in attainment for all federal and state ambient air quality standards.

Short-term construction emissions could include fugitive dust and other particulate matter, as well as exhaust emissions generated by earthmoving activities from operation of tractors, tillers, etc., during site preparation. Site preparation incudes only minor grading and tilling. Operation emissions could include fugitive dust, other particulate matter, and exhaust emissions from daily traffic as well as odor from cultivation activities.

Construction emissions could be caused by onsite or offsite activities. Onsite emissions principally consist of exhaust emissions (NOX, CO, ROG, PM10, and PM2.5) from construction equipment, motor vehicle operation, and fugitive dust (mainly PM10) from disturbed soil. Offsite emissions are caused by motor vehicle exhaust from delivery vehicles as well as worker commuter traffic, but they also include road dust (PM10).

Operational emission sources consist of mobile emissions and area source emissions. Mobile source emissions estimates are derived from motor vehicle traffic from staff commuting. Area source emissions estimates are derived from the consumption of propane, electricity, and consumer products, as well as emissions resulting from landscape maintenance. Power would be through solar power and on-grid PG&E. Cultivation operations may generate fugitive dust emissions through ground-disturbing activities such as ground tilling, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads. Dust management measures are provided below.

Operation of the proposed cultivation and processing operation would generate small amounts of carbon dioxide from vehicular traffic associated with staff commuting. The generation of carbon dioxide would be partially offset by the cultivation of fast-growing plants, which remove carbon dioxide in the air for photosynthesis.

The California Department of Food and Agriculture in 2017 concluded that cannabis cultivation activities under the Cannabis Licensing Program would not generate a substantial number of vehicle trips and

would not require intensive use of heavy equipment, and as such, would not degrade air quality or produce significant amounts of greenhouse gasses. California Department of Food and Agriculture summarizes the impacts from small cannabis cultivation operations as follows:

"*Despite the potential air quality emission-generating sources described above that are associated with cannabis cultivation activities, it is not anticipated that the Proposed Program would conflict with or obstruct implementation of air quality plans for the numerous reasons outlined below. First, the cannabis cultivation activities under the Proposed Program would not be anticipated to generate a substantial number of vehicle trips (see Section 4. 12, Transportation and Traffic) that would affect air quality. In addition, outdoor and mixed-light cultivation activities would generally occur on such small acreages that these activities would often not require intensive use of heavy equipment."*

No LCAQMD permits are anticipated to construct or operate the project as currently designed. In the event that an Authority to Construct permit is deemed necessary, one will be obtained pursuant to LCAQMD Rules and Regulations. If needed, the Authority to Construct or Permit to Operate will be maintained for the life of the project and listed in this Plan.

Cultivation operations may generate fugitive dust emissions through ground-disturbing activities such as ground tilling, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads. The following measures are proposed to minimize fugitive dust emissions through ground-disturbing activities such as ground tilling, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads.

- Inform staff of speed limits and dust pollution. All new hires shall be trained to limit emissions and to communicate activities and results to manager(s). Key topics are types and sources of emissions and impacts on human and environmental health; management plans, strategies, practices, and technologies; and pertinent regulations.
- Clearly mark roadways for limited speed to control dust. Post signs on unpaved roads restricting speeds to 15 mph or less, and ensure employees avoid excess travel.
- Armor road segments with gravel, road base, or asphalt, as appropriate.
- Implement a road maintenance program.
- On tilled earth and stockpiles, control fugitive dust by wetting the soil with a mobile water tank and hose, or by delaying ground disturbing activities until site conditions are not windy. Water applications may be concentrated during the late summer and early fall months, when soils have the lowest moisture content or when winds are severe.
- BMP Fact Sheets WE-1: Wind Erosion Control and NS-1: Water Conservation Practices will be implemented to provide dust control and prevent discharges from dust control activities and water supply equipment. Water application rates will be minimized as necessary to prevent runoff and ponding and water equipment leaks will be repaired immediately.

- During windy conditions (forecast or actual wind conditions of 25 miles per hour or greater), dust control may be applied to disturbed areas, including haul roads, to adequately control wind erosion.
- BMP Factsheet WM-3: Stockpile Management will be implemented using silt fences and plastic covers to prevent wind dispersal of sediment from stockpiles.
- The minimum amount of water should be used: refer to BMP Factsheet NS-1: Water Conservation Practices.

Cannabis Cultivation facilities can produce odors that some people find objectionable. An odor complaint procedure will be implemented as follows. Management staff of the Global Interactive Solutions LLC is responsible for responding to odor complaints 24 hours per day/seven (7) days a week, including holidays. Property owners and residents of property within a 1,000- foot radius of the Cannabis facility will be provided with the contact information of the individual(s) responsible for responding to odor complaints. This facility will develop policies and procedures describing the actions to be taken when an odor complaint is received, including the training provided to the responsible party on how to respond to an odor complaint. When an odor complaint is received, it will be forwarded to the manager responsible for odor control. The complaint will be logged, including time and type of complaint, the location of the odor reception, and contact info of the person making the complaint. The incident will be investigated, and the problem identified. The manager will visit the site or facility in question and determine any deficiencies in the odor control system (where applicable) and identify remedies. These remedies should be implemented immediately. The manager will prepare a written response and send it by certified mail to the person who made the complaint. The correspondence should acknowledge the complaint, describe the incident, and identify what remedial actions were taken. Each odor complaint will be logged in a master odor complaint logbook.

If necessary, an odor monitoring program will be developed and implemented. The monitoring program will include the location of monitoring station(s). Odor measurements will be recorded at each monitoring station. Odor data can be taken at the property boundary, the nearest road, or the nearest house. Measurements can be taken upwind and downwind of the odor source in order to characterize the odor plume line. Using a field odor detection meter, the odor strength will be measured as Dilution to Threshold (D/T) ratios, a dimensionless measure of odor concentration. Other odor parameters will be recorded, including descriptions of the odor's character, intensity, and offensiveness, and weather conditions.

Cannabis cultivation, especially during the flowering phase, generates volatile compounds (terpenes) that some people find objectionable. No significant odor impacts are anticipated from this cultivation operation, due to the limited population in the area, the setbacks from roads and property lines, and wind dilution/dispersal effects.

If odors become problematic, odor mitigation must be implemented. The cultivation operation should be analyzed to determine the source of odor emission and any concentrating effects. Mitigation can include some combination of the following administrative controls and engineering controls.

When the facility is constructed and operational, this section will be updated to describe activities such as cultivation management responsibilities. This section will describe the organizational responsibilities and the roles of the staff members who will be trained about

odor control; the specific administrative and operational activities that the training will encompass; and the frequency, duration, and format of the training (e.g., 60 minute in-person training of X staff, i). This section will include a description of the records that will be maintained (e.g., records of purchases of replacement carbon, performed maintenance tracking, documentation and notification of malfunctions, scheduled and performed training sessions, and monitoring of administrative and engineering controls). Examples of facility recordkeeping forms will be included as appendices to this plan.

If odors become problematic, engineering controls may need to be implemented. The cultivation operation should be analyzed to determine the source of odor emission and any concentrating effects. Mitigation can include some combination of the following:

- Increased and maximizing of property line setbacks to increase separation distances to residential areas.
- Windscreens could be erected that could partially contain odors within the cultivation compound.
- Installation and use of fans could to push/guide air flow in the opposite direction.
- Use of a high-pressure atomizing system, installed on the perimeter of grow areas, generates a water vapor (aerosol) that binds with the volatile compounds from Cannabis (terpenes) and makes them heavier, and then they drop out of the air.
- Application of masking and counteractive agents: use of chemical odor control technologies that are misted at the cultivation facility's exhaust. The use of these agents may be subject to air quality regulations.

Grounds and Site Maintenance - According to the Zoning Ordinance, the Property Management Plan must have a section on grounds maintenance:

(a) The permittee shall establish and implement written procedures to ensure that the grounds of the premises controlled by the permittee are kept in a condition that prevents the contamination of components and cannabis products. The methods for adequate maintenance of the grounds shall include at minimum:

a. The proper storage of equipment, removal of litter and waste, and cutting of weeds or grass so that the premises shall not constitute an attractant, breeding place, or harborage for pests.

b. The proper maintenance of roads, yards, and parking lots so that these areas shall not constitute a source of contamination in areas where cannabis products are handled or transported.

c. The provision of adequate draining areas in order to prevent contamination by seepage, foot-borne filth, or the breeding of pests due to unsanitary conditions.

d. The provision and maintenance of waste treatment systems so as to prevent contamination in areas where cannabis products may be exposed to such a system's waste or waste by-products.

(b) If the lot of record is bordered by grounds outside the applicant's control that are not maintained in the manner described in subsections (i) through (iv) of this section, inspection, extermination, and other reasonable care shall be exercised within the lot of record in order to eliminate any pests, dirt, and/or filth that pose a source of cannabis product

contamination.

(c) *Any other information as may be requested by the Director and/or by the Planning Commission.*

Excess compost will be stored within the green waste and compost storage area within the cultivation area and will be covered and surrounded by straw wattles to minimize loss of material. Fertilizers will be stored within the nutrient storage sheds and other designated storage location.

Pesticides will be used according to the instructions on the label or the material safety data sheets (MSDS). County regulations also apply to listed pesticides. Pesticides will be stored in proposed buildings so that storm water is not contaminated. Chemicals will be properly labeled, and open containers sealed when stored.

Good on-site maintenance measures will be implemented. The grounds will be inspected at least once per day and any litter picked up. Trash containers will be emptied when full. Roads will be maintained so that they function well and so that significant erosion does not occur. This may include wetting dusty roads, armoring unpaved sections with gravel, road base, or asphalt, patching holes, and maintaining drainage features such as water bars, culverts and side ditches, as applicable. Weeds and grasses will be controlled by mulching or by cutting with a lawnmower or line trimmer. Drainage ditches and swales will be regularly mowed and cleaned, including the removal of litter, debris, and sediment. Containers, sediment traps and basins, and ditches will be drained so that mosquitos do not breed. Areas inside cultivation compounds can be graveled or paved to prevent foot-borne filth. Live traps may be deployed to remove rodents from operational areas; these must be checked regularly to prevent animal suffering. Disposable coveralls (e. g. Tyvek) can be used to increase sanitation levels and reduce vectoring of mites and other pests. Changing stations or a mudroom can be provided for employees so that street clothing is separated from cultivation clothing.

Property maintenance will follow Best Management Practices. The following CASQA Industrial and Commercial Handbook BMP Fact Sheets are applicable:

- BG-40 Landscape Maintenance
- SC-41 Building & Grounds Maintenance
- SC-40: Contaminated or Erodible Areas
- SC-43 Parking Area Maintenance
- SC-44 Drainage System Maintenance

All on site generated waste will be managed as specified in the Waste Management subsection.

A waste monitoring and action program will be implemented and will consist of regular inspections of chemical storage areas, the immediate cleanup of spilled products, recordkeeping of quantities and types of fertilizers used, employee training in proper use and handling, and use of personal protective equipment.

Security - According to the Zoning Ordinance, the Property Management Plan must have a section on premise security:

(a) Intent: To minimize criminal activity, provide for safe and secure working environments, protect private property, and to prevent damage to the environment. The Applicant shall provide adequate security on the premises, as approved by the Sheriff and pursuant to this section, including lighting and alarms, to ensure the safety of persons and to protect the premises from theft.

(b) Security Plan. This section shall include at a minimum:

a. A description of the security measures to be taken to:

(1) Prevent access to the cultivation site by unauthorized personnel and protect the physical safety of employees. This includes, but is not limited to:

i. Establishing physical barriers to secure perimeter access and all points of entry (such as locking primary entrances with commercial-grade, non-residential door locks, or providing fencing around the grounds, driveway, and any secondary entrances including windows, roofs, or ventilation systems);

ii. Installing a security alarm system to notify and record incident(s) where physical barriers have been breached;

iii. Establishing an identification and sign-in/sign-out procedure for authorized personnel, suppliers, and/or visitors;

iv. Maintaining the premises such that visibility and security monitoring of the premises is possible; and

v. Establishing procedures for the investigation of suspicious activities.

(2) Prevent theft or loss of cannabis and cannabis products. This includes but is not limited to:

i. Establishing an inventory system to track cannabis material and the personnel responsible for processing it throughout the cultivation process;

ii. Limiting access of personnel within the premises to those areas necessary to complete job duties, and to those time-frames specifically scheduled for completion of job duties;

iii. Supervising tasks or processes with high potential for diversion (including the loading and unloading of cannabis transportation vehicles); and

iv. Providing designated areas in which personnel may store and access personal items.

(3) Identification of emergency contact(s) that is/are available 24 hours/seven (7) days a week including holidays. The plan shall include the name, phone number and facsimile number or email address of an individual working on the commercial cultivation premises, to whom notice of problems associated with the operation of the commercial cultivation establishment can be provided. The commercial cultivation establishment shall keep this information current at all times. The applicant shall make every good faith effort to encourage neighborhood residents to call this designated person to resolve operating problems, if any, before any calls or complaints are made to the County.

(4) The permitee shall maintain a record of all complaints and resolution of complaints and provide a tally and summary of issues the annual Performance Review Report.

(5) A description of fences, location of access points, and how access is controlled.

(6) Video Surveillance.

i. At a minimum, permitted premises shall have a complete digital video surveillance system with a minimum camera resolution of 1280 X 720 pixel. The video surveillance system shall be capable of recording all pre-determined surveillance areas in any lighting conditions.

ii. The video surveillance system shall be capable of supporting remote access by the permittee.

iii. To the extent reasonably possible, all video surveillance cameras shall be installed in a manner that prevents intentional obstruction, tampering with, and/or disabling.

iv. Areas that shall be recorded on the video surveillance system include, but are not limited to, the following:

a. The perimeter of the cannabis cultivation site and cannabis nursery,

b. Areas where cannabis or cannabis products are weighed, packed, stored, quarantined, loaded and/or unloaded for transportation, prepared, or moved within the premises;

c. Areas where cannabis is destroyed;

d. Limited-access areas;

e. Security rooms;

f. Areas containing surveillance-system storage devices, in which case, at least one camera shall record the access points to such an area; and

g. The interior and exterior of all entrances and exits to the cannabis cultivation sites and cannabis nursery including all buildings where cannabis or cannabis products are weighed, packed, stored, quarantined, loaded and/or unloaded for transportation, prepared, or moved within the premises.

v. The surveillance system shall record continuously 24 hours per day and at a minimum of 30 frames per second.

vi. All exterior cameras shall be waterproof, I-66 minimum.

vii. All interior cameras shall be moisture proof.

viii. Cameras shall be color capable.

ix. Video management software shall be capable of integrating cameras with door alarms.

x. Video recordings shall be digital.

xi. Thermal technology shall be use for perimeter fencing.

xii. All cameras shall include motion sensors that activates the camera when motion is detected.

xiii. In areas with inadequate lighting for the cameras being used, sufficient lighting shall be provided to illuminate the camera's field of vision.

xiv. All recording shall be located in secure rooms or areas of the premises in an access and environment-controlled environment which is separate from the room where the computer and monitoring equipment is located.

xv. All surveillance recordings shall be kept on the applicant's recording device or other approved location for a minimum of 30 days.

xvi. All video surveillance recordings are subject to inspection by the Department and shall be copied and sent, or otherwise provided, to the Department upon request.

ii. The video recordings shall display the current date and time of recorded events. Time is to be measured in accordance with the U.S. National Institute Standards and Technology standards. The displayed date and time shall not significantly obstruct the view of recorded images.

(3) Fences

i. All commercial cannabis cultivation sites shall be enclosed by a fence. The fence shall include, at a minimum, the following: Posts set into the ground. The posts may be steel tubing, timber or concrete and may be driven into the ground or set in concrete. End, corner or gate posts, commonly referred to as "terminal posts", must be set in concrete footing or otherwise anchored to prevent leaning under the tension of a stretched fence. Posts set between the terminal posts shall be set at intervals not to exceed 10 feet. A top horizontal rail is required between all posts. The fence shall be attached to the posts and top horizontal rail.

ii. No barbed wire, razor wire or similar design shall be used.

iii. The cultivation area shall be screened from public view. Methods of screen may include, but is not limited to, topographic barriers, vegetation, or solid (opaque) fences.

(4) Lighting

"All lights used for cannabis related permits including indoor or mixed light cultivation of cannabis shall be fully contained within structures or otherwise shielded to fully contain any light or glare involved in the cultivation process. Artificial light shall be completely shielded between sunset and sunrise.

Security lighting shall be motion activated and all outdoor lighting shall be shielded and downcast or otherwise positioned in a manner that will not shine light or allow light glare to exceed the boundaries of the lot of record upon which they are placed."

General security measures will consist of the following:

- A security plan, updated as needed;
- Staff screening process, including background checks;
- Personnel rules and responsibilities (to be incorporated into an employee handbook in the future);
- Physical barriers, including signage, road gates, security fencing with locked gates, and commercial-grade locks on all interior doors;
- Theft and loss control program;
- Video surveillance system.

Any complaints or problems associated with the operation of the commercial cultivation establishment will be directed to the Global Interactive Solutions LLC Manager/Security Officer. The Manager/Security Officer should make every good faith effort to encourage neighborhood residents to call the designated Security Officer to resolve operating problems, if any, before any calls or complaints are made to the County. The Manager/Security Officer should maintain a record of all complaints and resolution of complaints and provide a tally and summary of issues the annual Performance Review Report. The Staff Screening Process is described in the Operations Manual subsection of this Plan.

Personnel rules and responsibilities are as follows:

- Obey the rules of the Security Plan. Sign in when entering the facility (or property) and sign out when exiting the facility (or property).
- Report suspicious activity.
- Do not carry any weapons.
- Do not take photos or record video; do not post to social media about the cultivation operation.
- Do not engage in lengthy conversation with the public or respond directly to complaints: direct all such concerns to the Security Officer or to your supervisor.
- Only authorized vehicles are allowed in operational areas.
- Do not bring backpacks or other unnecessary storage devices that might complicate the theft control program. Lockers will be provided for personal items.
- Do not enter restricted areas unless authorized to do so.
- Re-lock gates after passing through.

The property entrance will be secured with metal bar gates and padlocks and subject to video surveillance.

The cultivation operations are closed to the public. Visitation is only allowed when specific permission is granted. All staff, all suppliers, all product transporters, and all visitors must sign the log in / log out sheet. Signage will be posted that states that the operational areas have restricted access and are closed to the public. The signage will not advertise the presence of Cannabis products.

Lake County requires an inventory system to track Cannabis material and personnel handling the material. This requirement will be fulfilled by following the requirements of the CalCannabis Licensing Program, which creates a Track-and Trace System. Sections 8401 through 8405, in part states:

"*The Department shall establish a track-and-trace system for unique identifiers of cannabis and nonmanufactured cannabis products, which all licensees shall use. Each licensee shall report in the track-and-trace system the disposition of immature and mature plants, as required by Section 8402 of this Chapter, and nonmanufactured cannabis products on the licensed premises and any transfers associated with commercial cannabis activity between licensees.*

(a) *The licensee is responsible for the accuracy and completeness of all data and information entered into the track-and- trace system. Data entered into the track-and-trace system is*

assumed to be accurate and can be used to take enforcement action against the licensee if not corrected.

(b) Attempts to falsify or misrepresent data or information entered into the track-and-trace system is a violation and subject to enforcement.

(c) Each licensee shall use the track-and-trace system for recording all applicable commercial cannabis activities. Each licensee shall do all of the following activities:

(1) Establish an account in the track-and-trace system prior to engaging in any commercial cannabis activities associated with their license and maintain an active account while licensed;

(2) Designate at least one of the owners or the responsible party named in the application to be the track-and-trace system administrator…. "

Personnel will be granted access within the premises to only those areas necessary to complete job duties, and to those time-frames specifically scheduled for completion of job duties. There will be supervision of tasks or processes with a high potential for diversion (including the loading and unloading of cannabis transportation vehicles). Supervision may include video surveillance and/or the requirement that the Security Officer or their designee be present.

An employee training program will be established to train staff in:

- Burglary and employee loss prevention
- Armed robbery and security breaches response
- Protocols for storage of large amounts of currency and/or cannabis
- Cannabis laws and employee responsibilities
- Identification and management of color-coded identification card and appropriate access areas
- Application and Live Scan process and procedures
- Policies for handling employees that do not wear identification cards on premise
- Inspection procedures for compliance checks and license renewals
- Escort policy for non-employee, or contractor visits
- Identification of limited access areas

The alarm system will be maintained by a licensed company with central monitoring capabilities. The alarm system may need to be permitted with the County. The alarm should contain a panic activation device for onsite employees. A responsible person should be required to respond within 30 minutes upon request.

The cultivation facility will have a comprehensive digital video surveillance system. Each camera must have the following specifications, according to the Ordinance:

- minimum resolution of 1920 X 1080 pixels
- digitally record continuously 24 hours per day and at a minimum of 30 frames per second, color
- exterior cameras shall be waterproof, I-66 minimum

- interior cameras shall be moisture proof
- display the current date and time of recorded events
- sufficient lighting shall be provided to illuminate the camera's field of vision or infrared cameras will be used
- thermal (infra-red) motion sensing technology shall be used for perimeter fencing
- installed in a manner that prevents intentional obstruction, tampering, and/or disabling

The video management software shall be capable of integrating cameras with door alarms. The video surveillance system shall be capable of recording all pre-determined surveillance areas in any lighting conditions. The video surveillance system shall be capable of supporting remote access by the permittee. To the extent reasonably possible, all video surveillance cameras shall be installed in a manner that prevents intentional obstruction, tampering with, and/or disabling.

Areas that shall be recorded on the video surveillance system include, but are not limited to, the following:

- The perimeter of the cannabis cultivation and processing,
- Areas where cannabis or cannabis products are loaded and/or unloaded for transportation, prepared, or moved within the premises.
- Areas where cannabis is destroyed.
- Limited-access areas.
- Security rooms.
- Areas containing surveillance-system storage devices, in which case, at least one camera shall record the access points to such an area.
- The interior and exterior of all entrances and exits to the cannabis cultivation sites including all buildings where cannabis or cannabis products are loaded and/or unloaded for transportation, prepared, or moved within the premises.

All recording shall be located in secure rooms or areas of the premises in an access and environment-controlled environment which is separate from the room where the computer and monitoring equipment is located. All surveillance recordings shall be kept on the applicant's recording device or other approved location for a minimum of 30 days. Data transfer will be by coax cable or by WiFi router. Power supplies shall be self-contained, solar arrays and batteries.

Security cameras that meet the County and state requirements will be installed. Locations to be determined once building layout is known. Data transfer will be via a WiFi to a secure building where recordings are stored for a minimum of 30 days. These cameras can be remotely accessed.

Perimeter lighting will be installed inside and around the exterior of the premises and maintained in working order. A lighting plan shall be consistent with the requirements of County ordinances and should include the following:

- Security lighting should consist primarily of motion-sensor lights and avoid adverse impacts on properties surrounding the lot on which the cannabis activity is located.
- Any outdoor lighting used for the illumination of parking areas and/or loading areas, and/or for security, shall be fully shielded and directed downward.

The following light pollution abatement measures will be implemented, as applicable:

- Shielded directional flood lighting aimed so that direct glare is not visible from adjacent properties and not exceeding the allowed lumen output.

The following best management practices will be implemented, as applicable (IDA 2020):

- LEDs and compact fluorescents (CFLs) can help reduce energy use and protect the environment, but only warm-colored bulbs should be used.
- Dimmers, motion sensors and timers can help to reduce average illumination levels and save even more energy.
- Outdoor lighting fixtures that shield the light source to minimize glare and light trespass help prevent light pollution.
- Switching to LED lighting allows for reduced illuminance without compromising visibility.
- Turn off unnecessary indoor lighting – particularly in empty office buildings at night.
- Avoid blue lights at night. Blue-rich white light sources are also known to increase glare and compromise human vision, especially in the aging eye. These lights create potential road safety problems for motorists and pedestrians alike. In natural settings, blue light at night has been shown to adversely affect wildlife behavior and reproduction. IDA recommends that only warm light sources be used for outdoor lighting. This includes Low-pressure Sodium (LPS), High-pressure Sodium (HPS) and low-color-temperature LEDs.

The cultivation area will be enclosed with a sturdy fence 6- to 8-feet in height. The posts will be set in the ground and should be made of steel tubing (at least 3-inch diameter) or wood posts (at least 4-inch diameter). Terminal posts should be set in concrete or otherwise anchored (such as with cables or diagonal bracing) to prevent leaning under the tension of stretched fence panels. Post interval should not exceed 10-feet. A top horizontal rail should be installed between each post interval. Fence panels should consist of metal mesh “cyclone” fabric or welded wire mesh. In some cases, wood panels can be used. Barbed wire or razor wire is prohibited from use on the top rails. If required by the County, opaque screening will be added: this may consist of plastic slats for cyclone fencing or plastic woven fabric (e.g., wind screens).

The fenced cultivation area will have at least one (1) locking swing gate. The gate will typically consist of metal tube frame and the paneling will be the same as described above. The gate should be large enough for a service vehicle to ingress/egress. Property entrance gates should be at least 14-feet wide to allow emergency vehicle access. The gates will be secured with a metal padlock. Keys or lock combinations should be controlled by the Security Officer. It is recommended that vegetation screening be planted to obscure views of the cultivation facilities from public roads if deemed necessary.

Storm Water Management - According to the Zoning Ordinance, the Property Management Plan must have a section on management of storm water runoff:

(a) Intent: To protect the water quality of the surface water and the stormwater management systems managed by Lake County and to evaluate the impact on downstream property owners.

(b) All permittees shall manage stormwater runoff to protect downstream receiving water bodies from water quality degradation.

(c) All cultivation activities shall comply with the California State Water Board, the Central Valley Regional Water Quality Control Board, and the North Coast Region Water Quality Control Board orders, regulations, and procedures as appropriate.

(d) Outdoor cultivation, including any topsoil, pest management, or fertilizer used for the cultivation cannabis shall not be located within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. For purposes of determining the edge of Clear Lake, the setback shall be measured from the full lake level of 7.79 feet on the Rumsey Gauge.

(e) The illicit discharge of irrigation or stormwater from the premises, as defined in Title 40 of the Code of Federal Regulations, Section 122.26, which could result in degradation of water quality of any water body is prohibited.

(f) All permittees shall prepare a Stormwater Management Plan based on the requirements of the California Regional Water Quality Control Board Central Valley Region or the California Regional Water Quality Control Board North Coast Region to be approved by the Lake County Water Resources Department. In addition to those requirements, the plan shall include:

a. Identification of any Lake County maintained drainage or conveyance system that the stormwater is discharged into and documentation that the stormwater discharge is in compliance with the design parameters of those structures.

b. Identification of any public roads and bridges that are downstream of the discharge point and documentation that the stormwater discharge is in compliance with the design parameters of any such bridges.

c. Documentation that the discharge of stormwater from the site will not increase the volume of water that historically has flow onto adjacent properties.

d. Documentation that the discharge of stormwater will not increase flood elevations downstream of the discharge point.

e. Documentation that the discharge of stormwater will not degrade water quality of any water body.

f. Documentation of compliance with the requirements of Chapter 29, Stormwater Management Ordinance of the Lake County Ordinance Code.

g. Describe the proposed grading of the property.

h. Describe the stormwater management system.

i. Describe the best management practices (BMPs) that will be used during construction and those that will be used post-construction. Post-construction BMPs shall be maintained through the life of the permit.

j. Describe what parameters will be monitored and the methodology of the monitoring program.

The manager of the Global Interactive Solutions LLC cannabis facilities is to be designated as the storm water manager and shall have primary responsibility and significant authority for the implementation, maintenance, inspection, and amendments to the Storm water Management Plan. Duties of the storm water manager include but are not limited to:

- Ensuring full compliance with the Plan and the Chapter 29, Storm water Management Ordinance of the Lake County Ordinance Code;
- Implementing all elements of the Plan, including but not limited to implementation of prompt and effective erosion and sediment control measures, and implementing all non-stormwater management, and materials and waste management activities (such as monitoring discharges (dewatering, diversion devices); general site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than storm water are discharged in quantities which will have an adverse effect on receiving waters or storm drain systems; etc.);
- Inspections (pre-storm, during storm, and post-storm) or designating qualified personnel to do so;
- Routine inspections as specified in the cultivation operation's specifications or described in the Plan;
- Preparing any annual compliance certification;
- Ensuring elimination of all unauthorized discharges;
- The storm water manager shall be assigned authority to mobilize crews to make immediate repairs to the control measures; and
- Coordinate with the landowner or cultivator to assure all the necessary corrections/repairs are made immediately, and that the project complies with the Plan and relevant permits.

The Lake County Zoning Ordinance requires that all cultivation operations be located at least 100 feet away from waterbodies (i.e. spring, top of bank of any creek or seasonal stream [interpreted to be Class II], edge of lake, wetland or vernal pool). The Water Board requires various setbacks depending upon the class of the watercourse. Project setback distances comply with these requirements. Vegetated buffers should be maintained or created so that stormwater runoff can be detained and filtered by vegetation. This may include vegetated swales or bioswales.

The property is enrolled with the State Water Resources Control Board (SWRCB) for Tier 1, Low Risk coverage under Order No. WQ 2019-001-DWQ (Cannabis Cultivation General Order). The Cannabis Cultivation General Order implements Cannabis Policy requirements with the purpose of ensuring that the diversion of water and discharge of waste associated with cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, or springs. The site was assigned WDID No. 5S17CC429428. The Cannabis Cultivation General Order requires the preparation of a Site Management Plan (SMP), a Nitrogen Management Plan (NMP), and the submittal of annual technical and monitoring reports demonstrating compliance. The purpose of the SMP is to identify Best Practicable Treatment or Control (BPTC) measures that the site intends to follow for erosion control

purposes and to prevent stormwater pollution. The purpose of the NMP is to identify how nitrogen is stored, used, and applied to crops in a way that is protective to water quality. The SMP and NMP are required prior to commencing cultivation activities.

The cultivation operations will not alter the hydrology of the parcels. Establishment of these cultivation operations requires no grading.

There are no onsite flooding hazards.

BMPs should be deployed in a sequence to follow the progress of site preparation / tilling / cultivation. As the locations of soil disturbance change, erosion and sedimentation controls should be adjusted accordingly to control stormwater runoff at the downgrade perimeter and drain inlets. BMPs should be mobilized as follows:

- Year-round:
  - The site manager or stormwater manager should monitor weather using National Weather Service reports (https://www. weather. gov/) to track conditions and alert crews to the onset of rainfall events.
  - Disturbed soil areas should be stabilized with temporary erosion control or with permanent erosion control.
- During the rainy season:
  - Disturbed areas should be stabilized with temporary or permanent erosion control before rain events. Disturbed areas that are substantially complete should be stabilized with permanent erosion control (soil stabilization) and vegetation (if within seeding window for seed establishment).
  - Prior to forecast storm events, temporary erosion control BMPs should be deployed and inspected.
  - During the non-rainy season:
  - The project schedule should sequence earth-moving activities with the installation of both erosion control and sediment control measures. The schedule should be arranged as much as practicable to leave existing vegetation undisturbed until immediately prior to any earth-moving activities.
  - Sufficient quantities of temporary sediment control materials should be maintained on-site throughout the duration of the project, to allow implementation of temporary sediment controls in the event of predicted rain, and for rapid response to failures or emergencies. This includes implementation requirements for active areas and non-active areas before the

onset of rain. The following table summarizes the general schedule of implementation of site BMPs.

Phase, Activity, or Milestone	Date
File any needed permit registration documents	immediately
Implementation of rainy season BMPs	October 1st of every year
Rainy season beings	October 15
Implementation of dry season BMPs	April 1st of every year
Dry season begins	April 15
Repair / replacement of erosion control devices	see BMP section of this Plan
Site inspections	see Inspection section of this Plan
Submit Annual Report	annually, as required
Expansion / modification of cultivation operational area	modify this Plan within 30 days

Construction or cultivation activities that have the potential to contribute sediment to stormwater discharges include:

- Tilling, grading and excavation operations;
- Soil import/export operations;
- Structure installation process; and
- Paving operations.

The following table provides a list of materials that may be used and activities that may be performed that will have the potential to contribute pollutants, other than sediment, to stormwater runoff.

Activity/Material Type	Potential Pollutant
Vehicle lubricants and fuels, including oil, grease, diesel and gasoline, and coolants	Petroleum hydrocarbons, volatile organic compounds (VOCs)
Asphaltic emulsions associated with asphalt-concrete paving operations	Petroleum hydrocarbons, VOCs
Portland cement, masonry, and concrete products, muriatic acid, etc.	Materials with a low or high pH, materials with high alkalinity, metals
Road base and subbase material	Materials with high alkalinity or high pH, metals
Gardening materials and wastes	Pesticides, nutrient pollution (nitrates, phosphates, biological oxygen demand, etc.), metals
Treated lumber (materials and waste)	Arsenic, copper, other metals, creosote
Material packaging and site personnel	General litter (municipal solid waste, universal waste)
Portable toilets	Septic waste (fecal coliform, biological oxygen demand), sanitizers

The following are existing (pre-construction) control measures within the project site:

- vegetated drainage swales
- armoring of driveways and roads with gravel, roadbase, or asphalt
- side ditches and pipe culverts and bridges under roads

- rolling dips or water bars on steep road sections, if applicable
- preservation of existing vegetation

The following resources can be consulted for BMP selection and implementation:

- California Stormwater Quality Association. 2011. California Stormwater Best Management Practice Handbook – Construction. California Stormwater Quality Association, Menlo Park, California 886 pp.
- California Stormwater Quality Association. 2014. Stormwater Best Management Practice Handbook Portal: Industrial and Commercial. California Stormwater Quality Association, Menlo Park, California. 474 pp.
- California Department of Transportation's Construction Site BMPs Handbook, available electronically at https://dot. ca. gov/programs/construction/storm-water-and-water-pollution-control/manuals-and-handbooks
- California Department of Transportation's Construction Site BMP Fact Sheets, available electronically at https://dot. ca. gov/programs/construction/storm-water-and-water-pollution-control/construction-site-bmp-fact-sheets
- USEPA NPDES Stormwater Program's National Menu of BMPs website at https://www. epa. gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu
- The following subsections discuss BMPs that have been selected for implementation in this project. Implementation and location of BMPs are shown in the Maps section. The Appendix includes a list of the fact sheets of the BMPs selected for this project.

Erosion Control

Erosion control, also referred to as soil stabilization, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. Erosion control BMPs protect the soil surface by covering and/or binding soil particles. This project will implement the following practices for effective temporary and final erosion control during construction:

- Preserve existing vegetation where required and when feasible;
- Apply temporary erosion control to exposed areas. Reapply as necessary to maintain effectiveness;
- Implement temporary erosion control measures at regular intervals throughout the defined rainy season to achieve and maintain stability. Implement erosion control prior to the defined rainy season;
- Control erosion in concentrated flow paths by applying erosion control devices.
- Divert run-on and stormwater generated from within the facility away from all erodible materials; and
- If sediment traps or basins are installed, ensure that they are working properly and emptied of accumulated sediment and litter.

Specific erosion control BMPs that can be implemented are listed here and the Construction and Industrial BMP fact sheets are included in the Appendix:

- EC-2: Preservation of Existing Vegetation
- EC-3: Hydraulic Mulch

- EC-4: Hydroseeding
- EC-5: Soil Binders
- EC-6: Straw Mulch
- EC-7: Geotextiles & Mats
- EC-8: Wood Mulching
- EC-9: Earth Dikes & Drainage Swales
- SC-33: Outdoor Storage of Raw Materials
- SC-40: Contaminated or Erodible Surfaces
- TC-30: Vegetated Swale
- TC-31: Vegetated Buffer Strip

Sediment Control

Sediment controls are structural measures that are intended to complement and enhance the selected erosion control measures and reduce sediment discharges from active construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. This project will incorporate sediment control measures as needed.

Specific sediment control BMPs that can be implemented are listed here and the Construction BMP Fact Sheets are included in the Appendix:

- SE-1: Silt Fence
- SE-2: Sediment Basin
- SE-3: Sediment Trap
- SE-5: Fiber Rolls
- SE-6: Gravel Bag Berm
- SE-8: Sand Bag Barrier
- SE-9: Straw Bale Barrier
- TC-32: Bioretention

Note that the Cannabis General Order states: "*Site development and/or road building and maintenance activities associated with cannabis cultivation are subject to this General Order*."

The Property contains the following roads (see exhibits):

- Property road network, a system of 1 and 2-lane private roads, dirt or gravel

The driveways and access roads are typically armored with gravel or roadbase and follow ridgelines and gentle contours. Driveways and roads will be maintained so that significant erosion does not occur. This may include wetting dusty roads, armoring with gravel, roadbase, or asphalt, patching holes, and maintaining drainage features such as rolling dips, water bars, culverts, and side ditches.

The following guidebook should be referenced for road maintenance:

- Handbook for Forest, Ranch, & Rural Roads: A Guide for Planning, Designing, Constructing, Reconstructing, Upgrading, Maintaining, and Closing Wildland Roads. [available at: http://www.pacificwatershed.com/sites/default/files/RoadsEnglishBOOKapril2015b.pdf]

Sufficient quantities of temporary sediment control materials should be maintained on-site throughout the rainy season, to allow implementation of temporary erosion and sediment controls in the event of predicted rain, and for rapid response to failures or emergencies.

A visual monitoring (inspection) program should be implemented, and an inspection would ideally be performed prior to each qualifying rain event and contain the following focal areas:

- All stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources
- All BMPs to identify whether they have been properly implemented
- Any stormwater storage and containment areas to detect leaks and ensure maintenance of adequate freeboard

Note that stormwater sampling procedures are discussed in the Water Use subsection.

A copy of the Plan should be made available to the site personnel or contractor representatives engaged in the maintenance or installation of BMPs. Site inspectors observing pollution caused by ineffective construction or cultivation practices should inform site personnel of appropriate and proper erosion and sedimentation control practices, along with special follow-up inspection for further training. The Stormwater Manager or general contractor should organize orientation sessions with all installation, inspection, and maintenance personnel upon initiation of a specific project activity or change in key personnel. These sessions should be setup to ensure that all contractor and sub-contractor operations are implemented in accordance with this Plan. Training sessions should be included as part of regular safety meetings to familiarize works with the requirements of the Plan.

Vegetative Waste Management - According to the Zoning Ordinance, the Property Management Plan must have a section on management of vegetative waste:

The cannabis vegetative material waste management section shall include:

(1) Provide an estimate of the type and amount of cannabis vegetative waste that will be generated on an annual basis.

(2) Describe how the permittee will minimize cannabis vegetative waste generation.

(3) Describe how solid waste will be disposed.

(4) Describe the methodology on how the amount of cannabis vegetative waste that is generated on the site, the amount that is recycled, and the amount and where cannabis vegetative waste is disposed of is measured.

Sources of cannabis vegetative material waste on this cultivation operation may consist of leaves, stems, and root balls that remain after flower harvest, trimming and grooming during cultivation, and whole

dead plants. Cannabis vegetative waste will be minimized by processing the waste by chipping or grinding, drying, and composting. This will reduce the volume and water content of the waste.

Cannabis green waste will be weighed daily, weekly, or as needed, and data shall be recorded in Metrc (track and trace) for reporting requirements. Cannabis waste should be shredded and mixed with at least an equal quantity of compostable materials such as food waste, yard waste, or growing medium (to render the cannabis unconsumable). Cannabis waste must be kept inside the locked fence or other locked compound at all times.

If cannabis waste is to be disposed offsite, it should first be shredded and blended with an equal part of non-consumable material, such as cardboard. Cannabis waste must be kept inside the locked garden area or other locked compound until ready for transport. It would then be transported as solid waste to the proper disposal facility.

Non-cannabis green waste will be shredded in a wood-chipper, as necessary. Vegetative waste will be mixed with soil and inoculated with humus and composted. If vegetative waste is composted, compost heaps should be at least one cubic yard in size to generate and sustain necessary heat for composting (to sustain aerobic digestion). Compost heaps should be segregated into batches as they age, with humus being the resulting product after several weeks of composting. Compost heaps should be turned often to encourage aeration and aerobic digestion and supplemental water added to keep the heaps moist, but not wet (to discourage anaerobic digestion).

Sources of non-Cannabis green waste on this cultivation operation consist of the following:

- Spent soil, mulch, humus, etc.
- Landscape maintenance: lawn and weed trimmings, fallen leaves and twigs, treated lumber, wood fencing, etc.

The volume of non-Cannabis green waste that is generated on the property is estimated to be: 1 cubic yard per month per acre, or 12 cubic yards per acre per year

There will be a dedicated area in each cultivation compound where Cannabis waste is handled. This area will be surveilled by video camera, and Cannabis waste will be weighed at regular intervals as part of the Track and Trace Program. Cannabis waste will be handled with appropriate PPE, including long-sleeved shirts, pants, boots, dust mask, eye protection, and gloves. Cannabis waste will be composted onsite. California Department of Food and Agriculture's CalCannabis Cultivation Licensing Program dictates specific Cannabis waste management practices, that will be adopted, as applicable, by this cultivation operation. The following draft regulations from the CalCannabis Cultivation Licensing Program are quoted as follows, and incorporated by reference:

§ 8305. Cannabis Waste Management

(a) *For the purposes of this Chapter, "cannabis waste" is waste that is not hazardous waste as defined in Section 40141 of Public Resources Code, and is solid waste, as defined in Section 40191 of Public Resources Code, that contains cannabis and that has been made unusable*

and unrecognizable in the manner prescribed in subsection (e). A licensee may not sell cannabis waste.

(b) *A licensee shall manage all waste that is hazardous waste, as defined in Section 40141 of Public Resources Code, in compliance with all applicable hazardous-waste statutes and regulations.*

(c) *A licensee shall dispose of cannabis waste as identified in the licensee's Cultivation Plan approved by the Department. A licensee shall not dispose of cannabis waste in an unsecured waste receptacle, whether in the control of the licensee or not.*

(d) *Cannabis that a licensee intends to render into cannabis waste shall be held in the designated holding area for a minimum of 72 hours. A licensee shall affix to each batch one or more documents with batch information and weight. At no time during the 72-hour hold period may the cannabis be handled, moved, or rendered into cannabis waste. The cannabis the licensee intends to render into cannabis waste is subject to inspection by the Department.*

(e) *A licensee shall make cannabis into cannabis waste by rendering the cannabis unusable and unrecognizable. The licensee shall render the cannabis into cannabis waste before removing the cannabis waste from the licensed premises. A licensee shall render the cannabis into cannabis waste by grinding and incorporating the cannabis with other ground material so that the resulting mixture is at least 50 percent noncannabis material by volume. A licensee shall render cannabis into cannabis waste and track that waste by batch.*

(f) *Cannabis that a licensee wishes to deposit at a compostable materials handling facility or at an in-vessel digestion facility may be rendered cannabis waste by incorporating any nonhazardous compostable material, as defined in Title 14 of the California Code of Regulations at Section 17852 (a)(11), that a compostable materials handling facility or in-vessel digestion facility may lawfully accept.*

(g) *Unless a licensee will compost onsite, after a licensee renders the cannabis into cannabis waste, a licensee shall do one of the following with the cannabis waste:*

(1) *Dispose of the cannabis waste at a manned and fully permitted solid waste landfill;*

(2) *Deposit the cannabis waste at a manned solid waste operation or a manned fully permitted compostable materials handling facility; or*

(3) *Deposit the cannabis waste at a manned solid waste operation or a manned fully permitted in-vessel digestion facility.*

(4) *In addition to all other tracking requirements set forth in Sections 8404 and 8405 of this Chapter, a licensee shall use the track-and-trace system and onsite documents to ensure the cannabis waste materials are identified, weighed, and tracked while on the licensed premises and when disposed of or deposited in accordance with subsection (g).*

(5) *A licensee shall enter the date and time that the cannabis was rendered cannabis waste and the weight of the resulting cannabis waste into the track-and-trace database.*

(6) A licensee shall maintain accurate and comprehensive records regarding cannabis waste material that account for, reconcile, and evidence all activity related to the generation and disposal or disposition of cannabis waste. A licensee shall obtain a record from the solid waste facility evidencing the acceptance of the cannabis waste material at the facility. The record shall contain the name and address of the facility, the date, and the volume or weight of the cannabis waste accepted. These documents are records subject to inspection by the Department and shall be kept in compliance with Section 8400 of this Chapter.

(7) A licensee shall enter the date and time of the disposal or deposit of the cannabis waste at a solid waste facility, compostable materials handling facility, or an in-vessel digestion facility into the track-and-trace system.

Growing Medium Management - According to the Zoning Ordinance, the Property Management Plan must have a section on management of soil and growing medium:

The growing medium management section shall include:

(1) Provide an estimate of the type and amount of new growing medium that will be used and amount of growing medium will be disposed of on an annual basis.

(2) Describe how the permittee will minimize growing medium waste generation.

(3) Describe any non-organic content in the growing medium used (such as vermiculite, silica gel, or other non-organic additives.

(4) Describe how growing medium waste will be disposed.

(5) Describe the methodology on how the amount of growing medium waste that is generated on the site, the amount that is recycled, and the amount and where growing medium waste is disposed of, is measured.

The CDFA CalCannabis Program describes soils handling as follows:

"Soils used in cannabis cultivation may be treated, reused, stockpiled, and/or discarded. For reuse, soils are piled and covered with tarps for an extended period (months to a year) to allow heat from sunlight to destroy any potential soil pathogens or pests. Another practice for soil reuse is to run a compost tea through the soils between harvests to restore soil nutrients. Although it is not a direct component of the Proposed Program, another aspect of soil reuse can include laboratory testing of soil samples to identify nutrient deficiencies or other issues. Identifying such deficiencies allows the soil to be properly treated or amended with fertilizers or other soil amendments, thereby correcting these deficiencies, prior to being reused with a new cannabis crop." (CDFA 2017)

"Outdoor cultivation typically involves planting rooted cannabis cuttings or seeds in the early spring and harvesting the plants in the fall (mid-September through November), after the plants flower. Soils used in the pots or grow bags are typically amended to ensure that nutrients are available to the plants throughout the growing season. Compost teas, which are created by steeping compost material in water, may also be used to fulfill nutrient needs (Ingham 2014). Water and nutrient supplement needs for outdoor cultivation may vary depending on the type of growing container selected. For example,

raised beds typically require more watering and additional liquid nutrient application compared to other growing container options." (CDFA 2017)

For the purposes of this Plan, growing medium will consist of soil and non-organic amendments (vermiculite, perlite, silica gel, etc.). It does not include fertilizers or organic amendments such as mulch, humus, worm castings. etc.

A growing medium or grow medium is the matrix that the Cannabis plant is cultivated in. The three main types of grow mediums for Cannabis plants are soil mixes, soil-less mixes, and hydroponics. The types differ in how nutrients, oxygen, and water are delivered to the plant, and how the roots are anchored.

Soil mixes combine soil with amendments, such as peat, humus (compost), worm castings, and perlite. Soil mixes naturally contain some nutrients, which means it will provide the nutrients Cannabis plants need for at least the first few weeks of life; supplemental fertilizer may be needed. Soil-less growing medium is composed of inert (non-living soil) ingredients like coco coir, perlite, peat moss, rockwool, or vermiculite. Because there are no nutrients in these inert substances, all nutrients must be delivered by irrigation. Hydroponics growing mediums use containers to suspend the roots over a water bath. Nutrients are introduced into the bath.

This cannabis operation will grow in above-ground containers or beds in the ground. The growing medium for this cultivation operation is estimated, by canopy area, to import approximately 500 cubic yards of soil/medium that would be amended each year for combined mature plant and nursery cannabis cultivation purposes.

Growing media waste can be reduced or eliminated by composting and blending old soils with new soils and amendments. No significant amounts of growing media are expected to be disposed. Instead, media is reduced in volume yearly because it is absorbed by the plants and metabolized by soil organisms (bacteria, fungi, invertebrates). Soil staging areas and compost piles will be located near each cultivation site as shown on the project Site Plans. Cannabis green waste must be stored inside a secure area. BMPs will be employed to ensure that these piles do not contaminate stormwater or cause nuisance dust or odor issues.

Water Use Management - According to the Zoning Ordinance, the Property Management Plan must have a section on the use and management of water:

(a) Intent: To conserve the County's water resources by minimizing the use of water.
(b) All permitted activities shall have a legal water source on the premises, and have all local, state, and federal permits required to utilize the water source. If the permitted activity utilizes a shared source of water from another site, such source shall be a legal source, have all local, state, and federal permit required to utilize the water source, and have a written agreement between the owner of the site where the source is located and the permitted activity agreeing to the use of the water source and all terms and conditions

of that use.

(c) Permittee shall not engage in unlawful or unpermitted drawing of surface water.

(d) The use of water provided by a public water supply, unlawful water diversions, transported by a water hauler, bottled water, a water-vending machine, or a retail water facility is prohibited.

(e) Where a well is used, the well must be located on the premises or an adjacent parcel. The production well shall have a meter to measure the amount of water pumped. The production wells shall have continuous water level monitors. The methodology of the monitoring program shall be described. A monitoring well of equal depth within the cone of influence of the production well may be substituted for the water level monitoring of the production well. The monitoring wells shall be constructed and monitoring begun at least three months prior to the use of the supply well. An applicant shall maintain a record of all data collected and shall provide a report of the data collected to the County annually.

(f) Water may be supplied by a licensed retail water supplier, as defined in Section 13575 of the Water Code, on an emergency basis. The application shall notify the Department within 7 days of the emergency and provide the following information:

(g) A description of the emergency.

(h) Identification of the retail water supplier including license number.

(i) The volume of water supplied.

(j) Actions taken to prevent the emergency in the future.

(k) All permittees shall prepare a Water Use Management Plan to be approved by the Lake County Water Resources Department. Said plan shall:

(l) Identify the source of water, including location, capacity, and documentation that it is a legal source.

(m) Described the proposed irrigation system and methodology.

(n) Describe the amount of water projected to be used on a monthly basis for irrigation and separately for all other uses of water and the amount of water to be withdrawn from each source of water on a monthly basis.

Global Interactive Solutions LLC, in accordance with the Lake County Urgency Ordinance 3106 has prepared a *Ordinance 3106 HYDROLOGY REPORT AND DROUGHT MANAGEMENT PLAN*. The Hydrology Report includes a project water analysis including the approximate amount of water available from project's water source; approximate recharge rate for project's identified water sources, cumulative impact analysis of water use to surrounding areas, and conclusions and recommendations.

Phase/Stage 1: The project proposes to use the existing groundwater well to fill 32,000 gallons of water storage tanks. The maximum daily cannabis irrigation demand would occur August through September at about 14,700 gallons per day, therefore, the storage represents about 2.2 days of water storage during peak demand. Water from the storage tanks will be piped to drip irrigation systems to the cultivation areas. Drip lines will be sized to irrigate the cultivation areas at a slow rate to maximize absorption and prevent runoff. Drip irrigation systems, when implemented properly, conserve water compared to other irrigation techniques.

Phase/Stage 2: The project proposes to use the existing groundwater well to fill 32,000 gallons of water storage tanks and three, 12,000 gallon above ground pools, totaling 68,000 gallons of water storage for cannabis irrigation. The maximum daily cannabis irrigation demand would occur August through September at about 12,500 gallons per day, therefore, the storage represents about 5.4 days

of water storage during peak demand. Water from the storage tanks and ponds will be piped to drip irrigation systems to the cultivation areas. Drip lines will be sized to irrigate the cultivation areas at a slow rate to maximize absorption and prevent runoff. Drip irrigation systems, when implemented properly, conserve water compared to other irrigation techniques.

The Drought Management Plan will describe how the applicant plans to reduce water use during a declared drought emergency, including standard operations during a non-drought emergency.

The Global Interactive Solutions LLC Revised HYDROLOGY REPORT AND DROUGHT MANAGEMENT PLAN – August 2024 prepared by Northpoint Consulting Group, Inc. is incorporated in total herein by reference.

The project property has an existing groundwater well that has been use to irrigate vineyards for over 20 years. The total well yield reported on the WCR is 300+gpm, however, the pump installed limits the rate to a maximum of 217 gpm or 350 AFY.

The existing demand, including vineyards and the residence, is approximately 6.8 AFY. The proposed maximum project water demand, including existing demand and the employee use, is 13.7 AFY (Stage 2 – full buildout). The maximum daily cannabis irrigation demand is estimated at 14,700 gpd (Stage 1), would occur June through September. The overall demand is 3.9% of the project well yield.

The project proposes 2 to 5 days of cannabis irrigation water storage during the highest demand period June through September, during Stages 1 and 2, respectively.

According to the geologic log from the project's WCR, the water bearing unit of the well is comprised primarily of fractured volcanic/basalt consistent with the Cache Formation water bearing unit. Wells drilled in this formation have yields up to 450 gpm.

The long-term average recharge, based on the most conservative estimates presented herein (based on 10% of precipitation per USGS Fact Sheet 2007-3007), is approximately 31.7 AFY during a dry year and 135 AFY during an average year over a recharge area of 584.2 acres. Both of which are sufficient to meet the project's demand.

The average recharge, based on 10% of the precipitation, over the last 23 years was 135 AFY, which is sufficient to meet the project's demand.

The estimated groundwater storage beneath the project parcel, over an area of 64.2 acres, is 23.4 AF. The project's groundwater supply, both recharge and storage, is sufficient to meet the project's demand.

The estimated storage capacity of the alluvial formation of BVGB is 4,000 AF, with a usable storage capacity of 1,400 AF. However, the deeper Cache Formation, from which the project draws water, has between 50,000 and 75,000 acre-feet of storage. Based on rainfall data, a drought occurs once every 7 to 8 years and can last up to three years, the average recharge over a 7-year period, assuming three drought years and four average years, the long-term average recharge in the BVGB would be 1,240 AFY.

The total potential agricultural demand within the BVGB is the existing demand of approximately 555 acre-feet, plus net proposed, 140.6 acre-feet, is approximately 695.6 acre-feet per year, with residential demand, the total groundwater demand is approximately 735.6 acre-feet per year. The dominant demand in the BVGB is associated with residential development and orchards in the lower part of BVGB and vineyards in the upper part of the BVGB. The long-term average recharge, including drought years, is sufficient to meet this demand. In addition, the projected overall demand (735.6 acre-feet per year) represents only 53% of the BVGB alluvial storage and less than 2% of the deeper Cache Formation storage.

The project area and surrounding area has had a historical use of vineyard and hops irrigation demand. The wells in the vicinity of the project area are primarily used for irrigation and have an average depth of 243 ft and average yield of 215 gpm.

Drawdown was estimated using the Theis equation. The radius of influence is estimated to be less than 15 feet, which is the distance where the modeled cone of depression from groundwater extraction under these conditions is negligible. None of the nearby wells are within the modeled cone of depression. In addition, since the project proposes approximately 2 to 5 days of water storage during peak cannabis irrigation, the project well would have approximately 2 to 5 days, or more, to recover, depending on the pumping and irrigation schedule.

The project wells extract water from the confined Cache Formation water bearing unit, at elevations well below Burns Valley Creek and are not likely hydrologically connected to the creek. Since the recorded and tested yields of the project's well are much greater than the project's demand; the project proposes 2 to 5 days of water storage during peak cannabis irrigation; the long-term average annual recharge exceeds the project's annual demand; the aquifer storage below the project area and within the overall aquifer is sufficient to meet the project's demand and cumulative future basin demand, the project is required to comply with the County's groundwater monitoring and reporting requirements, the potential drawdown due to the project is unlikely to result in appreciable drawdown of off-site wells, and the project wells are not likely hydrologically connected to Burns Valley Creek; the project would have sufficient water and would not have a significant impact on the surrounding area.

Water conservation practices will be implemented, including some combination of the following strategies and actions:

Standard Operational Measures:

- No surface water diversion;
- Selection of plant varieties that are suitable for the climate of the region;
- The use of drip irrigation (instead of spray irrigation);
- Cover drip lines with straw mulch or similar to reduce evaporation;
- Water application rates modified from data from soil moisture meters and weather monitoring;
- Shutoff valves on hoses and water pipes;
- Daily visual inspections of irrigation systems;
- Immediate repair of leaking or malfunctioning equipment; and

- Water use metering and budgeting – a water budget will be created every year and water use efficiency from the previous year will be analyzed.

In addition to water use metering, water level monitoring is also required by the Lake County Zoning Ordinance. Ordinance Article 27 Section 27.11(at) 3.v.e. requires the wells to have a meter to measure the amount of water pumped as well as a water level monitor.

In addition to the above measures, well water level monitoring and reporting shall be performed as follows:

Seasonal Static Water Level Monitoring: The purpose of seasonal monitoring of the water level in the well(s) is to provide information regarding long-term groundwater elevation trends. It is recommended that the water level in the wells be measured and recorded once in the Spring (March/April), before cultivation activities begin, and once in the fall (October) after cultivation is complete. (note: The California Statewide Groundwater Monitoring Program (CASGEM) monitors semi-annually around April 15 and October 15). Records shall be kept, and elevations reported to the County as part of the project's annual reporting requirements. Reporting shall include a hydrograph plot of all seasonal water level measurements to-date, beginning with the initial measurement. Seasonal water level trends will aid in the evaluation of the recharge rate of the well. For example, if the water level measured during the Spring remains relatively constant from year to year, then the water source is recharging each year.

Water Level Monitoring During Extraction: The purpose of monitoring the water level in the project well(s) during extraction is to evaluate the performance of the well(s) to determine the effect of the pumping rate on the water source during each cultivation season. This information shall be used to determine the capacity and yield of the well to aid the cultivators in determining pump rates and the need for water storage. The frequency of water level monitoring will depend on the source, the source's capacity, and the pumping rate. It is recommended that initially the water level be monitored twice per week or more, and that the frequency be adjusted as needed depending on the impact the pumping rate has on well water levels. Records shall be kept, and elevations reported to the County as part of the project's annual reporting requirements. Reporting shall include a hydrograph plot of the water level measurements during the cultivation season and compared to prior seasons. Measuring a water level in a well can be difficult and the level of difficulty will depend on site-specific conditions. As part of the well monitoring program, the well owner/operator shall work with a well expert to determine the appropriate methodology and equipment to measure the water level in their well(s) as well as who will conduct the monitoring and recording of the well level data. The methodology of the well monitoring program shall be described and provided in the project's annual report to the County. The groundwater level monitoring protocol is recommended to provide a framework for the early detection and response if there is groundwater depletion or inadequate recharge. Thus, in addition to monitoring and reporting, an analysis of the water level monitoring data shall be provided and included in the project's annual report, demonstrating whether use of the well is causing significant drawdown and/or impacts to the surrounding area and what measures were taken to reduce impacts. If there are impacts, a revised

Water Management Plan, including a revised water budget, shall be prepared and submitted to the County, for review and approval, demonstrating how the project will operate and mitigate the impacts in the future, including changes in operation, if necessary.

Drought Emergency Water Conservation Measures:

Drought can reduce both water availability and water quality necessary for productive farming, ranches, and grazing lands, resulting in significant negative direct and indirect economic impacts to the farm.

To plan and prepare for drought conditions, the project will follow recommendations for monitoring, planning, and preparedness provided by the National Integrated Drought Information System - https://www.drought.gov/sectors/agriculture.

In addition to the above ongoing conservation measures, water metering, and reporting, during times of drought emergencies or water scarcity, the project will implement the following additional measures, as needed or appropriate to the site, to reduce water use and ensure both success and decreased impacts to surrounding areas:

- Install additional water storage and/or implement a rainwater catchment system;
- Install moisture meters to monitor how much water is in the soil at the root level and reduce watering to only what is needed to avoid excess;
- Cover the soil and drip-lines with removable plastic covers or similar to reduce evaporation;
- Irrigate only in the early morning hours or before sunset;
- Cover plants with shaded meshes during peak summer heat to reduce plant water needs; and/or
- Use a growing medium that retains water in a way to conserve water and aid plant growth. Organic soil ingredients like peat moss, coco coir, compost and other substances like perlite and vermiculite retain water and provide a good environment for cannabis to grow.

CASQA Construction BMP Fact Sheet NS-1: Water Conservation Practices should be implemented to prevent discharges from water supply equipment. Water application rates should be minimized as necessary to prevent runoff and ponding and water equipment leaks should be repaired immediately. Implement Construction BMP Fact Sheet NS-7: Potable Water / Irrigation to manage the potential pollutants generate during discharges from irrigation lines and unplanned discharges from water sources.

Annual Monitoring and Reporting - According to the Zoning Ordinance, the Property Management Plan must have a section on project monitoring and reporting:

Compliance Monitoring

i. A compliance monitoring inspection of the cultivation site shall be conducted annually during growing season.

ii. The permittee shall pay a compliance monitoring fee established by resolution of the Board of Supervisors prior to the inspection.

iii. If there are no violations of the permit or state license during the first five years, the inspection frequency may be reduced by the Director to not less than once every five years.

7. Annual Reports

i. Performance Review

(a) All cannabis permittees shall submit a "Performance Review Report" on an annual basis from their initial date of operation for review and approval by the Planning Commission. The Planning Commission may delegate review of the annual Performance Review Report to the Director at the time of the initial hearing or at any time thereafter. This annual "Performance Review Report" is intended to identify the effectiveness of the approved development permit, use permit, Operations Manual, Operating Standards, and conditions of approval, as well as the identification and implementation of additional procedures as deemed necessary. In the event the Planning Commission identifies problems with specific Performance Review Report that could potentially lead to revocation of the associated development or use permit, the Planning Commission may require the submittal of more frequent "Performance Review Reports. "

(b) Pursuant to sub-section 6. i. above, the premises shall be inspected by the Department on an annual basis, or less frequently if approved by the Director. A copy of the results from this inspection shall be given to the permittee for inclusion in their "Performance Review Report" to the Department.

(c) Compliance monitoring fees pursuant to the County's adopted master fee schedule shall be paid by permittee and accompany the "Performance Review Report" for costs associated with the inspection and the review of the report by County staff.

(d) Non-compliance by permittee in allowing the inspection by the Department, or refusal to pay the required fees, or noncompliance in submitting the annual "Performance Review Report" for review by the Planning Commission shall be deemed grounds for a revocation of the development permit or use permit and subject the holder of the permit(s) to the penalties outlined in this Code.

The Cannabis General Order has annual monitoring and reporting requirements as follows:

A. Annual Report

Annual Reports shall be submitted to the Regional Water Board by March 1 following the year being monitored. For example, the monitoring report for activities conducted in the year 2018 is due on March 1, 2019. The Annual Report shall include the following:

1. *Facility Status, Site Maintenance Status, and Stormwater Runoff Monitoring.*
2. *The name and contact information for the person responsible for operation, maintenance, and monitoring.*

A letter transmitting the annual report shall accompany each report. The letter shall summarize the numbers and severity of violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent.
and shall be signed by the Discharger or the Discharger's authorized agent.

Grading

The proposed project cultivation area is part of a former wine grape vineyard. The site has been developed to include including a single-family residence, septic system, barn, accessory structures, a well, and accessory agricultural facilities (e.g., irrigation facilities). The existing agriculture activities cover about 20 acres.

No new grading will be taking place in the proposed planting area.

Per the Preliminary Grading Plan submitted with the application materials, no grading is required. If necessary, a grading permit will be obtained prior to initiating any grading work. All existing roads and driveways will be utilized for project access. An erosion and sediment control plan has been created and will be implemented for this project. Should additional, more extensive, grading be needed, the erosion and sediment control plan will be updated.

Biology and Botany

A Biological Assessment for a portion of Global Interactive Solutions LLC site was completed on August 14, 2019, prepared by Northwest Bio survey, 1905 Westlake Drive, Kelseyville, CA 95451.

The results of the Biological Assessment are described below, however for the complete results please see the attached report incorporated herein by reference - BIOLOGICAL RESOURCE ASSESSMENT WITH BOTANICAL SURVEY and DELINEATION OF WATERS OF THE U.S. for APN 010-055-24 LAKE COUNTY, CALIFORNIA - August 14, 2019 Prepared by: Northwest Biosurvey 1905 Westlake Drive Kelseyville, CA 95451 (707) 889-1061

No sensitive plant taxa were identified and two wildlife species with sensitive regulatory status have the potential to occur within the Oak Woodlands on the property surrounding the cultivation site, although none were discovered at the time of the study. The two sensitive wildlife species are White -Tailed Kite and Pallid Bats.

Proposed mitigations recommended by the study are as follows:

- In order to avoid impact on raptors breeding, the removal of trees during the nesting season (February 1 to August 31) must be preceded by a survey for nesting birds conducted by a qualified biologist. In the event nesting is identified a suitable construction buffer will be established around the nest and further instructions from the biologist will be followed.
- In order to avoid incidental take of bats, if work is proposed within the woodland habitat during the maternity roosting season for bats (April 1 through September 15), trees with features capable of supporting roosting bats shall be survey for bat roosts or evidence of bat roosting (guano, urine staining and scent, dead bats) within 14 days of the start of project activities or removal of vegetation. If active roosts are 5 discovered, a buffer of 50 feet around the active roost should be established by a qualified biologist.

CULTURAL RESOURCES

A Cultural Resource Evaluation of a portion of 1780 Highway 53 in Clearlake California was conducted by John W. Parker, Ph.D., RPA - dated June 3, 2019 - APN 010-055-24.

Dr. Parker writes:

“Prior to European arrival, the project area was located within the Southeastern Pomo Elem tribal territory (Barrett 1908, Kniffen 1939).

Linguistic research has determined that the earliest people in the area spoke a language that belonged to the Yukian Language family. The oldest archaeological sites in the Elem territory have been dated to ~20,000 years ago. These sites likely represent the Yukian people.

Pomo speakers were part of the Hokan Language Family that occupied most of North America during the last Ice Age (Moratto 1984:551). Researchers have long suspected that Hokan and Yukian were the two oldest language families in the New World (Shipley 1978:81) and have recently established that the Hokan language family “is the oldest linguistic relationship among Western North American languages that can be established by normal comparative linguistic methods” (Golla 2004).

Archaeological evidence suggests that a wave of people (most likely Hokan speakers) entered the Clear Lake Basin by way of the Cache Creek drainage from California’s Central Valley 14,000 years ago (Parker 1994, 2008, White 2002).

The purpose of the cultural resource investigation was to locate, describe, and evaluate any archaeological or historical resources that may be present in the area. In addition, the author was to assess the impact that might occur as a result of ground disturbance activities associated with cannabis farming and preparation.

The background research indicated that the project area had not been previously inspected for cultural resources. A review of the site record maps housed with the California Historical Resource Information System indicated that six prehistoric sites had been recorded within 1 mile of the project area.

No historic or prehistoric cultural material or features were discovered during the field inspection.

It has been determined that no significant historic resources exist within the proposed project location. It is recommended that the proposed project be approved as planned.

In the unlikely event that undiscovered cultural sites are encountered during the ground disturbance process, it is recommended that work in the immediate vicinity of the find be suspended and a Registered Professional Archaeologist called in to evaluate the find as required by CEQA.”

Compliance with Cal Fire - CA Public Resources Code Section 4290

The project will implement CalFire 4290 and 4291 SRA Requirements. Including the following:

- Road standards for fire equipment access.
- Sign standards for addressing, street names, and buildings.
- Provide a dedicated 2,500-gallon water tank at the cultivation site.
- Maintain defensible space as appropriate.

Citations and Additional Reading

1. California Department of Food and Agriculture. 2017. CalCannabis Cultivation Licensing Program Draft Program Environmental Impact Report. State Clearinghouse #2016082077. Prepared by Horizon Water and Environment, LLC, Oakland, California. 484 pp.

2. California Stormwater Quality Association. 2011. California Stormwater Best Management Practice Handbook – Construction. California Stormwater Quality Association, Menlo Park, California 886 pp.

3. California Stormwater Quality Association. 2014. Stormwater Best Management Practice Handbook Portal: Industrial and Commercial. California Stormwater Quality Association, Menlo Park, California. 474 pp.

4. Central Valley Region's Best Management Practices Manual for Cannabis Cultivation. Appendix A in: Waste Discharge Requirements for Cannabis Cultivation Order R5-2015-0113.

5. Denver Department of Public Health and Environment. 2018. Cannabis Environmental Best Management Practices. Denver Department of Public Health & Environment (DDPHE) Cannabis Sustainability Working Group, Denver, Colorado. 71 pp.

6. International Dark Sky Association. 2020. Official website. https://www.darksky.org/

7. Biological Resources Assessment and Botanical Survey Report. BIOLOGICAL RESOURCE ASSESSMENT WITH BOTANICAL SURVEY and DELINEATION OF WATERS OF THE U.S. for APN 010-055-24 LAKE COUNTY, CALIFORNIA August 14, 2019 Prepared by: Northwest Biosurvey 1905 Westlake Drive Kelseyville, CA 95451 (707) 889-1061

8. Natural Resources Conservation Service. 2020. Web Soil Survey. National Cooperative Soil Survey, U. S. Department of Agriculture. NRCS Soils Website (Internet database and digital maps) available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

9. Newman, J. (editor). 2008. Greenhouse and Nursery Management Practices to Protect Water Quality. Publication Number: 3508. University of California Agriculture and Natural Resources Publications, Oakland, CA. 160 pp.

10. Pacific Watershed Associates. 2015. Handbook for Forest, Ranch, & Rural Roads: A Guide for Planning, Designing, Constructing, Reconstructing, Upgrading, Maintaining, and Closing Wildland Roads. Available at: https://www.pacificwatershed.com/sites/default/files/RoadsEnglishBOOKapril2015b.pdf

11. Vossen, P. 2007. Current Opportunities in the California Olive Oil Industry. Farm Advisor UC Cooperative Extension – Sonoma County. California Plant and Soil Conference.

12. USEPA NPDES Stormwater Program's National Menu of BMP's website at https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater