

* Supporting info for EIR-2023-004 mem



Initial Study Application
 FILING FEE: \$2,000 and ENV HEALTH FEE: \$85
 DEPARTMENT OF PLANNING AND BUILDING SERVICES
 707 Nevada Street, Suite 5 · Susanville, CA 96130-3912
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LASSEN COUNTY DEPARTMENT OF
 PLANNING AND BUILDING SERVICES

Form must be typed or printed clearly in black or blue ink. All sections must be completed in full.
 This application consists of three pages; only attach additional sheets if necessary.

Put in file
 FILE NO. EIR-2023-004

Property Owner/s	Property Owner/s
Name: TLT Enterprises	Name:
Mailing Address: 24339 Hwy 89	Mailing Address:
City, ST, Zip: Burney, CA 96013	City, ST, Zip:
Telephone: 530-335-5501 Fax: 530-335-5510	Telephone: Fax:
Email:	Email:

Applicant/Authorized Representative*	Agent (Land Surveyor/Engineer/Consultant)
Same as above: <input checked="" type="checkbox"/>	Correspondence also sent to: <input type="checkbox"/>
Name:	Name: VESTRA Resources, Inc.
Mailing Address:	Mailing Address: 5300 Aviation Drive
City, ST, Zip:	City, ST, Zip: Redding, CA 96002
Telephone: Fax:	Telephone: 530-223-2585 Fax: 530-223-1145
Email:	Email: wjohnston@vestra.com License #:

Project Address or Specific Location:			
Deed Reference: Book:	Page:	Year:	Doc#:
Zoning: U-C-A-P	General Plan Designation: Urban Reserve		
Parcel Size (acreage): 640	Section: 1/2 34, 27 Township: 30 Range: 12		

Assessor's Parcel Number(s):	101 - 110 - 24	- -	- -
- -	- -	- -	- -

Project Description: See attached Project Description

SIGNATURE OF PROPERTY OWNER(S): I HEREBY ACKNOWLEDGE THAT: I have read this application and state that the information given is both true and correct to the best of my knowledge. I agree to comply with all County ordinances and State laws concerning this application. Signed by: 83B4DE871134453...	*SIGNATURE OF APPLICANT/AUTHORIZED REPRESENTATIVE (Representative may sign application on behalf of the property owner only if Letter of Authorization from the owner/s is provided).
Date: 9/19/2023	Date:
Date:	Date:

PROJECT DESCRIPTION

Site Location

The Skyline Aggregates Quarry is located approximately one-and-a-half miles east of State Route 139 off of Skyline Road to the northeast of Susanville in Lassen County. The site is approximately six-tenths of a mile to the east of Lassen Community College and seven-tenths of a mile northeast of Lassen County Fairgrounds. The city limits of the City of Susanville are located directly west of the project parcel. The quarry is located in north ½ of Section 34 and the south ½ of Section 27, Township 30 North, Range 12 East, Mount Diablo Base Meridian (MDBM). The latitude and longitude at the center of the site are 40.424213, and -120.622222, respectively. The general site location is illustrated on Figure 1. The Project site is located on a 640-acre parcel (APN: 101-110-24). Parcel boundaries are illustrated on Figure 2.

Environmental Setting

Topography

The Project site is located to the southwest of Antelope Mountain in Hidden Valley. Topography generally gently slopes from north to south. Site elevation ranges from 4160 feet above sea level in the southwest corner of the Project site to 4350 feet along the northern edge of the Project site. The existing topography of the Project site is illustrated on Figure 3.

Hydrology and Water Quality

The Project site is located within the Lassen Creek-Susan River HUC 12 watershed (180800030704). Drainage within the mining and reclamation boundaries of the Project site primarily sheet flows to the southwest into wetlands associated with Brockman Slough. Limited sections of the Project site outside of the mining and reclamation boundary drain through an intermittent tributary to Jensen Slough.

An intermittent tributary to Jensen Slough flows through the parcel from the northeastern corner of the site and along the eastern boundary. Three stock ponds totaling approximately 0.05-acres are mapped onsite. A large freshwater emergent wetland system is located adjacent to the southern end of the Project. This system is comprised of Jensen Slough and Brockman Slough, which flows across the adjacent parcel in a series of meandering, interconnected shallow channels. The slough is fed by a side channel from the Susan River, which flows through adjacent agricultural fields, and then follows the proposed mine property's southern border before flowing into the slough. Water flows from the slough ultimately back into the Susan River approximately 3.5 miles downstream from the mouth of the slough. The Project site is not within a 100-year floodplain. Hydrology of the site is illustrated on Figure 4.

The southern end of the proposed Project site is located within the Honey Lake Valley Groundwater Basin, which has been identified as a “low priority basin” by the Department of Water Resources (DWR), signifying that it is not currently at risk for overdraft. Within this basin, Bulletin 118 estimates the total volume of water stored in the upper 100 feet of saturated basin-fill deposits and volcanic-rock aquifers to be 10 million acre-feet. Estimates of annual groundwater

extraction for agricultural, municipal, industrial, and environmental wetland uses are 51,000, 15,000, and 3,800 acre-feet, respectively. Deep percolation from agricultural-applied water is estimated to be 14,000 acre-feet.

Geology and Soils

One geological unit exists within the bounds of the mining and reclamation boundary. Bedrock within the site is entirely mapped as the Basalt of Susanville. This unit, alternatively known as the Susanville Basalt, is Pleistocene in age with a K-Ar radiometric age of 1.3 ± 0.3 Ma (Grose and McKee, 1986). The Susanville Basalt is a dark gray to black diktytaxitic to finely and sparsely olivine porphyritic massive basalt. It occurs as multiple massive flow units, averaging 3 to 5 meters thick that may locally exhibit columnar jointing. Total thickness is unknown but estimated to be greater than 100 meters based on outcrop exposures and bedding orientation (Grose et al, 2013). Thin paleosol and pyroclastic horizons occur between some of the flow units. Unlike many of the other eruptive units in the area, the source for the Susanville Basalt is unknown. Geology within the Project is illustrated on Figure 5.

Geological mapping of the Susanville area by C. Wills (Wills, 1990) identified two faults within the subject property. One fault defines a drainage running north-south through the approximate center of the Project site, while the other defines a steeply incised drainage along the eastern margin of the property. The age and sense of motion of both faults is poorly constrained. Wills interpreted them to be Quaternary in age as the cut and displace the Susanville Basalt, but are deeply weathered and partly overlain by Holocene alluvium, constraining their ages. Neither fault is believed to be recently active. Sense of displacement is similarly poorly constrained due to the weathering of the fault lineaments, but believed to be predominantly dextral strike-slip with a down to the east dip-slip component. These faults are roughly perpendicular to the northwest-striking dextral slip faults of the Honey Lake Fault Zone that dominate local tectonics (Jennings and Saucedo, 2002).

The Natural Resources Conservation Service (2019), identified seven primary soil types within the project boundary. Cleghorn sandy loam 2 to 5 percent slopes this soil group is well drained with a high run off classification, and is primarily comprised of sandy loam, clay loam and loam. Horsecamp cobbly silty clay, 2 to 9 percent slopes, this soil group is well drained with a very high runoff classification and is primarily comprised of cobbly silty clay, and silty clay. Lakeview loam, warm, 0 to 2 percent slopes, this soil group is moderately well drained with a medium runoff classification and is comprised of loam and clay loam. Searles-Orhood-Devada association, 5 to 30 percent slopes, this soil group is well drained with a high run off classification, and is comprised of very stony loam and very cobbly clay loam. Springmeyer sandy loam, 0 to 5 percent slopes, this soil group is well drained with a medium run off classification and is comprised of sandy loam, clay loam and stratified gravelly loamy sand to sandy clay loam. Tunnison very cobbly clay, 2 to 9 percent slopes, this soil group is well drained and has a very high run-off classification it is primarily comprised of very cobbly clay and clay. The most common soil group within the project area is Tunnison-Devada association, 2 to 9 percent slopes which is well drained and with a very high run off classification and is comprised of very stony clay and clay. Existing onsite soils are illustrated on Figure 6.

Biota

A Biological Assessment was prepared for the Project by VESTRA Resources, Inc. Vegetation at the project site has been identified via the California Department of Fish and Wildlife's (CDFW) Vegetation Classification and Mapping Program (VegCAMP) data and field surveys, which identifies vegetation communities on a small-scale using definitions published in *A Manual of California Vegetation* (Sawyer et al. 2009). The vegetation alliances identified onsite in order of dominance onsite are *Artemisia arbuscula* ssp. *arbuscula* Shrubland Alliance, *Juniperus occidentalis* Woodland Alliance, *Bromus tectorum* - *Taeniatherum caput-medusae* Herbaceous Semi-Natural Alliance, and *Artemisia tridentata* Shrubland Alliance. Vegetation communities onsite are shown on Figure 7.

Special-status species identified by the California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS), and California Wildlife Habitat Relationships (CWHR) database searches and literature review were evaluated for their potential to occur within the project area. CNDDB occurrences within five miles of the site are shown on Figure 8. Potential for occurrence was based on habitat requirements and proximity to known recorded occurrences of a species.

The potentially occurring species that were generated through desktop review were assessed based on the actual observed habitat types onsite. The assessment found that the following species have the potential to occur and require further discussion.

Special-status species that are known to occur, or have the potential to occur, within the project area include:

- Greater sandhill crane (*Grus canadensis tabida*)
- Prairie falcon (*Falco mexicanus*)
- American badger (*Taxidea taxus*)
- Long-eared myotis (*Myotis evotis*)
- North American porcupine (*Erethizon dorsatum*)
- Morrison's bumble bee (*Bombus morrisoni*)
- Pulsifer's milk-vetch (*Astragalus pulsiferae* var. *pulsiferae*)
- Susanville beardtongue (*Penstemon sudans*)

Archaeological and Historical Resources

An archaeological study conducted in 2020 was prepared for the Project site (ALTA, 2020). This study indicated that the site is located in an area which was likely used by members of Maidu. The site is also near the Nobles Emigrant Trail, use of the trail which passes north of Susanville began in 1841. The archaeological study identified ten cultural resources and eighteen isolated finds were identified within the proposed project area.

Surrounding Land Use

The site is directly adjacent to the Susanville Sanitary District Wastewater Treatment Plant, Fairgrounds, and southeast of Lassen Community College. Land use adjacent to the current

operation boundaries are defined by the Lassen County General Plan as “Planned Development” and “Parks and Recreation” to the north, “Extensive Agriculture” and “Extensive Agriculture/Urban Reserve” to the east, “Intensive Agriculture”, and “Urban Reserve/Intensive Agriculture” the west, and “Extensive Agriculture/Urban Reserve”, “Urban Reserve/Intensive Agriculture”, and “Intensive Agriculture” to the south. Zoning designation adjacent to the project area are PD (Planned Development) and O-S (Open Space) to the north, U-C-A-P (Upland Conservation District-Agricultural Preserve Combining District) to the east, U-C-A-P (Upland Conservation District-Agricultural Preserve Combining District), and M-1 (Light Industrial Activity) to the south, A-3 (Agricultural District) and U-C (Upland Conservation District) to the west.

The nearest residence occurs approximately 2,675 feet from the western Project site boundary. There are residential homes within a mile radius of the Project site. All nearby residences are located west in Susanville. There are no residences or limited other development within a mile radius to the north, east, and south. Sensitive receptors are illustrated on Figure 9 and adjacent property ownership is illustrated on Figure 10.

General Plan and Zoning

The proposed project site is located in Lassen County and within the area covered by the *Susanville Area Plan*. The Susanville planning area primary extends 1 to 1 ½ miles from the 1982 Susanville city limits. The project parcel proposed for mining and processing operations is zoned U-C-A-P (Upland Conservation District-Agricultural Preserve Combining District). The Project sit, Lassen County assessor parcel number APN) 109-100-024 is designated as “Urban Reserve/Intensive” by the *Lassen County General Plan*. Surface mining and mineral processing are allowed with use permit under U-C-A-P zoning, proposed end use of agricultural land use for grazing is allowed by right and a change in land use or zoning will not be required.

Excavation and Mining Plan

Proposed mining and reclamation operations on the Skyline Aggregates site would be carried out by Hat Creek Construction and Materials, Inc. The project site encompasses approximately 640 acres, of which approximately 460 acres will directly be affected by mining and processing activities within the mining and reclamation plan boundary. The remaining acreage within the project site will serve as setback areas and buffers from surrounding properties, critical habitats, and archeological resources.

Materials mined onsite will consist of hard rock aggregate. Aggregate mined on the site will be crushed, screened, washed, and graded onsite and then used in the production of virgin aggregates, asphalt mix, and ready-mix concrete. These end products are generally associated with roadway construction, but they will also be used by public agencies to improve existing infrastructure.

Proposed mining operations will follow the guidelines established by SMARA and will conform to the monitoring schedule established by the Lead Agency. The site will be mined in five phases, taking approximately 10 years per phase and 50 years total to complete. Mining operations will begin in the spring of 2025 following permit approval. The termination date will be based on demand.

“Overburden,” the material lying above the aggregate deposits, will be removed and stockpiled to be used in support of site reclamation. Overburden will be used as backfill after mining activities are complete. Overburden varies in nature depending on its location onsite, but is generally a mix of loam and clay and very limited in supply. Rock is generally at the surface. Topsoil will not be mapped prior to mining.

To the extent possible, overburden will be moved directly to its final planned location immediately after excavation. If stockpiling is necessary, stockpiles will be managed to minimize water and wind erosion. Any stockpiles will receive an application of hydroseed/mulch to stabilize the slope. If stockpiled, the topsoil will be clearly identified to distinguish the topsoil material. Topsoil removal will not precede mining by more than one year. Topsoil stockpiles will be maintained, identified, signed, and managed prior to reclamation.

The excavation and mining plan included in the Reclamation Plan is described below.

Mining Operation Plan

Operation Overview

Setbacks and other areas of non-mining activity at the site are shown on the site plan (Figure 11).

A factor that will determine the amount of material to be removed is the quantity and quality of the aggregate in the gross excavated material. The depth of mining will vary with the depth of the material. Generally, the plan is to remove the 50 to 65 feet of basalt that overlies the base formation. The maximum depth of cut will be at ground surface level of the existing site. The elevation of the final mine grade will be from 4180 to 4272 feet above MSL. The site will include a headwall along the eastern portion and sloping topography to the north and west, as shown on Figure 11.

The total volume of material removed per day will fluctuate with seasonal demand. It is estimated that a maximum of 10,000 tons of material will be removed in 24 hours. Estimated excavation of 10,000 tons per day will be on an operating schedule of Monday through Saturday with some operational Sundays. An estimated 450,000 tons will be extracted each year. Drilling reports indicate an excess of 16 million tons of material is available in the basalt flow.

Approach to Mining and Excavation

The mining and excavation will begin with the removal of the topsoil and overburden material in each phase area. All salvageable topsoil will be removed as a separate layer. This material will be used immediately for reclamation in previously mined areas or stockpiled for future use. Stockpiles will be seeded or covered.

Following the removal and placement of overburden materials, the mining and processing of underlying aggregate materials will begin. The plan is to follow the 50 to 65 feet of overlying basalt upslope to a final slope at the north portion of the site.

The mining operation will result in small amounts of dust that will be controlled through the use of water trucks and/or dust suppressants.

Mine phasing and final contours are shown on Figure 11. Mining will commence in the southeast corner of the site and move to the north. Cross-section is included on Figure 12. Pond detail is provided on Figure 13.

Employees and Equipment Use

Employees will be operating various types of equipment and machinery on the Skyline Aggregates site. The equipment to be used for the mining and excavation of materials will generally be diesel-powered, hydraulically operated wheel and track-mounted machines. Power for the crushing equipment will be supplied by the local utility.

The following equipment will be used on the project site:

- One water truck for dust control;
- Two front-end loaders to feed the crusher and load trucks;
- One hydraulic excavator to harvest raw material from extraction areas;
- Two off-highway trucks to transport raw material from extraction areas to the processing area;
- One self-loading scraper to remove and transport overburden;
- One track dozer to level fill;
- One HP300 cone crusher (300 hp drive motor)
- One GP200 cone crusher (200 hp drive motor)
- One JCI 7 x 20 3-deck wash screen 40 hp drive motor on stand with 15 hp drive motor
- One El Jay 7 x 20 3-deck wash screen 40 hp drive motor on stand
- One 35-yard feeder bin with 36" feed belt 20 hp drive motor
- One 15-yard feeder bin for wet screen 15 hp motor drive
- One 15-yard supplemental feeder bin 15 hp motor
- One 44-inch sand screw 20 hp drive motor
- One 8-inch by 6-inch volume water pump 15 hp drive motor
- One 8-inch by 6-inch high-pressure water pump 100 hp drive motor
- Three 24-inch x 60-foot stacker conveyors 10hp drive motors
- Two superior 30-inch x 60-foot radial stacker conveyors 10hp drive motors
- Two 30-inch x 90-foot radial stacker conveyors 25hp drive motors
- Two 36-inch x 55-foot conveyors 15hp drive motors
- Two 30-inch x 55-foot conveyors 15hp drive motors
- One 30-inch x 60-foot conveyor 15hp drive motor
- One 36-inch x 10-foot stub conveyor 10hp drive motor
- One 75-foot truck scale
- One scale office trailer

The locations of some of this equipment are shown on Figure 11 in the southeast corner of the site. A centralized processing plant is proposed to reduce traffic and dust generation. Tracked equipment will be parked in the area designated for processing or material storage when not in use. Personnel vehicles will be parked at the entrance area during working hours. Daily fueling,

maintenance (lubing), and repairs will take place near the processing facility. Minor occurrences of breakdowns may require equipment to be repaired away from the processing facility.

Processing Plant Operations and Aggregate Transport

Processing Plant Operations

Processing plant operations will include the stockpiling of aggregate, loading of raw aggregate into convey or chutes, washing the aggregate, sorting and crushing the aggregate to market specifications, and delivery into stockpiles or into hauling trucks for delivery. In general, the proposed mining operations would normally occur between the hours of 6:00 AM and 6:00 PM, Monday through Saturday, with occasional need to operate on Sundays and 24 hours per day.

Loaders will deliver raw mined aggregate to the plant chutes, which will carry the aggregate into a jaw crusher. Aggregate will then enter a cone crusher, followed by screening and washing into its final form for delivery via hauling trucks.

The aggregate plant would be rated at 250 tons per hour. During typical operations, the aggregate plant would operate for 12 hours per day (3,000 tons per day) and 450,000 tons per year. The aggregate plant would have one jaw crusher, two cone crushers, two screen decks, and nine secondary conveyers. The wash plant may operate for 12 hours per day (3,000 tons per day) and will process approximately 20% of the annual throughput as the aggregate plant. The wash plant would have one feeder, eight conveyors, one deck screen, and two sand screws. For the aggregate operations, there are approximately 1.8 tons per cubic yard of materials.

The concrete plant would be rated at 150 tons per hour. During typical operations, the concrete plant would operate for 10 hours per day (1,500 tons per day) and 100,000 tons per year. The concrete plant would have one feeder, an aggregate hopper, a Portland cement silo, and a fly ash silo.

The asphalt drum hot mix plant (propane fired) would be rated at 350 tons per hour. During typical operations, the asphalt hot mix plant would operate for 10 hours per day (3,500 tons per day) and 400,000 tons per year. The material would be metered from the hoppers onto a conveyer belt and transported into a rotary natural gas/propane fired dryer. The asphalt hot mix plant would contain a bag house for emissions control and a 100 million British Thermal Units (BTU) per hour natural gas-fueled burner. The lime slurry plant would be rated at 400 tons per hour (4,000 tons per day) and 400,000 tons per year. The lime slurry mix plant would have a single hopper/pug mill/surge/conveyor. The facility would require three diesel backup (two hours per day and 250 hours per year) generators: 755 horsepower (hp) generator, 755 hp generator, and 350 hp generator.

Processing plant operations will primarily occur below grade. As shown in Figure 11, all processing plants will be located on a below-grade flat within the boundaries of Phase One. Operations will take excavate the area required within the first year of operation.

Aggregate Transport

Haul trucks will generally deliver aggregate processed at the Skyline Aggregates site to nearby road construction jobs. Project traffic is expected to occur as follows:

- Aggregate hauling will occur 300 days/year;
- Approximately 90 percent of the processed aggregate will be hauled to nearby job sites and approximately 10 percent will be hauled to the open market;
- Aggregate generally will be hauled between the hours of 6:00 AM and 6:00 PM, with nighttime and off-hour deliveries during high-demand or in peak periods, or as required by the project contract;
- 20 employees will be onsite;
- A single truckload will carry approximately 25 tons of aggregate;
- Typical operations would occur 12 hours per day (6 AM to 6 PM), Monday through Saturday, with maximum operations of 24 hours per day, six days a week;
- Annual average daily truck trips of 120 truck trips (60 arriving and 60 departing) throughout the calendar year and a daily maximum of 800 truck trips (400 arriving and 400 departing);
- The access road into the site back to the plant will be paved.

Hours of Operation

Generally, the facility will operate from 6:00 AM until 6:00 PM, Monday through Saturday, with some operational Sundays. During construction season, the site may operate 24 hours a day to meet construction demand and Caltrans requirements for nighttime work. It is estimated this will be fewer than 150 days per year.

Mining Area

The mining area of the proposed operation is 430 acres, and 30 acres of associated impacts and disturbances.

Site Life

The proposed start date for mining activities is Spring of 2025, the end date will be dependent upon market demand for the produced materials. The Reclamation Plan for the project includes a 50-year duration of mining.

Volume Removal

Mining is expected to remove approximately 50 to 65 feet of basalt flow located over previous formations. 39 million cubic yards of total aggregate will be mined and removed from the project site. An estimated 450,000 tons of aggregate will be removed per year with a maximum of 10,000 tons per day.

Water Use

Onsite groundwater well will be utilized onsite as 10,000 gallons per day will be used at the project site for washing the aggregate and dust suppression. Assuming an operational period of 300 days per year, 10,000 gallons per day would be used for dust suppression. Washing will occur at the site

on average 30 days per year with an estimated 10,000 gallons of water used per day. The combined water usage of dust suppression and washing would result in approximately 3,300,000 gallons of water used per year. The water used on the site for these purposes would be pumped from a well or collected from stormwater retention ponds. Water will also be recycled from the wash water and used for dust suppression.

Stormwater

The Project includes construction a stormwater retention pond in the southern portion of the Project site. Site stormwater will be directed to the retention pond onsite as shown on Figures 11 and 13. Water will be reused for dust suppression. The pond is designed for the 25-year, 24-hour storm event plus average annual precipitation. The ponds will have emergency spillways should capacity be breached.

Waste Disposal

Portable toilets will be provided onsite for sewage at the active quarry face and serviced/pumped at regular intervals. The office will have facilities with a septic system. Domestic waste generated by workers at the site will be disposed of in trashcans with lids or a dumpster. Solid waste will be picked up by a disposal service. No mining waste material will be generated

Pollution Prevention

The potential source for pollution on the site will be from the fuels and oils used in equipment. The maximum amount of fluids stored onsite will be 10,000 gallons of fuel in an aboveground storage tank and approximately five 55-gallon drums of lubricants and transmission oil.

Storage of fuels and oils will comply with the state guidelines for pollution prevention near water bodies. The vehicles and equipment used in the operation of the project would be maintained to prevent any possible leaks. Routine maintenance will be conducted onsite. Major repairs, other than emergency repairs, will be conducted at an offsite facility. Since onsite drainage will be designed to stay on the site and erosion control measures will be used to control offsite erosion, offsite drainage of potential leaks from operations would not occur. A Hazardous Materials Business Plan will be prepared for the project following reclamation plan approval.

Reclamation

The area to be reclaimed after mining activities are completed includes the 460 acres that will be disturbed for aggregate material or used for processing activities. The rest of the acreage will remain undisturbed, and will not require reclamation. The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, Sections 2710-2796) requires the means by which the areas disturbed by proposed mining activities will be restored for beneficial use be identified. Proposed reclamation activities would create an area for future industrial activities.

Reclaimed Land use

End use will consist of agricultural use as allowed by the existing U-C zoning district. The site will be revegetated with a dryland pasture seed mix. The Phase 1 area will include a 5-acre area

replanted with Bitterbrush and cattle exclusion fencing shall be installed to prohibit cattle grazing in this area during the winter months (November-April) when mule deer or pronghorn may be present. The onsite wash pond, retention pond and well will be retained onsite as a livestock water source. The wash pond and retention pond will be revegetated with suitable riparian species to prevent erosion.

Final Topography

Final area topography in follow bench geometries recommended in the Geotechnical Report prepared for the site by BAJADA Geosciences, Inc (Appendix F). Variations on bench width and height may be made but the proportion of maximum height to minimum width will be maintained (i.e., a 40-foot-tall and 23-foot-wide bench geometry would be equivalent to the recommendations) or flatter. Recommendations include a maximum bench height of 40 feet, minimum bench width of 23 feet, a maximum design face angle of 80-degrees, and a maximum overall slope angle of 53 degrees. The upper quarry slope phase should be inclined no steeper than 1.5:1 (horizontal:vertical) when exposing soil and 1:1 when exposing intensely to moderately weathered rock materials. The remaining areas to the north and west will be sloped at 3:1. Final topography is shown on Figure 11.

Required Site Improvements

Road Construction

Construction of a paved haul road will be required for the use of the site. The haul road will connect Skyline Road to the Landscape yard, stockpile area and active mining and processing areas. The road will be approximately 3,735 linear feet and paved to reduce dust generation. A scale and office trailer will be located along the road.

Stormwater Pond

Construction of a stormwater pond will be required to capture run off from the active mining site. The stormwater retention pond will be constructed at the southern end of the mining area and south of the haul road. the pond will have a maximum capacity of 30-acer feet. Three 24-inch culverts will run under the haul road hydrologically connecting it with the mining area. The pond will discharge through a constructed 60-foot spillway near its southwestern corner. The pond is designed for the 25-year, 24-hour storm event plus average annual precipitation, and is unlikely to discharge.

Landscape Yard

The project area will include a "Landscape Yard" area, comprised of a 17,660-square-foot graded area long Skyline Road. The landscape yard will serve as additional stockpile storage and material sales area.

Well

The project will require a well capable of meeting the anticipated water demand for industrial uses at the site. This demand is expected to be up to 10,000-gallons for aggregate washing and dust suppression per day with and total annual demand of 3,300,000-gallons. Water will also be recycled from the wash water and used for dust suppression. The well is anticipated to be located near the southern parcel boundary.

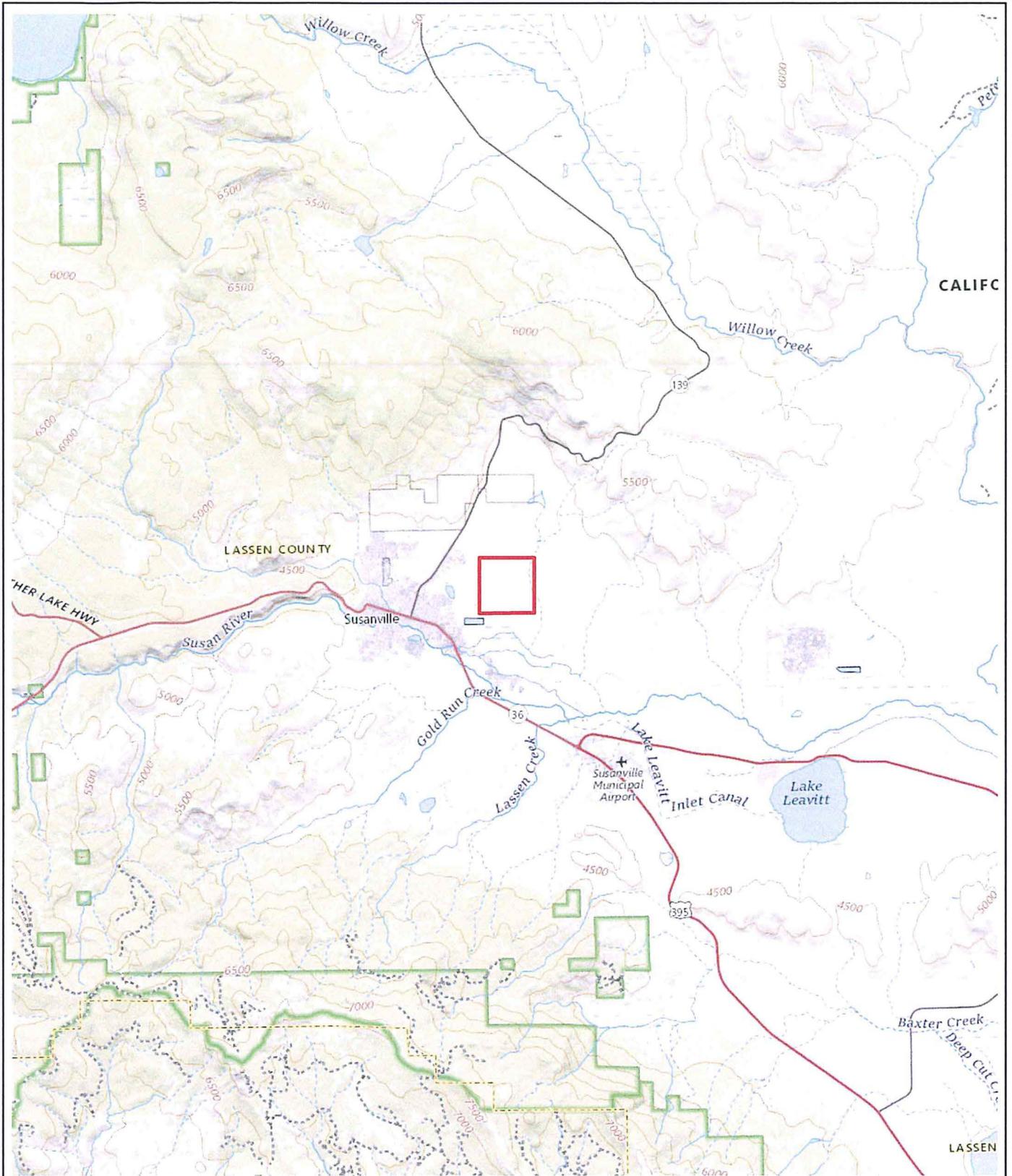
Utility Extensions

The project will require the extension of both electric utility and natural gas utility to the site. The electricity will be used to meet the power requirements demanded by onsite equipment. Natural Gas will be utilized by the Asphalt plant. Existing electric utility lines run to the intersection of Skyline Road and Highway 139, and Skyline Road and Johnsonville Road. Natural gas lines currently exist along Paul Bunyan Road, Johnsonville Road, and Highway 139.

Required Approvals

Lassen County is considered the Lead Agency under CEQA and is responsible for reviewing and certifying the adequacy of this DEIR. Responsible agencies are those agencies that have discretionary approval over one or more actions involved with the development of the proposed Project site. Trustee agencies are state agencies having discretionary approval or jurisdiction by law over natural resources affected by the project. Prior to development of the proposed Project, a number of discretionary permits and approvals must be obtained, from local and State agencies, as listed below. This DEIR and Final EIR will be relied on by the County and other responsible agencies when determining whether to issue discretionary approvals to implement the project. To implement the proposed Project, the mine operator will need to obtain, at a minimum, the following discretionary permits/approvals.

- Conditional Use Permit, Lassen County Planning Commission
- Reclamation Plan, Lassen County Planning Commission and Department of Conservation, Division of Mine Reclamation (DMR)
- Permits for Operation, Lassen County Air Pollution Control District (APCD)
- Industrial General Permit, Lahontan Regional Water Quality Control Board
- General Waste Discharge Requirements for Aggregate and Concrete Facilities, State Water Resources Control Boards
- Sewage Disposal Permit, Lassen County Department of Environmental Health



 Approximate Parcel Boundary

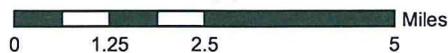
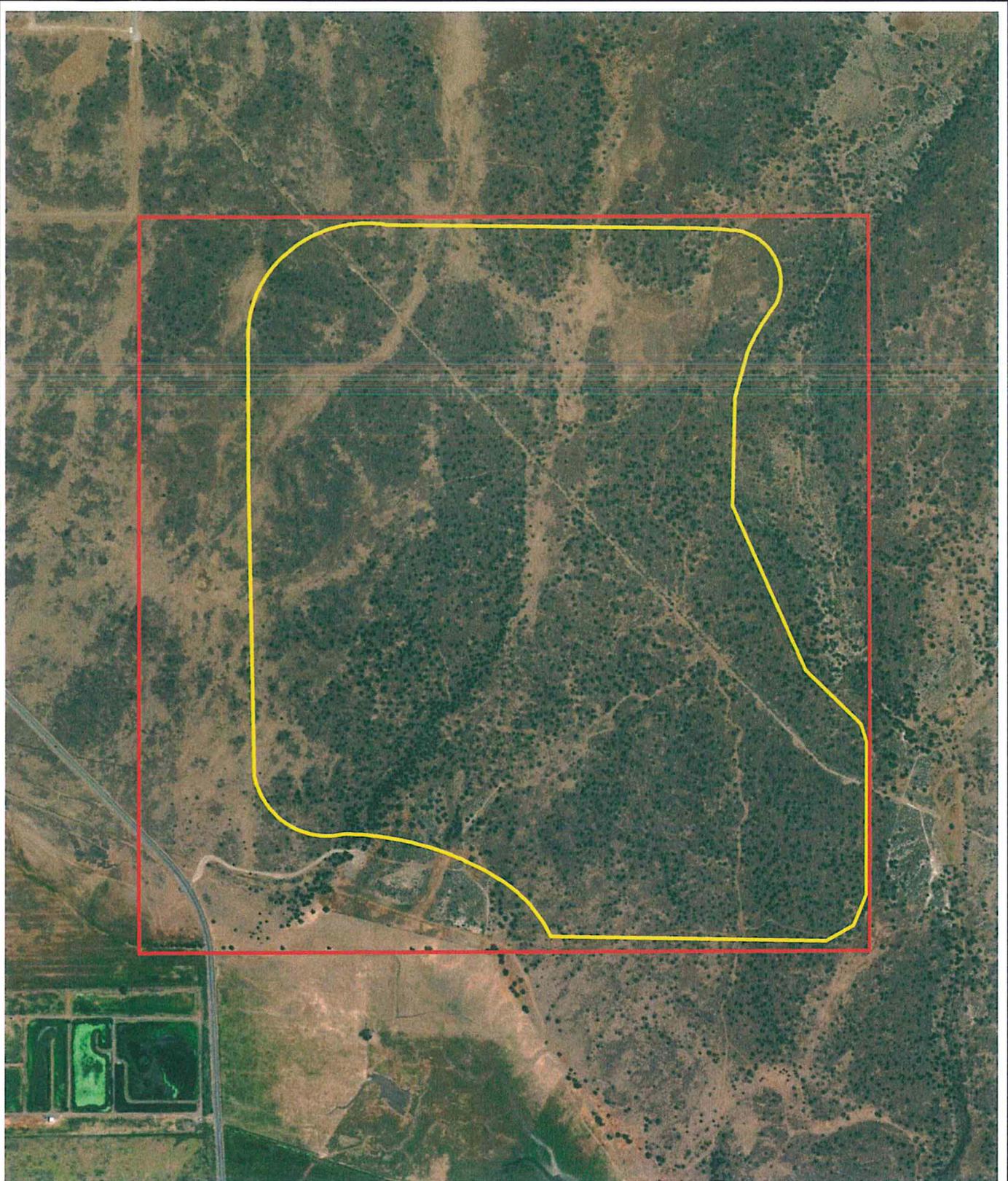


FIGURE 1
GENERAL SITE LOCATION
SKYLINE AGGREGATES
LASSEN COUNTY, CALIFORNIA



-  Reclamation Boundary
-  Approximate Parcel Boundary



SOURCE: DIGITALGLOBE 2018 AERIAL PHOTOGRAPH; LASSEN COUNTY 2017

FIGURE 2
SITE LAYOUT
SKYLINE AGGREGATES
LASSEN COUNTY, CALIFORNIA

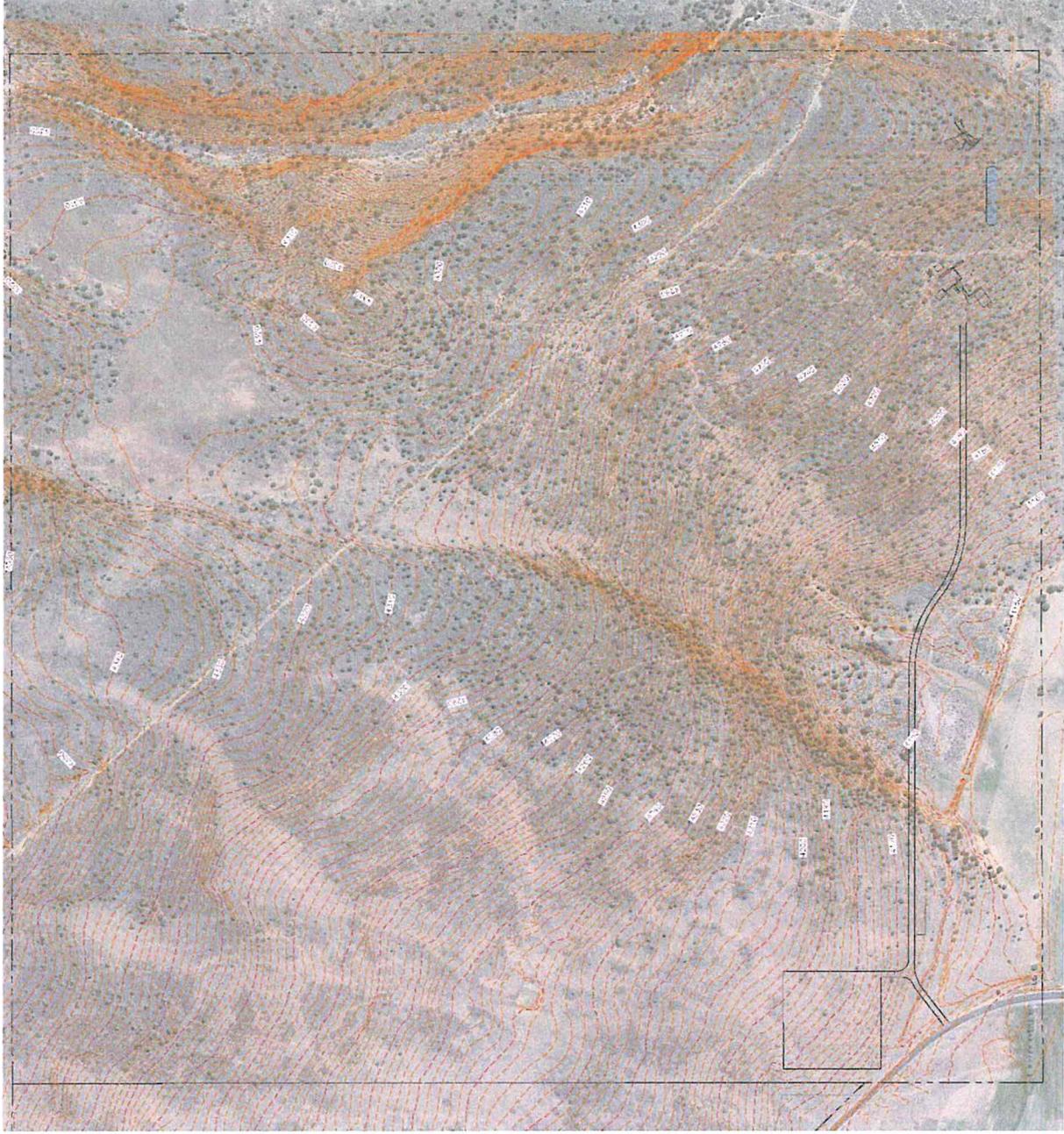
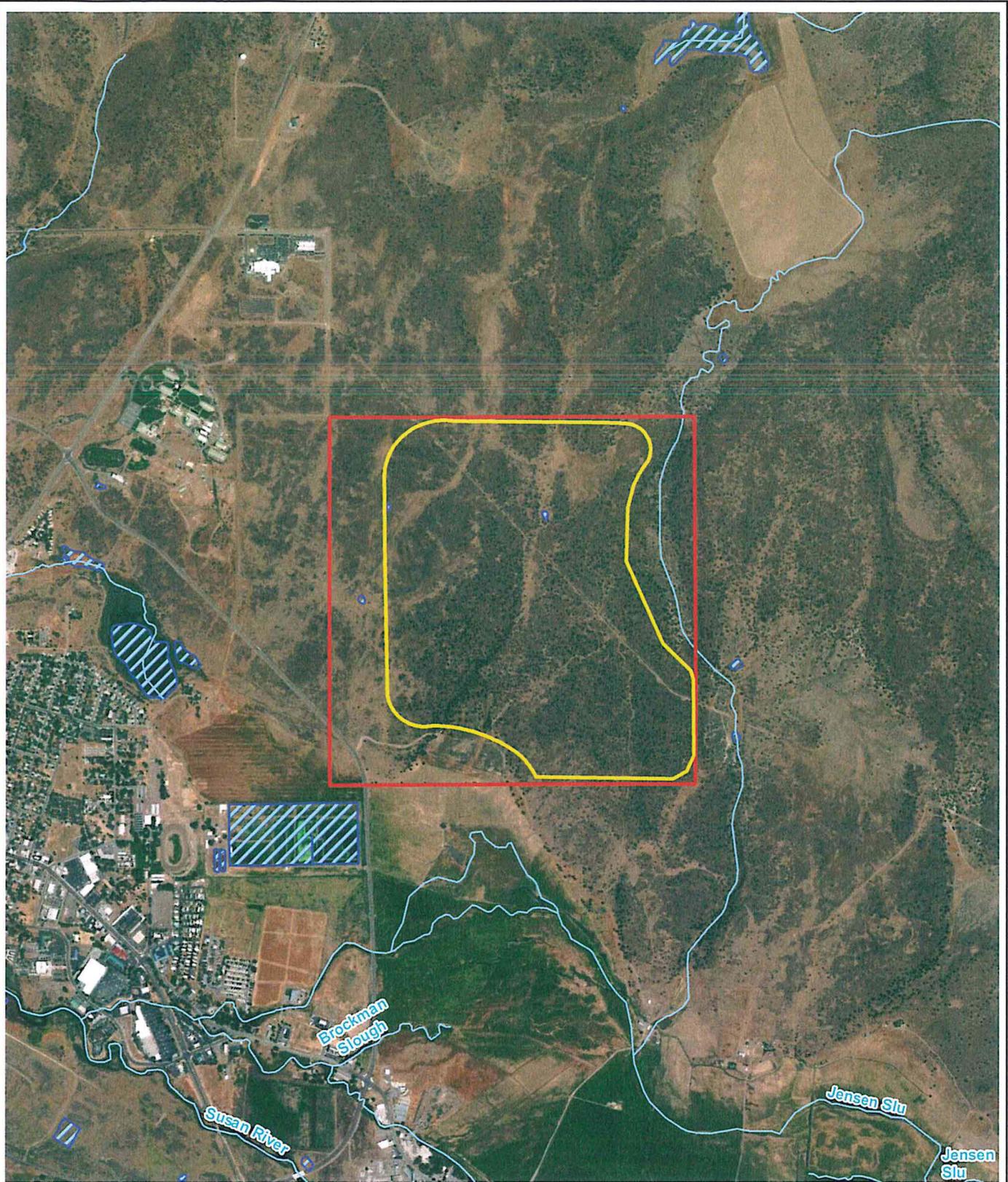


FIGURE 3
EXISTING TOPOGRAPHY
SKYLINE AGGREGATES
SUSANVILLE, CALIFORNIA

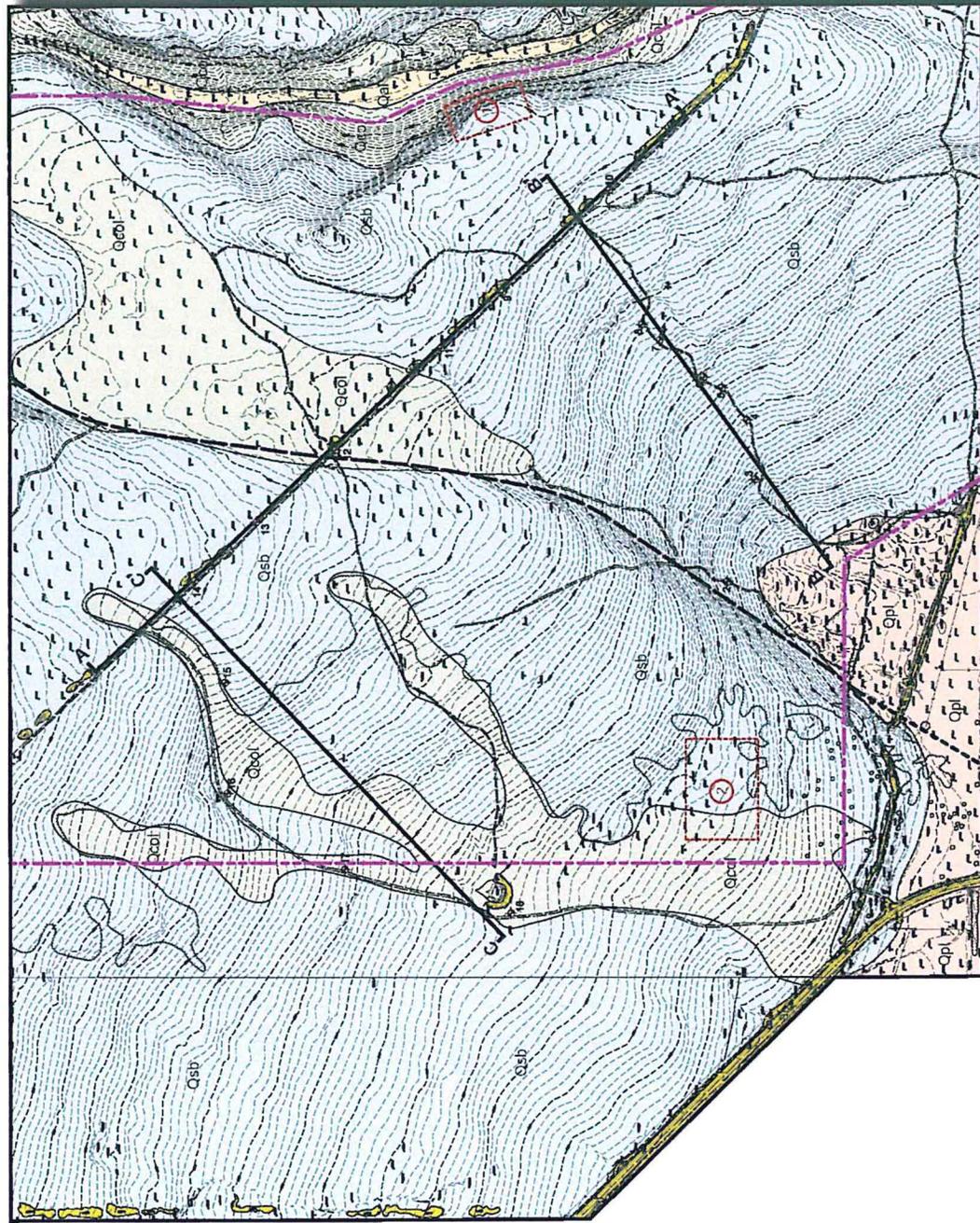


-  Stream
-  Waterbody
-  Reclamation Boundary
-  Approximate Parcel Boundary



SOURCE: DIGITALGLOBE 2018 AERIAL PHOTOGRAPH; USGS 2014

FIGURE 4
HYDROLOGY
 SKYLINE AGGREGATES
 SUSANVILLE, CALIFORNIA



- Artificial Fill/Stockpile
- Alluvium
- Colluvium
- Lacustrine Deposits
- Susanville Basalt

Geologic Contact,
Dashed where approximate

Fault, dashed where approximate
(per Grose et al., 2014)



Outcrop areas where measurement
of discontinuities was performed



A A'
Cross Sections
see Plate 4



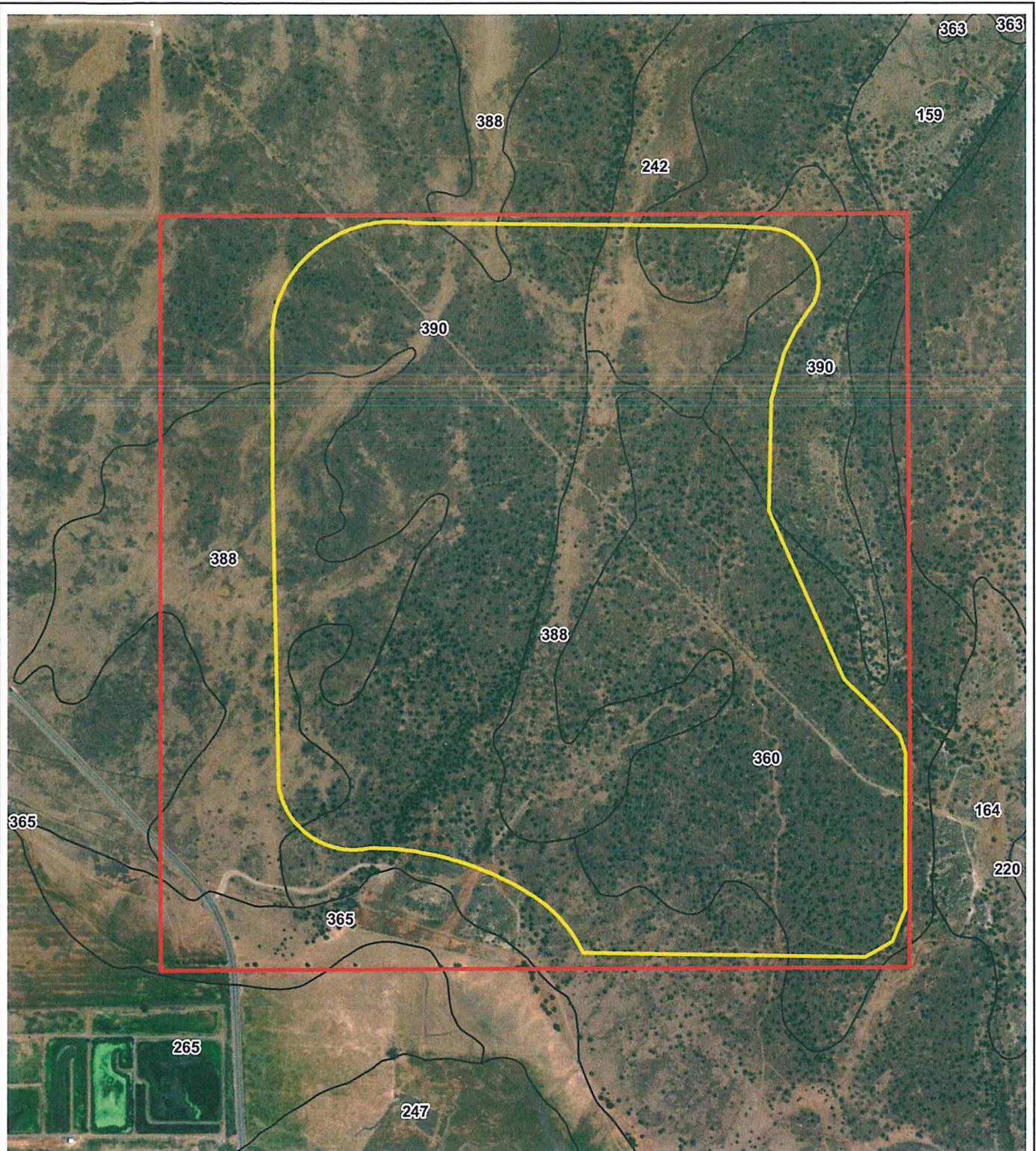
0 300 600
Scale: 1"=600'
1:7,200
Contour intervals: 2'

FIGURE 5
GEOLOGY
SKYLINE AGGREGATES
SUSANVILLE, CALIFORNIA



SOURCE: BAJADA GEOSCIENCES, INC. 2023

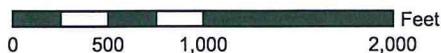
P:\GIS\71305\Skyline\Figures\EIR\71305_Geology.docx



-  Reclamation Boundary
-  Approximate Parcel Boundary
-  Soil Map Unit

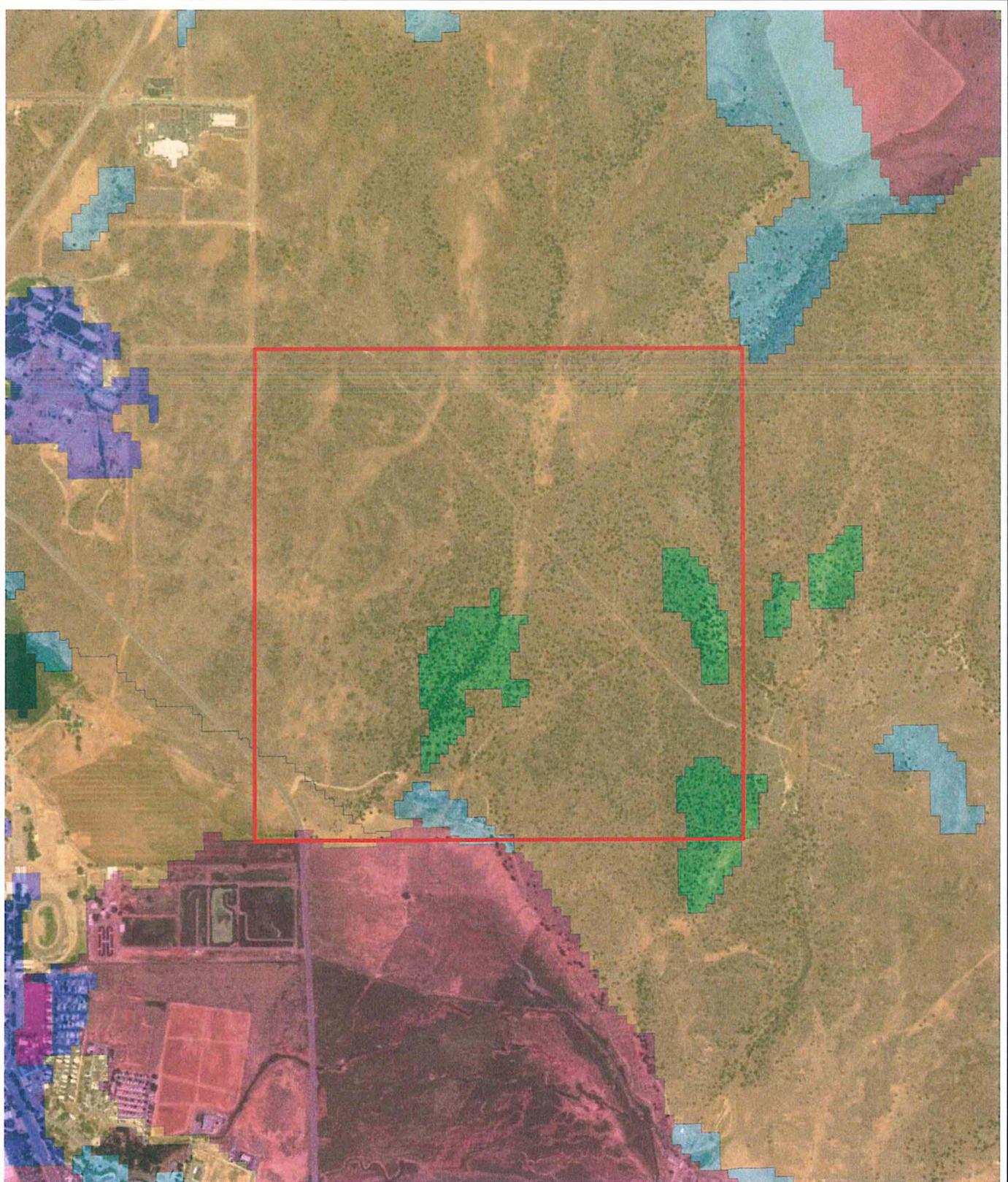


- 159: Cleghorn sandy loam, 2 to 5 percent slopes
- 242: Horsecamp cobbly silty clay, 2 to 9 percent slopes
- 265: Lakeview loam, warm, 0 to 2 percent slopes
- 360: Searles-Orhood-Devada association, 5 to 30 percent slopes
- 365: Springmeyer sandy loam, 0 to 5 percent slopes
- 388: Tunnison very cobbly clay, 2 to 9 percent slopes
- 390: Tunnison-Devada association, 2 to 9 percent slopes



SOURCE: DIGITALGLOBE 2018 AERIAL PHOTOGRAPH; NRCS 2014

FIGURE 6
SITE SOILS
 SKYLINE AGGREGATES
 SUSANVILLE, CALIFORNIA



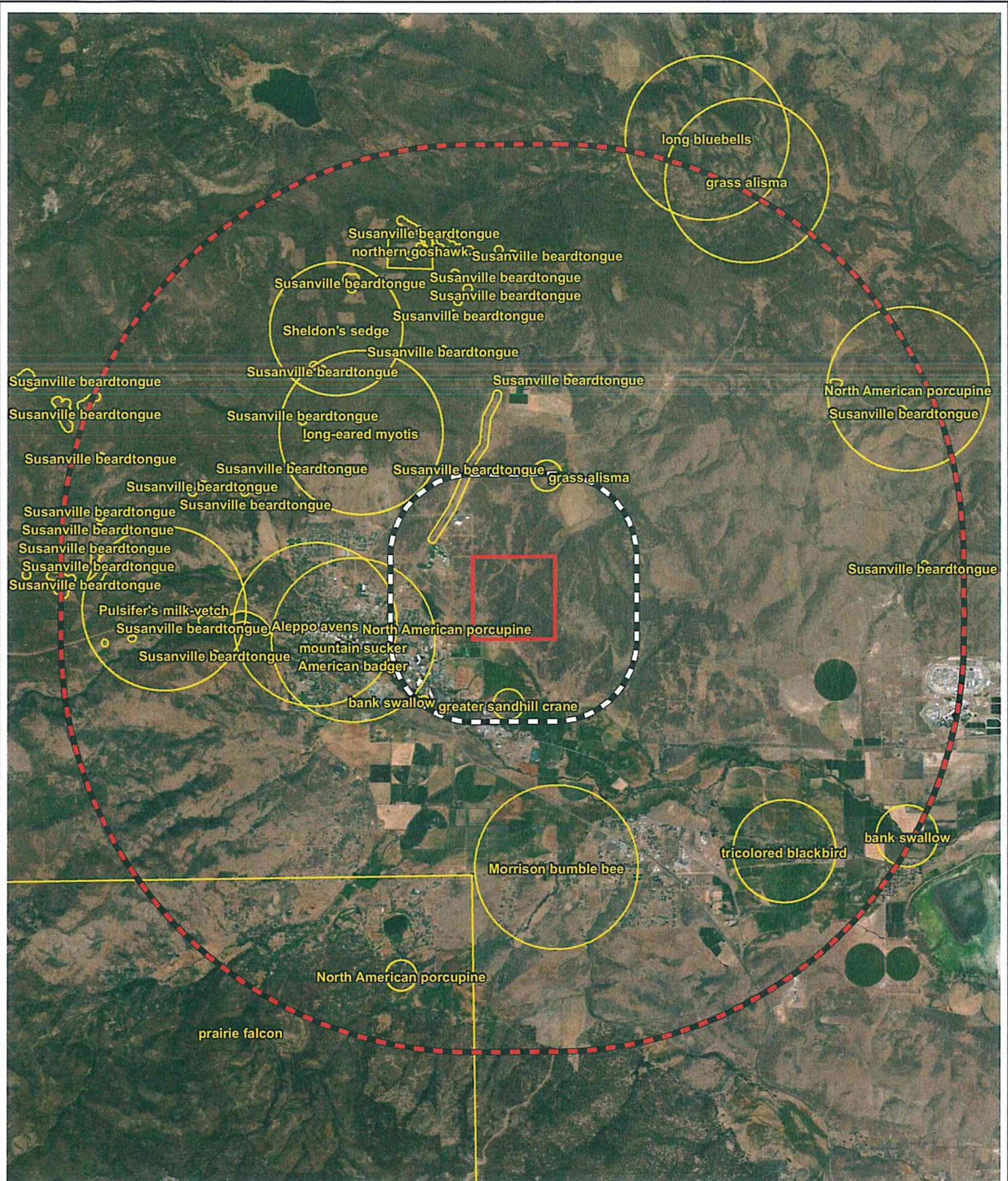
- | | | | | | |
|---|-----------------------------|---|------------------|--|------------|
|  | Approximate Parcel Boundary |  | Juniper |  | Sagebrush |
|  | Barren |  | Lacustrine |  | Urban |
|  | Cropland |  | Montane Riparian |  | Wet Meadow |



FIGURE 7
 CWHR VEGETATION TYPES
 SKYLINE AGGREGATES
 SUSANVILLE, CALIFORNIA



SOURCE: DIGITALGLOBE 2018 AERIAL PHOTOGRAPH;USFS 2009

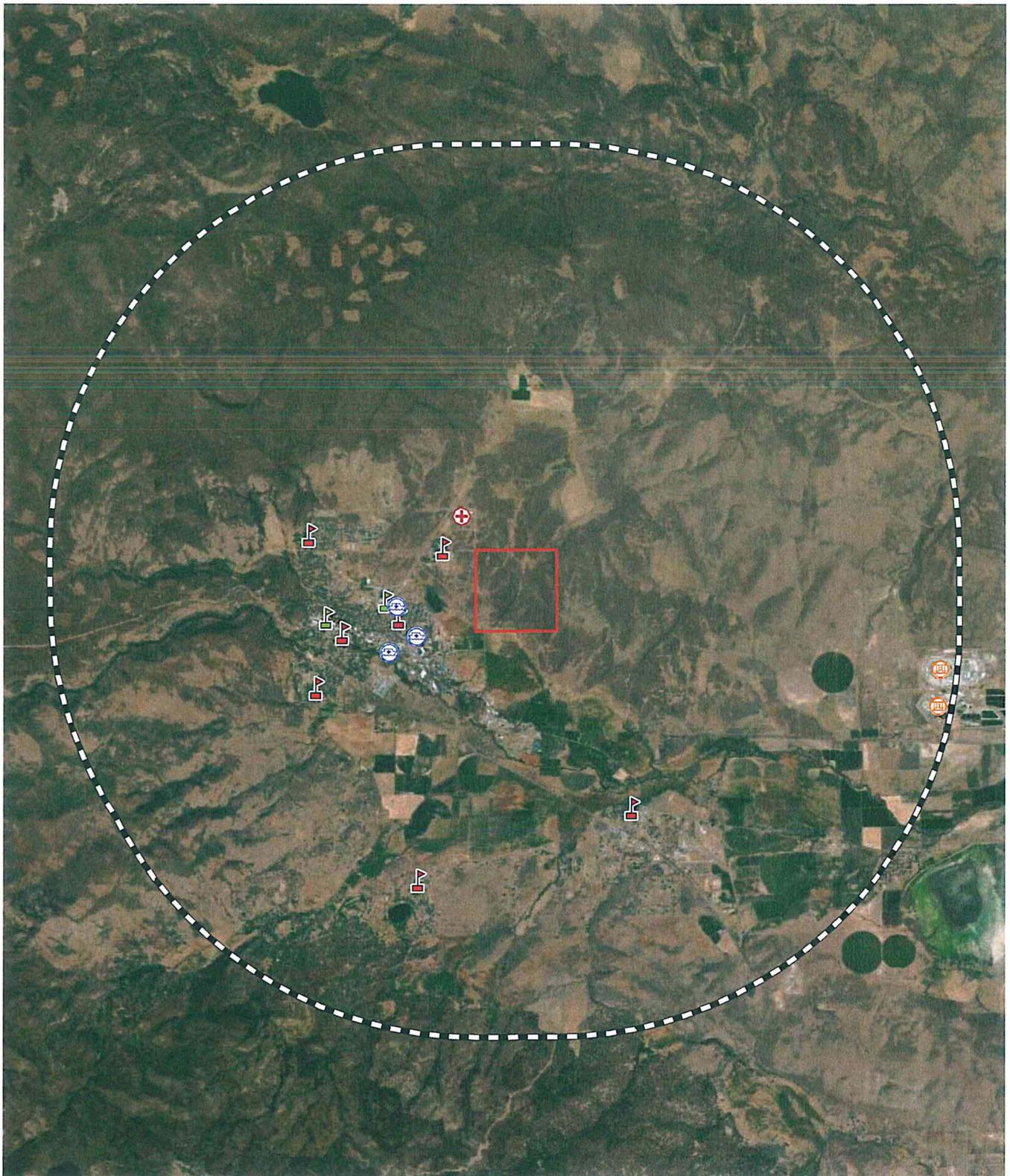


- CNDDDB Occurrence
- 1-Mile Buffer Around Parcel Boundary
- Approximate Parcel Boundary
- 5-Mile Buffer Around Parcel Boundary



FIGURE 8
 CNDDDB OCCURRENCES
 SKYLINE AGGREGATES
 SUSANVILLE, CALIFORNIA

SOURCE: DIGITALGLOBE 2018 AERIAL PHOTOGRAPH; CDFW CNDDDB OCTOBER 2022



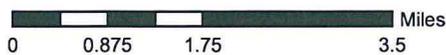
- | | | | |
|---|--------------------------|---|--------------------------------------|
|  | Assisted Living Facility |  | Prison |
|  | Hospital |  | School |
|  | Preschool |  | 5-Mile Buffer Around Project Parcels |

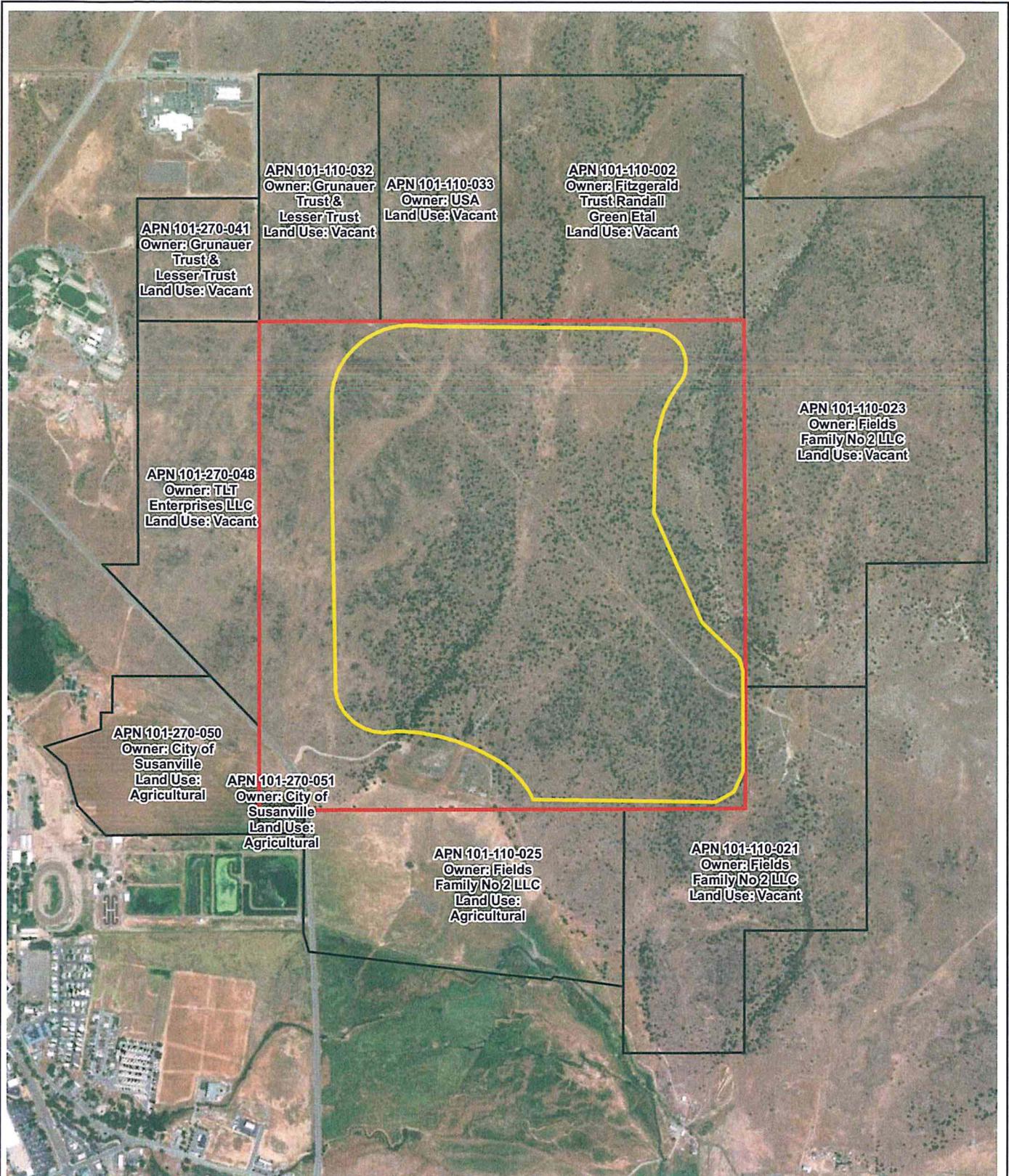


FIGURE 9
SENSITIVE RECEPTORS
WITHIN 5 MILES
SKYLINE AGGREGATES
LASSEN COUNTY, CALIFORNIA



SOURCE: MAXAR 2021 AERIAL PHOTOGRAPH



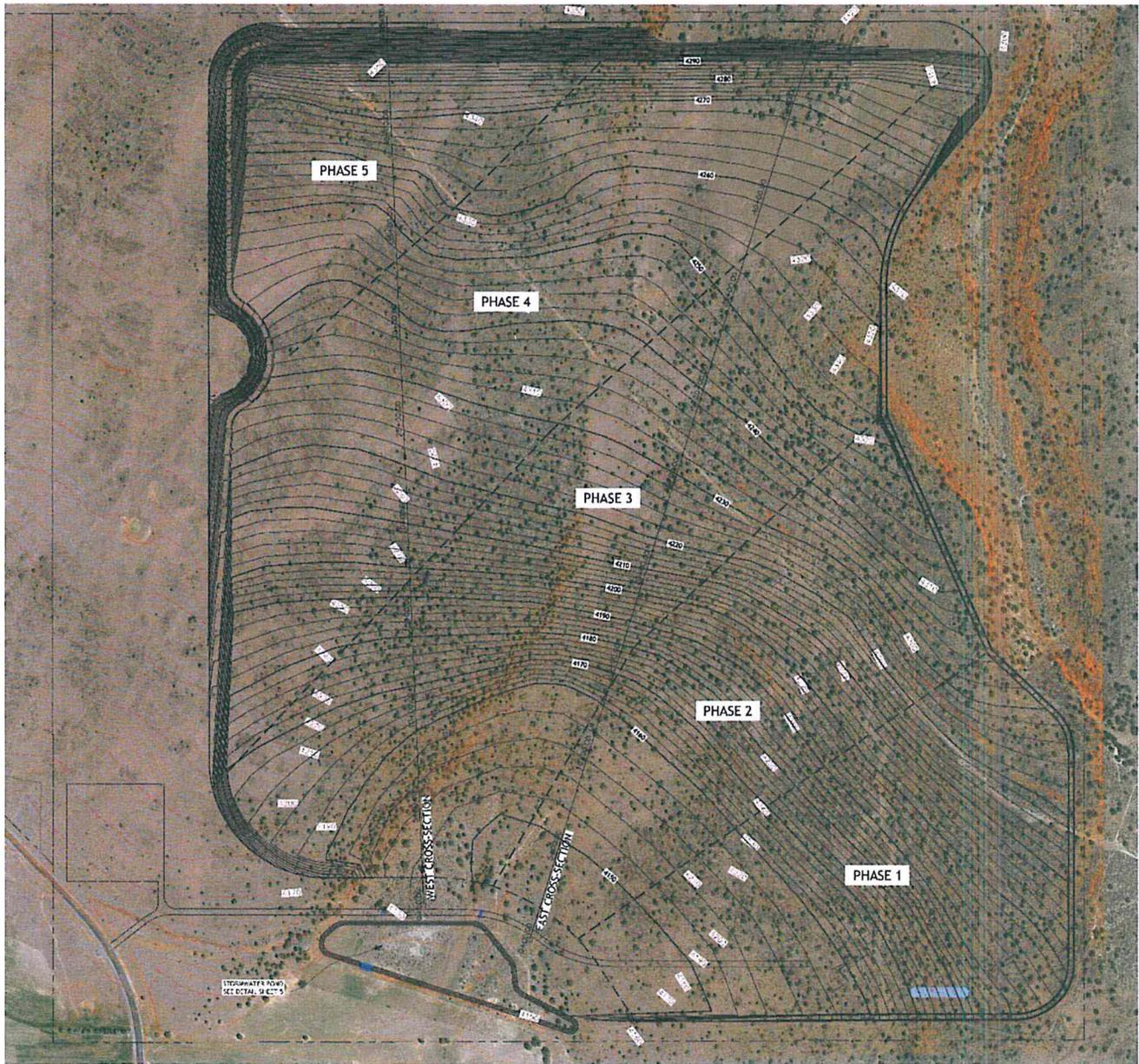


- Reclamation Boundary
- Approximate Property Boundary
- Approximate Surrounding Parcel Boundary



FIGURE 10
SURROUNDING PARCEL OWNERSHIP
SKYLINE AGGREGATES
LASSEN COUNTY, CALIFORNIA

SOURCE: DIGITALGLOBE 2018 AERIAL PHOTOGRAPH; LASSEN COUNTY 2017



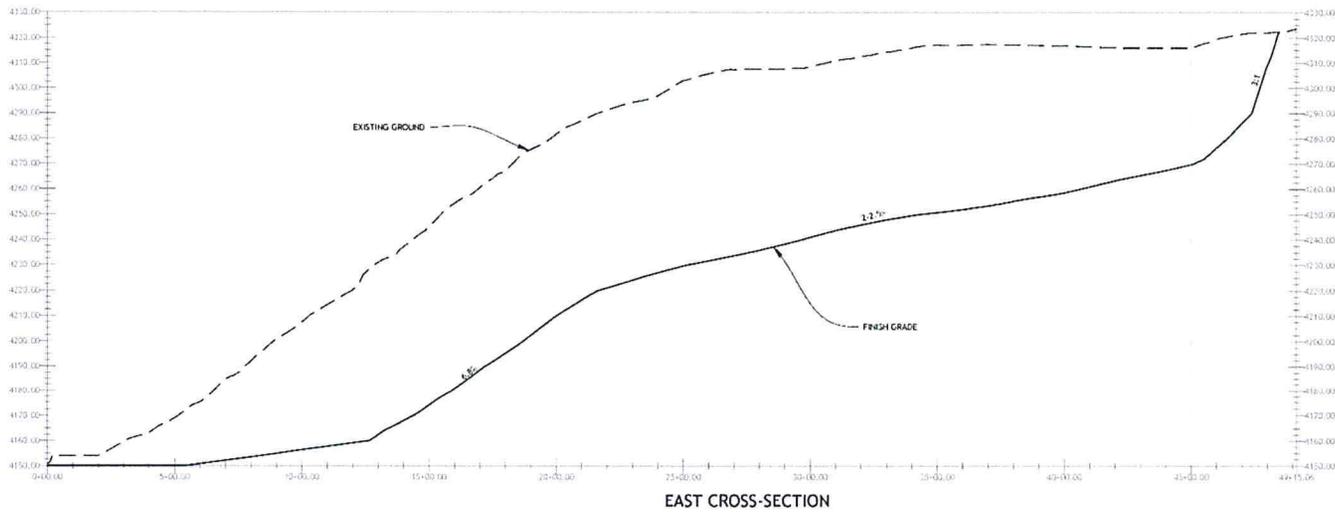
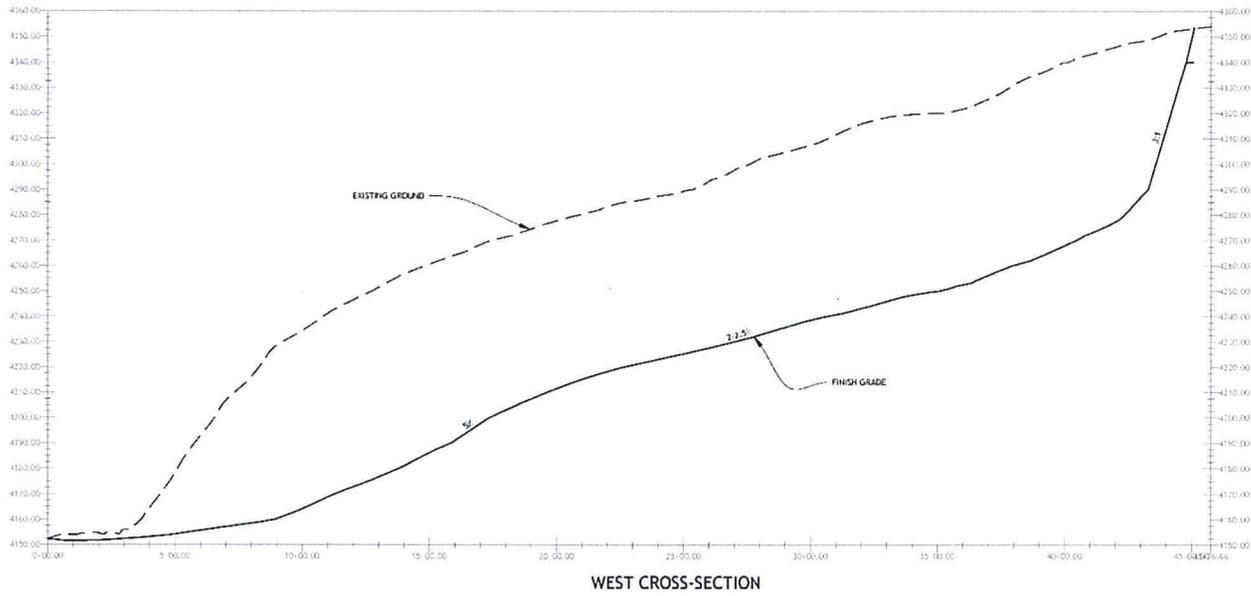
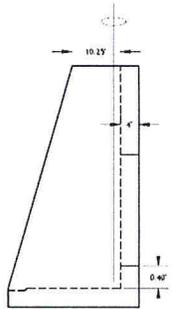
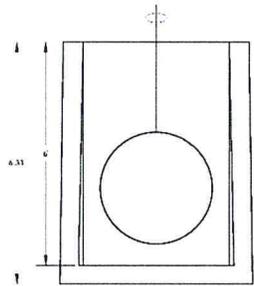
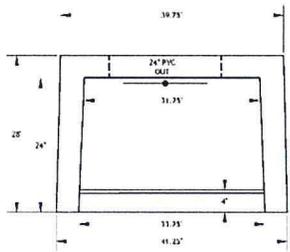


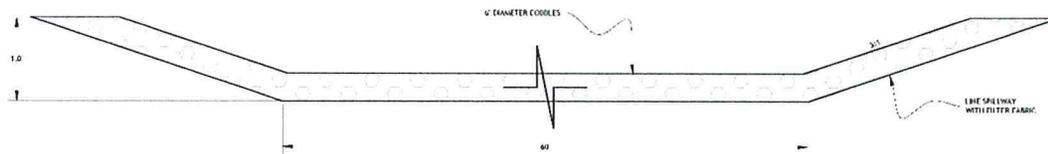
FIGURE 12
CROSS SECTIONS
SKYLINE AGGREGATES
SUSANVILLE, CALIFORNIA



HEADWALL (TYPICAL)
BRIGGS MANUFACTURING OR APPROVED EQUAL
NOT TO SCALE



STORMWATER POND DETAIL
1" = 60'



SPILLWAY DETAIL
NOT TO SCALE



FIGURE 13
STORMWATER POND DETAILS
SKYLINE AGGREGATES
SUSANVILLE, CALIFORNIA