DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
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AMENDED CEQA INITIAL STUDY

Adapted from CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, January 1, 2020
Amendments consisting of additions are reflected in bold text and deletions in strikeout text.

1.	**Project title:**	Rezone and Vesting Tentative Subdivision Map Application No. PLN2021-0101 – Hoffman Ranch
2.	**Lead agency name and address:**	Stanislaus County 1010 10th Street, Suite 3400 Modesto, CA 95354
3.	**Contact person and phone number:**	Kristen Anaya, Associate Planner (209) 525-6330
4.	**Project location:**	4325 Arnold Road and 4302 Riopel Avenue, between East Zeering and Powell Roads, in the Community of Denair (APN: 024-022-027).
5.	**Project sponsor's name and address:**	Dan Dunkley 239 Main Street, Suite E Pleasanton, CA 94566
6.	**General Plan designation:**	Planned Development
7.	**Community Plan designation:**	Low-Density Residential
8.	**Zoning:**	Planned Development (P-D) (288)

9. Description of project:

Request to rezone a 15.9± acres parcel from Planned Development (P-D) (288) to a new Planned Development, to subdivide the project site into 76 parcels, ranging in size from 5,855 square-feet to 12,631 square-feet and a 6,391± square-foot park site expansion. The project site has a General Plan designation of Planned Development and a Denair Community Plan designation of Low-Density Residential. With the exception of lot coverage, development standards and permitted uses applicable to the lots will be consistent with those of the County's Single-Family Residential (R-1) zoning district. The 76 single-family lots are proposed to allow a maximum aggregate building coverage of 50% for each, a 10% increase of the current 40% maximum aggregate building coverage requirement within R-1 zoning district. A tree planting plan has been included with the proposed project for each lot, which will require submittal of a landscape and irrigation plan upon development of each lot. If approved, each lot could be developed with one single-family dwelling, an accessory dwelling unit, and junior accessory dwelling unit.

As part of the project, the developer will extend the existing County-maintained Corona and Chalmer Ways eastward, through the proposed subdivision, terminating into Arnold Way along the eastern boundary. Interior 50-foot-wide roadways, including three cul-de-sacs, will be developed as part of the subdivision's interior circulation. Each street frontage will be developed with curb, gutter, sidewalk, and street lighting. Stormwater is proposed to be managed by an existing dual use basin located on Assessor's Parcel Number (APN) 024-022-030, which also serves the adjacent subdivision to the west. "Lot A" is proposed to dedicate a 6,391-square-foot expansion to the existing County park parcel, Hunter's Pointe, located on APN 024-022-029, and develop park improvements consisting of a basketball court and shade structure, in accordance with the Stanislaus County Park Land In-Lieu Of Fees Policy. A "Can-Serve" letter for water and sewer services to serve the residential development has been issued from the Denair Community Services District **(CSD)** for the project, which included ~~requirements~~**conditions of approval** that the project **annex into the CSD's boundaries, install all necessary water and sewer lines through the interior and outer boundary of the**

site, and pay **all applicable connection fees. As part of the conditions for connection the development will also be required to pay** its fair-share towards a ~~required municipal well~~**future capital improvement project consisting of a million gallon water tank, booster pumps, electrical upgrade, site work, and a backup generator.**".

P-D (288) was adopted by the Board of Supervisors on April 20, 2004 (General Plan Amendment 2003-01, Rezone 2003-03, and Tentative Map 2002-02 – Riopel Property ("Pope Subdivision"), which created the Rural Residential-zoned 53-lot subdivision located immediately west of the project site. The project site was included in creation of P-D (288), which was utilized to create two parcels, for development of a dual use drainage basin and park serving the subdivision to the west. The subsequent 15.9± acres parcel was not approved for further subdivision or use. Consequently, development of the site requires a new rezone and tentative map. If approved the applicant proposes for construction to begin within two years of project approval.

10. Surrounding land uses and setting: Single-family residential development to the west, scattered ranchette parcels and irrigated farmland to the north, east, and south; confined animal facility to the southeast.

11. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.): Stanislaus County Department of Public Works
Department of Environmental Resources
Denair Community Services District

12. Attachments:

I. Central California Information Center Records, dated September 10, 2021
II. California Emissions Estimator Model results, prepared by Insite Environmental, dated July 7, 2022
III. Phase I Environmental Site Assessment, prepared by Krazan and Associates, Inc., dated May 14, 2021
IV. Transportation Impact Assessment, prepared by Barrios Transportation Consulting, dated September 23, 2022
V. Mitigation Monitoring and Reporting Program, dated February 22, 2023

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ **Aesthetics**	☐ **Agriculture and Forestry Resources**	☐ **Air Quality**
☒ **Biological Resources**	☐ **Cultural Resources**	☐ **Energy**
☐ **Geology / Soils**	☐ **Greenhouse Gas Emissions**	☐ **Hazards and Hazardous Materials**
☐ **Hydrology / Water Quality**	☐ **Land Use / Planning**	☐ **Mineral Resources**
☐ **Noise**	☐ **Population / Housing**	☐ **Public Services**
☐ **Recreation**	☐ **Transportation**	☐ **Tribal Cultural Resources**
☐ **Utilities / Service Systems**	☐ **Wildfire**	☐ **Mandatory Findings of Significance**

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation:

☐ **I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.**

☒ **I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.**

☐ **I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.**

☐ **I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.**

☐ **I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.**

Signature on File
Prepared by Kristen Anaya, Associate Planner

February 22, 2023 (as updated on April 26, 2023)
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

> **a) Earlier Analysis Used. Identify and state where they are available for review.**
>
> **b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.**
>
> **c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.**

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). References to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

> **a) the significant criteria or threshold, if any, used to evaluate each question; and**
>
> **b) the mitigation measure identified, if any, to reduce the impact to less than significant.**

ISSUES

I. AESTHETICS – Except as provided in Public Resources Code Section 21099, could the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Discussion: The site itself is not considered to be a scenic resource or unique scenic vista. The site is designated Low-Density Residential within the Denair Community Plan. Neither Stanislaus County nor Denair Community Plan standards generally dictate the need or desire for architectural review of agricultural or residential subdivisions. The proposed project will rezone a 15.9± acres parcel from Planned Development (P-D) (288) to a new Planned Development and to subdivide the project site into 76 parcels, ranging in size from 5,855 square-feet to 12,631 square-feet and a 6,391± square-foot park site expansion.

The project site is currently vacant, but has been previously planted in row crops. The site is surrounded by single-family residential development to the west; scattered ranchettes and irrigated farmland to the north, east, and south; and confined animal facility to the southeast.

The applicant proposes to install street lighting, curb, gutter, and sidewalk for the entire subdivision. Additionally, the developer will extend the existing County-maintained Corona and Chalmer Ways eastward, through the proposed subdivision, terminating into Arnold Way. Interior 50-foot-wide roadways including three cul-de-sacs will be developed as part of the subdivision's interior circulation. Stormwater is proposed to be managed for the development through an existing 2.09 acres stormwater basin located on APN 024-022-030, which currently serves the existing residential development to the west. As part of the overall development plan, the proposed project includes a landscaping and tree planting plan. The applicant proposes to plant trees along the frontages of all lots and along the eastern frontage of the existing storm drainage basin, for an overall total of 137 trees. A referral response from the Department of Parks and Recreation provided a list of approved trees, requested that any street trees be planted at least three feet from hard surfaces such as curb, gutter, and sidewalk, and requested that the tree planting plan be submitted for review and approval. A basketball court and shade structure are proposed to be installed within Lot A, the Hunter's Pointe expansion. These project features will enhance the site's overall visual character as well as blending with the existing surrounding development.

A referral response was received from the County's Public Works Department requiring annexation of the project to the existing Community Service Area (CSA) #21 - *Riopel* and the Denair Highway Lighting and Landscaping District, to ensure future maintenance and eventual replacement of the storm drainage system and facilities, and any landscaped areas. Development standards have been added to the project addressing Public Works' requirements.

The project is not expected to degrade any existing visual character of the site or surrounding area. Lighting installed with the subdivision shall be designed to reduce any potential impacts of glare per the County's Public Works adopted Standards and Specifications.

Mitigation: None.

References: Referral Response from the Stanislaus County Department of Public Works, dated September 29, 2022; Referral Response from the Stanislaus County Department of Parks and Recreation, dated April 21, 2022; Application Information; Stanislaus County Zoning Ordinance; the Stanislaus County General Plan; and Support Documentation[1].

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			**X**	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			**X**	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?			**X**	
d) Result in the loss of forest land or conversion of forest land to non-forest use?			**X**	
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			**X**	

Discussion: The project site is 15.9± acres in size and presently unimproved, but in the past had been planted with row crops. The project site is classified by The California Department of Conservation Farmland Mapping and Monitoring Program as a being comprised of "Grazing Land." The United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS) Web Soil Survey indicates that the project site's soil primarily consists of: Grade 3 Greenfield sandy loam, deep over hardpan, 0 to 3 percent slops, Storie Index rating 47 (10.2± acres), Grade 4 Madera sandy loam, 0 to 2 percent slopes, Storie Index rating 30 (4.7± acres), and Grade 1 Hanford sandy loam, 0 to 3 percent slopes, Storie Index rating 93 (0.8± acres). Grade 1 soils are considered to be prime farmland; however, as the site's General Plan Designation and zoning were previously amended to Planned Development and includes a Denair Community Plan designation of Low-Density Residential, the site would not be considered Prime Farmland nor will the project convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

The project was referred to the Turlock Irrigation District (TID), who provided a referral response indicating that an irrigation pipeline belonging to Improvement District (ID) 573A runs along the western edge of the subject project. There are no electrical facilities on the parcel; however, there are two conduit stub-outs to the west that will be fed to serve the proposed subdivision: one located within Chalmer Way that terminates west where the project parcel begins, and one located at the

north end of the existing Hunter's Pointe Park, that terminates west at the project parcel boundaries. TID requested the developer enter into an irrigation improvements agreement and submit both irrigation improvement plans for any irrigation facility modifications, and the final map including an application for electrical facility extensions for approval by TID's Engineering Department prior to recording of the final map. Additionally, TID indicated that the developer must apply for abandonment from ID 573A since the subsequent parcels will no longer have direct access to water or irrigate. The District also requested that a 10-foot Public Utility Easement be dedicated along all street frontages, and that development of the proposed lots have a minimum 15-foot building setback from both the front property line and from back-of-sidewalk. Development standards will be placed on the project reflecting these requirements.

Surrounding uses include single-family residential development to the west, ranchette parcels and irrigated farmland to the north, east, and south, and confined animal facility to the southeast. In December of 2007, Stanislaus County adopted an updated Agricultural Element which incorporated guidelines for the implementation of agricultural buffers applicable to new and expanding non-agricultural uses within or adjacent to the A-2 Zoning District. Appendix A states: "All projects shall incorporate a minimum 150-foot-wide buffer setback. Projects which propose people intensive outdoor activities shall incorporate a minimum 300-foot-wide buffer setback." The purpose of these guidelines is to protect the long-term health of agriculture by minimizing conflicts such as spray drift and trespassing resulting from the interaction of agricultural and non-agricultural uses. Alternatives may be approved, provided the Planning Commission finds that the alternative provides equal or greater protection than the existing buffer standards. It is the opinion of staff that the proposed use is not a people intensive outdoor use. As mentioned, a residential subdivision is located west of the project site. Although the ranchette parcels to the east and south (all within approximately 50-feet from the project site) are agriculturally zoned, they are not in agricultural production, are designated as either Estate Residential or Low-Density Residential in the Denair Community Plan, and are improved with a single-family dwellings and accessory structures. Ranchettes are considered to be residential in nature as categorized under Goal Two of the Agriculture Element of the General Plan. Accordingly, the applicant is requesting an agricultural buffer alternative, consisting of a reduced distance of an at least 50-feet and physical separation of Arnold and East Zeering Roads, from the A-2 parcels to the east and south. The nearest parcels in agricultural production are two 5± acres ranchette parcels which bound the project site to the north but are designated Low Density Residential in the Denair Community Plan. Provision of 150-feet of distance is not feasible as the project site is immediately adjacent to the two northern parcels. Given the farming status of the two ranchette parcels to the north, the Agricultural Commissioner's Office has requested that an Agricultural Buffer alternative consisting of a solid eight-foot wood privacy fence be constructed along the northern property line of the proposed project. This requirement will be added as a development standard to the project.

The project parcel is not enrolled in a Williamson Act Contract. The nearest parcel enrolled under contract is a 326.4± acres parcel that is not in the Denair Community Plan and is located approximately 600+ feet away from the project site to the east, separated from the project site by ranchette parcels and a 100-foot-wide TID Main Canal. Therefore, the project is not anticipated to conflict with existing Williamson Act Contracts.

The Denair Community Plan outlines the future growth patterns of Denair and is used in conjunction with the General Plan to indicate the desired land use 'vision' for the town and to guide future growth patterns. Further residential development of the area would generally be confined within the Community Plan boundaries in areas with residential designations, or additional land use entitlements consisting of either Community Plan, General Plan, or zoning designation amendments would be required, subject to additional CEQA review. Residential development of land with a zoning or general plan designation of Agriculture also requires consistency with the Stanislaus County Zoning Ordinance Chapter 21.118 – 30-Year Land Use Restriction, or Measure E, which prohibits conversion of agriculturally designated land to residential without support of a majority vote by County voters at a special or general election. As residential development is limited to the current boundaries of the Denair Community Plan, the proposed project if approved is not anticipated to induce conversion of surrounding farmland to non-agriculture uses; nor will it conflict with existing zoning or a Williamson Act Contract. Additionally, although permits for spraying pesticides have been issued to the two parcels to the north of the project site, the proposed Agricultural Buffer will provide physical separation between the proposed subdivision and farming activities.

The project site is considered an in-fill development and will not contribute to the loss of farmland or forest land.

Mitigation: None.

References: E-mail correspondence from the Agricultural Commissioner's Office, dated May 17, 2022; Referral Response from Turlock Irrigation District, dated January 24, 2022; Natural Resources Conservation Service Soil Survey; application information; Stanislaus Soil Survey (1957); California State Department of Conservation Farmland Mapping and Monitoring Program - Stanislaus County Farmland 2018; Stanislaus County General Plan and Support Documentation[1].

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those odors adversely affecting a substantial number of people?			X	

Discussion: The proposed project is located within the San Joaquin Valley Air Basin (SJVAB) and, therefore, falls under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). In conjunction with the Stanislaus Council of Governments (StanCOG), the SJVAPCD is responsible for formulating and implementing air pollution control strategies. The SJVAPCD's most recent air quality plans are the 2007 PM10 (respirable particulate matter) Maintenance Plan, the 2008 PM2.5 (fine particulate matter) Plan, and the 2007 Ozone Plan. These plans establish a comprehensive air pollution control program leading to the attainment of state and federal air quality standards in the SJVAB, which has been classified as "extreme non-attainment" for ozone, "attainment" for respirable particulate matter (PM-10), and "non-attainment" for PM 2.5, as defined by the Federal Clean Air Act.

The primary source of air pollutants generated by this project would be classified as being generated from "mobile" sources. Mobile sources would generally include dust from roads, farming, and automobile exhausts. Mobile sources are generally regulated by the Air Resources Board of the California EPA which sets emissions for vehicles and acts on issues regarding cleaner burning fuels and alternative fuel technologies. As such, the District has addressed most criteria air pollutants through basin wide programs and policies to prevent cumulative deterioration of air quality within the Basin. The project will increase traffic in the area and, thereby, impacting air quality.

Potential impacts on local and regional air quality are anticipated to be less than significant, falling below SJVAPCD thresholds, as a result of the nature of the proposed project and project's operation after construction. Implementation of the proposed project would fall below the SJVAPCD significance thresholds for both short-term construction and long-term operational emissions, as discussed below. Because construction and operation of the project would not exceed the SJVAPCD significance thresholds, the proposed project would not increase the frequency or severity of existing air quality standards or the interim emission reductions specified in the air plans.

A project referral response from the Air District indicated that the proposed project is below the District's thresholds of significance for criteria pollutants, but requested the applicant perform an assessment of project emissions from both project-specific permitted equipment and activities using the California Emission Estimator Model (CalEEMod), to determine if emissions will contribute or cause violation of ambient air quality standards, and recommended an Ambient Air Quality Assessment (AAQA) to be performed for the project if the project criteria pollutants emissions exceed 100 pounds per day. Insite Environmental prepared a CalEEMod analysis of the project, dated July 7, 2022, which indicated the project emissions will not exceed 100 pounds per day; therefore, the project is not expected to cause or contribute to air quality standard violations. The results were provided to Air District staff, who concurred with the findings.

The District's Small Project Analysis Level (SPAL) guidance identifies thresholds of significance for criteria pollutant emissions, which are based on the District's New Source Review (NSR) offset requirements for stationary sources. Using project type and size, the District has pre-qualified emissions and determined a size below which it is reasonable to conclude that a project would not exceed applicable thresholds of significance for criteria pollutants. In the interest of streamlining CEQA requirements, projects that fit the descriptions and are less than the project sizes provided by the District are deemed to have a less than significant impact on air quality due to criteria pollutant emissions and as such are excluded from quantifying criteria pollutant emissions for CEQA purposes. The District's threshold of significance for residential projects is identified as 155 units, and less than 800 additional trips per day. The project proposes 76 residential lots, and one lot (Lot A) that is proposed to be dedicated as a park expansion. The proposed project has the potential to develop a maximum of 152 new dwelling units, inclusive of each new lot able to be developed with one single-family dwelling, and one accessory

dwelling unit (ADU). One junior accessory dwelling unit (JADU) per lot is also permitted under a single-family residential Planned Development zoning district; however, the JADU would not count as a separate dwelling unit, as the JADU consists of living space within the primary home. According to the Federal Highway Administration the average daily vehicle trips per household is 5.11, which would equal approximately 776.72 additional trips per-day as a result of project approval (152 new units x 5.11 = 776.72), which would be below the District's threshold of significance.

Construction activities associated with new development can temporarily increase localized PM10, PM2.5, volatile organic compound (VOC), nitrogen oxides (NOX), sulfur oxides (SOX), and carbon monoxide (CO) concentrations a project's vicinity. The primary source of construction related CO, SOX, VOC, and NOX emission is gasoline and diesel powered, heavy-duty mobile construction equipment. Primary sources of PM10 and PM2.5 emissions are generally clearing and demolition activities, grading operations, construction vehicle traffic on unpaved ground, and wind blowing over exposed surfaces. Construction activities associated with the proposed project would consist primarily of constructing the dwelling units and installing road and sidewalk improvements. These activities would not require any substantial use of heavy-duty construction equipment and would require little or no demolition or grading as the site is presently unimproved and considered to be topographically flat. As evaluated in the project's CalEEMod results, emissions would be minimal. Furthermore, all construction activities would occur in compliance with all SJVAPCD regulations; therefore, construction emissions would be less than significant without mitigation. Potential impacts on local and regional air quality are anticipated to be less than significant, falling below SJVAPCD thresholds, as a result of the nature of the potential construction of up to 152 new residential units and project's operation after construction.

For these reasons discussed above, the proposed project would be consistent with the applicable air quality plans. Also, the proposed project would not conflict with applicable regional plans or policies adopted by agencies with jurisdiction over the project and would be considered to have a less than significant impact.

Mitigation: None.

References: Application information; California Emissions Estimator Model results, prepared by Insite Environmental, dated July 7, 2022; San Joaquin Valley Air Pollution Control District's Small Project Analysis Level (SPAL) guidance, November 13, 2020; Federal Highway Administration, Summary of Travel Trends: 2017 National Household Travel Survey; Referral Response from the San Joaquin Valley Air Pollution Control District, dated January 26, 2022; E-mail correspondence from the San Joaquin Valley Air Pollution Control District, dated January 23, 2022 and May 23, 2022; San Joaquin Valley Air Pollution Control District - Regulation VIII Fugitive Dust/PM-10 Synopsis; www.valleyair.org; and the Stanislaus County General Plan and Support Documentation[1].

IV. BIOLOGICAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			**X**	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			**X**	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			**X**	

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		**X**		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			**X**	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			**X**	

Discussion: The project is located within the Denair Quad of the California Natural Diversity Database based on the U.S. Geographical quadrangle map series. According to aerial imagery and application materials, the surrounding area to the west is built up almost entirely with urban uses, and the area to the east is improved with ranchettes, and agricultural parcels, which are routinely disturbed in conjunction with farming practices.

Based on search results from the California Natural Diversity Database (CNDDB), there are two animals, one insect and one plant species, which are state or federally listed, threatened, or identified as species of special concern or a candidate of special concern within the Denair CNDDB Quad. These species include the Swainson's hawk, steelhead – Central Valley DPS, valley elderberry longhorn beetle, and San Joaquin Valley Orcutt grass. There are no reported sightings of any of the aforementioned species on the project site; however, a Swainson's hawk nesting site was observed on June 7, 1994, 1.25± miles northeast of the project site according to the CNDDB. There is no known sensitive or protected species or natural community located on the site.

An early consultation was referred to the California Department of Fish and Wildlife (CDFW) and no response was received. In follow-up correspondence, CDFW staff requested a mitigation measure to Swainson's hawk foraging habitat and requested that mitigation regarding no-disturbance active nest buffers, and temporal restrictions on construction during bird non-nesting season be applied to the project. A mitigation measure has been added to the project requiring pre-construction surveys by a qualified biologist, implementation of no-disturbance buffers, temporal restrictions on construction, and requiring an Incidental Take Permit be obtained if take cannot be avoided. CDFW staff reviewed and accepted the proposed mitigation. With mitigation in place, it does not appear this project will result in impacts to endangered species or habitats, locally designated species, or wildlife dispersal or mitigation corridors.

The project will not conflict with a Habitat Conservation Plan, a Natural Community Conservation Plan, or other locally approved conservation plans. Impacts to endangered species or habitats, locally designated species, or wildlife dispersal or mitigation corridors are considered to be less than significant.

Mitigation: If ground disturbing activity or construction commences between March 1 and September 15, pre-construction surveys for nesting Swainson's hawks (SWHA) shall be conducted by a qualified biologist. SWHA surveys shall be conducted a maximum of 10 days prior to the onset of grading or construction activities, within 0.5 miles of the project site area, in accordance with protocol developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC, 2000). If active nests are found, a qualified biologist, in consultation with the California Department of Fish and Wildlife (CDFW), shall determine the need (if any) for temporal restrictions on construction, including but not limited to a minimum no-disturbance buffer of 0.5 miles to be maintained around active nests prior to and during any ground-disturbing activities until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. If take cannot be avoided, take authorization through the issuance of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with the California Endangered Species Act (CESA). The determination shall utilize criteria set forth by CDFW (CDFG, 1994).

References: E-mail correspondence from the California Department of Fish and Wildlife, dated June 28, 2022 and January 13, 2023; California Department of Fish and Wildlife's Natural Diversity Database Quad Species List; Stanislaus County General Plan and Support Documentation[1].

V. CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?			**X**	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			**X**	
c) Disturb any human remains, including those interred outside of formal cemeteries?			**X**	

Discussion: A records search conducted by the Central California Information Center (CCIC) for the project site indicated that there are no historical, cultural, or archeological resources recorded on-site and that the site has a low sensitivity for the discovery of such resources. The report from the CCIC indicated that historic buildings and structure have been recorded within Denair and the surrounding vicinity. Since the project area has not been subject to previous investigations, there may be unidentified features involved in the project area that are 45 years or older and considered as historical resources requiring further study. The CCIC recommend further review for the possibility of identifying prehistoric or historic-era archaeological resources if ground disturbance is considered a part of the current project. If archaeological resources are encountered during project-related activities**,** work should be halted in the vicinity of the discovered materials until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. If Native American remains are found, the County Coroner and the Native American Heritage Commission are to be notified immediately for recommended procedures. If human remains are uncovered, all work within 100 feet of the find should halt in compliance with Section 15064.5(e) (1) of the CEQA Guidelines and Public Resources Code Section 7060.5. Development standards will be added to the project to ensure these requirements are met.

The County does not use age as an indication of historic resources. Further, as the site is presently unimproved with any structures, demolition or impact on existing buildings is not considered a significant impact to cultural resources.

Mitigation: None.

References: Central California Information Center Report for the project site, dated September 10, 2021; Stanislaus County General Plan, and Support Documentation[1].

VI. ENERGY -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			**X**	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			**X**	

Discussion: The CEQA Guidelines Appendix F states that energy consuming equipment and processes, which will be used during construction or operation such as: energy requirements of the project by fuel type and end use, energy conservation equipment and design features, energy supplies that would serve the project, total estimated daily vehicle trips to be generated by the project, and the additional energy consumed per trip by mode, shall be taken into consideration when evaluating energy impacts. Additionally, the project's compliance with applicable state or local energy legislation, policies, and standards must be considered.

The project proposes to rezone a 15.9± acres parcel from Planned Development (P-D) (288) to a new Planned Development and to allow for its subdivision into 76 single-family lots. All subsequent building permits for single-family dwellings would need to be in compliance with Title 24, Green Building Code, which includes energy efficiency requirements.

All proposed street lighting will be required to meet Public Works' standards and specifications as part of the improvement plans prior to acceptance of the improvement plans.

The project was referred to the Turlock Irrigation District (TID), who provided a referral response indicating that an irrigation pipeline belonging to Improvement District (ID) 573A runs along the western edge of the subject project. There are no electrical facilities on the parcel; however, there are two conduit stub-outs to the west that will be fed to serve the proposed subdivision: one located within Chalmer Way that terminates west where the project parcel begins, and one located at the north end of the existing Hunter's Pointe Park, that terminates west at the project parcel boundaries. TID requested the developer enter into an irrigation improvements agreement and submit both irrigation improvement plans for any irrigation facility modifications, and the final map including an application for electrical facility extensions for approval by the District's Engineering Department prior to recording of the final map. Additionally, TID indicated that the developer must apply for abandonment from ID 573A since the subsequent parcels will no longer have direct access to water or irrigate. TID also requested that a 10-foot Public Utility Easement be dedicated along all street frontages, and that development of the proposed lots have a minimum 15-foot building setback from both the front property line and from back-of-sidewalk. Development standards will be placed on the project reflecting these requirements.

It does not appear this project will result in significant impacts to the wasteful, inefficient, or unnecessary consumption of energy resources. A condition of approval will be added to this project to address compliance with Title 24, Green Building Code, for projects that require energy efficiency.

Mitigation: None.

References: Application Information; CEQA Guidelines; Title 16 of County Code; CA Building Code; Stanislaus County Zoning Ordinance (Title 21); Referral Response from Turlock Irrigation District, dated January 24, 2022; Stanislaus County 2016 General Plan EIR; Stanislaus County General Plan and Support Documentation[1].

VII. GEOLOGY AND SOILS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			**X**	
ii) Strong seismic ground shaking?			**X**	
iii) Seismic-related ground failure, including liquefaction?			**X**	
iv) Landslides?			**X**	
b) Result in substantial soil erosion or the loss of topsoil?			**X**	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			**X**	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			**X**	

e)	**Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**			**X**	
f)	**Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**			**X**	

Discussion: The USDA Natural Resources Conservation Service's Eastern Stanislaus County Soil Survey indicates that the property is made up of: Greenfield sandy loam, deep over hardpan, 0 to 3 percent slops (10.2± acres), Madera sandy loam, 0 to 2 percent slopes (4.7± acres), and Hanford sandy loam, 0 to 3 percent slopes (0.8± acres). As contained in Chapter 5 of the General Plan Support Documentation, the areas of the County subject to significant geologic hazard are located in the Diablo Range, west of Interstate 5; however, as per the California Building Code, all of Stanislaus County is located within a geologic hazard zone (Seismic Design Category D, E, or F) and a soils test may be required at building permit application. Department of Environmental Resources (DER), Public Works, and the Building Permits Division review and approve any building permit to ensure their standards are met. Any earth moving must be approved by Public Works as complying with adopted Standards and Specifications, which consider the potential for erosion and run-off prior to permit approval. The project was referred to Public Works who responded that prior to the recording of the final map, a complete set of improvement plans that are consistent with the Stanislaus County Standards and Specifications and the tentative map shall be submitted and approved by Stanislaus County Public Works. A soils report for the drainage basin was prepared in conjunction with this request, to determine whether the existing basin is adequately sized, and if deepening the basin was feasible. Based on the information, Public Works determined that the basin may be deepened, as needed to accommodate the drainage needs of the additional 76 residential lots; however, a current soils report for the project site and a grading, drainage, and erosion/sediment control plan shall be submitted prior to acceptance of the improvement plans. Public Works' requirements will be placed on the project as Development Standards.

The Building Division may utilize the results from the soils test, or require additional soils tests, to determine if unstable or expansive soils are present. If such soils are present, special engineering of any structures will be required to compensate for the soil deficiency. Any structures resulting from this project will be required to be designed and built according to building standards appropriate to withstand shaking for the area in which they are constructed. Likewise, any addition or expansion of a septic tank or alternative wastewater disposal system would require the approval of DER through the building permit process, which also takes soil type into consideration within the specific design requirements.

The project proposes creation of 76-lots for single-family dwelling units. The site will be served public water and sewer by the Denair Community Services District (CSD). The Denair CSD provided a "can-serve" letter indicating their ability to serve the project site with public water and sewer on the condition that the project pay its fair-share towards a planned municipal well in the future. The letter indicated that the Denair CSD will require the owner/developer to enter into an agreement with the Denair CSD to construct and pay for necessary infrastructure to enable the Denair CSD to provide water and sewer services to the project. The agreement will require the infrastructure be constructed to Denair CSD specifications, and that security be given to the Denair CSD to guarantee performance and payment for the infrastructure, and that all current connection fees be paid in full prior to issuance of a formal "Will-Serve" letter to the property owner/developer. Additionally, the applicant may be required to pay a fair-share fee for future facilities for Denair CSD services. The formal Will-Serve letter must be presented to the Stanislaus County Building Permits Division prior to issuance of a building permit for any residential structure. The CSD's comments will be applied to the project as development standards. No septic facilities are proposed as part of the project request. A referral response was received from DER requiring the development obtain a formal Will-Serve letter from the CSD for sewer and water services.

The project site is not located near an active fault or within a high earthquake zone. Landslides are not likely due to the flat terrain of the area. Compliance with the Storm Water Pollution Prevention Program (SWPPP), with the Alquist-Priolo Earthquake Fault Zoning Act, and the California Building Code are all required through the building and grading permit review process which would reduce the risk of loss, injury, or death due to earthquake or soil erosion to less than significant.

Mitigation: None.

References: Application information; USDA – NRCS Web Soil Survey; Referral Response received from Stanislaus County Department of Public Works, dated September 29, 2022; Letter received from Denair Community Services District, dated May 5, 2022; Referral Response from the Stanislaus County Department of Environmental Resources, dated January 25, 2022; Stanislaus County General Plan and Support Documentation[1].

VIII. GREENHOUSE GAS EMISSIONS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			**X**	

Discussion: The principal Greenhouse Gasses (GHGs) are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H2O). CO2 is the reference gas for climate change because it is the predominant greenhouse gas emitted. To account for the varying warming potential of different GHGs, GHG emissions are often quantified and reported as CO2 equivalents (CO2e). In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] No. 32), which requires the California Air Resources Board (ARB) design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020. Two additional bills, SB 350 and SB32, were passed in 2015 further amending the states Renewables Portfolio Standard (RPS) for electrical generation and amending the reduction targets to 40% of 1990 levels by 2030. GHGs emissions resulting from residential projects include emissions from temporary construction activities, energy consumption, and additional vehicle trips.

This project is a request to rezone a 15.9± acres parcel from Planned Development (P-D) (288) to a new Planned Development and to subdivide the project site into 76 parcels, ranging in size from 5,855 square-feet to 12,631 square-feet and a 6,391± square-foot park site expansion. With the exception of lot coverage, development standards and permitted uses applicable to the lots will be consistent with those of the County's Single-Family Residential (R-1) zoning district. The 76 single-family lots are proposed to allow a maximum aggregate building coverage of 50% for each, a 10% increase of the current 40% maximum aggregate building coverage requirement within R-1 zoning district. The developer has proposed to dedicate "Lot A" as a 6,391-square-foot expansion to the existing County park parcel, Hunter's Pointe, located on Assessor's Parcel Number (APN) 024-022-029, and develop park improvements. The proposed project has the potential to develop a maximum of 152 new dwelling units, inclusive of each new lot able to be developed with one single-family dwelling, and one accessory dwelling unit (ADU). One junior accessory dwelling unit (JADU) per lot is also permitted under a single-family residential Planned Development zoning district; however, the JADU would not count as a separate dwelling unit, as the JADU consists of converted living space within the primary home.

As required by CEQA Guidelines Section 15064.3, potential impacts regarding Green House Gas Emissions should be evaluated using Vehicle Miles Traveled (VMT). Stanislaus County has currently not adopted any significance thresholds for VMT, and projects are treated on a case-by-case basis for evaluation under CEQA. However, the State of California – Office of Planning and Research (OPR) has issued guidelines regarding VMT significance under CEQA. The CEQA Guidelines identify vehicle miles traveled (VMT), which is the amount and distance of automobile travel attributable to a project, as the most appropriate measure of transportation impacts.

The project was referred to the Stanislaus County Environmental Review Committee, who responded to the project requesting a traffic impact study to quantify project specific impacts to local roads and intersections. A Transportation Impact Assessment, dated May 17, 2022, was prepared by Barrios Transportation Consulting. Using the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition), the project's trip generation was estimated to result in 717 new daily vehicle trips, including approximately 58 morning peak hour trips and 77 evening peak hour trips. While vehicle miles of travel (VMT) is the current metric for which projects' traffic impacts must be evaluated under CEQA, the Stanislaus County General Plan still has a policy to maintain level of service (LOS) C or better operations at intersections during the peak hour. LOS is a method to qualify traffic flow based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels of service are defined ranging from LOS A (free-flow conditions) to LOS F (over capacity conditions). LOS E corresponds to operations "at capacity". When volumes exceed capacity, stop-and-go conditions result, and operations are designated LOS F.

The Assessment quantified the project's traffic impacts through both Level of Service (LOS). Six intersections in Denair were evaluated for conditions during both morning and evening peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.), including: Santa Fe Avenue and Zeering Road; Gratton and Zeering Roads; Riopel Avenue and Zeering Road; Santa Fe Avenue and Main Street; Lester Road and Main Street; and Santa Fe Avenue and Monte Vista Avenue. Based on the

assessment of both existing cumulative conditions, the project is not expected to add a substantial number of trips to the roadway network and therefore, intersection operations are anticipated to remain relatively unchanged compared to baseline cumulative conditions. All intersections that were evaluated will continue to operate at LOS C or better conditions. With respect to VMT, the project is considered an infill residential project, as the project site was already identified in the Denair Community Plan for residential uses and were therefore accounted for under previous environmental analysis. Additionally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. A major transit stop is defined as a site containing an existing rail transit station. The Turlock-Denair Amtrak station, a passenger transit line, is located approximately .46± miles to the southwest of the project site. Accordingly, VMT impacts are considered to be less than significant.

The proposed project will result in short-term emissions of GHGs during construction. These emissions, primarily CO2, CH4, and N2O, are the result of fuel combustion by construction equipment and motor vehicles. The other primary GHGs (HFCs, PFCs, and SF6) are typically associated with specific industrial sources and are not expected to be emitted by the proposed project. Use of heavy-duty construction equipment would be very limited as the site is considered relatively topographically flat. As described above in Section III - *Air Quality* of this report, the project was referred to the San Joaquin Valley Air Pollution Control District, who requested that the California Emissions Estimator Model (CalEEMod) be used to quantify the project's emissions resulting from both permitted and non-permitted, station and mobile, sources. Based on the CalEEMod results performed by, the project will result in less than 100 pounds of project emissions per day and therefore will not contribute or cause violations to air quality emission standards. Additionally, the Air District indicated the project is below the District's thresholds of significance for criteria pollutants; therefore, the emissions of CO2 from construction would be less than significant. Additionally, the construction of the proposed buildings is subject to the mandatory planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality measures of the California Green Building Standards (CALGreen) Code (California Code of Regulations, Title 24, Part 11). All proposed construction activities associated with this project are considered to be less than significant as they are temporary in nature and are subject to meeting SJVAPCD standards for air quality control. Accordingly, no significant impacts to GHG emissions are anticipated.

Mitigation: None.

References: Application Materials; Referral Response from the Environmental Review Committee, dated January 26, 2022; California Emissions Estimator Model results, prepared by Insite Environmental, dated July 7, 2022; Transportation Impact Assessment, prepared by Barrios Transportation Consulting, dated May 17, 2022; San Joaquin Valley Air Pollution Control District's; Referral Response from the San Joaquin Valley Air Pollution Control District, dated January 26, 2022; E-mail correspondence from the San Joaquin Valley Air Pollution Control District, dated January 23, 2022 and May 23, 2022; County General Plan and Support Documentation[1].

IX. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			**X**	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			**X**	

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			**X**	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			**X**	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			**X**	

Discussion: The project was referred to the Department of Environmental Resources (DER) Hazardous Materials Division, which is responsible for overseeing hazardous materials. The Hazardous Materials Division (HazMat) requested that should the project involve installation of monitoring wells or borings, the developer must submit a permit application to HazMat, as well as notify DER staff should any underground storage tanks, buried chemicals, buried refuse, or contaminated soil be discovered during grading or construction. A Phase I Environmental Site Assessment, dated May 14, 2021, was prepared by Krazan & Associates, Inc. in conjunction with this project. The Assessment identified 6,000-square-foot, 3-foot-high mounded soil present on the project site of unknown origin. Per the report, upon site reconnaissance, no odors, staining, discoloration stressed vegetation, or other obvious signs of hazardous materials were noted in connection with the soil mounds. However, the composition of the soil with respect to potential contaminants is unknown at this time. The Assessment recommended that a Phase II Limited Soils Assessment be conducted at the time of development. Additionally, HazMat staff responded to the assessment, requiring that the soil mounds be fully investigated prior to issuance of grading permit, including testing for various chemicals and volatile organic compounds/hydrocarbons in accordance with Environmental Protection Agency guidance and policies. These comments will be added as development standards for the project.

Pesticide exposure is a risk in areas located in the vicinity of agricultural uses. Sources of exposure include contaminated groundwater, which is consumed and drift from spray applications. Application of sprays are strictly controlled by the Agricultural Commissioner and can only be accomplished after first obtaining permits. Additionally, agricultural buffers are intended to reduce the risk of spray exposure to surrounding people. In December of 2007, Stanislaus County adopted an updated Agricultural Element which incorporated guidelines for the implementation of agricultural buffers applicable to new and expanding non-agricultural uses within or adjacent to the A-2 Zoning District. Appendix A states: "All projects shall incorporate a minimum 150-foot-wide buffer setback. Projects which propose people intensive outdoor activities shall incorporate a minimum 300-foot-wide buffer setback." The purpose of these guidelines is to protect the long-term health of agriculture by minimizing conflicts such as spray drift and trespassing resulting from the interaction of agricultural and non-agricultural uses. Alternatives may be approved, provided the Planning Commission finds that the alternative provides equal or greater protection than the existing buffer standards. The project proposes to create 76 residential lots which is not considered to be a people intensive outdoor use. It is the opinion of staff that the proposed use is not a people intensive outdoor use. As mentioned, a residential subdivision is located west of the project site which does not trigger any Agricultural Buffer requirements. Although the ranchette parcels to the east and south, all within approximately 50-feet from the project site are agriculturally zoned, they are not in agricultural production, are designated as either Estate Residential or Low-Density Residential in the Denair Community Plan, and are improved with a single-family dwellings and accessory structures. Ranchettes are considered to be residential in nature as categorized under Goal Two of the Agriculture Element of the General Plan. The nearest parcels in agricultural production are two 5± acres ranchette parcels which bound the project site to the north but are designated Low Density Residential in the Denair Community Plan. Accordingly, the County's requirement for an agricultural buffer is required between the project site and the parcels to the north only. Provision of 150-feet of distance is not feasible as the project site is immediately adjacent to the two northern parcels, which requires an alternative to be proposed. Given the farming status of the two ranchette parcels to the north, the Agricultural Commissioner's Office has requested that an Agricultural Buffer alternative consisting of a solid eight-foot wood privacy fence be constructed along the northern property line of the proposed project. This requirement will be added as a development standard to the project.

The project site is not listed on the EnviroStor database managed by the CA Department of Toxic Substances Control or within the vicinity of any airport. HazMat notified the Stanislaus County Planning Department of the presence of an open Central Valley Regional Water Quality Control Board (CVRWQCB) case (T0609997924) for a Leaking Underground Storage Tank (LUST) located 0.3± miles to the west of the project site at 4740 Main Street; however, groundwater is not known to

be contaminated within the project site area. The site is not known to be within the vicinity of any mining activities, past or present. The project will be served by the Denair Community Services District for their domestic water and sewer services. The Hazardous Material Division indicated that the project will not have a significant effect on the environment. Additionally, the project was referred to the Stanislaus County Environmental Review Committee (ERC), which did not expand on the comments provided by HazMat that were discussed previously.

The project was referred to the Department of Toxic Substances Control (DTSC), who responded to the project indicating that tailpipe emissions from vehicles using leaded gasoline resulted in aerially deposited lead (ADL) being deposited in and along roadways throughout California. Due to the potential for ADL-contaminated soil, DTSC recommended that soil samples be collected and analyzed prior to issuance of a grading or building permit. Their response also indicated that any imported soil utilized for backfill should be sampled to ensure the imported soil is free from contamination, and that due to the site's past agricultural usage, proper investigation for organochlorinated pesticides should occur via a Phase 2 Study prior to issuance of a grading or building permit. These recommendations will be added as a Development Standards to the project. DTSC also recommended that sites which were used for mining activities, or in the vicinity of past or present mining activities, should be investigated for mine waste. The project site has no known history of mining, nor is there any known mining activities in the vicinity of the project site. Further, they recommended surveys be conducted for presence of lead-based paint products, mercury, asbestos, and polychlorinated biphenyl caulk in the event that buildings are to be demolished on the project site. The project site is presently unimproved and therefore, no demolition is proposed to occur.

The site is located in a Local Responsibility Area (LRA) for fire protection and is served by Denair Fire Protection District. The project was referred to the District; however, no response has been received to date. Each subsequent building permit for the residential development will be required to meet any relevant State of California Fire Code requirement prior to issuance.

The project site is not within the vicinity of any airstrip or wildlands. With development standards in place, no significant impacts associated with hazards or hazardous materials are anticipated to occur as a result of the proposed project.

Mitigation: None.

References: Phase I Environmental Site Assessment, dated May 14, 2021, was prepared by Krazan & Associates, Inc.; Referral Response from the Environmental Review Committee, dated January 21, 2022; Referral Responses from Department of Environmental Resources – Hazardous Materials Division, dated January 21, 2022; Referral Response from the Department of Toxic Substances Control, dated January 20, 2022; Stanislaus County General Plan and Support Documentation[1].

X. HYDROLOGY AND WATER QUALITY -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			**X**	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			**X**	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;			**X**	
ii) substantially increase the rate of amount of surface runoff in a manner which would result in flooding on- or off-site.			**X**	

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			**X**	
iv) impede or redirect flood flows?			**X**	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			**X**	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			**X**	

Discussion: Areas subject to flooding have been identified in accordance with the Federal Emergency Management Act (FEMA). The project site is located in FEMA Flood Zone X, which includes areas determined to be outside the 0.2% annual chance floodplains. All flood zone requirements are addressed by the Building Permits Division during the building permit process.

The project is a request to rezone a 15.9± acres parcel from Planned Development (P-D) (288) to a new Planned Development and to subdivide the project site into 76 parcels, ranging in size from 5,855 square-feet to 12,631 square-feet and a 6,391± square-foot park site expansion. As required by the Stanislaus County General Plan's Land Use Element Sphere of Influence (SOI) Policy No. 27, projects within the sphere of influence of a sanitary sewer district, domestic water district, or community services district, shall be forwarded to the district board for comment regarding the ability of the district to provide services. Although the project site is not within the Denair Community Service District (CSD) boundaries, it is located within the CSD's Local Agency Formation Commission's (LAFCO) adopted Sphere of Influence (SOI). The applicant has provided a "Can-Serve" letter issued by the CSD, stating their ability to serve the proposed ~~lots~~**residential development** with sewer and water services. As a condition of service, the CSD will require the owner/developer to enter into an agreement to construct and pay for necessary infrastructure to enable the District to provide water and sewer services to the project. The agreement will require the infrastructure be constructed to District specifications, and that security be given to the District to guarantee performance and payment for the infrastructure, and that all current connection fees be paid in full. Additionally, the applicant ~~may be~~ **will be** required to pay a fair-share fee for future facilities for District services. **While the development will be required to install new water and sewer lines within the interior and western boundary of the project site for service, no new facilities are required in order for the proposed development to be served under the CSD's existing capacity. However, the CSD has identified a planned capital improvement project consisting of installation of a million-gallon water tank, booster pumps, electrical upgrade, site work and a backup generator, and an 1,800-foot tank fill line, which all new development projects will contribute a fair-share payment towards.** Development standards will be added to the project to reflect the CSD's conditions for services. In accordance with the implementation measures listed under Goal Two, Policy Two of the Denair Community Plan, the sizing of sewer and water lines should be reduced as they approach the northerly, westerly and easterly periphery of the Denair Community Plan area to limit growth influences beyond the Plan area. There is an existing 12-inch water main in East Zeering Road that stops at Riopel Avenue, which will need to be extended east to Arnold Road and then north to the edge of the project site boundaries; however, this is needed to maintain adequate water pressure and fire flow conditions. Otherwise, 8-inch pipes will be routed through the interior roadways of the project site to serve the proposed subdivision. The project was referred to LAFCO who responded to the project requiring the developer to annex into the CSD's boundaries and obtain LAFCO approval prior to extension of services. Additionally, a referral response was received from the Department of Environmental Resources (DER) who will require the project site obtain a "Will-Serve" letter for water and sewer services to serve the development issued from the Denair CSD prior to issuance of a building permit. These requirements will be reflected in the development standards for this project.

Water quality in Stanislaus County is regulated by the Regional Water Quality Control Board, Central Valley Region, (RWQCB) under a Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins. Under the Basin Plan, the RWQCB issues Waste Discharge Requirements (WDRs) to regulate discharges with the potential to degrade surface water and/or groundwater quality. In addition, the RWQCB issues orders to cease and desist, conduct water quality investigations, or implement corrective actions. The Stanislaus County Department of Public Works manages compliance with WDRs for some projects under a Memorandum of Understanding with the RWQCB. A response was received from the Department of Environmental Resources Hazardous Materials Division as previously mentioned in Section IX - *Hazards and Hazardous Materials*, which indicated the presence of an open Central Valley Regional Water Quality Control Board (CVRWQCB) case (T0609997924) for a Leaking Underground Storage Tank (LUST) located 0.3± miles to the southwest of the project site at 4740 Main Street; however, groundwater is not known to be contaminated within

the project site area. The CSD would be subject to regulatory requirements related to efforts to address any future water contamination issues. The project was referred to RWQCB who responded to the project with a list of regulatory programs and permits that may apply to the project. A development standard will be added to the project requiring the applicant contact and coordinate with RWQCB to determine if any permits or Water Board requirements be obtained/met prior to issuance of a building permit.

By virtue of the proposed paving for the roadways, building pads, driveways, and sidewalk improvements, the current absorption patterns of water upon this property will be altered, and as such, a Grading and Drainage Plan shall be approved prior to issuance of any building permit as required by Public Works. Stormwater is proposed to be managed by the existing basin located on Assessor Parcel Number (APN) 024-022-030, which currently serves the existing residential development to the west. The basin is currently planted in turf and is dual use for recreational purposes. A soils report for the drainage basin was prepared in conjunction with this request, to determine whether the existing basin is adequately sized, and if deepening the basin was feasible. Based on the information, Public Works determined that the basin may be deepened, as needed to accommodate the drainage needs of the additional 76 residential lots. Prior to recording of the final map, the developer will be required to submit improvement plans demonstrating the required modifications to the existing basin.

A referral response was received from the County's Public Works Department requiring annexation of the project to the existing Community Service Area (CSA) #21 - *Riopel* and the Denair Highway Lighting and Landscaping District to ensure future maintenance and eventual replacement of the storm drainage system and facilities, and any landscaped areas. Development standards have been added to the project addressing Public Works' requirements. Prior to the recording of the final map, a complete set of improvement plans that are consistent with the Stanislaus County Standards and Specifications and the tentative map shall be submitted and approved by Stanislaus County Public Works; additionally, a current soils report for the area to be subdivided and grading, drainage, and erosion/sediment control plan shall be submitted prior to acceptance of the improvement plans. Public Works' requirements will be placed on the project as Development Standards.

Groundwater management in California is regulated under the 2014 California Sustainable Groundwater Management Act (SGMA), which requires the formation of local Groundwater Sustainability Agencies (GSAs) to oversee the development and implementation of Groundwater Sustainability Plans (GSPs). SGMA defines sustainable groundwater management as the prevention of "undesirable results," including significant and unreasonable chronic groundwater levels, reduction of groundwater storage, degraded water quality, land subsidence, and/or depletions of interconnected surface water. GSPs define minimum thresholds and measurable objectives for sustainable groundwater management, designate monitoring networks to assess compliance with these management criteria and prescribe management actions and projects to achieve sustainability objectives within 20 years of their adoption.

Public and private water agencies and user groups within each of the four groundwater subbasins underlying the County work together as GSAs to implement SGMA. DER is a participating member in five GSAs. GSPs were adopted in January 2020 for the portions of the County underlain by the Eastern San Joaquin and Delta-Mendota Groundwater Subbasins and were adopted for the Turlock and Modesto Subbasins as required by January 31, 2022. The subject project is located within the West Turlock Groundwater Subbasin and the jurisdiction of the Turlock GSA; any modification, expansion, or addition of a municipal well by the Denair CSD is subject to meeting any applicable requirements of the Turlock GSP.

Groundwater management in Stanislaus County is also regulated under the County Groundwater Ordinance, adopted in 2014. In addition to GSPs and the Groundwater Ordinance, the County General Plan includes goals, policies, and implementation measures focused on protecting groundwater resources. The Groundwater Ordinance is aligned with SGMA in its objective to prevent "undesirable results". To this end, the Groundwater Ordinance requires that applications for new wells that are not exempt from the Ordinance are accompanied by substantial evidence that operation of the new well will not result in unsustainable groundwater extraction. Further, the owner of any well from which the County reasonably concludes groundwater may be unsustainably withdrawn, is required to provide substantial evidence of sustainable extraction. No new wells are anticipated to be installed as a result of this project. However, if a new well were developed in the future by the CSD, the drilling of a new well would be regulated by DER and the Turlock GSP, which would include an environmental analysis consistent with the California Environmental Quality Act (CEQA) with the CSD acting as lead agency. Additionally, projects with a potential to affect groundwater recharge or that involve the construction of new wells are referred to the DER for review. DER evaluates projects which for compliance with the County Groundwater Ordinance and refers projects to the applicable GSAs for determination whether or not they are compliance with an approved GSP.

No new septic systems are proposed under this request.

The project was referred to the Turlock Irrigation District (TID), who provided a referral response indicating that an irrigation pipeline belonging to Improvement District (ID) 573A runs along the western edge of the subject project. TID requested the developer enter into an irrigation improvements agreement and submit both irrigation improvement plans for any irrigation facility modifications for approval by the District's Engineering Department prior to recording of the final map. Additionally, TID indicated that the developer must apply for abandonment from ID 573A since the subsequent parcels will no longer have direct access to water or irrigate. Development standards will be placed on the project reflecting these requirements. As a result of the development standards required for this project, impacts associated with drainage, water quality, and runoff are expected to have a less than significant impact.

Mitigation: None.

References: Can-Serve Letter received from Denair Community Services District, dated May 5, 2022; Referral Response from the Stanislaus County Department of Environmental Resources, dated January 25, 2022; Referral Response received from Stanislaus County Department of Environmental Resources - Hazardous Materials Division, dated January 21, 2022; Referral Response received from Stanislaus County Department of Public Works, dated September 29, 2022; Referral Response from Turlock Irrigation District, dated January 26, 2022; Referral Response from Regional Water Quality Control Board, dated January 29, 2022; Stanislaus County General Plan and Support Documentation[1].

XI. LAND USE AND PLANNING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Physically divide an established community?			**X**	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			**X**	

Discussion: Request to rezone a 15.9± acres parcel from Planned Development (P-D) (288) to a new Planned Development and to subdivide the project site into 76 parcels, ranging in size from 5,855 square-feet to 12,631 square-feet and a 6,391± square-foot park site expansion. The project site has a General Plan designation of Planned Development and a Denair Community Plan designation of Low-Density Residential. With the exception of lot coverage, development standards and permitted uses applicable to the lots will be consistent with those of the County's Single-Family Residential (R-1) zoning district. The 76 single-family lots are proposed to allow a maximum aggregate building coverage of 50% for each, a 10% increase of the current 40% maximum aggregate building coverage requirement within R-1 zoning district. A tree planting plan has been included with the proposed project for each lot, which will require submittal of a landscape and irrigation plan upon development of each lot. A tree planting plan has been included with the proposed project for each lot, which will require submittal of a landscape and irrigation plan upon development of each lot. A referral response from the Department of Parks and Recreation provided a list of approved trees, requested that any street trees be planted at least three feet from hard surfaces such as curb, gutter, and sidewalk, and requested that the tree planting plan be submitted for review and approval. The land dedicated for the Hunter's Pointe park expansion will include improvements consisting of a basketball court, shade structure, and picnic table and be dedicated to Stanislaus County in accordance with the Stanislaus County Park Land In-Lieu Of Fees Policy, pursuant to General Plan Amendment No. 2003-02.

P-D (288) was adopted by the Board of Supervisors on April 20, 2004 (General Plan Amendment 2003-01, Rezone 2003-03, and Tentative Map 2002-02 – *Riopel Property* ("Pope Subdivision"), which created the Rural Residential zoned 53 lot subdivision located immediately west of the project site. The project site was included in creation of P-D (288), which was utilized to create two parcels, for development of a dual use drainage basin and park serving the subdivision to the west. The subsequent 15.9± acres parcel was not approved for further subdivision or use. Consequently, development of the site requires a new rezone and tentative map. If approved the applicant proposes for construction to begin within two years of project approval.

The project site is designated as Low-Density Residential (LDR) in the Denair Community Plan of the County General Plan. The project site is situated near the northeast corner of the Community Plan, buffered from the edge of the Community Plan boundaries by approximately 600-feet of distance consisting of the parcels zoned A-2 and designated Estate Residential in the Denair Community Plan fronting on Arnold Road to the east. The project site is surrounded by single-family residential development to the west, scattered ranchette parcels and irrigated farmland to the north, east, and south, and confined animal facility to the southeast. All immediately surrounding parcels zoned A-2, consisting of the adjacent parcels to the

north, east, and south are designated as Urban Transition under the Land Use Element and either Low-Density Residential or Estate Residential under the Denair Community Plan. The project is considered consistent with the LDR Community Plan designation and similar to development immediately west of the project site. The site is not anticipated to divide an established community, nor is it anticipated to be growth inducing. While residential development of the parcels with these Community Plan designations was considered in the Denair Community Plan Environmental Impact Report (EIR), a zoning change would need to be approved prior to any subdivision and residential development occurring, which will require project-level CEQA analysis and consistency with the Stanislaus County Zoning Ordinance Chapter 21.118 – *30-Year Land Use Restriction* ("Measure E"). Measure E prohibits conversion from agricultural zoning to residential without approval by a majority vote of county voters at a general or special election, which will further limit urban growth beyond the project site.

The LDR Community Plan designation allows for zero to eight units per net acre. If approved, each lot could be developed with one single-family dwelling, an accessory dwelling unit, and junior accessory dwelling unit; however, maximum density restrictions are not considered when developing accessory dwelling units in accordance with Senate Bill (SB) 13. The project proposes to create 76 lots ranging in size from 5,855 square-feet to 12,631 square-feet in size on 15.7± net acres (excepting the park dedication and street development), near the northeastern border of the community of Denair, which equates to a total net density of 4.8± units per net acre. The proposed Planned Development zoning district will include all uses and development standards permitted in the Stanislaus County Single-Family Residential (R-1) zoning district, with the exception of lot coverage. The applicant has proposed the resulting parcels be permitted to develop a cumulative building footprint of up to 50% of the total lot size, an increase of 10% from the current R-1 zoning district allowances. The applicant has requested this to achieve a greater flexibility in siting the housing product offered. The proposed lots will be served by the Denair Community Service District (CSD) for public water and sewer services. The proposed lot configuration and density will be consistent with the General Plan and zoning designations of Planned Development, and with the Community Plan designation of Low Density Residential, the zoning designation of the R-1 zoning district, and the Subdivision Map Act.

The intent of the LDR Community Plan designation is to provide appropriate locations and adequate areas for single-family detached homes in either conventional or clustered configurations. Under the LDR designation, residential building intensity, when served by a community services district or sanitary sewer district and public water district, is zero to eight units per acre. The project proposes a density of 4.8 units per net acre for the project site, which is consistent with the site's General Plan Designation of LDR. The General Plan and Community Plan designations do not factor in increased densities associated with the development of an Accessory Dwelling Unit (ADU) or Junior Accessory Dwelling Unit (JADU). If approved, each of the 76 developable residential parcels would be able to develop one single-family dwelling, one ADU, and one JADU. Section 21.74.040(D) of the County's Zoning Ordinance does not consider ADU's, developed in accordance with County regulations, as a part of the allowed overall density of a parcel's General Plan designation.

As required by the Stanislaus County General Plan's Land Use Element Sphere of Influence (SOI) Policy No. 27, projects within the sphere of influence of a sanitary sewer district, domestic water district, or community services district, shall be forwarded to the district board for comment regarding the ability of the district to provide services. As previously mentioned, the project site is not within the Denair CSD district boundaries, but is located within the CSD's Local Agency Formation Commission's (LAFCO) adopted Sphere of Influence (SOI). The applicant has provided a "Can-Serve" letter issued by the CSD, stating their ability to serve the proposed lots with sewer and water services. As a condition of service, the CSD will require the owner/developer to enter into an agreement to construct and pay for necessary infrastructure to enable the District to provide water and sewer services to the project. The agreement will require the infrastructure be constructed to District specifications, and that security be given to the District to guarantee performance and payment for the infrastructure, and that all current connection fees be paid in full. Additionally, the applicant may be required to pay a fair share fee for future facilities for District services. Development standards will be added to the project to reflect the CSD's conditions for services. In accordance with the implementation measures listed under Goal Two, Policy Two of the Denair Community Plan, the sizing of sewer and water lines should be reduced as they approach the northerly, westerly and easterly periphery of the Denair Community Plan area to limit growth influences beyond the Plan area. The project was referred to LAFCO who responded to the project requiring the developer to annex into the CSD's boundaries and obtain LAFCO approval prior to extension of services. Additional information provided by the CSD indicated that the existing sewer and water pipelines are sufficient size to serve the proposed subdivisions.

The SOI Policy No. 27 also requires that projects located within the boundaries of a Municipal Advisory Council (MAC) shall be referred to the MAC and the decision-making body give consideration to any comments received from the MAC. The proposed project is located within the Denair MAC boundaries and, accordingly, has been referred to the Denair MAC and no formal response has been received to date. The Denair MAC has requested to hear the project proposal and make a recommendation at a regularly scheduled monthly meeting following circulation of this environmental document.

In December of 2007, Stanislaus County adopted an updated Agricultural Element which incorporated guidelines for the implementation of agricultural buffers applicable to new and expanding non-agricultural uses within or adjacent to the A-2 Zoning District. Appendix A states: "All projects shall incorporate a minimum 150-foot-wide buffer setback. Projects which propose people intensive outdoor activities shall incorporate a minimum 300-foot-wide buffer setback." The purpose of these guidelines is to protect the long-term health of agriculture by minimizing conflicts such as spray drift and trespassing resulting from the interaction of agricultural and non-agricultural uses. Alternatives may be approved, provided the Planning Commission finds that the alternative provides equal or greater protection than the existing buffer standards. It is the opinion of staff that the proposed use is not a people intensive outdoor use. As mentioned, a residential subdivision is located west of the project site. Although the ranchette parcels to the east and south, all within approximately 50-feet from the project site are agriculturally zoned, they are not in agricultural production, are designated as either Estate Residential or Low-Density Residential in the Denair Community Plan, and are improved with a single-family dwellings and accessory structures. Ranchettes are considered to be residential in nature as categorized under Goal Two of the Agriculture Element of the General Plan. Accordingly, the applicant is requesting an agricultural buffer alternative, consisting of a reduced distance of an at least 50-feet and physical separation of Arnold and East Zeering Roads, from the A-2 parcels to the east and south. The nearest parcels in agricultural production are two 5± acres ranchette parcels which bound the project site to the north but are designated Low Density Residential in the Denair Community Plan. Provision of 150-feet of distance is not feasible as the project site is immediately adjacent to the two northern parcels. Given the farming status of the two ranchette parcels to the north, the Agricultural Commissioner's Office has requested that an Agricultural Buffer alternative consisting of a solid eight-foot wood privacy fence be constructed along the northern property line of the proposed project. This requirement will be added as a development standard to the project.

The General Plan and the Denair Community Plan requires at least three net acres of developed neighborhood parks, or the maximum number allowed by law, to be provided for every 1,000 residents. The project site abuts the County's Hunter's Pointe Park. Currently, Hunter's Pointe Park is approximately 0.34± acres in size. The Stanislaus County Parks and Recreation Park Land In-Lieu Of Fees Policy ("Policy") requires new subdivisions creating 53 parcels or more to build a park with amenities. Options to the developer include, land dedication, installation of equipment, park site development, payment of in-lieu fees or combination thereof. Based on the Policy, a 76-lot subdivision is required to dedicate 0.70 acres of land to serve the additional residents, payment of a $2,050 in-lieu fee per lot, development of park improvements of equivalent value, or a combination thereof. Given the County's existing Hunter's Pointe Park abuts the project site to the west, the applicant has agreed to dedicate 0.15± acres at the easterly portion of the park, to serve as a park expansion (which is equivalent to a required park acreage dedication for 16 lots), leaving 0.56± acres remaining required to be dedicated. In-lieu of additional land dedication, the applicant has opted to develop the park expansion site with a basketball court and shade structure, bids for which have been provided and meet the equivalent cost of the in-lieu fees for 60 lots/0.56 acres. The proposed dedication would be consistent with General Plan and Community Plan parks goals.

The Denair Community Plan outlines the future growth patterns of Denair and is used in conjunction with the General Plan to indicate the desired land use 'vision' for the town and to guide future growth patterns. Any request for a General Plan amendment or rezoning of the property must be consistent with the proposed use category on the Community Plan map and the Community Plan in general. Community Plans on a whole must be consistent with the overall General Plan. In this case, the project is consistent with both the General Plan and Community Plan designations of Planned Development and Low-Density Residential, respectively. Further residential development of the area would generally be confined within the Community Plan boundaries in areas with residential designations, or additional land use entitlements consisting of either Community Plan, General Plan, or zoning designation amendments would be required, subject to additional California Environmental Quality Act (CEQA) review. Residential development of land with a zoning or general plan designation of Agriculture also requires consistency with the Stanislaus County Zoning Ordinance Chapter 21.118 – 30-Year Land Use Restriction, or Measure E, which prohibits conversion of agriculturally designated land to residential without support of a majority vote by County voters at a special or general election. The proposed project will not create significant service extensions or new infrastructure which could be considered as growth inducing, as the Denair Community Service District's (CSD) Local Agency Formation Commission (LAFCO) adopted district boundaries and Sphere of Influence (SOI) identify the extent of the existing and planned service areas, with areas outside these boundaries generally considered unsuitable for growth and provision of services. Additionally, in accordance with the implementation measures listed under Goal Two, Policy Two of the Denair Community Plan, the sizing of sewer and water lines should be reduced as they approach the northerly, westerly and easterly periphery of the Denair Community Plan area to limit growth influences beyond the Plan area. There is an existing 12-inch water main in East Zeering Road that stops at Riopel Avenue, which will need to be extended east to Arnold Road and then north to the edge of the project site boundaries to maintain adequate water pressure and fire flow conditions. An existing eight inch water main at Riopel Avenue with a stub-out at Corona Way will be extended throughout the proposed roads within the proposed subdivision. An existing eight inch sewer main that will also be extended throughout the development. None of the existing pipelines will need to be upgraded or increased in size to serve the

development. Accordingly, the project is not anticipated to be growth inducing. The Land Use section of the Denair Community Plan states that the future growth forecasted for Denair translates into demand for a variety of housing types. The four Goals of the Denair Community Plan are:

- Goal One – Reinforce Denair's small rural town character;
- Goal Two – Provide a well-defined community edge between Denair and adjacent agricultural land, as well as between Denair and the City of Turlock;
- Goal Three – Provide for non-motorized transportation needs of the Denair community; and
- Goal Four – Provide for the recreational needs of residents of the Denair community.

The project is proposing development at a scale consistent with other residential development within the community, is providing sidewalk improvements aimed at improving nonmotorized transportation and providing a park expansion that will benefit both the project and the greater community. The proposed tree planting will serve to enhance the character of the community

Mitigation: None.

References: Letter from Denair Community Services District, dated May 5, 2022; E-mail correspondence from the Denair Community Services District, dated February 17, 2023; E-mail correspondence from the Agricultural Commissioner's Office, dated May 17, 2022; Stanislaus County Parks and Recreation Park Land In-Lieu Of Fees Policy, adopted by General Plan Amendment No. 2003-02; Referral Response from the Department of Parks and Recreation, dated April 21, 2022 and February 9, 2022; Referral Response from Local Agency Formation Commission, dated January 14, 2022; Stanislaus County General Plan and Support Documentation[1].

XII. MINERAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			**X**	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			**X**	

Discussion: The location of all commercially viable mineral resources in Stanislaus County has been mapped by the State Division of Mines and Geology in Special Report 173. There are no known significant resources on the site, nor is the project site located in a geological area known to produce resources.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1].

XIII. NOISE -- Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			**X**	
b) Generation of excessive groundborne vibration or groundborne noise levels?			**X**	

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			**X**	

Discussion: The Stanislaus County General Plan identifies noise levels up to 55 dB Ldn (or CNEL) as the normally acceptable level of noise for Residential uses during daytime hours from 7:00 a.m. to 10:00 p.m. and 45 dB Ldn during nighttime hours between 10:00 p.m. and 7:00 a.m. The nearest sensitive noise receptors adjacent to the project site are the single-family dwellings abutting the project site to the west. The proposed project is required to comply with the noise standards included in the General Plan and Noise Control Ordinance. On-site grading and construction resulting from this project may result in a temporary increase in the area's ambient noise levels; however, noise impacts associated with on-site activities and traffic are not anticipated to exceed the normally acceptable level of noise. The site itself is impacted by the noise generated from adjacent roadways.

The site is not located within an airport land use plan. Noise impacts associated with the proposed project are considered to be less than significant.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1].

XIV. POPULATION AND HOUSING -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			**X**	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			**X**	

Discussion: The vacant sites inventory for the 2016 Stanislaus County Housing Element, which covers the 5th cycle Regional Housing Needs Allocation (RHNA) for the County, identified Denair as having a realistic capacity for producing an additional 35 housing units, made up of 17 above moderate units and 18 moderate and below moderate units. Although the project site is not included in the vacant sites inventory, the project would produce 76 new single-family above moderate residential units, which will assist the County in producing a portion of the above moderate units identified as being needed within Stanislaus County.

The proposed project will not create significant service extensions or new infrastructure which could be considered as growth inducing, as services are available to neighboring properties. The Denair Community Plan outlines the future growth patterns of Denair and is used in conjunction with the General Plan to indicate the desired land use 'vision' for the town and to guide future growth patterns. Further residential development of the area would generally be confined within the Community Plan boundaries in areas with residential designations, or additional land use entitlements consisting of either Community Plan, General Plan, or zoning designation amendments would be required, subject to additional CEQA review. Residential development of land with a zoning or general plan designation of Agriculture also requires consistency with the Stanislaus County Zoning Ordinance Chapter 21.118 – *30-Year Land Use Restriction*, or Measure E, which prohibits conversion of agriculturally-designated land to residential without support of a majority vote by County voters at a special or general election. As residential development is limited to the current boundaries of the Denair Community Plan, the proposed project if approved is not anticipated to induce conversion of surrounding farmland to non-agriculture uses; nor will it conflict with existing zoning or a Williamson Act Contract. Additionally, although permits for spraying pesticides have been issued to the two parcels to the north of the project site, the proposed Agricultural Buffer will provide physical separation between the proposed subdivision and farming activities. Additionally, in accordance with the implementation

measures listed under Goal Two, Policy Two of the Denair Community Plan, the sizing of sewer and water lines should be reduced as they approach the northerly, westerly and easterly periphery of the Denair Community Plan area to limit growth influences beyond the Plan area.

The project site is designated as Planned Development (P-D) in the Land Use Element of the General Plan and Low-Density Residential (LDR) in the Denair Community Plan. The intent of the LDR designation is to provide appropriate locations and adequate areas for single-family detached homes in either conventional or clustered configurations. The LDR designation is the same for the General Plan and the Denair Community Plan. Under the LDR designation, residential building intensity, when served by a community services district or sanitary sewer district and public water district, is zero to eight units per acre. The maximum number of residential units the proposed project could develop is 76 units, with each new lot capable of being developed with one single-family dwelling and one accessory dwelling unit (ADU) each; as mentioned in Section XI - *Land Use and Planning*, maximum density restrictions are not considered when developing accessory dwelling units in accordance with Senate Bill (SB) 13 and the Stanislaus County Zoning Ordinance. The project proposes a density of 4.8 units per net acre for the project site, which is consistent with the site's General Plan Designation of Planed Development and Community Plan designation of LDR.

The extension of Denair CSD water and sewer services will not induce any further growth as the development is an infill project. The nearest existing water mains are 12-inches within East Zeering Road and 8-inches at Corona Way. The existing sewer main is 8-inches at Riopel Avenue. No increase in the sizes of pipelines is needed to serve the development; however, existing pipelines will be extended east through the proposed subdivision to serve the development. The site is located adjacent to urban development to the west, and agriculturally zoned parcel to the north, east, and south.

Mitigation: None.

References: E-mail correspondence from the Denair Community Services District, dated February 17, 2023; Stanislaus County General Plan and Support Documentation[1].

XV. PUBLIC SERVICES --	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Would the project result in the substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			**X**	
Police protection?			**X**	
Schools?			**X**	
Parks?			**X**	
Other public facilities?			**X**	

Discussion: The project site is served by Denair Rural Fire District, the Denair Unified and Turlock Unified School District, Stanislaus County Sheriff Department for police protections, the Denair Community Services District for public water and sewer, Stanislaus County Parks and Recreation Department for parks facilities, and the Turlock Irrigation District (TID) for power. County adopted Public Facilities Fees, as well as fire and school fees are required to be paid based on the development type prior to issuance of a building permit. Payment of the applicable district fees will be required prior to issuance of a building permit. All new dwellings will be required to pay the applicable Public Facility Fees through the building permit process. The Sheriff's Department also uses a standardized fee for new dwellings that will be incorporated into the Development Standards.

The project was referred to the Denair Fire Protection District, but no comments have been received to date. All improvements will be reviewed by the Stanislaus County Fire Prevention Bureau and will be required to meet all State and Local fire code requirements.

As discussed in Section XI – *Land Use and Planning*, the General Plan and the Denair Community Plan requires at least three net acres of developed neighborhood parks, or the maximum number allowed by law, to be provided for every 1,000 residents. The General Plan and the Denair Community Plan requires at least three net acres of developed neighborhood parks, or the maximum number allowed by law, to be provided for every 1,000 residents. The project site abuts the County's Hunter's Pointe Park. Currently, Hunter's Pointe Park is approximately 0.34± acres in size. The Stanislaus County Parks and Recreation Park Land In-Lieu Of Fees Policy ("Policy") requires new subdivisions creating 53 parcels or more to build a park with amenities. Options to the developer include, land dedication, installation of equipment, park site development, payment of in-lieu fees or combination thereof. Based on the Policy, a 76-lot subdivision is required to dedicate 0.70 acres of land to serve the additional residents, payment of a $2,050 in-lieu fee per lot, development of park improvements of equivalent value, or a combination thereof. Given the County's existing Hunter's Pointe Park abuts the project site to the west, the applicant has agreed to dedicate 0.15± acres at the easterly portion of the park, to serve as a park expansion (which is equivalent to a required park acreage dedication for 16 lots), leaving 0.56± acres remaining required to be dedicated. In-lieu of additional land dedication, the applicant has opted to develop the park expansion site with a basketball court and shade structure, bids for which have been provided and meet the equivalent cost of the in-lieu fees for 60 lots/0.56 acres. The proposed dedication would be consistent with General Plan and Community Plan parks goals.

A referral response was received from the County's Public Works Department requiring annexation of the project to the existing Community Service Area (CSA) #21 - Riopel and the Denair Highway Lighting and Landscaping District to ensure future maintenance and eventual replacement of the storm drainage system and facilities, and any landscaped areas and requirements regarding connection to the Denair CSD prior to the final map being recorded. The applicant proposes to install street lighting, curb, gutter, and sidewalk for the entire subdivision Including in the development of the residential subdivision, the developer will extend the existing County-maintained Corona and Chalmer Ways eastward, through the proposed subdivision, terminating into Arnold Way. Interior 50-foot-wide roadways including three cul-de-sacs will be developed as part of the subdivision's interior circulation. Development standards have been added to the project addressing Public Works' requirements.

The project was referred to the Turlock Irrigation District (TID), who provided a referral response indicating that an irrigation pipeline belonging to Improvement District (ID) 573A runs along the western edge of the subject project. There are no electrical facilities on the parcel; however, there are two conduit stub-outs to the west that will be fed to serve the proposed subdivision: one located within Chalmer Way that terminates west where the project parcel begins, and one located at the north end of the existing Hunter's Pointe Park, that terminates west at the project parcel boundaries. TID requested the developer enter into an irrigation improvements agreement and submit both irrigation improvement plans for any irrigation facility modifications, and the final map including an application for electrical facility extensions for approval by the District's Engineering Department prior to recording of the final map. Additionally, TID indicated that the developer must apply for abandonment from ID 573A since the subsequent parcels will no longer have direct access to water or irrigate. The District also requested that a 10-foot Public Utility Easement be dedicated along all street frontages, and that development of the proposed lots have a minimum 15-foot building setback from both the front property line and from back-of-sidewalk. Development standards will be placed on the project reflecting these requirements.

Although the project site is not within the Denair CSD district boundaries, it is located within the CSD's Local Agency Formation Commission's (LAFCO)-adopted Sphere of Influence. The applicant has provided a "Can Serve" letter issued by the CSD, stating their ability to serve the proposed lots with sewer and water services. As a condition of service, the CSD will require the owner/developer to enter into an agreement to construct and pay for necessary infrastructure to enable the District to provide water and sewer services to the project. The agreement will require the infrastructure be constructed to District specifications, and that security be given to the District to guarantee performance and payment for the infrastructure, and that all current connection fees be paid in full. Additionally, the applicant may be required to pay a fair share fee for future facilities for District services. Development standards will be added to the project to reflect the CSD's conditions for services. In accordance with the implementation measures listed under Goal Two, Policy Two of the Denair Community Plan, the sizing of sewer and water lines should be reduced as they approach the northerly, westerly and easterly periphery of the Denair Community Plan area to limit growth influences beyond the Plan area. There is an existing 12-inch water main in East Zeering Road that stops at Riopel Avenue, which will need to be extended east to Arnold Road and then north to the edge of the project site boundaries; however, this is needed to maintain adequate water pressure and fire flow conditions. Otherwise, 8-inch pipes will be routed through the interior roadways of the project site to serve the proposed subdivision. The project was referred to LAFCO who responded to the project requiring the developer to annex into the CSD's boundaries

and obtain LAFCO approval prior to extension of services. Additionally, a referral response was received from the Department of Environmental Resources who will require the project site obtain a "Will-Serve" letter for water and sewer services to serve the development issued from the Denair CSD prior to issuance of a building permit. These requirements will be reflected in the development standards for this project.

Mitigation: None.

References: Referral Response received from Stanislaus County Department of Public Works, dated September 29, 2022; Referral Response from Turlock Irrigation District, dated January 24, 2022; Letter from Denair Community Services District, dated May 5, 2022; Stanislaus County General Plan and Support Documentation[1].

XVI. RECREATION --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			**X**	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			**X**	

Discussion: The General Plan and the Denair Community Plan requires at least three net acres of developed neighborhood parks, or the maximum number allowed by law, to be provided for every 1,000 residents. The project site abuts the County's Hunter's Pointe park and a 2.09± acres dual use stormwater drainage basin.

The General Plan and the Denair Community Plan requires at least three net acres of developed neighborhood parks, or the maximum number allowed by law, to be provided for every 1,000 residents. The General Plan and the Denair Community Plan requires at least three net acres of developed neighborhood parks, or the maximum number allowed by law, to be provided for every 1,000 residents. The project site abuts the County's Hunter's Pointe Park. Currently, Hunter's Pointe Park is approximately 0.34± acres in size. The Stanislaus County Parks and Recreation Park Land In-Lieu Of Fees Policy ("Policy") requires new subdivisions creating 53 parcels or more to build a park with amenities. Options to the developer include, land dedication, installation of equipment, park site development, payment of in-lieu fees or combination thereof. Based on the Policy, a 76-lot subdivision is required to dedicate 0.70 acres of land to serve the additional residents, payment of a $2,050 in-lieu fee per lot, development of park improvements of equivalent value, or a combination thereof. Given the County's existing Hunter's Pointe Park abuts the project site to the west, the applicant has agreed to dedicate 0.15± acres at the easterly portion of the park, to serve as a park expansion (which is equivalent to a required park acreage dedication for 16 lots), leaving 0.56± acres remaining required to be dedicated. In-lieu of additional land dedication, the applicant has opted to develop the park expansion site with a basketball court and shade structure, bids for which have been provided and meet the equivalent cost of the in-lieu fees for 60 lots/0.56 acres. The proposed dedication would be consistent with General Plan and Community Plan parks goals.

Mitigation: None.

References: Stanislaus County Parks and Recreation Park Land In-Lieu Of Fees Policy, adopted by General Plan Amendment No. 2003-02; E-mail correspondence from the Department of Parks and Recreation, dated November 13, 2022; Stanislaus County General Plan and Support Documentation[1].

XVII. TRANSPORTATION -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			**X**	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
d) Result in inadequate emergency access?			**X**	

Discussion: This project is a request to rezone a 15.9± acres parcel from Planned Development (P-D) (288) to a new Planned Development and to subdivide the project site into 76 parcels, ranging in size from 5,855 square-feet to 12,631 square-feet and a 6,391± square-foot park site expansion. The project site has a General Plan designation of Planned Development and a Denair Community Plan designation of Low-Density Residential. As part of the subdivision development, the applicant proposes to install street lighting, curb, gutter, and sidewalk for the entire subdivision, as well as the extension of the existing County-maintained Corona and Chalmer Ways eastward, through the proposed subdivision, terminating into Arnold Way. Interior 50-foot-wide roadways including three cul-de-sacs will be developed as part of the subdivision's interior circulation.

A referral response was received from the County's Public Works Department, which included requirements for site development standards that would account for the County's Standards and Specifications for subdivisions. Development standards were also included for: right-of-way dedication for Zeering and Arnold Roads; requirements for final map recordation; requirements for submission of improvement plans; grading and drainage plan requirements, including removal or relocation of existing irrigation facilities and provision of a soil report; inclusion of a 10-foot Public Utilities Easement along the frontage of each parcel; annexation of the project to the existing Community Service District and Lighting and Landscaping District for funding of improvement maintenance; and annexation of the project to the Riopel county service area (CSA) to provide funds to ensure future maintenance and eventual replacement of the storm drainage system, and any landscaped areas. These requirements will be added to the project as development standards.

The project was referred to the Stanislaus County Environmental Review Committee (ERC), who responded to the project requesting a traffic impact study to quantify project-specific impacts to local roads and intersections. A Transportation Impact Assessment, dated May 17, 2022, was prepared by Barrios Transportation Consulting. Using the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition), the project's trip generation was estimated to result in 717 new daily vehicle trips, including approximately 58 morning peak hour trips and 77 evening peak hour trips.

As required by the California Environmental Quality Act (CEQA) Guidelines Section 15064.3, potential impacts to transportation should be evaluated using Vehicle Miles Traveled (VMT). Stanislaus County has currently not adopted any significance thresholds for VMT, and projects are treated on a case-by-case basis for evaluation under CEQA. However, the State of California Office of Planning and Research (OPR) has issued guidelines regarding VMT significance under CEQA. The CEQA Guidelines identify vehicle miles traveled (VMT), which is the amount and distance of automobile travel attributable to a project, as the most appropriate measure of transportation impacts. According to the same technical advisory from OPR, projects that generate or attract fewer than 110 trips per-day generally or achieves a 15% reduction of VMT may be assumed to cause a less than significant transportation impact. The VMT increase associated with the proposed project is proposed to exceed 110 trips per-day; however, the project is considered an infill residential project, as the project site was already identified in the Denair Community Plan for residential uses, which was accounted for under previous environmental analysis. Accordingly, an analysis of VMT is not triggered due to the project's consistently with previously adopted land use plans. Additionally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. A major transit stop is defined as a site containing an existing rail transit station. The Turlock-Denair Amtrak station, a passenger transit line, is located .46± miles to west of the project site and provides connection from Bakersfield, through Denair and Stockton, to both the Sacramento Valley Station in Sacramento and the Jack London Square Station in Oakland. Accordingly, VMT impacts are considered to be less than significant.

While vehicle miles of travel (VMT) is the current metric for which projects' traffic impacts must be evaluated under CEQA, the Stanislaus County General Plan still has a policy to maintain level of service (LOS) C or better operations at intersections during the peak hour. LOS is a method to qualify traffic flow based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels of service are defined ranging from LOS A (free-flow conditions) to LOS F (over capacity conditions). LOS E corresponds to operations "at capacity". When volumes exceed capacity, stop-and-go conditions result, and operations are designated LOS F. The Assessment quantified the project's traffic impacts through both Level of Service (LOS) and Vehicle Miles Traveled (VMT). Six intersections in Denair were evaluated for conditions during both morning

and evening peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.). Based on the assessment of both existing cumulative conditions, the project is not expected to add a substantial number of trips to the roadway network and therefore, intersection operations are anticipated to remain relatively unchanged compared to baseline cumulative conditions. To mirror existing signage, the Assessment recommended that a "STOP" sign and associated striping be installed at the westbound approach to the Chalmer Way extension/Riopel Avenue intersection, at the eastbound approach to the Chalmer Way extension/Arnold Road intersection, and to the westbound approach to Corona Way extension/Riopel Avenue intersection. Additionally, as two new connections to Arnold Road (identified as "Court D" and "Street B" on the associated site plan) are proposed, the Assessment recommends that a side street stop sign and striping be installed at the eastbound approach to proposed "Court D"/Arnold Road intersection, and at the eastbound approach to proposed "Street B"/Arnold Road intersection. Public Works reviewed the Transportation Impact Assessment and accepted the findings. These recommendations will be added as development standards under Public Works' requirements. **Additionally, although not identified in the traffic study as a project-specific area of concern, the Department of Public Works is adding a development standard requiring installation of two radar speed feedback signs to be installed by the developer along East Zeering Way to help deter speeding and respond to concerns raised by the public during community meetings.**

Frontage improvements proposed for the development include curb, gutter, and sidewalk for the entire subdivision. As part of the map design, two new County-maintained roadways will be installed by the developer, and existing Corona and Chalmer Ways will be extended to provide the subdivision two outlets to Arnold Road and Riopel Avenue. Three cul-de-sacs will be utilized in the map design.

All development on-site will be required to pay applicable County PFF fees, which will be utilized for maintenance and traffic congestion improvements to all County roadways.

The proposed project is not anticipated to conflict with any transportation program, plan, ordinance or policy.

Mitigation: None.

References: Application Materials; Referral Response from the Environmental Review Committee, dated January 26, 2022; Referral Response from the Stanislaus County Department of Public Works, dated September 29, 2022; Transportation Impact Assessment, prepared by Barrios Transportation Consulting, dated May 17, 2022; Referral Response from the Environmental Review Committee, dated January 26, 2022; Transportation Impact Assessment, prepared by Barrios Transportation Consulting, dated May 17, 2022; Federal Highway Administration, Summary of Travel Trends: 2017 National Household Travel Survey; Stanislaus County General Plan and Support Documentation[1].

XVIII. TRIBAL CULTURAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			**X**	

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set for the in subdivision (c) of Public Resource Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			**X**	

Discussion: It does not appear this project will result in significant impacts to any tribal cultural resource. The site is currently vacant; however, the surrounding area has been developed with single-family dwellings and residential and agricultural accessory structures. As discussed in Section V – *Cultural Resources* of this report, the records search indicated there may be unidentified features involved in the project area that are 45 years or older and considered as historical resources requiring further study. The Central California Information Center (CCIC) recommend further review for the possibility of identifying prehistoric or historic-era archaeological resources if ground disturbance is considered a part of the current project. The CCIC recommendations as mentioned in the "Cultural Resources" section of this report will be applied to the project.
In accordance with SB 18 and AB 52, this project was not referred to the tribes listed with the Native American Heritage Commission (NAHC) as the project is not a General Plan Amendment and no tribes have requested consultation or project referral noticing.

It does not appear that this project will result in significant impacts to any tribal cultural resources

Mitigation: None.

References: Application Information; Central California Information Center Report for the project site, dated September 10, 2021; Stanislaus County General Plan and Support Documentation[1].

XIX. UTILITIES AND SERVICE SYSTEMS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			**X**	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			**X**	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			**X**	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			**X**	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			**X**	

Discussion: Limitations on providing services have not been identified. Stormwater is proposed to be managed by the existing basin located on Assessor Parcel Number (APN) 024-022-030, which currently serves an existing residential development to the west. A referral response was received from the County's Public Works Department requiring annexation of the project to the existing Community Service Area (CSA) #21 - Riopel and the Denair Highway Lighting and Landscaping District to ensure future maintenance and eventual replacement of the storm drainage system and facilities, and any landscaped areas.

The project was referred to the Turlock Irrigation District (TID), who provided a referral response indicating that an irrigation pipeline belonging to Improvement District (ID) 573A runs along the western edge of the subject project. There are no electrical facilities on the parcel; however, there are two conduit stub-outs to the west that will be fed to serve the proposed subdivision: one located within Chalmer Way that terminates west where the project parcel begins, and one located at the north end of the existing Hunter's Pointe Park, that terminates west at the project parcel boundaries. TID requested the developer enter into an irrigation improvements agreement and submit both irrigation improvement plans for any irrigation facility modifications, and the final map including an application for electrical facility extensions for approval by the District's Engineering Department prior to recording of the final map. Additionally, TID indicated that the developer must apply for abandonment from ID 573A since the subsequent parcels will no longer have direct access to water or irrigate. The District also requested that a 10-foot Public Utility Easement be dedicated along all street frontages, and that development of the proposed lots have a minimum 15-foot building setback from both the front property line and from back-of-sidewalk. Development standards will be placed on the project reflecting these requirements.

Although the project site is not within the Denair CSD district boundaries, it is located within the CSD's Local Agency Formation Commission's (LAFCO) adopted Sphere of Influence (SOI). The applicant has provided a "Can-Serve" letter issued by the Denair CSD, stating their ability to serve the proposed lots with sewer and water services. As a condition of service, the CSD will require the owner/developer to enter into an agreement to construct and pay for necessary infrastructure to enable the District to provide water and sewer services to the project. The agreement will require the infrastructure be constructed to District specifications, and that security be given to the District to guarantee performance and payment for the infrastructure, and that all current connection fees be paid in full. Additionally, the applicant may be required to pay a fair share fee for future facilities for District services. Development standards will be added to the project to reflect the CSD's conditions for services. In accordance with the implementation measures listed under Goal Two, Policy Two of the Denair Community Plan, the sizing of sewer and water lines should be reduced as they approach the northerly, westerly and easterly periphery of the Denair Community Plan area to limit growth influences beyond the Plan area. The nearest existing water mains are 12-inches within East Zeering Road and eight inches at Corona Way. The existing sewer main is eight inches at Riopel Avenue. No increase in the sizes of pipelines is needed to serve the development; however, the existing 12-inch water main in East Zeering Road that stops at Riopel Avenue, will need to be extended east to Arnold Road and then north to the edge of the project site boundaries in ordero to maintain adequate water pressure and fire flow conditions. Otherwise, 8-inch pipes will be routed through the interior roadways of the project site to serve the proposed subdivision. The project was referred to LAFCO who responded to the project requiring the developer to annex into the Denair CSD's boundaries and obtain LAFCO approval prior to extension of services. Additionally, a referral response was received from the Department of Environmental Resources (DER) who will require the project site obtain a "Will-Serve" letter for water and sewer services to serve the development issued from the Denair CSD prior to issuance of a building permit. The Department of Public Works will review and approve grading and drainage plans prior to construction. Development standards will be added to the project to reflect these requirements. These requirements will be reflected in the development standards for this project.

Mitigation: None.

References: Referral Response from Local Agency Formation Commission, dated January 14, 2022; Letter received from Denair Community Services District, dated May 5, 2022; Referral Response from the Stanislaus County Department of Environmental Resources, dated January 25, 2022; Referral Response received from Stanislaus County Department of Public Works, dated September 29, 2022; Referral Response from Turlock Irrigation District, dated January 26, 2022; Stanislaus County General Plan and Support Documentation[1].

XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			**X**	

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			**X**	
c) Require the installation of maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			**X**	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			**X**	

Discussion: The Stanislaus County Local Hazard Mitigation Plan from the Department of Emergency Services, identifies risks posed by disasters and identifies ways to minimize damage from those disasters. With the Wildfire Hazard Mitigation Activities of this plan in place, impacts to an adopted emergency response plan or emergency evacuation plan are anticipated to be less than significant. The terrain of the site is relatively flat, and the site has access to a County-maintained road. The site is located in a Local Responsibility Area (LRA) for fire protection and is served by the Denair Fire Protection District. The project was referred to the Denair Fire Protection District, but no comments have been received to date. All improvements will be reviewed by the Stanislaus County Fire Prevention Bureau and will be required to meet all state and local fire code requirements.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1].

XXI. MANDATORY FINDINGS OF SIGNIFICANCE --	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		**X**		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			**X**	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			**X**	

Discussion: Review of this project has not indicated any features which might significantly impact the environmental quality of the site and/or the surrounding area. The project site is currently vacant, was previously planted in row crops, and is surrounded by single-family residential development to the west, ranchette parcels and irrigated farmland to the north, east, and south; and confined animal facility to the southeast.

The project site is designated as Low-Density Residential (LDR) in the Denair Community Plan of the County General Plan, Planned Development in the Stanislaus County General Plan, and has a zoning designation of P-D 288. The project site is situated near the northeast corner of Denair, buffered from the edge of the Community Plan boundaries by approximately 600-feet of distance consisting of the parcels zoned A-2 and designated Estate Residential in the Denair Community Plan fronting on Arnold Road to the east. All immediately surrounding parcels zoned A-2, consisting of the adjacent parcels to the north, east, and south are designated as Urban Transition under the Land Use Element and either Low-Density Residential or Estate Residential under the Denair Community Plan; however, the adjacent agriculturally zoned parcels, with the exception of two 5± acres parcels to the north, are not actively farmed. While residential development of the parcels with these Community Plan designations was considered in the Denair Community Plan Environmental Impact Report (EIR), a zoning change would need to be approved prior to any subdivision and residential development occurring, which will require project-level CEQA analysis and consistency with the Stanislaus County Zoning Ordinance Chapter 21.118 – *30-Year Land Use Restriction* ("Measure E"). Measure E prohibits conversion from agricultural zoning to residential without approval by a majority vote of county voters at a general or special election, which will further limit urban growth beyond the project site, which will further limit urban growth beyond the project site. Any development of the surrounding area would be subject to the permitted uses of the applicable zoning district the property is located within or would require additional land use entitlements and environmental review.

No cumulative impacts are anticipated as a result of this project. Based on the Transportation Impact Assessment prepared for the project for both existing cumulative conditions and cumulative conditions with consideration of the proposed project, the project is not expected to add a substantial number of trips to the roadway network and therefore, intersection operations are anticipated to remain relatively unchanged compared to baseline cumulative conditions. The proposed project will not create significant service extensions or new infrastructure which could be considered as growth inducing, as services are available to neighboring properties. Additionally, in accordance with the implementation measures listed under Goal Two, Policy Two of the Denair Community Plan, the sizing of sewer and water lines should be reduced as they approach the northerly, westerly and easterly periphery of the Denair Community Plan area to limit growth influences beyond the Plan area. The nearest existing water mains are 12-inches within East Zeering Road and eight inches at Corona Way. The existing sewer main is eight inches at Riopel Avenue. Although the existing pipelines will be extended east through the proposed subdivision to serve the development, including a new water and sewer main within Arnold Road terminating at the northern boundary of the project site, the existing pipeline infrastructure will not be upgraded or increased in size to accommodate the proposed subdivision. The 12-inch pipe will be extended along the project site periphery in order to maintain adequate water pressure and fire flow conditions As discussed in Section IV – *Biological Resources* above, the project has potential to impact Swainson's Hawk due to the site being potential foraging habitat; however, mitigation requiring pre-construction surveys, temporal limits on construction, avoidance, and if necessary, require the applicant to obtain an Incidental Take Permit from the California Department of Fish and Wildlife, have been added to the project.

Mitigation: See Mitigation Measure No. 1.

References: Initial Study; Stanislaus County General Plan and Support Documentation[1].

[1]Stanislaus County General Plan and Support Documentation adopted in August 23, 2016, as amended. ***Housing Element*** adopted on April 5, 2016.

CENTRAL CALIFORNIA INFORMATION CENTER
California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 9/102021

Records Search File #: 11894N
Project: Dunkley Denair Subdivision
APN 024-022-027; E. Zeering Road, between Riopel Avenue & Arnold Road, Denair

Vionna J. Adams, Project Manager
O'Dell Engineering
1165 Scenic Drive, Suite A
Modesto, CA 84566
209-4497-4062

vadams@odellengineering.com

Dear Ms. Adams:

We have conducted a non-confidential extended records search as per your request for the above-referenced project area located on the Denair USGS 7.5-minute quadrangle map in Stanislaus County.

Search of our files includes review of our maps for the specific project area and the immediate vicinity of the project area, and review of the following:

National Register of Historic Places (NRHP)
California Register of Historical Resources (CRHR)
California Inventory of Historic Resources (1976)
California Historical Landmarks
California Points of Historical Interest listing
Office of Historic Preservation Built Environment Resource Directory (BERD) and the Archaeological Determinations of Eligibility (ADOE)
Survey of Surveys (1989)
Caltrans State and Local Bridges Inventory
General Land Office Plats
Other pertinent historic data available at the CCaIC for each specific county

The following details the results of the records search:

Prehistoric or historic resources within the project area:

- There are no formally recorded prehistoric or historic archaeological resources or historic buildings or structures within the project area.

- The General Land Office Survey plat for T5S R11E (dated 1855) shows Section 5

divided into parcels of various acreages, but no historic features are referenced.

- The Map of the County of Stanislaus, California (1906) shows the street layout of both Zeering and Arnold Roads within Denair, referencing the "Elmwood Tract".

- The 1916 and 1952 editions of the Denair USGS maps show the street layout of Zeering and Arnold Roads, no other historic features referenced.

Prehistoric or historic resources within the immediate vicinity of the project area:
There are no formally recorded prehistoric or historic resources within the immediate vicinity of the project, but historic buildings and structures have been recorded elsewhere within the City of Denair.

Resources that are known to have value to local cultural groups: None has been formally reported to the Information Center.

Previous investigations within the project area: None has been formally reported to the Information Center.

Recommendations/Comments:

Please be advised that a historical resource is defined as a building, structure, object, prehistoric or historic archaeological site, or district possessing physical evidence of human activities over 45 years old. Since the project area has not been subject to previous investigations, there may be unidentified features involved in your project that are 45 years or older and considered as historical resources requiring further study and evaluation by a qualified professional of the appropriate discipline.

If the current project does not include ground disturbance, further study for archaeological resources is not recommended at this time. If ground disturbance is considered a part of the current project, we recommend further review for the possibility of identifying prehistoric or historic-era archaeological resources.

If the proposed project contains buildings or structures that meet the minimum age requirement (45 years in age or older) it is recommended that the resource/s be assessed by a professional familiar with architecture and history of the county. Review of the available historic building/structure data has included only those sources listed above and should not be considered comprehensive.

If at any time you might require the services of a qualified professional the Statewide Referral List for Historical Resources Consultants is posted for your use on the internet at http://chrisinfo.org

If archaeological resources are encountered during project-related activities**,** work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. Project personnel should not collect cultural resources.

If human remains are discovered, California Health and Safety Code Section 7050.5 requires you to protect the discovery and notify the county coroner, who will determine if the find is Native American. If the remains are recognized as Native American, the coroner shall then notify the Native American Heritage Commission (NAHC). California Public Resources Code Section 5097.98 authorizes the NAHC to appoint a Most Likely Descendant (MLD) who will make recommendations for the treatment of the discovery.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the State Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

We thank you for contacting this office regarding historical resource preservation. Please let us know when we can be of further service. Thank you for completing the **Access Agreement Short Form.**

Note: Billing will be transmitted separately via email from the Financial Services office ($150.00), payable within 60 days of receipt of the invoice.

If you wish to include payment by Credit Card, you must wait to receive the official invoice from Financial Services so that you can reference the CMP # (Invoice Number), and then contact the link below:

https://commerce.cashnet.com/ANTHROPOLOGY

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: ARBilling@csustan.edu, CSU Stanislaus Financial Services

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Denair Hoffman Ranch

Stanislaus County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	76.00	Dwelling Unit	15.90	136,800.00	217

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2025
Utility Company	Turlock Irrigation District				
CO2 Intensity (lb/MWhr)	607.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site acreage.

Construction Phase - No demolition.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT -

Area Coating - Per SJVAPCD Rule 4601.

Construction Off-road Equipment Mitigation - CalEEMod defaults.

Area Mitigation -

ATTACHMENT II

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Water Mitigation - CalEEMod defaults.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	0	150
tblAreaCoating	Area_EF_Nonresidential_Interior	0	150
tblAreaCoating	Area_EF_Parking	0	150
tblAreaCoating	Area_EF_Residential_Exterior	0	50
tblAreaCoating	Area_EF_Residential_Interior	0	50
tblAreaCoating	Area_Residential_Exterior	0	92340
tblAreaCoating	Area_Residential_Interior	0	277020
tblAreaCoating	ReapplicationRatePercent	0	10
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	0	55
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	0	55
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LotAcreage	24.68	15.90
tblWaterMitigation	PercentReductionInFlowBathroomFaucet	0	32
tblWaterMitigation	PercentReductionInFlowKitchenFaucet	0	18
tblWaterMitigation	PercentReductionInFlowShower	0	20
tblWaterMitigation	PercentReductionInFlowToilet	0	20
tblWaterMitigation	UseWaterEfficientIrrigationSystemPercentReduction	0	6.1

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1850	1.7702	1.7709	3.2100e-003	0.0408	0.0819	0.1227	7.6800e-003	0.0765	0.0842	0.0000	278.1768	278.1768	0.0746	0.0000	280.0419
2024	0.5464	1.0821	1.3365	2.2100e-003	0.0218	0.0498	0.0715	5.3500e-003	0.0467	0.0521	0.0000	190.6704	190.6704	0.0464	0.0000	191.8296
Maximum	**0.5464**	**1.7702**	**1.7709**	**3.2100e-003**	**0.0408**	**0.0819**	**0.1227**	**7.6800e-003**	**0.0765**	**0.0842**	**0.0000**	**278.1768**	**278.1768**	**0.0746**	**0.0000**	**280.0419**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1850	1.7702	1.7709	3.2100e-003	0.0315	0.0819	0.1134	6.6700e-003	0.0765	0.0832	0.0000	278.1765	278.1765	0.0746	0.0000	280.0416
2024	0.5464	1.0821	1.3365	2.2100e-003	0.0218	0.0498	0.0715	5.3500e-003	0.0467	0.0521	0.0000	190.6702	190.6702	0.0464	0.0000	191.8294
Maximum	**0.5464**	**1.7702**	**1.7709**	**3.2100e-003**	**0.0315**	**0.0819**	**0.1134**	**6.6700e-003**	**0.0765**	**0.0832**	**0.0000**	**278.1765**	**278.1765**	**0.0746**	**0.0000**	**280.0416**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**14.91**	**0.00**	**4.81**	**7.75**	**0.00**	**0.74**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**4-1-2023**	**6-30-2023**	0.9179	0.9179
2	**7-1-2023**	**9-30-2023**	0.5243	0.5243
3	**10-1-2023**	**12-31-2023**	0.5243	0.5243
4	**1-1-2024**	**3-31-2024**	0.4847	0.4847
5	**4-1-2024**	**6-30-2024**	0.4847	0.4847
6	**7-1-2024**	**9-30-2024**	0.6483	0.6483
		Highest	0.9179	0.9179

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5940	6.4900e-003	0.5638	3.0000e-005		3.1300e-003	3.1300e-003		3.1300e-003	3.1300e-003	0.0000	0.9218	0.9218	8.8000e-004	0.0000	0.9439
Energy	9.8500e-003	0.0842	0.0358	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003	0.0000	264.6134	264.6134	0.0109	2.8900e-003	265.7471
Mobile	0.3629	0.5659	3.3590	7.6500e-003	0.7780	6.9200e-003	0.7850	0.2082	6.4900e-003	0.2147	0.0000	707.6074	707.6074	0.0402	0.0373	719.7170
Waste						0.0000	0.0000		0.0000	0.0000	15.8577	0.0000	15.8577	0.9372	0.0000	39.2867
Water						0.0000	0.0000		0.0000	0.0000	1.5710	10.4022	11.9731	0.1619	3.8800e-003	17.1767
Total	**0.9668**	**0.6566**	**3.9586**	**8.2200e-003**	**0.7780**	**0.0169**	**0.7949**	**0.2082**	**0.0164**	**0.2246**	**17.4286**	**983.5447**	**1,000.9733**	**1.1511**	**0.0440**	**1,042.8714**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5940	6.4900e-003	0.5638	3.0000e-005		3.1300e-003	3.1300e-003		3.1300e-003	3.1300e-003	0.0000	0.9218	0.9218	8.8000e-004	0.0000	0.9439
Energy	9.8500e-003	0.0842	0.0358	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003	0.0000	264.6134	264.6134	0.0109	2.8900e-003	265.7471
Mobile	0.3225	0.4583	2.7336	5.9000e-003	0.5947	5.4100e-003	0.6001	0.1591	5.0700e-003	0.1642	0.0000	545.4115	545.4115	0.0341	0.0302	555.2591
Waste						0.0000	0.0000		0.0000	0.0000	3.9644	0.0000	3.9644	0.2343	0.0000	9.8217
Water						0.0000	0.0000		0.0000	0.0000	1.2568	8.3217	9.5785	0.1295	3.1000e-003	13.7414
Total	**0.9264**	**0.5490**	**3.3331**	**6.4700e-003**	**0.5947**	**0.0154**	**0.6100**	**0.1591**	**0.0150**	**0.1741**	**5.2212**	**819.2684**	**824.4896**	**0.4098**	**0.0362**	**845.5132**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**4.18**	**16.39**	**15.80**	**21.29**	**23.57**	**8.96**	**23.26**	**23.57**	**8.64**	**22.48**	**70.04**	**16.70**	**17.63**	**64.40**	**17.85**	**18.92**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	-98.5800
Total	**-98.5800**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2023	3/31/2023	5	0	
2	Site Preparation	Site Preparation	4/1/2023	4/14/2023	5	10	
3	Grading	Grading	4/15/2023	5/26/2023	5	30	
4	Building Construction	Building Construction	5/27/2023	7/19/2024	5	300	
5	Paving	Paving	7/20/2024	8/16/2024	5	20	
6	Architectural Coating	Architectural Coating	8/17/2024	9/13/2024	5	20	

Acres of Grading (Site Preparation Phase): 16

Acres of Grading (Grading Phase): 16

Acres of Paving: 0

Residential Indoor: 277,020; Residential Outdoor: 92,340; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30				
Site Preparation	0	18.00	0.00	0.00	10.80	7.30				
Grading	0	15.00	0.00	0.00	10.80	7.30				

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Building Construction	0	35.00	8.00	0.00	10.80	7.30				
Paving	0	15.00	0.00	0.00	10.80	7.30				
Architectural Coating	0	7.00	0.00	0.00	10.80	7.30				

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.4800e-003	0.0000	8.4800e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**8.4800e-003**	**6.3300e-003**	**0.0148**	**9.2000e-004**	**5.8200e-003**	**6.7400e-003**	**0.0000**	**16.7254**	**16.7254**	**5.4100e-003**	**0.0000**	**16.8606**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					6.2000e-004	0.0000	6.2000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**6.2000e-004**	**0.0000**	**6.2000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.8200e-003	0.0000	3.8200e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**3.8200e-003**	**6.3300e-003**	**0.0102**	**4.1000e-004**	**5.8200e-003**	**6.2300e-003**	**0.0000**	**16.7253**	**16.7253**	**5.4100e-003**	**0.0000**	**16.8606**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					6.2000e-004	0.0000	6.2000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**6.2000e-004**	**0.0000**	**6.2000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.4800e-003	0.0000	8.4800e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	**0.0498**	**0.5177**	**0.4208**	**9.3000e-004**	**8.4800e-003**	**0.0214**	**0.0299**	**9.2000e-004**	**0.0197**	**0.0206**	**0.0000**	**81.8028**	**81.8028**	**0.0265**	**0.0000**	**82.4642**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					1.5600e-003	0.0000	1.5600e-003	3.8000e-004	0.0000	3.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**1.5600e-003**	**0.0000**	**1.5600e-003**	**3.8000e-004**	**0.0000**	**3.8000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.8200e-003	0.0000	3.8200e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	**0.0498**	**0.5177**	**0.4208**	**9.3000e-004**	**3.8200e-003**	**0.0214**	**0.0252**	**4.1000e-004**	**0.0197**	**0.0201**	**0.0000**	**81.8027**	**81.8027**	**0.0265**	**0.0000**	**82.4641**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					1.5600e-003	0.0000	1.5600e-003	3.8000e-004	0.0000	3.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**1.5600e-003**	**0.0000**	**1.5600e-003**	**3.8000e-004**	**0.0000**	**3.8000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1219	1.1148	1.2589	2.0900e-003		0.0542	0.0542		0.0510	0.0510	0.0000	179.6487	179.6487	0.0427	0.0000	180.7171
Total	**0.1219**	**1.1148**	**1.2589**	**2.0900e-003**		**0.0542**	**0.0542**		**0.0510**	**0.0510**	**0.0000**	**179.6487**	**179.6487**	**0.0427**	**0.0000**	**180.7171**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					2.9000e-003	0.0000	2.9000e-003	7.1000e-004	0.0000	7.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0188	0.0000	0.0188	4.6000e-003	0.0000	4.6000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.0217**	**0.0000**	**0.0217**	**5.3100e-003**	**0.0000**	**5.3100e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1219	1.1148	1.2589	2.0900e-003		0.0542	0.0542		0.0510	0.0510	0.0000	179.6485	179.6485	0.0427	0.0000	180.7169
Total	**0.1219**	**1.1148**	**1.2589**	**2.0900e-003**		**0.0542**	**0.0542**		**0.0510**	**0.0510**	**0.0000**	**179.6485**	**179.6485**	**0.0427**	**0.0000**	**180.7169**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					2.9000e-003	0.0000	2.9000e-003	7.1000e-004	0.0000	7.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0188	0.0000	0.0188	4.6000e-003	0.0000	4.6000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.0217**	**0.0000**	**0.0217**	**5.3100e-003**	**0.0000**	**5.3100e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1067	0.9747	1.1721	1.9500e-003		0.0445	0.0445		0.0418	0.0418	0.0000	168.0906	168.0906	0.0398	0.0000	169.0843
Total	**0.1067**	**0.9747**	**1.1721**	**1.9500e-003**		**0.0445**	**0.0445**		**0.0418**	**0.0418**	**0.0000**	**168.0906**	**168.0906**	**0.0398**	**0.0000**	**169.0843**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					2.7100e-003	0.0000	2.7100e-003	6.7000e-004	0.0000	6.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0176	0.0000	0.0176	4.3100e-003	0.0000	4.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.0203**	**0.0000**	**0.0203**	**4.9800e-003**	**0.0000**	**4.9800e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1067	0.9747	1.1721	1.9500e-003		0.0445	0.0445		0.0418	0.0418	0.0000	168.0904	168.0904	0.0398	0.0000	169.0841
Total	**0.1067**	**0.9747**	**1.1721**	**1.9500e-003**		**0.0445**	**0.0445**		**0.0418**	**0.0418**	**0.0000**	**168.0904**	**168.0904**	**0.0398**	**0.0000**	**169.0841**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					2.7100e-003	0.0000	2.7100e-003	6.7000e-004	0.0000	6.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0176	0.0000	0.0176	4.3100e-003	0.0000	4.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.0203**	**0.0000**	**0.0203**	**4.9800e-003**	**0.0000**	**4.9800e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.8800e-003**	**0.0953**	**0.1463**	**2.3000e-004**		**4.6900e-003**	**4.6900e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**20.0265**	**20.0265**	**6.4800e-003**	**0.0000**	**20.1885**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					1.0400e-003	0.0000	1.0400e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**1.0400e-003**	**0.0000**	**1.0400e-003**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.8800e-003**	**0.0953**	**0.1463**	**2.3000e-004**		**4.6900e-003**	**4.6900e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**20.0265**	**20.0265**	**6.4800e-003**	**0.0000**	**20.1884**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					1.0400e-003	0.0000	1.0400e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**1.0400e-003**	**0.0000**	**1.0400e-003**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4280					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	**0.4298**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5569**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					4.8000e-004	0.0000	4.8000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4280					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	**0.4298**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5568**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					4.8000e-004	0.0000	4.8000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3225	0.4583	2.7336	5.9000e-003	0.5947	5.4100e-003	0.6001	0.1591	5.0700e-003	0.1642	0.0000	545.4115	545.4115	0.0341	0.0302	555.2591
Unmitigated	0.3629	0.5659	3.3590	7.6500e-003	0.7780	6.9200e-003	0.7850	0.2082	6.4900e-003	0.2147	0.0000	707.6074	707.6074	0.0402	0.0373	719.7170

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	717.44	725.04	649.80	2,077,650	1,587,984
Total	717.44	725.04	649.80	2,077,650	1,587,984

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	48.40	13.90	37.70	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.530702	0.051956	0.166139	0.152700	0.030655	0.007634	0.013363	0.016357	0.000829	0.000302	0.024359	0.001347	0.003656

5.0 Energy Detail

Historical Energy Use: N

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	167.1255	167.1255	9.0700e-003	1.1000e-003	167.6799
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	167.1255	167.1255	9.0700e-003	1.1000e-003	167.6799
NaturalGas Mitigated	9.8500e-003	0.0842	0.0358	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003	0.0000	97.4879	97.4879	1.8700e-003	1.7900e-003	98.0672
NaturalGas Unmitigated	9.8500e-003	0.0842	0.0358	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003	0.0000	97.4879	97.4879	1.8700e-003	1.7900e-003	98.0672

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	1.82685e+006	9.8500e-003	0.0842	0.0358	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003	0.0000	97.4879	97.4879	1.8700e-003	1.7900e-003	98.0672
Total		**9.8500e-003**	**0.0842**	**0.0358**	**5.4000e-004**		**6.8100e-003**	**6.8100e-003**		**6.8100e-003**	**6.8100e-003**	**0.0000**	**97.4879**	**97.4879**	**1.8700e-003**	**1.7900e-003**	**98.0672**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	1.82685e+006	9.8500e-003	0.0842	0.0358	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003	0.0000	97.4879	97.4879	1.8700e-003	1.7900e-003	98.0672
Total		**9.8500e-003**	**0.0842**	**0.0358**	**5.4000e-004**		**6.8100e-003**	**6.8100e-003**		**6.8100e-003**	**6.8100e-003**	**0.0000**	**97.4879**	**97.4879**	**1.8700e-003**	**1.7900e-003**	**98.0672**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	606021	167.1255	9.0700e-003	1.1000e-003	167.6799
Total		**167.1255**	**9.0700e-003**	**1.1000e-003**	**167.6799**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	606021	167.1255	9.0700e-003	1.1000e-003	167.6799
Total		**167.1255**	**9.0700e-003**	**1.1000e-003**	**167.6799**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5940	6.4900e-003	0.5638	3.0000e-005		3.1300e-003	3.1300e-003		3.1300e-003	3.1300e-003	0.0000	0.9218	0.9218	8.8000e-004	0.0000	0.9439
Unmitigated	0.5940	6.4900e-003	0.5638	3.0000e-005		3.1300e-003	3.1300e-003		3.1300e-003	3.1300e-003	0.0000	0.9218	0.9218	8.8000e-004	0.0000	0.9439

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5343					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0169	6.4900e-003	0.5638	3.0000e-005		3.1300e-003	3.1300e-003		3.1300e-003	3.1300e-003	0.0000	0.9218	0.9218	8.8000e-004	0.0000	0.9439
Total	**0.5940**	**6.4900e-003**	**0.5638**	**3.0000e-005**		**3.1300e-003**	**3.1300e-003**		**3.1300e-003**	**3.1300e-003**	**0.0000**	**0.9218**	**0.9218**	**8.8000e-004**	**0.0000**	**0.9439**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5343					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0169	6.4900e-003	0.5638	3.0000e-005		3.1300e-003	3.1300e-003		3.1300e-003	3.1300e-003	0.0000	0.9218	0.9218	8.8000e-004	0.0000	0.9439
Total	**0.5940**	**6.4900e-003**	**0.5638**	**3.0000e-005**		**3.1300e-003**	**3.1300e-003**		**3.1300e-003**	**3.1300e-003**	**0.0000**	**0.9218**	**0.9218**	**8.8000e-004**	**0.0000**	**0.9439**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.5785	0.1295	3.1000e-003	13.7414
Unmitigated	11.9731	0.1619	3.8800e-003	17.1767

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	4.95171 / 3.12173	11.9731	0.1619	3.8800e-003	17.1767
Total		**11.9731**	**0.1619**	**3.8800e-003**	**17.1767**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	3.96136 / 2.49738	9.5785	0.1295	3.1000e-003	13.7414
Total		**9.5785**	**0.1295**	**3.1000e-003**	**13.7414**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.9644	0.2343	0.0000	9.8217
Unmitigated	15.8577	0.9372	0.0000	39.2867

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	78.12	15.8577	0.9372	0.0000	39.2867
Total		**15.8577**	**0.9372**	**0.0000**	**39.2867**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	19.53	3.9644	0.2343	0.0000	9.8217
Total		**3.9644**	**0.2343**	**0.0000**	**9.8217**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

111

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-98.5800	0.0000	0.0000	-98.5800

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	15.9 / 0	-98.5800	0.0000	0.0000	-98.5800
Total		**-98.5800**	**0.0000**	**0.0000**	**-98.5800**

May 14, 2021 Project No. 034-21023

Mr. Dan Dunkley
Redwood Park Properties
746 Division Street
Pleasanton, California 94566
dan@redwoodproperties.com

RE: Phase I Environmental Site Assessment
Elmwood Colony Property
Northwest Corner of East Zeering and Arnold Roads
APN 024-022-027
Denair, California 95316

Dear Mr. Dunkley:

Krazan & Associates, Inc., (Krazan) completed a Phase I Environmental Site Assessment at the referenced site summarized in a report dated May 14, 2021. We appreciate the opportunity to serve your environmental due diligence needs. During the course of this assessment, Krazan identified no evidence of recognized environmental conditions (RECs), controlled RECs (CRECs) or historical RECs (HRECs) in conjunction with the subject site as defined by ASTM E 1527-13. However, the following potential areas of concern (PAOCs) were identified in connection with the subject site:

PAOCs

- During Krazan's May 10, 2021 site reconnaissance, vegetation-covered soil piles/mounded soil and a more recently deposited end-dump soil pile were observed in the central-western portion of the subject site adjacent to Riopel Avenue. The vegetation-covered soil piles/mounded soil occupied an area of approximately 6,000 square feet with mounds reaching a height of 3+ feet in places. No odors, surface staining, soil discoloration, stressed vegetation, or other obvious evidence of the presence of hazardous materials or hazardous waste was noted in association with the soil piles/mounded soil. However, a significant portion of the surface of the soil piles/mounded soil was covered with vegetation precluding observation of the surface soils. Mr. Paul Rodrigues, the owner of the subject site familiar with the subject site for the past 35years, indicated via responses to an environmental questionnaire that he has no knowledge of the presence of imported soil on the subject site. Consequently, no information concerning the origin of the above-referenced on-site soil piles/mounds was obtained from the property owner.

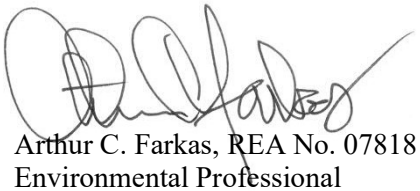
  Review of historical aerial photographs indicates that the area of vegetation-covered soil piles/mounded soil was present in May 2009. Historical aerial photographs indicate that the western adjacent single-family homes, playground, and open space were being developed in 2006 and it is possible that the vegetation covered soils may have been derived from that development. However, this hypothesis could not be substantiated during the course of this assessment and the single end-dump soil pile appeared to have been deposited on site much more recently as it had no vegetative cover. The actual origin and composition of on-site soil piles and mounded soil are

unknown, and available information suggests that some or all of these soil piles/mounds may be comprised of imported soil. Consequently, the composition of the soil contained within the soil piles/mounds relative to potential contaminants is unknown. Furthermore, given the location of these materials immediately proximate to a paved road, the potential exists that some of these materials are the result of illegal dumping. Krazan's experience indicates that imported soil can be contaminated with agricultural chemicals or other hazardous materials, dependent upon the specific location from which the soil is derived, and that the risk of contamination is increased for illegally disposed soils. Therefore, the origin and composition of the soil contained within the on-site soil piles/mounded soil related to potential contaminants is unknown relative to future use in development of the property or for disposal purposes.

Krazan recommends that a Phase II Limited Soils Assessment be conducted and that soil samples be collected from the on-site soil piles/mounded soil and analyzed to assess the presence or absence of potential significant concentrations of constituents of concern to determine whether or not the soils can be spread on site at the time of development or for disposal purposes, if found to be warranted.

Our firm specializes in full-service Site Development Engineering with considerable project management experience. When you are interested in proceeding with the recommended work, Krazan can evaluate your unique circumstances and prepare a Phase II Proposal/Cost Estimate for the additional assessment including the proposed scope of work, budget, and anticipated project schedule. If you have any questions regarding the information presented in this report, please call me at (559) 348-2200.

Respectfully Submitted,
KRAZAN & ASSOCIATES, INC.



Arthur C. Farkas, REA No. 07818
Environmental Professional

ACF/mlt

PHASE I ENVIRONMENTAL
SITE ASSESSMENT
ELMWOOD COLONY PROPERTY
NWC EAST ZEERING AND ARNOLD ROADS
APN 024-022-027
DENAIR, CALIFORNIA 95316

Pursuant to ASTM E 1527-13

Project No. 034-21023
May 14, 2021

Prepared for:
Mr. Dan Dunkley
Redwood Park Properties
746 Division Street
Pleasanton, California 94566
(925) 400-7277

Prepared by:
Krazan & Associates, Inc.
215 West Dakota Avenue
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Krazan & ASSOCIATES, INC.
SITE DEVELOPMENT ENGINEERS

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May 14, 2021 Project No. 034-21023

PHASE I ENVIRONMENTAL SITE ASSESSMENT
ELMWOOD COLONY PROPERTY
NWC EAST ZEERING AND ARNOLD ROADS
APN 024-022-027
DENAIR, CALIFORNIA 95316

1.0 EXECUTIVE SUMMARY

Krazan & Associates, Inc. (Krazan) has conducted a Phase I Environmental Site Assessment (ESA) of the Elmwood Colony Property associated with Stanislaus County Assessor's Parcel Number (APN) 024-022-027 located northwest of E. Zeering Road and Arnolds Road in Denair, California 95316 (subject site). It is incumbent upon the user to read this Phase I ESA report in its entirety. If not otherwise defined within the text of this report, please refer to the Glossary of Terms Section following the References Section for definitions of terms and acronyms utilized within this Phase I ESA report. Krazan conducted the Phase I ESA of the subject site in conformance with the American Society for Testing and Materials (ASTM) E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* This Phase I ESA constitutes all appropriate inquiry (AAI) designed to identify recognized environmental conditions (RECs) in connection with the previous ownership and uses of the subject site as defined by ASTM E 1527-13.

ASTM E 1527-13 Section 1.1.1 *Recognized Environmental Conditions* – In defining a standard of good commercial and customary practice for conducting an environmental site assessment of a parcel of property, the goal of the processes established by this practice is to identify recognized environmental conditions. The term recognized environmental conditions means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions.

Krazan's findings of this Phase I ESA revealed no evidence of recognized environmental conditions (RECs), controlled RECs (CRECs) or historical RECs (HRECs) in conjunction with the subject site as defined by ASTM E 1527-13. However, the following potential areas of concern (PAOCs) were identified in connection with the subject site:

PAOCs

- The potential presence of hazardous materials associated with soil piles and mounded soil of unknown origin or content observed in the central-western portion of the subject site.

Please refer to Section 8.0 Conclusions/Opinions for a discussion of the findings included in this summary.

2.0 PURPOSE AND SCOPE OF ASSESSMENT

2.1 Purpose

According to ASTM E 1527-13, the purpose of this practice is to define good commercial and customary practice in the United States of America for conducting an *environmental site assessment* of a parcel of *commercial real estate* with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) and *petroleum products.* As such, this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner, contiguous property owner,* or *bona fide prospective purchaser* limitation on CERCLA liability (hereinafter, the *landowner liability protections,* or *LLPs*): that is, the practice that constitutes *all appropriate inquiries* into the previous ownership and uses of the *property* consistent with good commercial and customary practice as defined at 42 U.S.C. §9601(35)(B).

2.2 Scope of Work

The Phase I ESA includes the following scope of work: a) a site reconnaissance of existing on-site conditions and observations of adjacent property uses, b) a review of user-provided documents, c) a review of historical aerial photographs, a review of pertinent building permit records, cross-reference directories, historical Sanborn Fire Insurance Maps (SFIMs), and interview(s) with person(s) knowledgeable of the previous and current ownership and uses of the subject site, d) a review of local regulatory agency records, and e) a review of local, state, and federal regulatory agency lists compiled by Environmental Data Resources, Inc. (EDR). The scope of work for this Phase I ESA conforms to ASTM E 1527-13. Krazan was provided written authorization to conduct the Phase I ESA by Mr. Dan Dunkley with Redwood Park Properties on April 16, 2021 in Krazan's April 16, 2021 Proposal/Cost Estimate No. P21-150.

3.0 SITE DESCRIPTION

The subject site is located northeast of Riopel Avenue and E. Zeering Road within an unincorporated area of Stanislaus County, California. The subject site consists of one irregular-shaped parcel measuring approximately 15.86 acres with the associated Stanislaus County Assessor's Parcel Number of 024-022-027. The subject site is currently vacant land that is utilized for dry farming. According to the Stanislaus County GIS database, the subject site parcel is associated with an address of 4325 Arnold Road. The subject site appears to have been utilized for agricultural purposes since at least 1937, and does not appear to have been developed with any structures historically.

General property information and property use are summarized in the following Table I. Refer to Figures No. 1 – 3 following the Reference Section.

TABLE I
Subject Site Information Summary

Current Owner:	Riopel & Associates, L.P.
Assessor's Parcel Number:	024-022-027
Address:	4325 Arnold Road (Stanislaus County GIS Database) Denair, California 95316
Historical Address:	None Identified
General Location:	Northeast of Riopel Avenue and E. Zeering Road
Acreage:	15.86 acres (approximately)
Existing Use:	Vacant Land / Dry Farming
Number of Buildings:	None
Original Construction Date:	N/A
Proposed Use:	Residential
Topographic Map:	U.S. Geological Survey, 7.5-minute Denair, California topographic quadrangle map, dated 1969, photorevised 1976
Topographic Map Location:	Northwestern quarter of Section 05, Township 05 South, Range 11 East, Mount Diablo Baseline and Meridian
Latitude/Longitude:	37.53075° / –120.78805°
Topography:	Relatively flat, approximately 125 feet above mean sea level
Approximate Depth to Groundwater:	100 feet below ground surface (bgs), State of California Department of Water Resources (DWR), SGMA Portal** (Spring 2020)
Regional Groundwater Flow Direction:	East, DWR **(Spring 2020)

** State of California, Department of Water Resources, Sustainable Groundwater Management Act Portal, 2020 data.

3.1 Geology and Hydrogeology

The subject site is located within the San Joaquin Valley, a broad structural trough bound by the Sierra Nevada and Coast Ranges of California. The San Joaquin Valley, which comprises the southern portion of the Great Valley of California, has been filled with several thousand feet of sedimentary deposits. Sediments in the eastern valley, derived from the erosion of the Sierra Nevada, have been deposited by

major to minor west-flowing drainages and their tributaries. Near-surface sediments are dominated by sands and silty sands with lesser silts, minor clays, and gravel. The sedimentary deposits in the region form large coalescing alluvial fans with gentle slopes. Groundwater in the subject site vicinity was reported to be first encountered at a depth of approximately 100 feet bgs in Spring 2020. The groundwater flow direction in the area of the subject site is generally toward the east (Spring 2020 data).

4.0 SITE RECONNAISSANCE

A site reconnaissance, which included a visual observation of the subject site and surrounding properties, was conducted by Mr. Bill Vick, Krazan's Environmental Professional, on May 10, 2021. Krazan's Environmental Professional was unaccompanied during the site reconnaissance. The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions, including hazardous substances and petroleum products, in connection with the property (including soils, surface waters, and groundwater).

4.1 Observations

The following Table II summarizes conditions encountered during our site reconnaissance. A discussion of visual observations is presented in the table below. Refer to the Site Map (Figure No. 2) and color photographs following the text for the locations of items discussed in this section of the report.

TABLE II
Summary of Site Reconnaissance

Feature	Observed	Not Observed
Structures (existing)		X
Evidence of Past Uses (foundations, debris)		X
Hazardous Substances and/or Petroleum Products (including containers)		X
Aboveground Storage Tanks (ASTs)		X
Underground Storage Tanks (USTs) or Evidence of USTs		X
Evidence of Underground Pipelines		X
Irrigation System Water Conveyance Features	X	
Strong, Pungent, or Noxious Odors		X
Pools of Liquid Likely to be Hazardous Materials or Petroleum Products		X
Drums		X
Unidentified Substance Containers		X
Potential Polychlorinated Biphenyl (PCB)-Containing Equipment		X
Subsurface Hydraulic Equipment		X
Heating/Ventilation/Air conditioning (HVAC)		X
Stains or Corrosion on Floors, Walls, or Ceilings		X
Floor Drains, Sumps, or Oil/Water Clarifiers		X
Storm Drains		X

TABLE II (continued)
Summary of Site Reconnaissance

Feature	Observed	Not Observed
Pits, Ponds, or Lagoons		X
Stained Soil and/or Pavement		X
Soil Piles/Mounded Soil	X	
Stressed Vegetation		X
Waste or Wastewater (including stormwater) Discharges to Surface/ Surface Waters		X
Wells (irrigation, domestic, dry, injection, abandoned, monitoring wells)		X
Septic Systems		X

The subject site comprises approximately 15.86 acres of vacant land with the associated Stanislaus County APN of 024-022-027. Refer to Figure No. 2, Site Map, for locations of the following referenced on-site features:

- The subject site was observed to be relatively flat, primarily vacant land upon which a hay crop had been harvested relatively recently (See Photographs No. 1 - No. 6). Housekeeping conditions were observed to be good throughout the subject site. No structures were observed on the subject site.

- Vegetation-covered soil piles/mounded soil and a more recently deposited end-dump soil pile were observed in the central-western portion of the subject site adjacent to Riopel Avenue (See Photographs No. 7 and No. 8). The vegetation-covered soil piles/mounded soil occupied an area of approximately 6,000 square feet with mounds reaching a height of 3+ feet in places. No odors, surface staining, soil discoloration, stressed vegetation, or other obvious evidence of the presence of hazardous materials or hazardous waste was noted in association with the soil piles/mounded soil. However, a significant portion of the surface of the soil piles/mounded soil was covered with vegetation precluding observation of the surface soils.

- Water conveyance features apparently associated with an irrigation system/pipeline were observed in the western portion of the subject site on/near the property boundary, including valve, access and vent features in the southwestern portion of the subject site (See Photograph No. 9) and several apparent irrigation water capture boxes located on/near the property boundary (See Photograph No. 10). Given the presence of these subsurface irrigation system components, it is possible that other subsurface irrigation water conveyance features are located on/near the subject site.

- During the visual observations of the subject site, no hazardous materials or hazardous waste were observed. Exposed surface soils did not exhibit obvious signs of discoloration. No obvious evidence (vent pipes, fill pipes, dispensers, etc.) of USTs was noted within the areas observed. No standing water or major depressions were observed on the subject site. No indications of former structures, such as foundations, were observed on the subject site.

- No pole- or pad-mounted electrical transformers were observed on the subject site.

- No high-voltage, tower-mounted electrical transmission lines were observed on or within 100 feet of the subject site.

4.2 Utilities

Based on Krazan's research, the following Table III summarizes companies/municipalities that currently provide utility services to the subject site:

TABLE III
Municipal Service / Utility Providers

Service / Utility	Provider
Electricity	Pacific Gas & Electric (PG&E)
Natural Gas	PG&E
Potable Water	Denair Community Services District
Sanitary Sewer	Unknown Purveyor

Water / Wells

Krazan's research indicates that no potable water has been historically supplied to the subject site. However, the water purveyor for the subject site vicinity is the Denair Community Services District. The Denair Community Services District's water quality monitoring is an on-going program with water samples obtained on a regular basis. It is the responsibility of the Denair Community Services District to provide customers with potable water in compliance with the California State Maximum Contaminant Levels (MCLs) for primary drinking water constituents in water supplied to the public.

Sewer / Septic Systems

Krazan's research indicates that no sewage disposal systems have historically serviced the subject site.

4.3 Adjacent Streets and Property Usage

The following Table IV summarizes the current adjacent roads and adjacent property uses observed during the site reconnaissance:

TABLE IV
Adjacent Streets and Property Use

Direction	Adjacent Street	Adjacent Property Use
North	None	Agriculture
South	E. Zeering Road	Residential
East	Arnold Road	Residential/ Pasture
West	Riopel Avenue	Residential/ Playground/Open Space

Based on the observed uses of the properties located immediately adjacent to the subject site, it is unlikely that significant quantities of hazardous materials are stored at the adjacent properties.

4.4 ASTM Non-Scope Considerations

According to ASTM E 1527-13, there may be environmental issues or conditions at the subject site that are outside the scope of the Phase I ESA practice (non-scope considerations). Some substances may be present at the subject site in quantities and under conditions that may lead to contamination of the subject site or of nearby properties but are not included in CERCLA's definition of hazardous substances (42 U.S.C. §9601[14]). ASTM non-scope considerations are discussed below.

Asbestos-Containing Materials

Asbestos is a group of naturally occurring mineral fibers that have been used commonly in a variety of building construction materials for insulation and as a fire-retardant. Because of its fiber strength and heat resistant properties, asbestos has been used for a wide range of manufactured goods, mostly in building materials, vehicle brakes, and heat-resistant fabrics, packaging, gaskets, and coatings. When asbestos-containing materials (ACMs) are damaged or disturbed by repair, remodeling, or demolition activities, microscopic asbestos fibers may become airborne and can be inhaled into the lungs, where they can cause significant health problems.

No structures are located on the subject site. Therefore, ACMs are not considered an on-site environmental concern at this time.

Lead-Based Paint

Although lead-based paint (LBP) was banned in 1978, many buildings constructed prior to 1978 have paint that contains lead. Lead from paint, chips, and dust can pose serious health hazards if not addressed properly.

No structures are located on the subject site. Therefore, lead-based paint is not considered an on-site environmental concern at this time.

Mold and Moisture Intrusion

A class of fungi, molds have been found to cause a variety of health problems in humans, including allergic, toxicological, and infectious responses. Molds are decomposers of organic materials, and thrive in humid environments, and produce spores to reproduce, just as plants produce seeds. When mold spores land on a damp spot indoors, they may begin growing and digesting whatever they are growing on in order to survive. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or unaddressed. As such, interior areas of buildings characterized by poor ventilation and high humidity are the most common locations of mold growth. Building materials

including drywall, wallpaper, baseboards, wood framing, insulation and carpeting often play host to such growth. Moisture control is the key to mold control. Molds need both food and water to survive; since molds can digest most things, water is the factor that limits mold growth. The EPA recommends the following action to prevent the amplification of mold growth in buildings:

- Fix leaky plumbing and leaks in the building envelope as soon as possible.
- Watch for condensation and wet spots. Fix source(s) of moisture problem(s) as soon as possible.
- Prevent moisture due to condensation by increasing surface temperature or reducing the moisture level in air (humidity). To increase surface temperature, insulate or increase air circulation. To reduce the moisture level in air, repair leaks, increase ventilation (if outside air is cold and dry), or dehumidify (if outdoor air is warm and humid).
- Keep heating, ventilation, and air conditioning (HVAC) drip pans clean, flowing properly, and unobstructed.
- Vent moisture-generating appliances, such as dryers, to the outside where possible.
- Maintain low indoor humidity, below 60% relative humidity (RH), ideally 30-50%, if possible.
- Perform regular building/HVAC inspections and maintenance as scheduled.
- Clean and dry wet or damp spots within 48 hours.
- Do not let foundations stay wet. Provide drainage and slope the ground away from the foundation.

No structures are currently located on the subject site. Therefore, microbial growth and moisture intrusion are not considered an on-site environmental concern at this time.

Radon

Radon is a radioactive gas that is found in certain geologic environments and is formed by the natural breakdown of radium, which is found in the earth's crust. A radon survey was not included within the scope of this investigation; however, the State of California Department of Public Health (CDPH) maintains a statewide database of radon results in designated geographic areas. Radon detection devices are placed in homes throughout the study region to determine geographic regions with elevated radon concentrations. The U.S. EPA has set the safety standard for radon gas in homes to be 4.0 pico Curies per liter (pCi/L).

The US EPA has prepared a map to assist National, State and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, Zone 1 being those areas with the average predicted indoor radon concentration in residential dwellings exceeding the EPA Action Limit of 4.0 pCi/L. It is important to note that the EPA has found homes with

elevated levels of radon in all three zones, and the EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures. Review of the EPA Map of Radon Zones places the Property in Zone 3, where average predicted radon levels are below 2.0 pCi/L. Therefore, the available data suggests that the potential for radon to adversely impact the subject site appears to be low.

Environmental Non-Compliance Issues

No obvious material environmental non-compliance issues were identified in connection with the subject site in the process of preparing this report.

Activity and Use Limitations

No environmental activity and use limitations were identified in connection with the subject site in the process of preparing this report.

Wetlands

As defined by the U.S. EPA and the Department of Army, Corps of Engineers, wetlands are "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Jurisdictional wetlands are regulated under Section 404 of the Clean Water Act (1972, 1977, and 1987, and also the 1985 and 1990 Farm Bills), and are important for protection of aquatic waterfowl and species, water purification, and flood control. According to current Corps of Engineers information, three basic criteria are currently used to define wetlands:

- Wetland hydrology - areas exhibiting surface or near-surface saturation or inundation at some point in time (greater than 12.5 percent of growing season defined on basis of frost-free days) during an average rainfall year.

  Hydrophilic vegetation - frequency of occurrence of wetland indicator plants (plant life growing in water, soil, or substrate that is periodically deficient in oxygen as a result of excessive water content).

- Hydric soil - landscape patterns identified by saturation, flooding, or ponding long enough during the growing season (generally seven days) which develop characteristic color changes in the upper part of the soil as a result of anaerobic conditions.

Based on Krazan's reconnaissance of the subject site, evidence was not apparent to suggest that the site contained a wetland. Furthermore, according to the U. S. Fish & Wildlife Service (USFWS) National Wetlands Inventory available via the USFWS Internet website, the subject site does not contain a designated wetland. Therefore, at this time, regulations pertaining to wetlands do not appear to impact the subject site.

5.0 USER-PROVIDED INFORMATION

A review of user-provided information was conducted in order to help identify pertinent information regarding potential environmental impacts associated with the subject site. A Final Title Report or Environmental Lien Search were not provided to or prepared by Krazan in conjunction with this assessment.

5.1 Title Report

A Preliminary Title Report (PTR) dated April 2, 2021, prepared for the subject site by Chicago Title Company, was provided to Krazan by Redwood Park Properties, Inc., Krazan's client and the Phase I ESA User. The subject site PTR was reviewed to identify potential environmental deed restrictions, environmental liens, or environmental activity and use limitations (AULs) which may have occurred on or exist in connection with the subject site. Krazan's review of the PTR indicated no environmental deed restrictions, environmental liens or environmental AULs for the subject site. However, as quoted from the subject site PTR, "It is important to note that this Preliminary Title Report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land." The absence of a Final Title Report or Environmental Lien Search represents a data gap. Please refer to Appendix A for a copy of the PTR.

5.2 Phase I Environmental Site Assessment User Questionnaire

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *Brownfields Amendments*), the *user* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiry* is not complete. The user is asked to provide information or knowledge of the following:

1. Environmental cleanup liens that are filed or recorded against the site.
2. Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry.
3. Specialized knowledge or experience of the person seeking to qualify for the LLPs.
4. Relationship of the purchase price to the fair market value of the *property* if it were not contaminated.
5. Commonly known or *reasonably ascertainable* information about the *property*.

6. The degree of obviousness of the presence or likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation.

7. The reason for preparation of this Phase I ESA.

On April 21, 2021, a completed Phase I ESA user questionnaire was received from Mr. Dan Dunkley, the Phase I ESA user. Please refer to Appendix B for a copy of the completed Phase I ESA user questionnaire.

According to the questionnaire responses, Mr. Dunkley, to the best of his knowledge as the user of this Phase I ESA, was not aware of any environmental cleanup liens and activity or land use limitations which have been filed or recorded against the subject site; and Mr. Dunkley has no specialized knowledge or experience of the prior nature of the business or chemical utilization on the subject site. Mr. Dunkley indicated that he has no knowledge of the historical uses of the subject site. Mr. Dunkley indicated that he did not have knowledge of the past or current presence of specific chemicals or hazardous materials, unauthorized spills or chemical releases or of any environmental cleanups in connection with the subject site. Mr. Dunkley indicated that he is not aware of any obvious indications pointing to the presence or likely presence of contamination of the subject property. Mr. Dunkley stated that the purchase price of the subject site reasonably reflects fair market value. Additionally, Mr. Dunkley indicated that the reason for preparation of this Phase I ESA is related to a proposed property purchase and residential development.

6.0 SITE USAGE SURVEY

The property usage survey included assessing property history, and reviewing local, state, and federal regulatory agency records.

6.1 Site History

A review of historical aerial photographs, a USGS topographic quadrangle map, Stanislaus County Planning & Community Development Department records, and reasonably ascertainable cross-reference directories, a search for Sanborn Fire Insurance Maps (SFIMs), and a Phase I ESA interview were utilized to assess the history of the subject site.

Previous Environmental Assessment

No previous environmental assessments of the subject site were provided to Krazan for review during the course of this assessment.

Aerial Photograph Interpretation

Historical aerial photographs dated 1937, 1942, 1946, 1950, 1957, 1967, 1973, 1976, 1984, 1998, 2006, 2012, and 2019 were reviewed to assess the history of the subject site. These photographs were obtained from Environmental Data Resources, Inc. (EDR) and via the internet at Google Earth™. The aerial photograph summary is provided in the following Table V. Please refer to Appendix C for a copy of the Historical Aerial Photographs.

TABLE V
Summary of Aerial Photograph Review

Year/Scale	Site Use	Site and Adjacent Property Observation
1937 1" = 500'	Agricultural	The subject site appears to be utilized for agricultural purposes with no visible on-site structures. Irrigation canals are visible in the central portion of the subject site and adjacent to the west of the subject site. The northern, southern, eastern and western adjacent properties appear to be occupied by rural residences and utilized for agricultural purposes.
1942 1" = 500'	Agricultural	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1937 aerial photograph.
1946 1" = 500'	Agricultural	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1942 aerial photograph except for the development of additional structures associated with the western adjacent rural residence including an outbuilding near the western boundary of the subject site.
1950 1" = 500'	Agricultural	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1946 aerial photograph.
1957 1" = 500'	Agricultural	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1950 aerial photograph.
1967 1" = 500'	Agricultural	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1957 aerial photograph.
1973 1" = 500'	Agricultural	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1967 aerial photograph except: 1) the rural residence previously noted adjacent to the west of the southern portion of the subject site is no longer present, 2) several dwellings have been developed adjacent to the west of the southern portion of the subject site, and 3) single-family homes have been developed adjacent to the southwest of the subject site.
1976 1" = 500'	Vacant Land/ Pasture	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1973 aerial photograph except: 1) the subject site and much of the western adjacent property appear to be vacant land possibly being utilized as pasture, and 2) a residential subdivision has been developed 400 feet to the west of the subject site.
1984 1" = 500'	Agricultural/ Hay Cultivation	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1976 aerial photograph except the subject site and the western adjacent property appear to be dry farmed and additional residences have been developed on the eastern adjacent property.

TABLE V (continued)
Summary of Aerial Photograph Review

Year/Scale	Site Use	Site and Adjacent Property Observation
1998 1" = 500'	Agricultural	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1984 aerial photograph except the subject site and the western adjacent property appear to be cultivated with an irrigated crop.
2006 1" = 500'	Vacant Land/ Fallow Land	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 1998 aerial photograph except: 1) the subject site appears to be vacant land, and 2) the western adjacent property has been rough grading and is being developed.
2012 1" = 500'	Vacant Land/ Fallow Land	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 2006 aerial photograph except the western adjacent property appears to be occupied by single-family homes and the existing playground and open space.
2019 1" = 500'	Vacant Land/ Fallow Land	Conditions on the subject site and the adjacent properties appear relatively similar to those noted in the 2012 aerial photograph.

USGS Topographic Quadrangle Map

Krazan's review of the USGS, 7.5-minute, Denair, California topographic quadrangle map dated 1969, photorevised 1976, indicates that the subject site is depicted as vacant land in 1969 and in 1976. No structures are depicted on the subject site. The southern, eastern, and western adjacent properties are occupied by small structures and vacant land. The northern adjacent property is depicted as vacant land. Refer to Figure No. 3, Topographic Map, for reference.

Stanislaus County Planning & Community Development Department

On April 21, 2021, the Stanislaus County Planning & Community Development Department's (SCPCDD) online building permit database available via the Stanislaus County website was reviewed for the subject site APN of 024-022-027 and for the Stanislaus County GIS database address of 4325 Arnold Road reportedly associated with the subject site. Krazan's review of the SCPCDD's online building permit database revealed no permits for the referenced subject APN/address. Therefore, no permits for items such as underground storage tanks, septic systems, building demolition, or previous structures/features were included in the SCPCDD database for the subject site.

City Directories

Cross-reference directories were not searched due to the historical and current absence of structures and addresses associated with the subject site.

Sanborn Fire Insurance Maps

Krazan reviews Sanborn Fire Insurance Maps (SFIMs) to evaluate prior land use of the subject site and the adjacent properties. SFIMs typically exist for cities with populations of 2,000 or more, the coverage dependent on the location of the subject site within the city limits. Krazan contracted with EDR to provide copies of available SFIMs for the subject site and the adjacent properties as far back as 1867. EDR's search of SFIMs revealed no coverage for the subject site and the adjacent properties. Please refer to Appendix D for a copy of the EDR, SFIM *No Maps Available* Report.

6.2 Interviews

Krazan conducts interviews with the owner of the subject site, a key site manager, subject site occupants, and/or the previous owners/occupants of the subject site. The interviews are designed to provide pertinent information regarding potential environmental impacts associated with the subject site.

Subject Site Owner – An interview was conducted with Mr. Paul Rodrigues, the owner of the subject site, via his completion of an environmental questionnaire. According to questionnaire responses, Mr. Rodrigues indicated that he has been familiar with the subject site for the past 35 years. Mr. Rodrigues indicated that the subject site is currently and was historically utilized for dry farming. Mr. Rodrigues indicated that no structures are currently located on site and none have been located on site previously.

According to Mr. Rodrigues, to the best of his knowledge, no use, storage, or disposal of hazardous materials, including environmentally persistent pesticides/herbicides; no existing or former ASTs or USTs; no hazardous materials spills, no environmental cleanups, no on-site treatment and/or discharge of waste; no environmental liens, AULs, engineering or institutional controls, no on-site leach fields, dry wells, sumps, or disposal ponds; no buried materials; no monitoring, domestic, or irrigation wells; or any items of environmental concern are associated with the subject site. Mr. Rodrigues indicated that he is not aware of any obvious indications pointing to the presence or likely presence of contamination of the subject property. Mr. Rodrigues indicated that the purchase price of the subject site reasonably reflects fair market value. Please refer to Appendix E for a copy of the environmental questionnaire completed by Mr. Rodrigues.

Previous Subject Site Owners/Occupants – An interview with a previous owner/occupant of the subject site was not reasonably ascertainable. Consequently, information regarding the history and historical uses of the subject site obtained from an interview of a previous owner and/or occupant constitutes a data gap.

6.3 Agricultural Chemicals

Review of historical aerial photographs indicates that the subject site was utilized for agricultural purposes from at least 1937 until at least 1998. Although the potential exists that environmentally persistent pesticides/herbicides were historically applied to crops grown on the subject site circa-1940s to 1960s; 1) no structures were noted on historical aerial photographs of the subject site taken between 1948 and the present, and impacts from agricultural chemicals are most often identified in association with chemical mixing and storage areas (structures), 2) no material evidence of the use of environmentally persistent pesticides/herbicides was obtained during the course of this assessment, and 3) it is anticipated that any environmentally persistent pesticides/herbicides potentially located on site will be dislocated and diluted as a result of the grading and trenching operations which will be conducted in conjunction with the proposed redevelopment of the property in the 1970s. Consequently, given the above-referenced factors and Krazan's experience in the subject site vicinity which generally indicates that the potential is low for elevated concentrations of environmentally persistent pesticides/herbicides related to crop cultivation to exist in the near-surface soils of common agricultural ground at concentrations which would require regulatory action, despite the absence of specific data, the potential for elevated concentrations of environmentally persistent pesticides or herbicides to currently exist in the near-surface soils of the subject site at concentrations which would require regulatory action appears to be low.

6.4 Regulatory Agency Interface

A review of regulatory agency records was conducted to help determine if hazardous materials have been handled, stored, or generated on the subject site and/or the adjacent properties and businesses.

Regulatory records are reviewed based on the following criteria: 1) properties with known soils and/or groundwater releases considered to represent the potential for impact to the subject site that are located within 1,760 feet of the subject site for constituents of concern impacts or 528 feet of the subject site for petroleum hydrocarbon impacts; 2) properties that are adjacent or in proximity to the subject site included within the EDR regulatory database report or noted during the site reconnaissance to possibly handle, store, or generate hazardous materials. Applicable property records are discussed below.

Stanislaus County Department of Environmental Resources

The Stanislaus County Department of Environmental Resources (SCDER) is the lead regulatory agency or Certified Unified Program Agency (CUPA) for hazardous materials handling facilities located in Stanislaus County. On April 22, 2021, the Stanislaus County Department of Environmental Resources was contacted regarding potential records associated with USTs, leaking USTs (LUSTs), hazardous materials business plans (HMBPs), environmental cleanups, or hazardous materials release incidents for the subject site APN

of 024-022-027 and for the 4325 Arnold Road address referenced in the Stanislaus County GIS database. According to a representative of the Stanislaus County Department of Environmental Resources, no hazardous materials records are on file with the SCDER for the referenced subject site APN/address.

State of California Regional Water Quality Control Board - Geotracker

Krazan's April 21, 2021 review of the State of California Regional Water Quality Control Board (RWQCB) Geotracker database available via the RWQCB Internet Website indicated that no cleanup sites including LUST sites, cleanup program sites, land disposal sites, or military sites are listed for the subject site, the adjacent properties, or properties located within the subject site vicinity. Additionally, no permitted UST sites were determined to be located on or adjacent to the subject site.

State of California Environmental Protection Agency

Krazan's April 21, 2021 review of the State of California Environmental Protection Agency (CalEPA) – Department of Toxic Substances Control (DTSC) Envirostor database available via the DTSC's Internet Website indicated that no records of cleanup sites including State response sites, voluntary cleanup sites, school cleanup sites, or military or school evaluation sites are listed for the subject site, the adjacent properties, or properties located within 500 feet of the subject site. Additionally, no Federal Superfund – National Priorities List (NPL) sites were determined to be located within a one-mile radius of the subject site.

Stanislaus Consolidated Fire Protection District

The Stanislaus Consolidated Fire Protection District (SCFPD) has jurisdiction for fire protection for the subject site and the immediate vicinity. On April 21, 2021, the Stanislaus Consolidated Fire Protection District was contacted regarding potential records of hazardous materials storage and hazardous materials release incidents for the subject site APN of 024-022-027 and for the 4325 Arnold Road address referenced in the Stanislaus County GIS database. According to a representative of the Stanislaus Consolidated Fire Protection District, no hazardous materials records are on file with the SCFPD for the referenced subject site APN/address.

California Department of Conservation, California Geologic Energy Management Division

Krazan's April 21, 2021 review of the State of California Department of Conservation, California Geologic Energy Management Division (CalGEM) Online Mapping System indicated that no plugged and abandoned or producing oil wells are located on or adjacent to the subject site.

Local Area Tribal Records

No Indian reservations, USTs on Indian land, or LUSTs on Indian land were reported on the subject site, adjacent properties, or vicinity properties in the EDR-provided government database report.

6.5 Regulatory Agency Lists Review

Several agencies have published documents that list businesses or properties which have handled hazardous materials or waste or may have experienced site contamination. The lists consulted in the course of our assessment were compiled by EDR and Krazan and represent reasonably ascertainable current listings. Krazan did not verify the locations and distances of every property listed by EDR. Krazan verified the location and distances of the properties Krazan deemed as having the potential to adversely impact the subject site. The actual location of the listed properties may differ from the EDR listing. Refer to the following Table VI for a summary of the listed properties considered to have the potential to impact the subject site located within the specified ASTM Search Radii. The actual distances of the listed properties (which are summarized below) are based on observations during Krazan's site reconnaissance. No EDR-listed unmapped (non-geocoded) sites were determined to be located on or adjacent to the subject site. Please refer to the Appendix F for a copy of the EDR, Radius Map report.

TABLE VI
Listed Properties

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	2	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	4	NR	NR	4

TABLE VI (continued)
Listed Properties

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		1	0	NR	NR	NR	1
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

TABLE VI (continued)
Listed Properties

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	4	NR	NR	4
CUPA Listings	0.250		0	0	NR	NR	NR	0

TABLE VI (continued)
Listed Properties

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	2	NR	NR	2
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	2	1	10	2	0	15

TABLE VI (continued)
Listed Properties

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:
TP = Target Property
NR = Not Requested at this Search Distance
Sites may be listed in more than one database

The subject site address/location was not listed in the EDR regulatory database report.

Hazardous Materials Migration in Soils and/or Groundwater

No sites with reported releases of hazardous materials to the subsurface were reported within a 1,500-foot radius of the subject site. In general, potentially hazardous materials or petroleum products released from facilities located approximately hydraulically upgradient within the subject site vicinity, or in a hydraulically cross-gradient direction in proximity to the site, may have a reasonable potential of migrating to the subject site via groundwater flow. This opinion is based on the assumption that non-vaporous hazardous materials generally do not migrate large distances laterally within the soil, but rather tend to migrate with groundwater in the general direction of groundwater flow. However, the potential for migration of volatile hazardous materials may include movement within soils, groundwater flow or potentially omni-directionally if present in a vaporous state.

Hazardous Materials Migration in Vapor

Hazardous materials or petroleum product vapors which may have the potential to migrate into the subsurface of the subject site may be caused by the release of vapors from contaminated soil or groundwater either on or in the vicinity of the subject site from current or historical uses of the subject site and/or adjacent or vicinity properties. Current or past land uses such as gasoline stations (using petroleum hydrocarbons), dry cleaning establishments (using chlorinated volatile organic compounds), former manufactured gas plant sites (using volatile and semi-volatile organic compounds), and former industrial sites such as those that had vapor degreasing or other parts-cleaning operations (using chlorinated volatile organic compounds) are of particular concern. Constituent of concern vapors are capable of migrating great distances omni-

directionally along subsurface conduits such as pipelines, utility lines, sewer and stormwater lines, and building foundations.

Based on Krazan's observations and review of State and local regulatory agency records and the EDR regulatory database report, no listings of concern related to potential vapor migration were determined to be associated with the subject site, adjacent properties, or properties located within the subject site vicinity. Review of vicinity properties listed by EDR as release sites within the applicable search radii suggests that these properties do not represent a significant potential for vapor migration in conjunction with the subject site. The rationale supporting this opinion includes the following:

- None of the reported sites were in close proximity to the subject site.
- Relevant sites had undergone investigation and remediation sufficient to receive regulatory agency closure.
- Sites with reported releases of minor quantities of COCs or COCs of limited volatility impacting soil only were considered of minimal concern.
- The lateral migration of the COCs in groundwater is reported to be limited and COCs were not detected in groundwater samples collected downgradient of the release and several hundred feet upgradient of the subject site.
- Sites with reported releases of COCs including volatile organic compounds (VOCs) were either of sufficient distance or hydraulically down- or cross-gradient from the subject site such that they do not appear to represent a significant potential for vapor migration on the subject site.

No engineering control sites, sites with institutional controls, or sites with deed restrictions were listed for the subject site, adjacent sites or vicinity properties in the EDR Report.

7.0 DISCUSSION OF FINDINGS

TABLE VII
Summary of Conclusions

Apparent Evidence of RECs or PAOCs From	Not Noted	Noted
Historical Uses		X
Current Uses	X	
Adjacent or Vicinity Property Uses	X	

Historical Uses

Based on Krazan's review of historical aerial photographs, a site reconnaissance, contacts with the local regulatory agencies, and an interview with a representative of the owner of the subject site, there is no evidence that recognized environmental conditions exist in connection with the historical uses of the subject site. However, potential areas of concern (PAOCs) were identified in connection with the historical uses of the subject site which are discussed in the Conclusions/Opinions section of this report.

Current Uses

Based on Krazan's site reconnaissance, contacts with local regulatory agencies, and an interview with the owner of the subject site, there is no evidence that recognized environmental conditions exist in connection with the current uses of the subject site.

Adjacent or Vicinity Property Uses

Based on Krazan's field observations, review of the EDR government database report, and consultation with local regulatory agencies, there is no evidence that recognized environmental conditions exist in connection with the subject site from adjacent property uses.

7.1 Evaluation of Data Gaps/Data Failure

In accordance with ASTM E 1527-13 guidance, data gaps represent a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice. Data failure represents the failure to achieve the historical research objectives of this practice even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. Data failure is one type of data gap.

The following is a summary of data gaps encountered in the process of preparing this report including an observation as to the presumed significance of that data gap to the conclusions of this assessment.

- Absence of Final Title Report or Environmental Lien Search (Section 5.1)

  A Final Title Report or Environmental Lien Search were not provided by the Phase I ESA user, therefore, a preliminary title report with attendant limitations was utilized in preparation of this report. Taken in consideration with the available information obtained in the course of preparing this report in conjunction with professional experience, there is no evidence to suggest that this data gap might alter the conclusions of this assessment. However, the contents of a Final Title Report or Environmental Lien Search are unknown.

- Absence of Interview with Previous Property Owner/Occupant (Section 6.1)

  A Phase I ESA interview with the previous owner/occupant of the subject site was not reasonably ascertainable. Consequently, information regarding the history and historical uses of the subject site obtained from an interview of a previous owner and/or occupant constitutes a data gap. Taken in consideration with the available information obtained in the course of preparing this report in conjunction with professional experience, there is no evidence to suggest that this data gap might alter the conclusions of this assessment. However, the contents of an interview with a previous property owner/occupant are unknown.

8.0 CONCLUSIONS/OPINIONS

We have conducted a Phase I ESA of the subject site in conformance with the scope and limitations of the ASTM E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* guidance documents. Any deviations from this practice were previously described in this report. During the course of this assessment, Krazan identified no evidence of recognized environmental conditions (RECs), controlled RECs (CRECs) or historical RECs (HRECs) in conjunction with the subject site as defined by ASTM E 1527-13. However, the following potential areas of concern (PAOCs) were identified in connection with the subject site:

PAOCs

- During Krazan's May 10, 2021 site reconnaissance, vegetation-covered soil piles/mounded soil and a more recently deposited end-dump soil pile were observed in the central-western portion of the subject site adjacent to Riopel Avenue. The vegetation-covered soil piles/mounded soil occupied an area of approximately 6,000 square feet with mounds reaching a height of 3+ feet in places. No odors, surface staining, soil discoloration, stressed vegetation, or other obvious evidence of the presence of hazardous materials or hazardous waste was noted in association with the soil piles/mounded soil. However, a significant portion of the surface of the soil piles/mounded soil was covered with vegetation precluding observation of the surface soils. Mr. Paul Rodrigues, the owner of the subject site familiar with the subject site for the past 35years, indicated via responses to an environmental questionnaire that he has no knowledge of the presence of imported soil on the subject site. Consequently, no information concerning the origin of the above-referenced on-site soil piles/mounds was obtained from the property owner.

  Review of historical aerial photographs indicates that the area of vegetation-covered soil piles/mounded soil was present in May 2009. Historical aerial photographs indicate that the western adjacent single-family homes, playground, and open space were being developed in 2006 and it is possible that the vegetation covered soils may have been derived from that development. However, this hypothesis could not be substantiated during the course of this assessment and the single end-dump soil pile appeared to have been deposited on site much more recently as it had no vegetative cover. The actual origin and composition of on-site soil piles and mounded soil are

unknown, and available information suggests that some or all of these soil piles/mounds may be comprised of imported soil. Consequently, the composition of the soil contained within the soil piles/mounds relative to potential contaminants is unknown. Furthermore, given the location of these materials immediately proximate to a paved road, the potential exists that some of these materials are the result of illegal dumping. Krazan's experience indicates that imported soil can be contaminated with agricultural chemicals or other hazardous materials, dependent upon the specific location from which the soil is derived, and that the risk of contamination is increased for illegally disposed soils. Therefore, the origin and composition of the soil contained within the on-site soil piles/mounded soil related to potential contaminants is unknown relative to future use in development of the property or for disposal purposes.

9.0 RELIANCE

This report was prepared solely for use by Client and should not be provided to any other person or entity without Krazan & Associates' prior written consent. No party other than Client may rely on this report without Krazan & Associates' express prior written consent. Reliance rights for third parties will only be in effect once requested by Client and authorized by Krazan & Associates with authorization granted by way of a Reliance Letter. The Reliance Letter will require that the relying party(ies) agree to be bound to the terms and conditions of the agreement between Client and Krazan & Associates as if originally issued to the relying party(ies), or as so stipulated in the Reliance Letter.

10.0 LIMITATIONS

The site reconnaissance and research of the subject site has been limited in scope. This type of assessment is undertaken with the calculated risk that the presence, full nature, and extent of contamination would not be revealed by visual observation alone. Although a thorough site reconnaissance was conducted in accordance with ASTM Guidelines and employing a professional standard of care, no warranty is given, either expressed or implied, that hazardous material contamination or buried structures, which would not have been disclosed through this investigation, do not exist at the subject site. Therefore, the data obtained are clear and accurate only to the degree implied by the sources and methods used.

The findings presented in this report were based upon field observations during a single property visit, review of available data, and discussions with local regulatory and advisory agencies. Observations describe only the conditions present at the time of this investigation. The data reviewed and observations made are limited to accessible areas and currently available records searched. Krazan cannot guarantee the completeness or accuracy of the regulatory agency records reviewed. Additionally, in evaluating the

property, Krazan has relied in good faith upon representations and information provided by individuals noted in the report with respect to present operations and existing property conditions, and the historical uses of the property. It must also be understood that changing circumstances in the property usage, proposed property usage, subject site zoning, and changes in the environmental status of the other nearby properties can alter the validity of conclusions and information contained in this report. Therefore, the data obtained are clear and accurate only to the degree implied by the sources and methods used.

This report is provided for the exclusive use of the client noted on the cover page and shall be subject to the terms and conditions in the applicable contract between the client and Krazan. Any third party use of this report, including use by Client's lender, shall also be subject to the terms and conditions governing the work in the contract between the client and Krazan. The unauthorized use of, reliance on, or release of the information contained in this report without the express written consent of Krazan is strictly prohibited and will be without risk or liability to Krazan.

Conclusions and recommendations contained in this report are based on the evaluation of information made available during the course of this assessment. It is not warranted that such data cannot be superseded by future environmental, legal, geotechnical or technical developments. Consequently, given the possibility for unanticipated hazardous conditions to exist on a subject site which may not have been discovered, this Phase I ESA is not intended as the basis for a buyer or developer of real property to waive their rights of recovery based upon environmental unknowns. Parties that choose to waive rights of recovery prior to site development do so at their own risk.

Parties who seek to rely upon Phase I Environmental Site Assessment reports dated more than 180 days prior to the date of reliance do so at their own risk. This limitation in reliance is based on the potential for physical changes at the site, changes in circumstances, technological and professional advances, and guidance related to the continued viability of Environmental Site Assessment reports, User's responsibilities, and requirements for updating of components of the inquiry as stated in the ASTM Standard E 1527-13.

11.0 QUALIFICATIONS

This Phase I ESA was conducted under the supervision or responsible charge of Krazan's undersigned environmental assessor with oversight from the undersigned environmental professional. The work was conducted in accordance with ASTM E 1527-13 guidance, generally accepted industry standards for

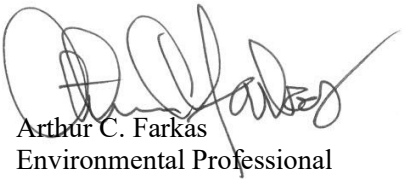
environmental due diligence in place at the time of the preparation of this report, and Krazan's quality-control policies.

We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Respectfully submitted,
KRAZAN & ASSOCIATES, INC.



William Vick, PhD, REA
Environmental Professional



Arthur C. Farkas
Environmental Professional

WHV/ACF/mlt

REFERENCES

Aerial photographs obtained from Environmental Data Resources, Inc. (EDR), Microsoft® Research Maps, and Google Earth™.

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State of California Geologic Energy Management Division (CalGEM) Maps Website: https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx.

State of California Department of Toxic Substances Control, Envirostor Website: http://www.envirostor.dtsc.ca.gov/public

State of California Environmental Protection Agency (CalEPA), California Environmental Reporting System (CERS) Database, CalEPA Regulated Site Portal.

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State of California, Department of Water Resources, *Lines of Equal Elevation of Water in Wells Unconfined Aquifer, San Joaquin Valley, Spring 2010*.

State of California, Department of Water Resources, Sustainable Groundwater Management Act Portal, 2018 data.

U.S. Department of Transportation – Pipeline & Hazardous Materials Safety Administration, National Pipeline Mapping System.

REFERENCES (continued)

U.S. Environmental Protection Agency (EPA) *Map of Radon Zones*.

U.S. Fish & Wildlife Service National Wetland Inventory *Wetlands Mapper:* http://www.fws.gov/wetlands/Data/Mapper.html

U.S. Geological Survey, 7.5-minute Denair, California topographic quadrangle map, dated 1969, photorevised 1976.

GLOSSARY OF TERMS

Subject Site: The real property being investigated under this Phase I ESA.

Adjacent Properties: Properties which are contiguous with the subject site, or would be contiguous except for a street, road, or other public thoroughfare.

Subject Site Vicinity: Properties located within a 500-foot radius of the subject site.

Environmental Professional: A person meeting the education, training, and experience requirements as set forth in 40 CFR §312.10(b). The EP may be an independent contractor or an employee of the user.

User: The party seeking to use Practice E 1527 to complete an environmental site assessment of the subject site. A user may include, without limitation, a potential purchaser of the subject site, a potential tenant of the subject site, an owner of the subject site, a lender, or a property manager.

Recognized Environmental Condition (REC): In defining a standard of good commercial and customary practice for conducting an environmental site assessment of a parcel of property, the goal of the processes established by this practice is to identify recognized environmental conditions. The term recognized environmental conditions means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions.

Controlled Recognized Environmental Condition (CREC): A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). For example, if a leaking underground storage tank has been cleaned up to a commercial use standard, but does not meet unrestricted residential cleanup criteria, this would be considered a CREC. The "control" is represented by the restriction that the property use remain commercial. A condition considered by the environmental professional to be a CREC shall be listed in the findings section of the Phase I ESA report and as an REC in the conclusions section. A condition identified as a CREC does not imply that the environmental professional has evaluated or confirmed the adequacy, implementation, or continued effectiveness of the required control that has been, or is intended to be, implemented.

Historical Recognized Environmental Condition (HREC): A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release an HREC, the environmental professional must determine whether the past release is an REC at the time the Phase I ESA is conducted (for example, if there has been change in the regulatory criteria). If the EP considers the past release to be an REC at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as an REC.

GLOSSARY OF TERMS (continued)

Potential Area of Concern (PAOC): A term adopted to provide an alternative designation to the REC and HREC for a range of environmental issues related to current subject site uses, historical subject site uses, or from adjacent and/or vicinity property uses. The PAOC is utilized to emphasize full disclosure and provide the User with conclusions and recommendations related to potential environmental issues in connection with the subject site based on Krazan's professional experience in cases where official documentation or other evidence may be absent in order to identify an REC or HREC, thereby aiding the User's considerations of environmental due diligence risk tolerance.

Migrate/migration: For the purposes of this practice, "migrate" and "migration" refer to the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface. Vapor migration in the subsurface is described in ASTM E 2600-10 guidance; however, nothing in the E 1527-13 practice should be construed to require application of the E 2600-10 standard to achieve compliance with AAI.

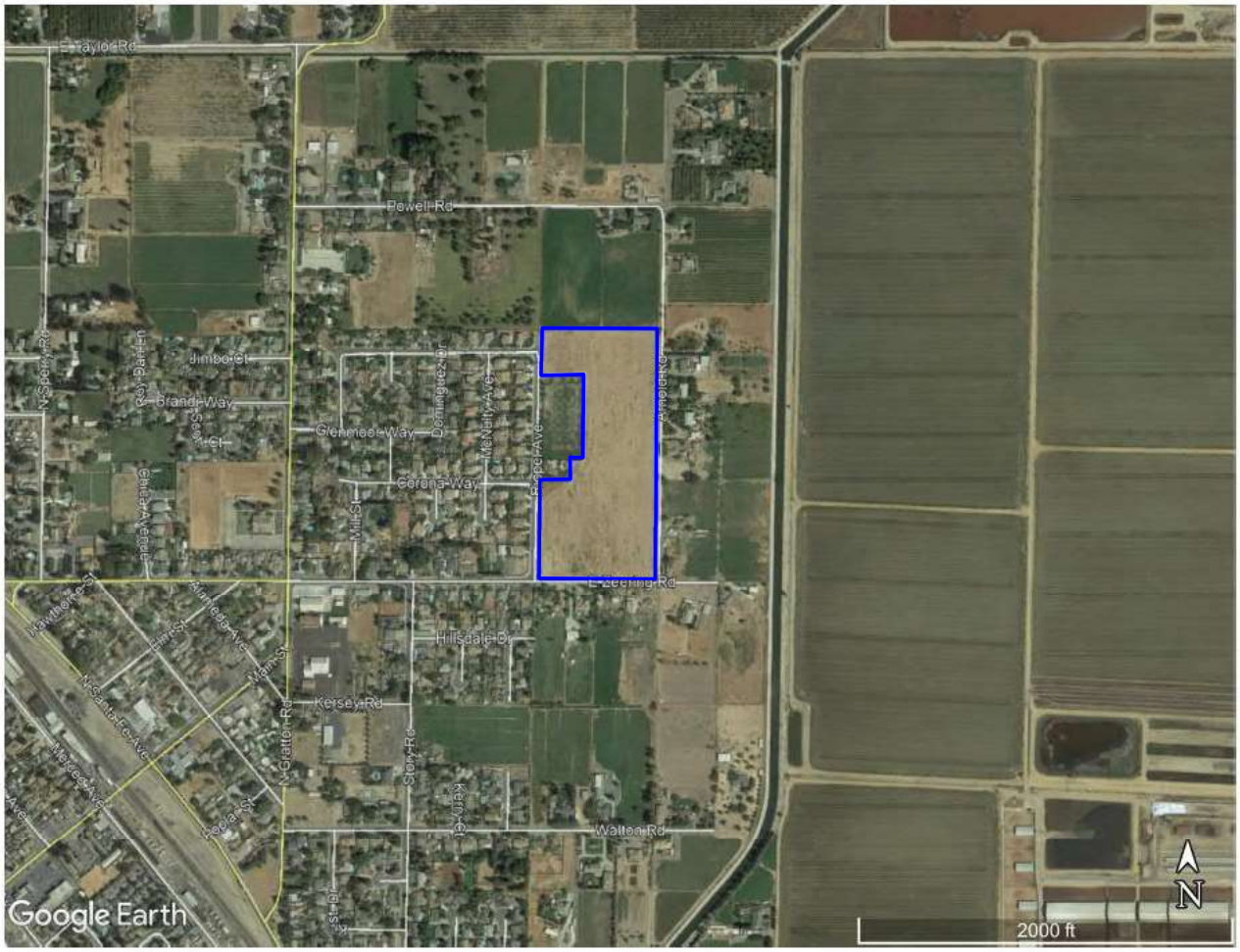
De minimis condition: A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Condition determined to be *de minimis conditions* are not RECS or CRECs.

Data Gap: A lack of or inability to obtain information required by this practice despite good faith efforts by the Environmental Professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to the site reconnaissance and interviews.

Data Failure: A failure to achieve the historical research objectives even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. Data failure is one type of data gap.

GLOSSARY OF TERMS (continued)

AAI	All Appropriate Inquiries
AC	Asphalt Concrete
ACM	Asbestos-Containing Materials
AOC	Area of Concern
APN	Assessor's Parcel Number
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
AS	Air Sparging
AUL	Activity & Use Limitations
bgs	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CESQG	Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CMU	Concrete Masonry Unit
COCs	Constituents of Concern
DEULs	Declaration of Environmental Use Restrictions
DOGGR	Division of Oil, Gas & Geothermal Resources (CA)
DTSC	Department of Toxic Substances Control (CA)
EC	Engineering Control
EDR	Environmental Data Resources, Inc.
EP	Environmental Professional
EPA	United States Environmental Protection Agency
ERP	Emergency Response Plan
ESA	Environmental Site Assessment
ESL	Environmental Screening Level
FOIA	Freedom of Information Act
GPR	Ground Penetrating Radar
HCCD	Haines Criss-Cross Directory
SFIM	Sanborn Fire Insurance Map
HMBP	Hazardous Materials Business Plan
HREC	Historical Recognized Environmental Condition
HVAC	Heating, Ventilation, Air Conditioning
IC	Institutional Control
LBP	Lead-Based Paint
LLP	Landowner Liability Protection
LQG	Large Quantity Generator
LUC	Land Use Control
LUST	Leaking Underground Storage Tank
MCL	Maximum Contaminant Level
µg/L	Micrograms Per Liter
mg/kg	Milligrams Per Kilogram
mg/L	Milligrams Per Liter
MSDS	Material Safety Data Sheet
MTBE	Methyl Tertiary Butyl Ether
MFR	Multi-Family Residential
ND	Nondetectable
NFA	No Further Action (letter)
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
O&M	Operations & Maintenance Plan
PAOC	Potential Area of Concern
PCB	Polychlorinated Biphenyl
PCC	Portland Cement Concrete
PCE	Perchloroethylene
PEC	Potential Environmental Concern (TS)
PGD	Polk Guide Directory
PG&E	Pacific Gas & Electric
PHCs	Petroleum Hydrocarbon Constituents
PID	Photoionization Detector
ppb	Parts Per Billion
ppm	Parts Per Million
PRG	Preliminary Remediation Goal
PRP	Potentially Responsible Party
RAP	Remedial Action Plan
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RP	Responsible Party
RWQCB	Regional Water Quality Control Board (CA)
SBA	Small Business Administration
SFR	Single-Family Residential
SPCC	Spill Prevention Control and Countermeasure Plan
SQG	Small Quantity Generator
SCE	Southern California Edison
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compound
SWRCB	State Water Resources Control Board
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbons
TPH-D	Total Petroleum Hydrocarbons as Diesel
TPH-G	Total Petroleum Hydrocarbons as Gasoline
TPH-MO	Total Petroleum Hydrocarbons as Motor Oil
TS	Transaction Screen
USGS	United States Geological Survey
USFWS	United States Fish & Wildlife Service
UST	Underground Storage Tank
VEC	Vapor Encroachment Condition
VES	Vapor Encroachment Screening
VOCs	Volatile Organic Compounds



= SUBJECT SITE BOUNDARY

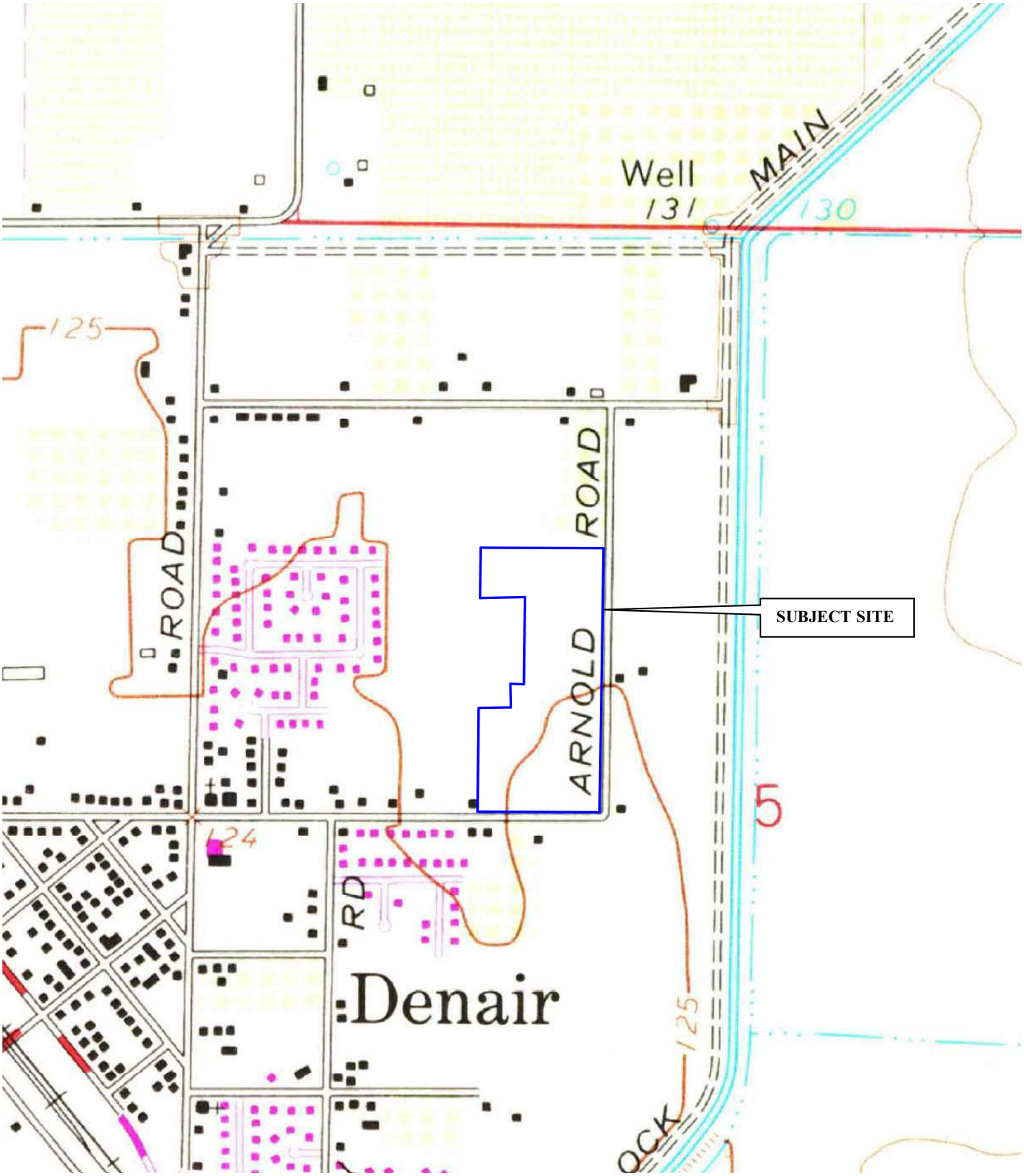
VICINITY MAP	Scale: NTS	Date: May 2021	Krazan
ELMWOOD COLONY PROPERTY NWC ZEERING & ARNOLD ROADS APN 024-022-027 DENAIR, CALIFORNIA 95316	Drawn By: BV	Approved by: BV	SITE DEVELOPMENT ENGINEERS *With Offices Serving the Western U. S.*
	Project No. 034-21023	Figure No. 1	



= SUBJECT SITE BOUNDARY (APPROXIMATE)

= APPROXIMATE LOCATION OF VEGETATION COVERED SOIL PILES/MOUNDED SOIL
= END-DUMP SOIL PILE AND CONCRETE DEBRIS
= IRRIGATION SYSTEM ACCESS/VALVE/VENT FEATURE
= IRRIGATION WATER CONTROL STATION (OFF-SITE)

SITE MAP **ELMWOOD COLONY PROPERTY** **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Scale:** NTS	**Date:** May 2021	Krazan **SITE DEVELOPMENT ENGINEERS** ***With Offices Serving the Western U. S.***
	Drawn By: BV	**Approved by:** BV	
	Project No. 034-21023	**Figure No.** 2	



7.5-MINUTE SERIES
USGS TOPOGRAPHIC MAP
DENAIR, CALIFORNIA
DATED 1969
PHOTOREVISED 1976

= SUBJECT SITE BOUNDARY

N

TOPOGRAPHIC MAP	Scale: NTS	Date: May 2021	Krazan
ELMWOOD COLONY PROPERTY NWC ZEERING & ARNOLD ROADS APN 024-022-027 DENAIR, CALIFORNIA 95316	Drawn By: BV	Approved by: BV	SITE DEVELOPMENT ENGINEERS *With Offices Serving the Western U. S.*
	Project No. 034-21023	Figure No. 3	



Photo 1: Northern-facing view of the southwestern portion of the subject site adjacent to Riopel Avenue.



Photo 2: Western-facing view of the southern portion of the subject site adjacent to E. Zeering Road.



Photo 3: Northern-facing view of the central-eastern portion of the subject site.



Photo 4: Southern-facing view of the northeastern portion of the subject site adjacent to Arnold Road.



Photo 5: Eastern-facing view of the northwestern portion of the subject site.



Photo 6: Eastern-facing view of the central portion of the subject site.



Photo 7: View of the vegetation-covered soil piles/mounded soil located in the central-western portion of the subject site adjacent to Riopel Avenue.



Photo 8: View of the end-dump soil pile and concrete debris located in the central-western portion of the subject site adjacent to Riopel Avenue.



Photo 9: View of irrigation system access/valve/vent features located in the southwestern portion of the subject site.



Photo 10: View of a representative irrigation system capture box located in the western portion of the subject site.



Photo 11: View of an apparent irrigation water control station located adjacent to the south of the northwestern portion of the subject site.



Photo 12: View of the playground and open space located adjacent to the west of the central portion of the subject site.



Photo 13: View of representative single-family homes located adjacent to the west of the subject site.



Photo 14: View of a residence located adjacent to the south of the subject site.



Photo 15: View of the residences located adjacent to the east of the southern portion of the subject site.



Photo 16: View of the hay field located adjacent to the north of the subject site.

Appendix A

CHICAGO TITLE COMPANY

PRELIMINARY REPORT

In response to the application for a policy of title insurance referenced herein, ***Chicago Title Company*** *hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.*

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

The policy(ies) of title insurance to be issued hereunder will be policy(ies) of Chicago Title Insurance Company, a Florida corporation.

Please read the exceptions shown or referred to herein and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land.

Chicago Title Insurance Company

By:

President

Countersigned By:

Authorized Officer or Agent

CHICAGO TITLE INSURANCE COMPANY CORPORATE SEAL

Attest:

Secretary

Visit Us on our Website: www.ctic.com

CHICAGO TITLE COMPANY

ISSUING OFFICE: 2540 W. Shaw Lane, Suite 112, Fresno, CA 93711

FOR SETTLEMENT INQUIRIES, CONTACT:
Chicago Title Company
1700 Standiford Ave., Suite 110 • Modesto, CA 95350
(209)571-6300 • FAX (209)571-1912

Another Prompt Delivery From Chicago Title Company Title Department
Where Local Experience And Expertise Make A Difference

PRELIMINARY REPORT

Title Officer: Ritch Boyatt
Email: ritch.boyatt@fnf.com
Title No.: FSST-5112101274

Escrow Officer: Gina Belletto
Email: bellettog@ctt.com
Escrow No.: FSST-5112101274 -GB

TO: Redwood Park Properties, Inc.

Attn: Daniel Dunkley
Your Ref No.:

PROPERTY ADDRESS(ES): APN: 024-022-027-000, Denair, CA

EFFECTIVE DATE: April 2, 2021 at 07:30 AM

The form of policy or policies of title insurance contemplated by this report is:

CLTA Standard Coverage Policy 1990 (04-08-14)

CLTA Standard Coverage Policy 1990 (04-08-14)

1. THE ESTATE OR INTEREST IN THE LAND HEREINAFTER DESCRIBED OR REFERRED TO COVERED BY THIS REPORT IS:

   A Fee

2. TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS VESTED IN:

   Riopel & Associates, a California limited partnership

3. THE LAND REFERRED TO IN THIS REPORT IS DESCRIBED AS FOLLOWS:

   SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT "A"
Legal Description

For APN/Parcel ID(s): 024-022-027-000

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA IN COUNTY OF STANISLAUS, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

ALL THAT CERTAIN REAL PROPERTY IDENTIFIED AS ADJUSTED PARCEL "B" IN THAT CERTAIN CERTIFICATE OF LOT LINE ADJUSTMENT NO. 2004-62 RECORDED NOVEMBER 22, 2004 AS DOCUMENT NO. 2004-0193026, OFFICIAL RECORDS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

ALL OF LOT 7 AS SHOWN ON THE MAP OF THE ELMWOOD COLONY FILED FOR RECORD ON APRIL 11, 1905 IN VOLUME 2 OF MAPS, AT PAGE 13, STANISLAUS COUNTY RECORDS, SITUATE IN THE WEST HALF OF SECTION 5, TOWNSHIP 5 SOUTH, RANGE 11 EAST, MOUNT DIABLO BASE AND MERIDIAN, COUNTY OF STANISLAUS, STATE OF CALIFORNIA.

EXCEPTING THEREFROM A TRACT OF LAND, BEING A PORTION OF LOT 7 AS SHOWN ON THE MAP OF THE ELMWOOD COLONY FILED FOR RECORD ON APRIL 11,1905 IN VOLUME 2 OF MAPS AT PAGE 13, STANISLAUS COUNTY RECORDS, SITUATE IN THE WEST HALF OF SECTION 5, TOWNSHIP 5 SOUTH, RANGE 11 EAST, MOUNT DIABLO BASE AND MERIDIAN, COUNTY OF STANISLAUS, STATE OF CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF LOT 7 AS SHOWN ON THE SAID MAP OF THE ELMWOOD COLONY, SAID POINT ALSO BEING THE NORTHEAST CORNER OF PARCEL 1 AS SHOWN ON THE PARCEL MAP FILED FOR RECORD ON SEPTEMBER 17,1986 IN BOOK 38 OF PARCEL MAPS AT PAGE 73; THENCE SOUTH 89°59'31" EAST ALONG THE NORTH LINE OF SAID LOT 7, A DISTANCE OF 30.00 FEET; THENCE SOUTH 00°58'33" WEST, 30.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SAID LOT 7, A DISTANCE OF 244.15 FEET; THENCE SOUTH 89°01 '27" EAST 208.23 FEET TO A POINT DISTANT 238.23 FEET EAST OF THE WEST LINE OF SAID LOT 7; THENCE SOUTH 00°58'33" WEST, 238.23 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SAID LOT 7, A DISTANCE OF 430.46 FEET; THENCE NORTH 89°56'00" WEST 60.00 FEET; THENCE SOUTH 00°04'00" WEST 109.99 FEET; THENCE NORTH 89°56'00" WEST 134.71 FEET; THENCE NORTH 39°21'56" WEST 23.61 FEET TO A POINT DISTANT 30.00 FEET EAST OF THE WEST LINE OF SAID LOT 7; THENCE SOUTH 00°58'33" WEST, 30.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SAID LOT 7, A DISTANCE OF 537.32 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF A 20.00 FOOT HALF-WIDTH ZEERING ROAD; THENCE NORTH 89° 57' 00" WEST, ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID 20.00 FOOT HALF-WIDTH ZEERING ROAD, A DISTANCE OF 30.00 FEET TO THE SOUTHWEST CORNER OF SAID LOT 7; THENCE NORTH 00°58'33" EAST ALONG THE WESTERLY LINE OF SAID LOT 7, A DISTANCE OF 1306.97 FEET TO THE POINT OF BEGINNING.

AT THE DATE HEREOF, EXCEPTIONS TO COVERAGE IN ADDITION TO THE PRINTED EXCEPTIONS AND EXCLUSIONS IN SAID POLICY FORM WOULD BE AS FOLLOWS:

1. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2021-2022.

2. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.

3. Taxes and assessments levied by the Turlock Irrigation District.

   Amounts are unavailable at this time. A report has been ordered and the Company reserves the right to add additional items or make further requirements after review of the requested report.

4. Taxes and assessments levied by the Improvement District No's. 573 and 573A of the Turlock Irrigation District.

   Amounts are unavailable at this time. A report has been ordered and the Company reserves the right to add additional items or make further requirements after review of the requested report.

5. Easement(s) for the purpose(s) shown below and rights incidental thereto as reserved in a document(s):

   Purpose: Ditch
   Recording No.: Vol. 97 of Deeds, Page 304 and in Vol. 103 of Deeds, Page 156, Stanislaus County Records.

   The exact location and extent of said easement is not disclosed of record.

6. Right of way for County Road, and rights incidental thereto, along the South boundary line as established by an order of the Board of Supervisors recorded June 14, 1934 in Vol. 532 of Official Records, Page 456, Instrument No. 8087.

7. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

   Granted to: Denair Community Services District
   Purpose: Public utilities
   Recording Date: September 21, 1988
   Recording No.: 064933, Official Records
   Affects: Reference is hereby made to the record for the particulars therein.

8. The search did not disclose any open mortgages or deeds of trust of record, therefore the Company reserves the right to require further evidence to confirm that the property is unencumbered, and further reserves the right to make additional requirements or add additional items or exceptions upon receipt of the requested evidence.

9. The Requirement to complete that certain Lot Line Adjustment approved by the County of Stanislaus in that certain Notice of Lot Line Adjustment recorded November 22, 2004 as Document No. 2004-0193026 Official Records, by the recording of deed(s) that reflect all the resultant legal description(s) shown on said notice, in compliance with Government Code Section 66412(d).

EXCEPTIONS
(continued)

10. Before issuing its policy of title insurance, the Company will require the following for the below-named limited partnership:

Name: Riopel & Associates, a California limited partnership

a. Certificate of Limited Partnership filed with the Secretary of State, in compliance with the provision of the California Revised Limited Partnership Act, Section 15611 et. seq., Corporations Code.

b. Certified Copy of the Certificate of Limited Partnership certified by the Secretary of State filed with the County Recorder.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation

END OF EXCEPTIONS

NOTES

Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.

Note 1. Note: The charge for a policy of title insurance, when issued through this title order, will be based on the Basic Title Insurance Rate.

Note 2. Note: The name(s) of the proposed insured(s) furnished with this application for title insurance is/are:

Name(s) furnished: Daniel Dunkley

If these name(s) are incorrect, incomplete or misspelled, please notify the Company.

Note 3. Note: Property taxes for the fiscal year shown below are PAID. For proration purposes the amounts were:

Tax Identification No.:	024-022-027-000
Fiscal Year:	2020-2021
1st Installment:	$1,164.87
2nd Installment:	$1,164.87
Exemption:	$0.00
Land:	$198,411.00
Improvements:	$0.00
Personal Property:	$0.00
Code Area:	056-001
Bill No.:	024022027000

Prior to close of escrow, please contact the Tax Collector's Office to confirm all amounts owing, including current fiscal year taxes, supplemental taxes, escaped assessments and any delinquencies.

Note 4. Note: There are NO conveyances affecting said Land recorded within 24 months of the date of this report.

Note 5. The application for title insurance was placed by reference to only a street address or tax identification number. The proposed Insured must confirm that the legal description in this report covers the parcel(s) of Land requested to be insured. If the legal description is incorrect, the proposed Insured must notify the Company and/or the settlement company in order to prevent errors and to be certain that the legal description for the intended parcel(s) of Land will appear on any documents to be recorded in connection with this transaction and on the policy of title insurance.

Note 6. Note: If a county recorder, title insurance company, escrow company, real estate broker, real estate agent or association provides a copy of a declaration, governing document or deed to any person, California law requires that the document provided shall include a statement regarding any unlawful restrictions. Said statement is to be in at least 14-point bold face type and may be stamped on the first page of any document provided or included as a cover page attached to the requested document. Should a party to this transaction request a copy of any document reported herein that fits this category, the statement is to be included in the manner described.

NOTES
(continued)

Note 7. Note: Any documents being executed in conjunction with this transaction must be signed in the presence of an authorized Company employee, an authorized employee of a Company agent, an authorized employee of the insured lender, or by using Bancserv or other Company-approved third-party service. If the above requirement cannot be met, please call the Company at the number provided in this report.

Note 8. Pursuant to Government Code Section 27388.1, as amended and effective as of 1-1-2018, a Documentary Transfer Tax (DTT) Affidavit may be required to be completed and submitted with each document when DTT is being paid or when an exemption is being claimed from paying the tax. If a governmental agency is a party to the document, the form will not be required. DTT Affidavits may be available at a Tax Assessor-County Clerk-Recorder.

Note 9. Due to the special requirements of SB 50 (California Public Resources Code Section 8560 et seq.), any transaction that includes the conveyance of title by an agency of the United States must be approved in advance by the Company's State Counsel, Regional Counsel, or one of their designees.

END OF NOTES

WIRE SAFE™ | Inquire before you wire!

WIRE FRAUD ALERT

This Notice is not intended to provide legal or professional advice.
If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. DO NOT use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the number of relevant parties to the transaction as soon as an escrow account is opened.** DO NOT send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and do NOT reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

Federal Bureau of Investigation:
http://www.fbi.gov

Internet Crime Complaint Center:
http://www.ic3.gov

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FIDELITY NATIONAL FINANCIAL
PRIVACY NOTICE

Effective April 9, 2020

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF," "our," or "we") respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

A limited number of FNF subsidiaries have their own privacy notices. If a subsidiary has its own privacy notice, the privacy notice will be available on the subsidiary's website and this Privacy Notice does not apply.

Collection of Personal Information

FNF may collect the following categories of Personal Information:

- contact information (e.g., name, address, phone number, email address);
- demographic information (e.g., date of birth, gender, marital status);
- identity information (e.g. Social Security Number, driver's license, passport, or other government ID number);
- financial account information (e.g. loan or bank account information); and
- other personal information necessary to provide products or services to you.

We may collect Personal Information about you from:

- information we receive from you or your agent;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

Collection of Browsing Information

FNF automatically collects the following types of Browsing Information when you access an FNF website, online service, or application (each an "FNF Website") from your Internet browser, computer, and/or device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website.

Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

Other Online Specifics

Cookies. When you visit an FNF Website, a "cookie" may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

Web Beacons. We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

Do Not Track. Currently our FNF Websites do not respond to "Do Not Track" features enabled through your browser.

Links to Other Sites. FNF Websites may contain links to unaffiliated third-party websites. FNF is not responsible for the privacy practices or content of those websites. We recommend that you read the privacy policy of every website you visit.

Use of Personal Information

FNF uses Personal Information for three main purposes:

- To provide products and services to you or in connection with a transaction involving you.
- To improve our products and services.
- To communicate with you about our, our affiliates', and others' products and services, jointly or independently.

When Information Is Disclosed

We may disclose your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;
- to nonaffiliated third party service providers with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or
- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law. We may share your Personal Information with affiliates (other companies owned by FNF) to directly market to you. Please see "Choices with Your Information" to learn how to restrict that sharing.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

Security of Your Information

We maintain physical, electronic, and procedural safeguards to protect your Personal Information.

Choices With Your Information

If you do not want FNF to share your information among our affiliates to directly market to you, you may send an "opt out" request by email, phone, or physical mail as directed at the end of this Privacy Notice. We do not share your Personal Information with nonaffiliates for their use to direct market to you without your consent.

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you.

For California Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties, except as permitted by California law. For additional information about your California privacy rights, please visit the "California Privacy" link on our website (https://fnf.com/pages/californiaprivacy.aspx) or call (888) 413-1748.

For Nevada Residents: You may be placed on our internal Do Not Call List by calling (888) 934-3354 or by contacting us via the information set forth at the end of this Privacy Notice. Nevada law requires that we also provide you with the following contact information: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: BCPINFO@ag.state.nv.us.

For Oregon Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes.

For Vermont Residents: We will not disclose information about your creditworthiness to our affiliates and will not disclose your personal information, financial information, credit report, or health information to nonaffiliated third parties to market to you, other than as permitted by Vermont law, unless you authorize us to make those disclosures.

Information From Children

The FNF Websites are not intended or designed to attract persons under the age of eighteen (18). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

International Users

FNF's headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

FNF Website Services for Mortgage Loans

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except as required or authorized by contract with the mortgage loan servicer or lender, or as required by law or in the good-faith belief that such disclosure is necessary: to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

Your Consent To This Privacy Notice; Notice Changes; Use of Comments or Feedback

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The Privacy Notice's effective date will show the last date changes were made. If you provide information to us following any change of the Privacy Notice, that signifies your assent to and acceptance of the changes to the Privacy Notice. We may use comments or feedback that you submit to us in any manner without notice or compensation to you.

Accessing and Correcting Information; Contact Us

If you have questions, would like to correct your Personal Information, or want to opt-out of information sharing for affiliate marketing, send your requests to privacy@fnf.com, by phone to (888) 934-3354, or by mail to:

Fidelity National Financial, Inc.
601 Riverside Avenue,
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

ATTACHMENT ONE

CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE POLICY - 1990

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.

3. Defects, liens, encumbrances, adverse claims or other matters:

   (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;

   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;

   (c) resulting in no loss or damage to the insured claimant;

   (d) attaching or created subsequent to Date of Policy; or

   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.

4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.

5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.

6. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

   Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.

2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.

3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.

4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.

5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

6. Any lien or right to a lien for services, labor or material not shown by the public records.

ATTACHMENT ONE
(CONTINUED)

CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)
ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE

EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
   a. building;
   b. zoning;
   c. land use;
   d. improvements on the Land;
   e. land division; and
   f. environmental protection.

   This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
   a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
   b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
   c. that result in no loss to You; or
   d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
   a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
   b. in streets, alleys, or waterways that touch the Land.

   This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake or subsidence.
9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19 and 21, Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or $5,000.00 (whichever is less)	$ 25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or $5,000.00 (whichever is less)	$ 25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$ 5,000.00

ATTACHMENT ONE
(CONTINUED)

2006 ALTA LOAN POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;
   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

[Except as provided in Schedule B - Part II,[t[or T]his policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

[PART I

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.]

PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:]

ATTACHMENT ONE
(CONTINUED)

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;
   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
   (a) a fraudulent conveyance or fraudulent transfer; or
   (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.]
7. [Variable exceptions such as taxes, easements, CC&R's, etc., shown here.]

ATTACHMENT ONE
(CONTINUED)

ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY - ASSESSMENTS PRIORITY (04-02-15)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;
   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury, or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the filed rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for such discount. These discounts only apply to transactions involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

Not all discounts are offered by every FNF Company. The discount will only be applicable to the FNF Company as indicated by the named discount.

FNF Underwritten Title Companies	Underwritten by FNF Underwriters
CTC - Chicago Title Company	CTIC - Chicago Title Insurance Company
CLTC - Commonwealth Land Title Company	CLTIC - Commonwealth Land Title Insurance Company
FNTC - Fidelity National Title Company of California	FNTIC - Fidelity National Title Insurance Company
FNTCCA - Fidelity National Title Company of California	FNTIC - Fidelity National Title Insurance Company
TICOR - Ticor Title Company of California	CTIC - Chicago Title Insurance Company
LTC - Lawyer's Title Company	CLTIC - Commonwealth Land Title Insurance Company
SLTC - ServiceLink Title Company	CTIC - Chicago Title Insurance Company

Available Discounts

DISASTER LOANS (CTIC, CLTIC, FNTIC)
The charge for a Lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within twenty-four (24) months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be fifty percent (50%) of the appropriate title insurance rate.

CHURCHES OR CHARITABLE NON-PROFIT ORGANIZATIONS (CTIC, FNTIC)
On properties used as a church or for charitable purposes within the scope of the normal activities of such entities, provided said charge is normally the church's obligation the charge for an owner's policy shall be fifty percent (50%) to seventy percent (70%) of the appropriate title insurance rate, depending on the type of coverage selected. The charge for a lender's policy shall be forty percent (40%) to fifty percent (50%) of the appropriate title insurance rate, depending on the type of coverage selected.

Appendix B

Phase I ESA User Questionnaire
Proposed Residential Property
NWC East Zeering & Arnold Roads, APN 024-022-027
Denair, California 95316

Respondent Information:

Name: Dan Dunkley
Date: 4/21/21

Company: Redwood Park Properties
Phone: 925-400-7277

Introduction

"In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfield Revitalization Act of 2001 (the 'Brownfields Amendments'), the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that 'all appropriate inquiry' is not completed"- American Society for Testing and Materials (ASTM) E1527-05 Appendix X3: User Questionnaire

1. Are you aware of any environmental cleanup liens against the subject site that are filed or recorded under federal, tribal, state, or local law?

No

2. Are you aware of any activity use limitations (AULs) such as engineering controls, land use restrictions, or institutional controls that are in place at the subject site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?

No

3. As the user of the Phase I Environmental Site Assessment (ESA), do you have any specialized knowledge or experience related to the subject site or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the subject site or an adjacent property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

No

4. Does the purchase price being paid for the subject site reasonably reflect the fair market value of the subject site? (Yes) No

   A. If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the subject site?

5. Are you aware of commonly known or reasonably ascertainable information about the subject site that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:

A. Do you know the past uses of the subject site? If so, briefly explain.

No -

B. Do you know of specific chemicals that are present or once were present at the subject site? If so, briefly explain.

No

C. Do you know of spills or other chemical releases that have taken place at the subject site? If so, briefly explain.

No

D. Do you know of any environmental cleanups that have taken place at the subject site? If so, briefly explain.

No

6. As the user of the Phase I ESA, based on your knowledge and experience related to the subject site, are there any obvious indicators that point to the presence or likely presence of contamination at the subject site?

No

7. What is the reason for preparation of this Phase I ESA? (Property purchase/sale; bank loan; proposed development; etc.)

Purchase / Residential Development

I, the user of this Phase I ESA (or authorized representative of the User), do hereby attest that I have carefully considered the questions herein and have presented answers to the best of my knowledge and ability based upon the Responsibilities of the User as required within ASTM E1527-05 guidance.

Name Dan Dunkley Date 4/21/21
(Please Print)

Signature

Appendix C



= Subject Site Boundary (Approximate)

1937 AERIAL PHOTOGRAPH	**Scale:** 1" = 500'	**Date:** May 2021	Krazan SITE DEVELOPMENT ENGINEERS *Offices Serving the Western United States*
PROPOSED RESIDENTIAL PROPERTY **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Drawn By:** BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



= Subject Site Boundary (Approximate)

1942 AERIAL PHOTOGRAPH	**Scale:** 1" = 500'	**Date:** May 2021	Krazan SITE DEVELOPMENT ENGINEERS *Offices Serving the Western United States*
PROPOSED RESIDENTIAL PROPERTY **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Drawn By:** BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



= Subject Site Boundary (Approximate)

1946 AERIAL PHOTOGRAPH	**Scale:** 1" = 500'	**Date:** May 2021	Krazan SITE DEVELOPMENT ENGINEERS *Offices Serving the Western United States*
PROPOSED RESIDENTIAL PROPERTY **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Drawn By:** BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



= Subject Site Boundary (Approximate)

1950 AERIAL PHOTOGRAPH	**Scale:** 1" = 500'	**Date:** May 2021	Krazan SITE DEVELOPMENT ENGINEERS *Offices Serving the Western United States*
PROPOSED RESIDENTIAL PROPERTY **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Drawn By:** BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



= Subject Site Boundary (Approximate)

1957 AERIAL PHOTOGRAPH	**Scale:** 1" = 500'	**Date:** May 2021	Krazan SITE DEVELOPMENT ENGINEERS *Offices Serving the Western United States*
PROPOSED RESIDENTIAL PROPERTY **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Drawn By:** BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



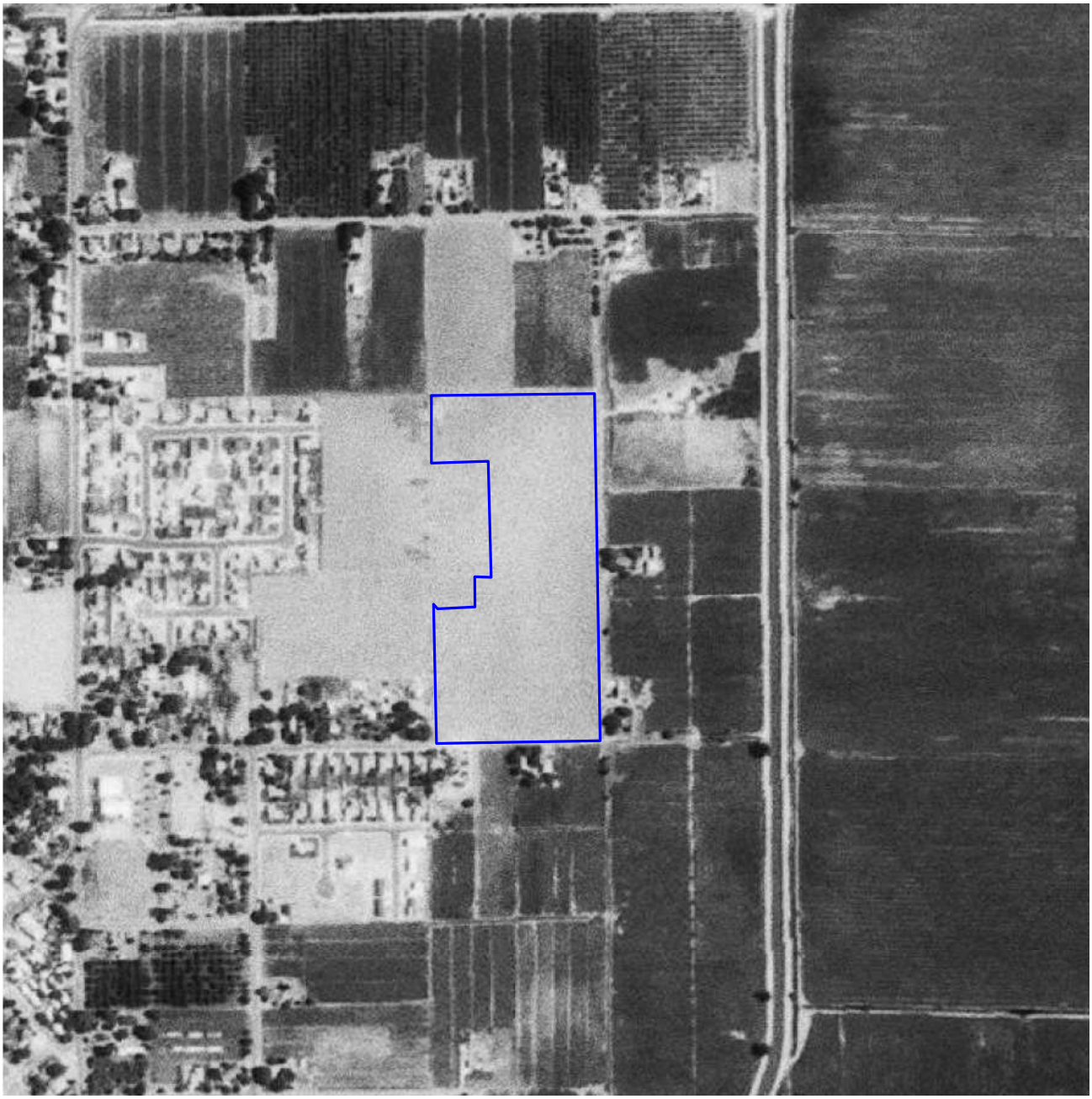
= Subject Site Boundary (Approximate)

1967 AERIAL PHOTOGRAPH	**Scale:** 1" = 500'	**Date:** May 2021	Krazan SITE DEVELOPMENT ENGINEERS *Offices Serving the Western United States*
PROPOSED RESIDENTIAL PROPERTY **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Drawn By:** BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



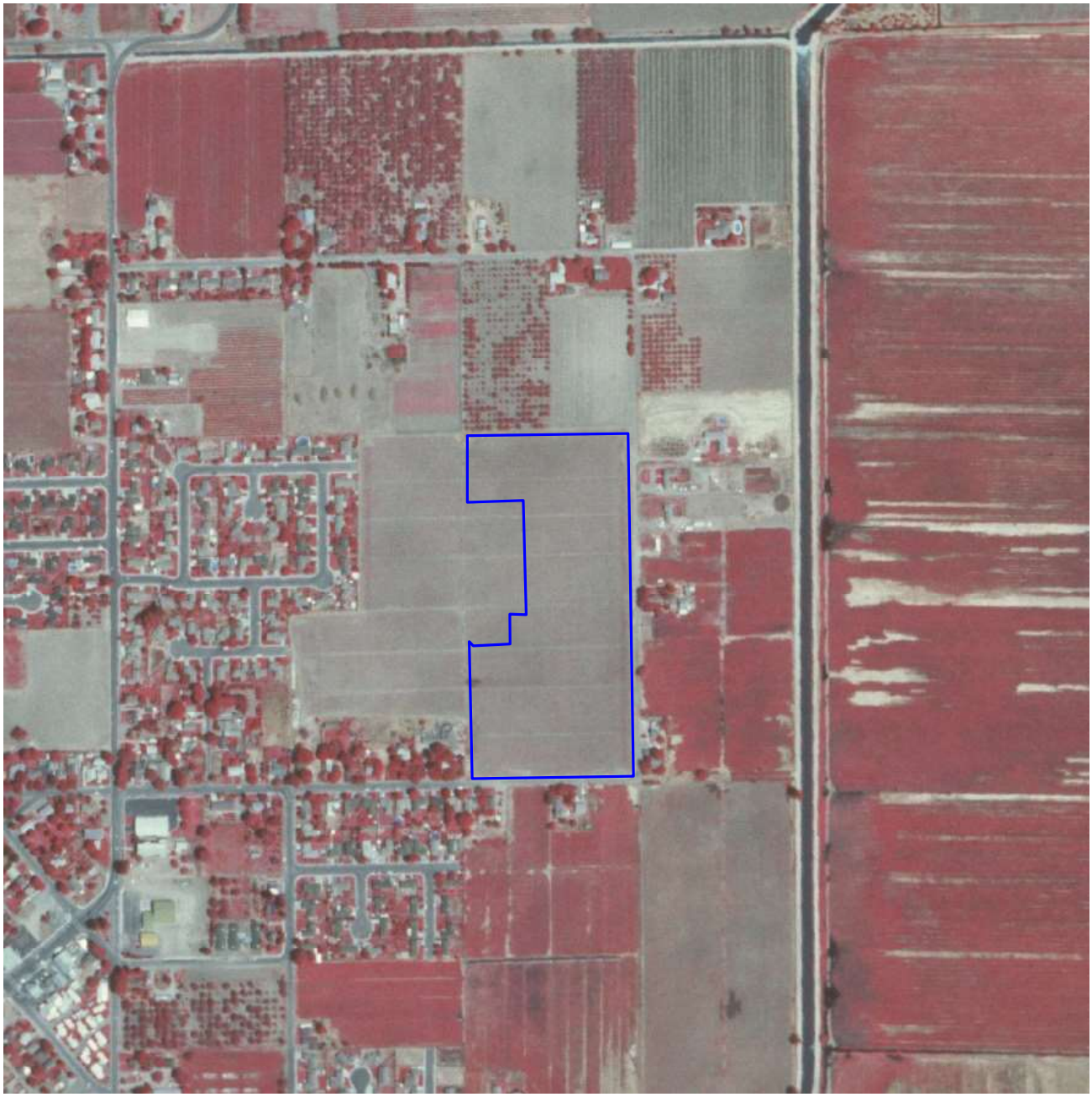
= Subject Site Boundary (Approximate)

1973 AERIAL PHOTOGRAPH	**Scale:** 1" = 500'	**Date:** May 2021	Krazan SITE DEVELOPMENT ENGINEERS *Offices Serving the Western United States*
PROPOSED RESIDENTIAL PROPERTY **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Drawn By:** BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



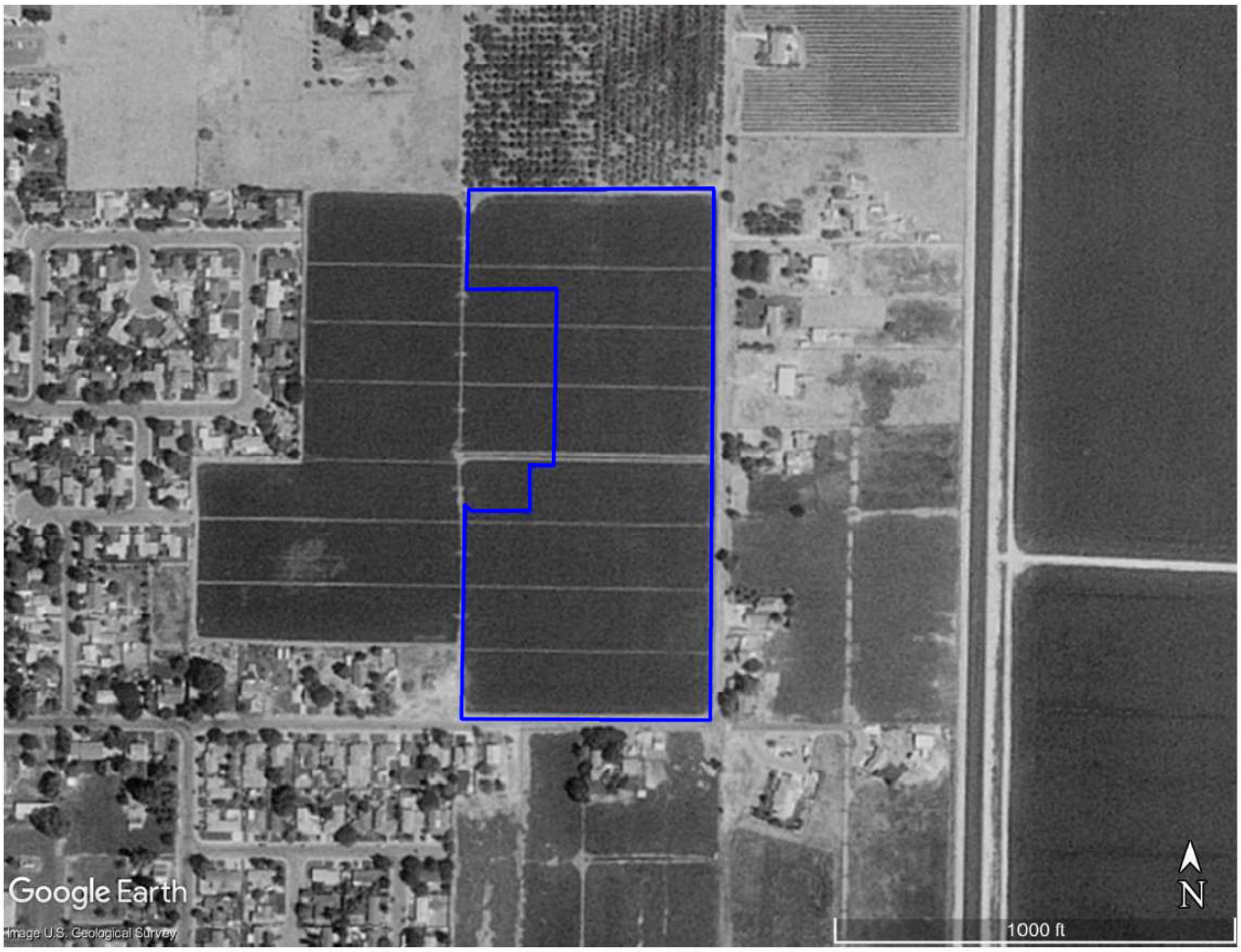
= Subject Site Boundary (Approximate)

1976 AERIAL PHOTOGRAPH	**Scale:** 1" = 500'	**Date:** May 2021	Krazan SITE DEVELOPMENT ENGINEERS *Offices Serving the Western United States*
PROPOSED RESIDENTIAL PROPERTY **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Drawn By:** BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



= Subject Site Boundary (Approximate)

1984 AERIAL PHOTOGRAPH	**Scale:** 1" = 500'	**Date:** May 2021	Krazan SITE DEVELOPMENT ENGINEERS *Offices Serving the Western United States*
PROPOSED RESIDENTIAL PROPERTY **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Drawn By:** BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



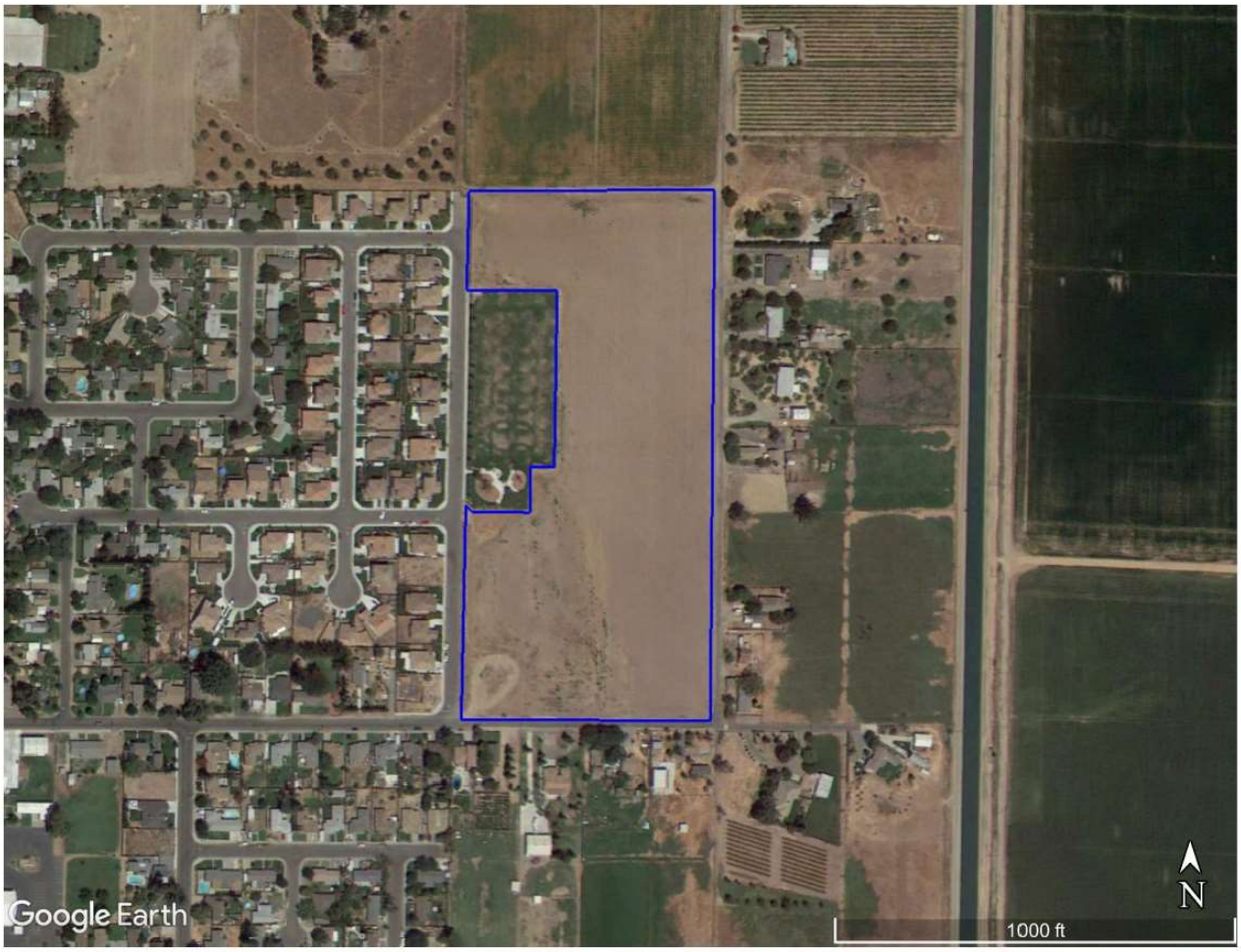
= **Subject Site Boundary (Approximate)**

1998 AERIAL PHOTOGRAPH	**Scale:** 1" = 500'	**Date:** May 2021	Krazan SITE DEVELOPMENT ENGINEERS *Offices Serving the Western United States*
PROPOSED RESIDENTIAL PROPERTY **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Drawn By:** BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



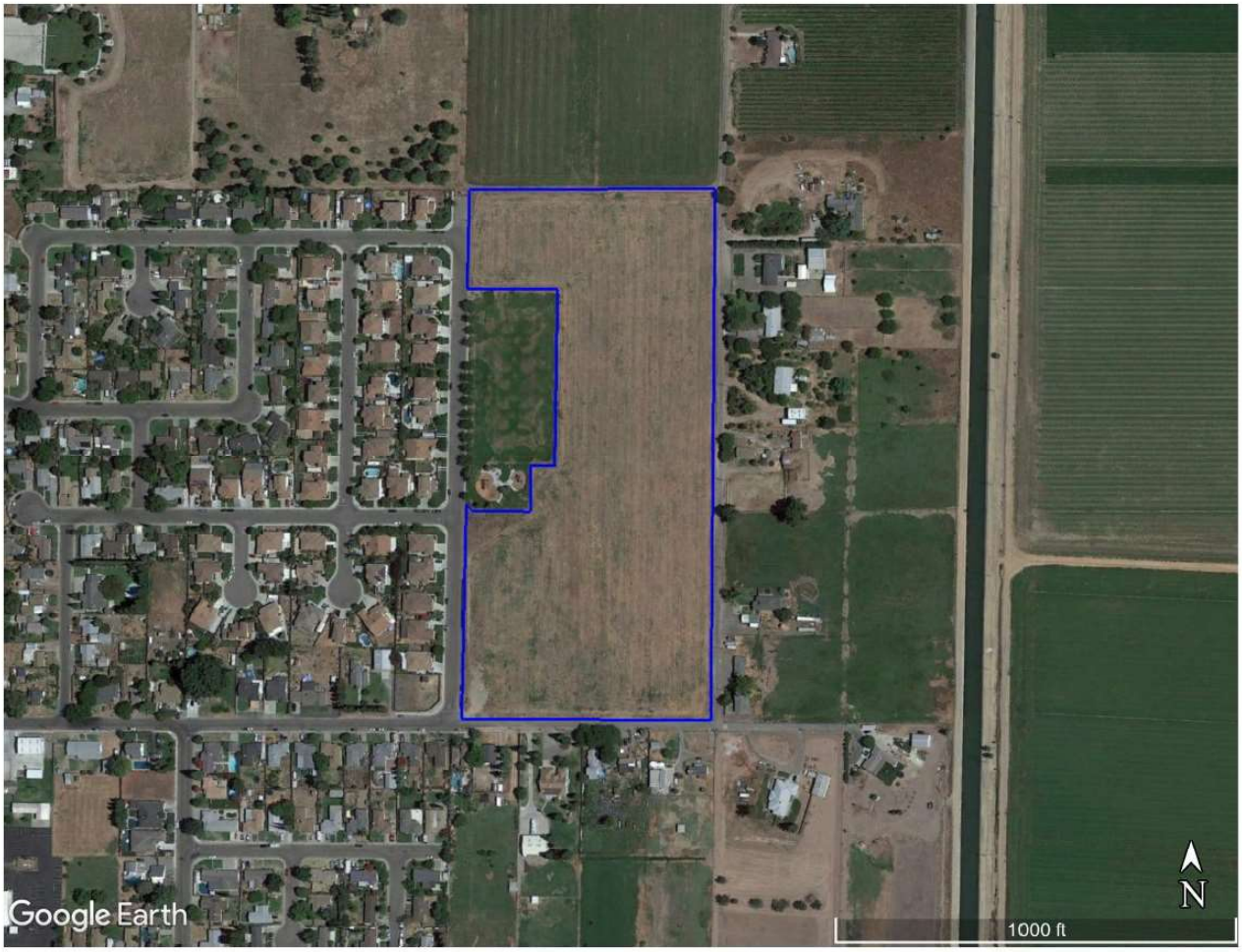
= **Subject Site Boundary (Approximate)**

2006 AERIAL PHOTOGRAPH **PROPOSED RESIDENTIAL PROPERTY** **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Scale:** 1" = 500'	**Date:** May 2021	Krazan **SITE DEVELOPMENT ENGINEERS** ***Offices Serving the Western United States***
	Drawn By: BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



= **Subject Site Boundary (Approximate)**

2012 AERIAL PHOTOGRAPH **PROPOSED RESIDENTIAL PROPERTY** **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Scale:** 1" = 500'	**Date:** May 2021	Krazan **SITE DEVELOPMENT ENGINEERS** ***Offices Serving the Western United States***
	Drawn By: BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	



= **Subject Site Boundary (Approximate)**

2019 AERIAL PHOTOGRAPH **PROPOSED RESIDENTIAL PROPERTY** **NWC ZEERING & ARNOLD ROADS** **APN 024-022-027** **DENAIR, CALIFORNIA 95316**	**Scale:** 1" = 500'	**Date:** May 2021	Krazan **SITE DEVELOPMENT ENGINEERS** ***Offices Serving the Western United States***
	Drawn By: BV	**Approved by:** BV	
	Project No. 034-21023	**Source:** EDR	

Appendix D

Proposed Residential Property
East Zeering Road
Denair, CA 95316

Inquiry Number: 6460076.3
April 21, 2021

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

04/21/21

Site Name:

Proposed Residential Property
East Zeering Road
Denair, CA 95316
EDR Inquiry # 6460076.3

Client Name:

Krazan & Associates, Inc.
4320 Orange Grove Avenue Suite E
Sacramento, CA 95841
Contact: William Vick

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Krazan & Associates, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # F6FF-4D72-A2C7

PO # NA

Project 034-21023

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: F6FF-4D72-A2C7

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Appendix E

Krazan & ASSOCIATES, INC.

GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPERTY OWNER INTERVIEW QUESTIONNAIRE

Date: April 21, 2021 Krazan Project Manager: Bill Vick

Project No: 034-21023 Project Name: Proposed Residential Property

Site Address: NWC East Zeering and Arnold Roads, Denair, California 95316; APN 024-022-027

Interview With: PAUL RODRIGUES

Telephone No: (209) 632-7203 Fax No:

Knowledge of Previous Owner(s) and Phone Number? UNKNOWN

How are you associated with the subject property? Property Owner / Property Owner's Representative

How long have you been associated with the subject property? 35 YRS

What is the subject property currently used for? DRY CROP FARMING

Are there structures on the subject property? NO How Many? Ø

Do you know of any previous structures on the subject property? NO

Do you have knowledge of the presence of underground storage tanks being located on the subject property either historically or currently? NO

Do you have knowledge of the presence of aboveground storage tanks being located on the subject property either historically or currently? NO

Do you have knowledge of the presence of imported soil on the subject property? If so, please indicate the origin/location of the imported soil. NO

Do you know of any chemicals, hazardous materials, and/or environmentally persistent pesticides/herbicides being used, stored or discharged on the subject property? NO

Do you know of any buried materials such as garbage dumps or burn pits located on the subject property? NO

Do you know of any septic systems located on the subject property (current or historical)? Yes (No)
If yes, how many currently? If yes, how many historically?

Do you know of any water wells located on the subject property (current or historical)? Yes (No)
If yes, how many currently? If yes, how many historically?

Do you know of any dry wells located on the subject property (current or historical)? Yes (No)

Do you know of any environmental monitoring wells located on the subject property (current or historical)? Yes (No)

Do you know of any drainage or disposal ponds located on the subject property? NO

Is the subject property connected to municipal water and sewer systems? NO

Do you know of obvious indications pointing to the presence or likely presence of contamination of the subject property?
NO

Do you have any concerns about adjacent property usage such as gasoline stations, industrial uses, or USTs/ASTs on adjacent properties? NO

Are you aware of any environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state, or local law? NO

Please list previous commercial and/or industrial (non-residential) tenants/occupants of the on-site building:
NONE

Are you aware of any activity use limitations (AULs) such as engineering controls, land use restrictions, or institutional controls that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law?
NO

Do you have any specialized knowledge or experience related to the subject property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the subject property or an adjacent property so that you would have specialized knowledge of the chemicals and processes used by this type of business?
NO

Does the purchase price being paid for the subject property reasonably reflect the fair market value of the subject property?
(Yes) No

Do you know the past uses of the subject property? If so, briefly explain.
DRY FARMING

Do you have knowledge of the current or historical presence of vehicle repair-related features (i.e., sumps, oil/water clarifiers, subsurface hydraulic vehicle hoists, etc.)?
If so, briefly explain.
NO

Do you know of specific chemicals that are present or once were present at the subject property?
If so, briefly explain.
NO

Do you know of spills or other chemical releases that have taken place at the subject property?
If so, briefly explain.
NO

Do you know of spills or other chemical releases that have taken place at the subject property?
NO

Are you aware of, or have you been notified of, any contamination issues to soil or groundwater either at the subject site or in the vicinity of the subject site?
If so, briefly explain.
NO

What is the reason for preparation of this Phase I ESA? (Property purchase/sale; bank loan; proposed development; etc.)
BUYER REQUIRES IT AND ORDERED IT.
I WILL NOT BE RESPONSIBLE FOR ANY COST.

Name: PAUL A RODRIGUES (Please Print) Date: 4/23/2021

Signature: Paul Rodrigues

Appendix F

Proposed Residential Property
East Zeering Road
Denair, CA 95316

Inquiry Number: 6460076.2s
April 21, 2021

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Detail Map	3
Map Findings Summary	4
Map Findings	9
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GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
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Physical Setting Source Map Findings	A-13
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

EAST ZEERING ROAD
DENAIR, CA 95316

COORDINATES

Latitude (North):	37.5307520 - 37˚ 31' 50.70''
Longitude (West):	120.7880540 - 120˚ 47' 16.99''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	695451.3
UTM Y (Meters):	4155847.5
Elevation:	127 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5639976 DENAIR, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140624
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
EAST ZEERING ROAD
DENAIR, CA 95316

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	AARM A WAYNE	5300 POWELL RD	SWEEPS UST, HIST UST	Higher	600, 0.114, North
2	GARY SANDERS	4424 N GRATTON RD	RCRA NonGen / NLR	Higher	1292, 0.245, WNW
A3	JACOBS PROPERTY	4740 MAIN STREET	LUST, Cortese, CERS	Lower	1621, 0.307, SW
A4	DENAIR MART	4700 MAIN ST	LUST, SWEEPS UST, Cortese, EMI, HIST CORTESE,...	Lower	1626, 0.308, WSW
5	OASIS GAS STATION	4601 MAIN	LUST, Cortese, CERS	Lower	2229, 0.422, WSW
B6	DENAIR LUMBER CO	4501 MAIN ST	SWEEPS UST, HIST UST, HIST CORTESE, HWTS	Lower	2580, 0.489, WSW
B7	DENAIR LUMBER CO	4501 MAIN	LUST, Cortese	Lower	2580, 0.489, WSW
8	LESTER ROAD/ZEERING	SOUTHWESTERN CORNER	ENVIROSTOR, SCH	Lower	4658, 0.882, WSW
9	ADDITION TO LESTER/Z	LESTER ROAD/MONTE VI	ENVIROSTOR, SCH	Lower	5271, 0.998, WSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

US ENG CONTROLS Engineering Controls Sites List
US INST CONTROLS Institutional Controls Sites List

Federal ERNS list

ERNS Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST Leaking Underground Storage Tanks on Indian Land
CPS-SLIC Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST Underground Storage Tank Listing
UST Active UST Facilities
AST Aboveground Petroleum Storage Tank Facilities
INDIAN UST Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP Voluntary Cleanup Program Properties
INDIAN VCP Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
HAULERS Registered Waste Tire Haulers Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
ODI Open Dump Inventory
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register

HIST Cal-Sites ---- Historical Calsites Database
SCH ---- School Property Evaluation Program
CDL ---- Clandestine Drug Labs
Toxic Pits ---- Toxic Pits Cleanup Act Sites
CERS HAZ WASTE ---- CERS HAZ WASTE
US CDL ---- National Clandestine Laboratory Register
PFAS ---- PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

CA FID UST ---- Facility Inventory Database
CERS TANKS ---- California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ---- Formerly Used Defense Sites
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---- Indian Reservations

FUSRAP - Formerly Utilized Sites Remedial Action Program
UMTRA - Uranium Mill Tailings Sites
LEAD SMELTERS - Lead Smelter Sites
US AIRS - Aerometric Information Retrieval System Facility Subsystem
US MINES - Mines Master Index File
ABANDONED MINES - Abandoned Mines
FINDS - Facility Index System/Facility Registry System
ECHO - Enforcement & Compliance History Information
DOCKET HWC - Hazardous Waste Compliance Docket Listing
UXO - Unexploded Ordnance Sites
FUELS PROGRAM - EPA Fuels Program Registered Listing
CA BOND EXP. PLAN - Bond Expenditure Plan
CUPA Listings - CUPA Resources List
DRYCLEANERS - Cleaner Facilities
EMI - Emissions Inventory Data
ENF - Enforcement Action Listing
Financial Assurance - Financial Assurance Information Listing
HAZNET - Facility and Manifest Data
ICE - ICE
HWP - EnviroStor Permitted Facilities Listing
HWT - Registered Hazardous Waste Transporter Database
MINES - Mines Site Location Listing
MWMP - Medical Waste Management Program Listing
NPDES - NPDES Permits Listing
PEST LIC - Pesticide Regulation Licenses Listing
PROC - Certified Processors Database
Notify 65 - Proposition 65 Records
UIC - UIC Listing
UIC GEO - UIC GEO (GEOTRACKER)
WASTEWATER PITS - Oil Wastewater Pits Listing
WDS - Waste Discharge System
WIP - Well Investigation Program Case List
MILITARY PRIV SITES - MILITARY PRIV SITES (GEOTRACKER)
PROJECT - PROJECT (GEOTRACKER)
WDR - Waste Discharge Requirements Listing
CIWQS - California Integrated Water Quality System
CERS - CERS
NON-CASE INFO - NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS - OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS - PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT - SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ - Well Stimulation Project (GEOTRACKER)
HWTS - Hazardous Waste Tracking System
MINES MRDS - Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP - EDR Proprietary Manufactured Gas Plants
EDR Hist Auto - EDR Exclusive Historical Auto Stations
EDR Hist Cleaner - EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF - Recovered Government Archive Solid Waste Facilities List

RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/25/2021 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LESTER ROAD/ZEERING Facility Id: 60000252 Status: No Further Action	***SOUTHWESTERN CORNER***	***WSW 1/2 - 1 (0.882 mi.)***	***8***	***38***
ADDITION TO LESTER/Z Facility Id: 60000721 Status: No Action Required	***LESTER ROAD/MONTE VI***	***WSW 1/2 - 1 (0.998 mi.)***	***9***	***42***

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 4 LUST sites within

approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
JACOBS PROPERTY	***4740 MAIN STREET***	***SW 1/4 - 1/2 (0.307 mi.)***	***A3***	***12***
Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 03/08/2021 Status: Open - Site Assessment Status: Leak being confirmed Global Id: T0609997924				
DENAIR MART	***4700 MAIN ST***	***WSW 1/4 - 1/2 (0.308 mi.)***	***A4***	***17***
Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 03/08/2021 Status: Completed - Case Closed Status: Remediation Plan Global Id: T0609900378				
OASIS GAS STATION	***4601 MAIN***	***WSW 1/4 - 1/2 (0.422 mi.)***	***5***	***27***
Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 03/08/2021 Status: Completed - Case Closed Status: Preliminary site assessment workplan submitted Global Id: T0609993665				
DENAIR LUMBER CO	***4501 MAIN***	***WSW 1/4 - 1/2 (0.489 mi.)***	***B7***	***36***
Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 03/08/2021 Status: Completed - Case Closed Status: Case Closed Global Id: T0609900082				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AARM A WAYNE	***5300 POWELL RD***	***N 0 - 1/8 (0.114 mi.)***	***1***	***9***
Status: A Tank Status: A Comp Number: 49977				

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AARM A WAYNE	***5300 POWELL RD***	***N 0 - 1/8 (0.114 mi.)***	***1***	***9***
Facility Id: 00000049977				

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/14/2020 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GARY SANDERS	4424 N GRATTON RD	WNW 1/8 - 1/4 (0.245 mi.)	2	10

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 12/17/2020 has revealed that there are 4 Cortese sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
JACOBS PROPERTY	***4740 MAIN STREET***	***SW 1/4 - 1/2 (0.307 mi.)***	***A3***	***12***
Cleanup Status: OPEN - SITE ASSESSMENT				
DENAIR MART	***4700 MAIN ST***	***WSW 1/4 - 1/2 (0.308 mi.)***	***A4***	***17***
Cleanup Status: COMPLETED - CASE CLOSED				
OASIS GAS STATION	***4601 MAIN***	***WSW 1/4 - 1/2 (0.422 mi.)***	***5***	***27***
Cleanup Status: COMPLETED - CASE CLOSED				
DENAIR LUMBER CO	***4501 MAIN***	***WSW 1/4 - 1/2 (0.489 mi.)***	***B7***	***36***
Cleanup Status: COMPLETED - CASE CLOSED				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DENAIR MART	***4700 MAIN ST***	***WSW 1/4 - 1/2 (0.308 mi.)***	***A4***	***17***

Reg Id: 500440

DENAIR LUMBER CO ***4501 MAIN ST*** ***WSW 1/4 - 1/2 (0.489 mi.)*** ***B6*** ***35***

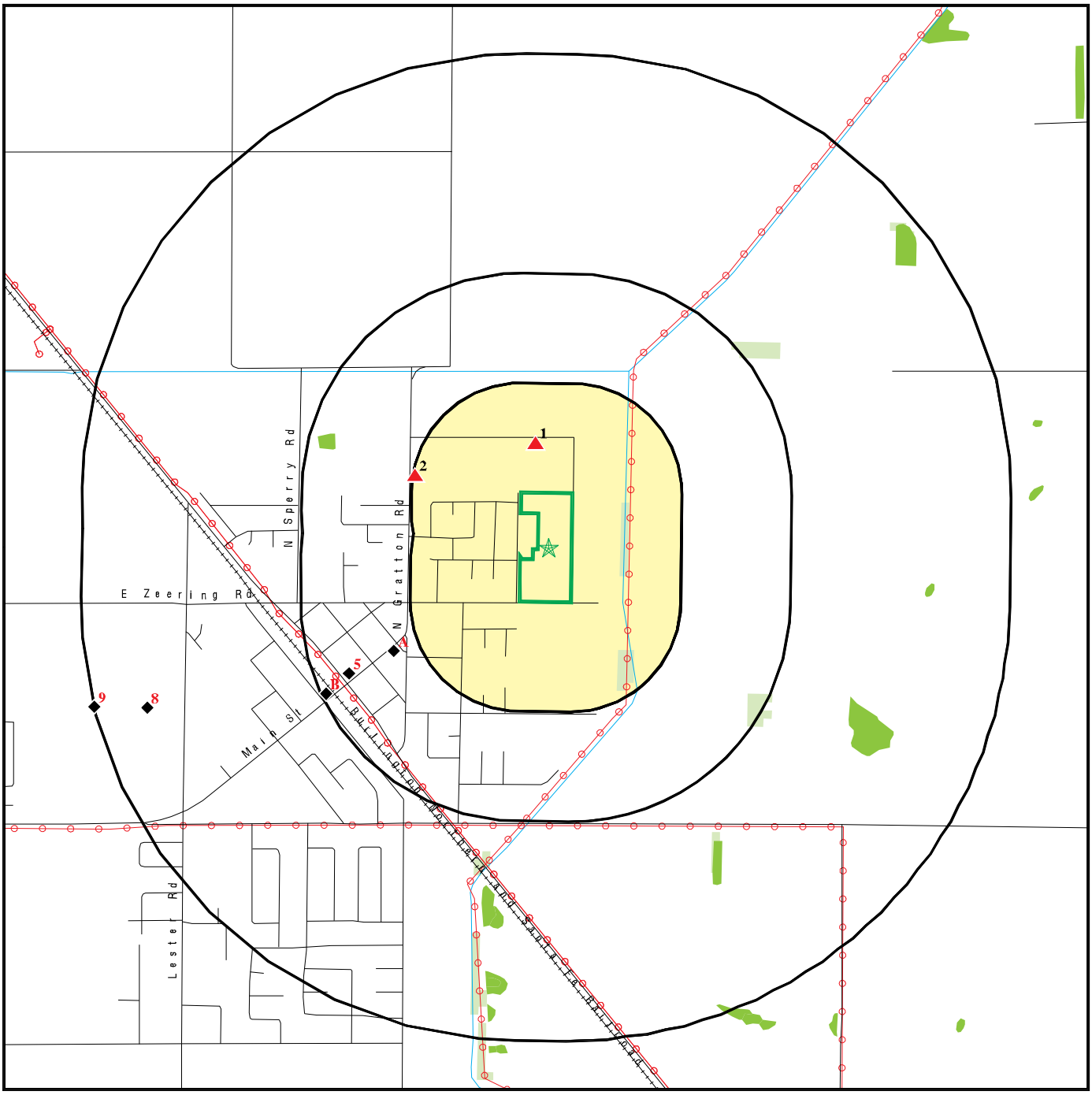
Reg Id: 500097

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

Site Name	Database(s)
	CDL
	CDL
	CDL
TURLOCK PCE INVESTIGATION	CPS-SLIC

OVERVIEW MAP - 6460076.2S



0 1/4 1/2 1 Miles

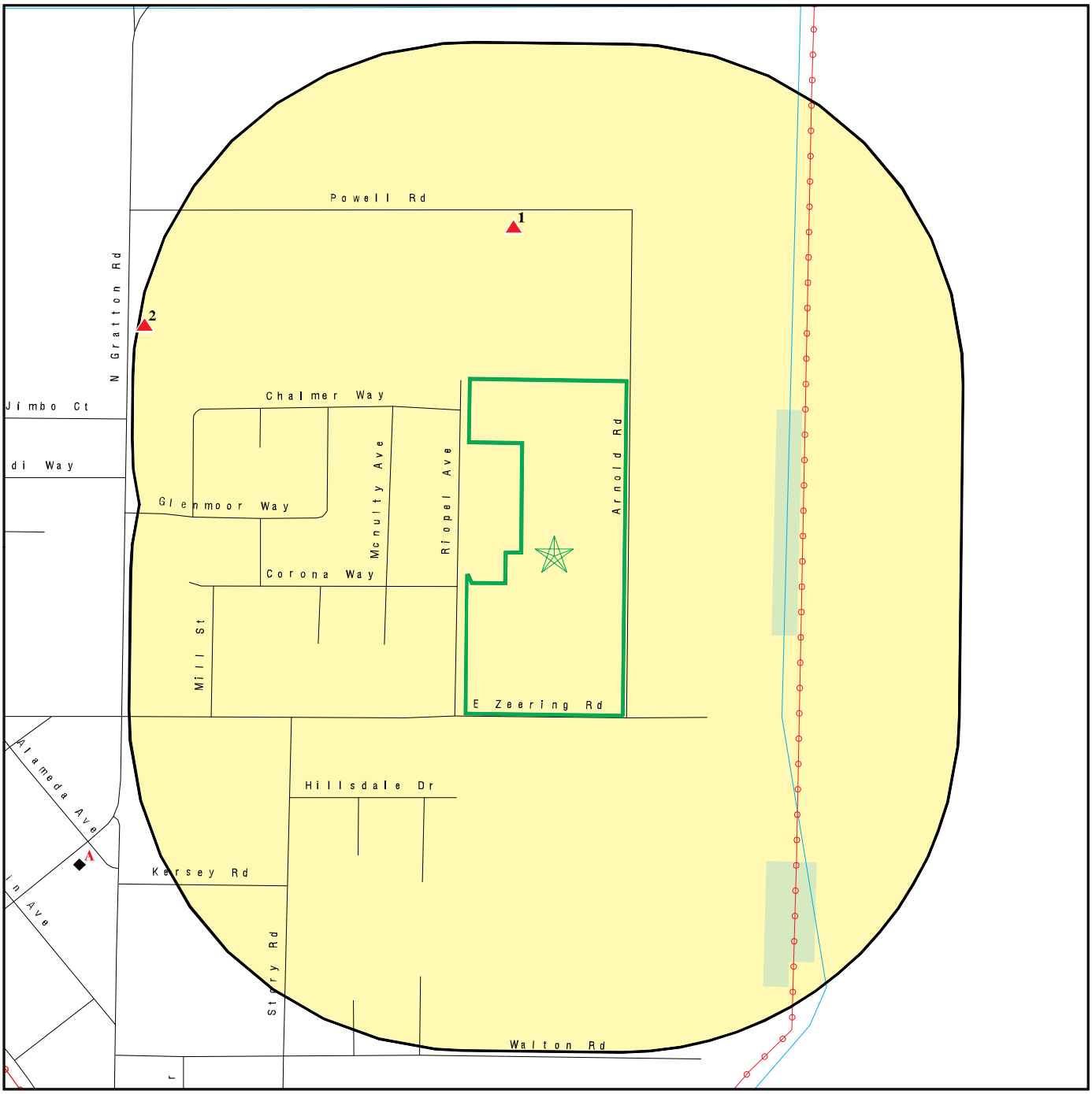
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Proposed Residential Property ADDRESS: East Zeering Road Denair CA 95316 LAT/LONG: 37.530752 / 120.788054	CLIENT: Krazan & Associates, Inc. CONTACT: William Vick INQUIRY #: 6460076.2s DATE: April 21, 2021 1:29 pm

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DETAIL MAP - 6460076.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Proposed Residential Property ADDRESS: East Zeering Road Denair CA 95316 LAT/LONG: 37.530752 / 120.788054	CLIENT: Krazan & Associates, Inc. CONTACT: William Vick INQUIRY #: 6460076.2s DATE: April 21, 2021 1:30 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	2	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	4	NR	NR	4

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		1	0	NR	NR	NR	1
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	4	NR	NR	4
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	2	NR	NR	2
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	2	1	10	2	0	15

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
North
< 1/8
0.114 mi.
600 ft.

AARM A WAYNE
5300 POWELL RD
DENAIR, CA 95316

SWEEPS UST **U001605124**
HIST UST **N/A**

Relative:
Higher

Actual:
130 ft.

SWEEPS UST:

Name:	AARM A. WAYNE
Address:	5300 POWELL RD
City:	DENAIR
Status:	Active
Comp Number:	49977
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	50-000-049977-000001
Tank Status:	A
Capacity:	240
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	1

HIST UST:

Name:	AARM A WAYNE
Address:	5300 POWELL RD
City,State,Zip:	DENAIR, CA 95316
File Number:	000219C9
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000219C9.pdf
Region:	STATE
Facility ID:	00000049977
Facility Type:	Other
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	2096674370
Owner Name:	AARM A. WAYNE
Owner Address:	5300 POWELL RD.
Owner City,St,Zip:	DENAIR, CA 95316
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	1982
Tank Capacity:	00000240
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	3/8
Leak Detection:	None

Click here for Geo Tracker PDF:

2
WNW
1/8-1/4
0.245 mi.
1292 ft.

GARY SANDERS
4424 N GRATTON RD
DENAIR, CA 95316

RCRA NonGen / NLR

1026162648
CAC003062634

Relative:
Higher

Actual:
128 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		2020-04-07 00:00:00.0
Handler Name:	GARY SANDERS	
Handler Address:		4424 N GRATTON RD
Handler City,State,Zip:		DENAIR, CA 95316-9714
EPA ID:		CAC003062634
Contact Name:		GARY SANDERS
Contact Address:		4424 N GRATTON RD
Contact City,State,Zip:		DENAIR, CA 95316-9714
Contact Telephone:		209-613-9407
Contact Fax:		Not reported
Contact Email:		PROJECT@ETABATEMENT.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		4424 N GRATTON RD
Mailing City,State,Zip:		DENAIR, CA 95316-9714
Owner Name:		GARY SANDERS
Owner Type:		Other
Operator Name:		GARY SANDERS
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

GARY SANDERS (Continued) **1026162648**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2020-04-08 18:59:39.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	GARY SANDERS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4424 N GRATTON RD
Owner/Operator City,State,Zip:	DENAIR, CA 95316-9714
Owner/Operator Telephone:	209-613-9407
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	GARY SANDERS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4424 N GRATTON RD
Owner/Operator City,State,Zip:	DENAIR, CA 95316-9714
Owner/Operator Telephone:	209-613-9407
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

GARY SANDERS (Continued) **1026162648**

Historic Generators:
Receive Date: 2020-04-07 00:00:00.0
Handler Name: GARY SANDERS
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

A3 **JACOBS PROPERTY** **LUST** **S107863228**
SW **4740 MAIN STREET** **Cortese** **N/A**
1/4-1/2 **DENAIR, CA 95316** **CERS**
0.307 mi.
1621 ft. **Site 1 of 2 in cluster A**

Relative:
Lower

Actual:
124 ft.

LUST:
Name: JACOBS PROPERTY
Address: 4740 MAIN STREET
City,State,Zip: DENAIR, CA 95316
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609997924
Global Id: T0609997924
Latitude: 37.527366
Longitude: -120.794427
Status: Open - Site Assessment
Status Date: 05/30/2006
Case Worker: BJL
RB Case Number: 500537
Local Agency: Not reported
File Location: Local Agency
Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Benzene, Toluene, Xylene, Gasoline
Site History: Open

LUST:
Global Id: T0609997924
Contact Type: Regional Board Caseworker
Contact Name: BENJAMIN LEHMANN

JACOBS PROPERTY (Continued) **S107863228**

Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 Sun Center Drive #200
City: RANCHO CORDOVA
Email: benjamin.lehmann@waterboards.ca.gov
Phone Number: 9164644760

LUST:
Global Id: T0609997924
Action Type: RESPONSE
Date: 07/06/2017
Action: Email Correspondence

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 09/02/2009
Action: File Review - Closure

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 04/16/2008
Action: Staff Letter

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 01/24/2007
Action: Staff Letter

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 03/08/2006
Action: Staff Letter

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 03/23/2011
Action: Meeting

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 02/26/2007
Action: Staff Letter

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 03/17/2017
Action: Technical Correspondence / Assistance / Other

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 12/22/2010
Action: Staff Letter

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 09/23/2015
Action: Staff Letter

JACOBS PROPERTY (Continued) **S107863228**

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 01/11/2017
Action: Staff Letter

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 02/22/2017
Action: Email Correspondence

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 03/23/2016
Action: Staff Letter

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 07/07/2017
Action: Email Correspondence

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 07/06/2017
Action: Email Correspondence

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 07/03/2017
Action: Technical Correspondence / Assistance / Other

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 06/09/2017
Action: Technical Correspondence / Assistance / Other

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 04/26/2019
Action: Staff Letter

Global Id: T0609997924
Action Type: RESPONSE
Date: 09/02/2016
Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 12/18/2007
Action: Staff Letter

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 06/19/2012
Action: File review

Global Id: T0609997924
Action Type: Other

JACOBS PROPERTY (Continued) **S107863228**

Date: 04/13/2006
Action: Leak Began

Global Id: T0609997924
Action Type: Other
Date: 04/13/2006
Action: Leak Discovery

Global Id: T0609997924
Action Type: RESPONSE
Date: 04/27/2006
Action: Site Assessment Report

Global Id: T0609997924
Action Type: RESPONSE
Date: 10/17/2016
Action: Soil and Water Investigation Workplan - Addendum - Regulator Responded

Global Id: T0609997924
Action Type: Other
Date: 05/30/2006
Action: Leak Reported

Global Id: T0609997924
Action Type: RESPONSE
Date: 03/02/2006
Action: Preliminary Site Assessment Workplan

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 01/30/2009
Action: File review

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 05/11/2009
Action: Staff Letter

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 11/09/2010
Action: Staff Letter

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 08/01/2006
Action: Notification - Fee Title Owners Notice

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 12/13/2013
Action: Technical Correspondence / Assistance / Other

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 07/06/2006
Action: Staff Letter

JACOBS PROPERTY (Continued) **S107863228**

Global Id: T0609997924
Action Type: ENFORCEMENT
Date: 06/13/2007
Action: Staff Letter

LUST:
Global Id: T0609997924
Status: Open - Case Begin Date
Status Date: 04/13/2006

Global Id: T0609997924
Status: Open - Site Assessment
Status Date: 05/30/2006

LUST REG 5:
Name: JACOBS PROPERTY
Address: 4740 MAIN
City: TURLOCK
Region: 5
Status: Leak being confirmed
Case Number: 500537
Case Type: Drinking Water Aquifer affected
Substance: Not reported
Staff Initials: MTS
Lead Agency: Local
Program: LUST
MTBE Code: N/A

CORTESE:
Name: JACOBS PROPERTY
Address: 4740 MAIN STREET
City,State,Zip: DENAIR, CA 95316
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0609997924
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: OPEN - SITE ASSESSMENT
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

JACOBS PROPERTY (Continued) **S107863228**

CERS:
- Name: JACOBS PROPERTY
- Address: 4740 MAIN STREET
- City,State,Zip: DENAIR, CA 95316
- Site ID: 192550
- CERS ID: T0609997924
- CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
- Affiliation Type Desc: Regional Board Caseworker
- Entity Name: BENJAMIN LEHMANN - CENTRAL VALLEY RWQCB (REGION 5S)
- Entity Title: Not reported
- Affiliation Address: 11020 Sun Center Drive #200
- Affiliation City: RANCHO CORDOVA
- Affiliation State: CA
- Affiliation Country: Not reported
- Affiliation Zip: Not reported
- Affiliation Phone: 9164644760

A4 **DENAIR MART** **LUST** **S103480220**
WSW **4700 MAIN ST** **SWEEPS UST** **N/A**
1/4-1/2 **DENAIR, CA 95316** **Cortese**
0.308 mi. **EMI**
1626 ft. **Site 2 of 2 in cluster A** **HIST CORTESE**
CERS
Relative: Lower **HWTS**
Actual: 124 ft.

LUST:
- Name: DENAIR MINI MART
- Address: 4700 MAIN
- City,State,Zip: DENAIR, CA 95316
- Lead Agency: STANISLAUS COUNTY
- Case Type: LUST Cleanup Site
- Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609900378
- Global Id: T0609900378
- Latitude: 37.5269945
- Longitude: -120.7953539
- Status: Completed - Case Closed
- Status Date: 06/08/2011
- Case Worker: HF
- RB Case Number: 500440
- Local Agency: STANISLAUS COUNTY
- File Location: Local Agency
- Local Case Number: 278
- Potential Media Affect: Aquifer used for drinking water supply
- Potential Contaminants of Concern: Gasoline
- Site History: Not reported

LUST:
- Global Id: T0609900378
- Contact Type: Local Agency Caseworker
- Contact Name: HORACIO FERRIZ, RG, CEG
- Organization Name: STANISLAUS COUNTY
- Address: 3800 CORNUCOPIA WAY STE# C
- City: MODESTO
- Email: hferriz@envres.org
- Phone Number: Not reported

DENAIR MART (Continued) **S103480220**

Global Id: T0609900378
Contact Type: Regional Board Caseworker
Contact Name: VERA J. FISCHER
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 SUN CENTER DRIVE #200
City: RANCHO CORDOVA
Email: vera.fischer@waterboards.ca.gov
Phone Number: Not reported

LUST:
Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 09/09/2009
Action: Staff Letter

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 07/18/2003
Action: File review - #on file

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 04/06/2004
Action: Staff Letter - #on file

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 02/01/2010
Action: Staff Letter

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 11/14/2002
Action: Staff Letter - #on file

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 10/14/2002
Action: Staff Letter - #on file

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 10/18/2000
Action: * Corrective Action Orders - #on file

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 09/14/2004
Action: File review - #on file

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 02/07/2011
Action: Staff Letter

Global Id: T0609900378
Action Type: ENFORCEMENT

DENAIR MART (Continued) **S103480220**

Date: 06/08/2011
Action: Closure/No Further Action Letter

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 07/06/2010
Action: Staff Letter

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 06/13/2008
Action: Staff Letter - #ON FILE

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 04/13/2011
Action: Staff Letter

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 03/03/2011
Action: Staff Letter

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 04/04/2008
Action: Staff Letter - #ON FILE

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 02/07/2011
Action: Staff Letter

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 08/29/2010
Action: Staff Letter

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 08/27/2010
Action: Staff Letter

Global Id: T0609900378
Action Type: Other
Date: 05/05/1998
Action: Leak Discovery

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 06/30/2003
Action: * Historical Enforcement - #on file

Global Id: T0609900378
Action Type: Other
Date: 09/11/1998
Action: Leak Reported

DENAIR MART (Continued) **S103480220**

Global Id: T0609900378
Action Type: RESPONSE
Date: 10/30/2008
Action: Other Report / Document

Global Id: T0609900378
Action Type: REMEDIATION
Date: 09/21/2005
Action: Soil Vapor Extraction (SVE)

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 04/28/2003
Action: Technical Correspondence / Assistance / Other

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 01/05/2009
Action: File review

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 03/13/2008
Action: Staff Letter - #ON FILE

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 04/21/2000
Action: Notice of Responsibility - #on file

Global Id: T0609900378
Action Type: ENFORCEMENT
Date: 06/17/2009
Action: Staff Letter

LUST:
Global Id: T0609900378
Status: Open - Case Begin Date
Status Date: 05/05/1998

Global Id: T0609900378
Status: Open - Site Assessment
Status Date: 09/08/2000

Global Id: T0609900378
Status: Open - Site Assessment
Status Date: 03/26/2002

Global Id: T0609900378
Status: Open - Site Assessment
Status Date: 06/23/2003

Global Id: T0609900378
Status: Open - Remediation
Status Date: 05/27/2005

Global Id: T0609900378

DENAIR MART (Continued) **S103480220**

Status: Open - Verification Monitoring
Status Date: 12/01/2010

Global Id: T0609900378
Status: Completed - Case Closed
Status Date: 06/08/2011

LUST REG 5:
Name: DENAIR MINI MART
Address: 4700 MAIN
City: DENAIR
Region: 5
Status: Remediation Plan
Case Number: 500440
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: MTS
Lead Agency: Local
Program: LUST
MTBE Code: 1

SWEEPS UST:
Name: DENAIR MINI MART
Address: 4700 MAIN ST
City: DENAIR
Status: Active
Comp Number: 16459
Number: 9
Board Of Equalization: 44-028622
Referral Date: 12-05-91
Action Date: 12-05-91
Created Date: 02-29-88
Owner Tank Id: 32
SWRCB Tank Id: 50-000-016459-000001
Tank Status: A
Capacity: 8000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: 3

Name: DENAIR MINI MART
Address: 4700 MAIN ST
City: DENAIR
Status: Active
Comp Number: 16459
Number: 9
Board Of Equalization: 44-028622
Referral Date: 12-05-91
Action Date: 12-05-91
Created Date: 02-29-88
Owner Tank Id: 33
SWRCB Tank Id: 50-000-016459-000002
Tank Status: A

DENAIR MART (Continued) **S103480220**

Capacity: 6000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: DENAIR MINI MART
Address: 4700 MAIN ST
City: DENAIR
Status: Active
Comp Number: 16459
Number: 9
Board Of Equalization: 44-028622
Referral Date: 12-05-91
Action Date: 12-05-91
Created Date: 02-29-88
Owner Tank Id: 34
SWRCB Tank Id: 50-000-016459-000003
Tank Status: A
Capacity: 2000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

CORTESE:
Name: DENAIR MINI MART
Address: 4700 MAIN
City,State,Zip: DENAIR, CA 95316
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0609900378
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

EMI:
Name: DENAIR MART
Address: 4700 MAIN ST

DENAIR MART (Continued) **S103480220**

City,State,Zip:	DENAIR, CA 95316
Year:	2002
County Code:	50
Air Basin:	SJV
Facility ID:	1870
Air District Name:	SJU
SIC Code:	5541
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	DENAIR MART
Address:	4700 MAIN ST
City,State,Zip:	DENAIR, CA 95316
Year:	2003
County Code:	50
Air Basin:	SJV
Facility ID:	1870
Air District Name:	SJU
SIC Code:	5541
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	DENAIR MART
Address:	4700 MAIN ST
City,State,Zip:	DENAIR, CA 95316
Year:	2004
County Code:	50
Air Basin:	SJV
Facility ID:	1870
Air District Name:	SJU
SIC Code:	5541
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.244699935
Reactive Organic Gases Tons/Yr:	0.2434818
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

DENAIR MART (Continued) **S103480220**

Name:	DENAIR MART
Address:	4700 MAIN ST
City,State,Zip:	DENAIR, CA 95316
Year:	2005
County Code:	50
Air Basin:	SJV
Facility ID:	1870
Air District Name:	SJU
SIC Code:	5541
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.2446999348617696844
Reactive Organic Gases Tons/Yr:	.2434818
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	DENAIR MART
Address:	4700 MAIN ST
City,State,Zip:	DENAIR, CA 95316
Year:	2006
County Code:	50
Air Basin:	SJV
Facility ID:	1870
Air District Name:	SJU
SIC Code:	5541
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.1478414159003012174
Reactive Organic Gases Tons/Yr:	.14705942872253419
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	DENAIR MART
Address:	4700 MAIN ST
City,State,Zip:	DENAIR, CA 95316
Year:	2007
County Code:	50
Air Basin:	SJV
Facility ID:	1870
Air District Name:	SJU
SIC Code:	5541
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.1517648388040505787
Reactive Organic Gases Tons/Yr:	.15096209921264643
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

DENAIR MART (Continued) **S103480220**

Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: DENAIR MART
Address: 4700 MAIN ST
City,State,Zip: DENAIR, CA 95316
Year: 2008
County Code: 50
Air Basin: SJV
Facility ID: 1870
Air District Name: SJU
SIC Code: 5541
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .1394435323186875355
Reactive Organic Gases Tons/Yr: .13868638156127923
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

HIST CORTESE:
edr_fname: DENAIR MINI MART
edr_fadd1: 4700 MAIN
City,State,Zip: DENAIR, CA 95316
Region: CORTESE
Facility County Code: 50
Reg By: LTNKA
Reg Id: 500440

CERS:
Name: DENAIR MART
Address: 4700 MAIN ST
City,State,Zip: DENAIR, CA 95316-8548
Site ID: 464294
CERS ID: 110021301081
CERS Description: US EPA Air Emission Inventory System (EIS)

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: HORACIO FERRIZNA RGNA CEG STANISLAUS CNTY LOP
Entity Title: Not reported
Affiliation Address: 3800 CORNUCOPIA WAY STE C
Affiliation City: MODESTO
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker
Entity Name: MICHAEL SMITH CTRL VLY RWQCB REGN 5S
Entity Title: Not reported
Affiliation Address: 11020 SUN CENTER DRIVE 200
Affiliation City: RANCHOCORDOVA
Affiliation State: Not reported

DENAIR MART (Continued) **S103480220**

Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: DENAIR MINI MART
Address: 4700 MAIN
City,State,Zip: DENAIR, CA 95316
Site ID: 205358
CERS ID: T0609900378
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: VERA J. FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title: Not reported
Affiliation Address: 11020 SUN CENTER DRIVE #200
Affiliation City: RANCHO CORDOVA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker
Entity Name: HORACIO FERRIZ, RG, CEG - STANISLAUS COUNTY
Entity Title: Not reported
Affiliation Address: 3800 CORNUCOPIA WAY STE# C
Affiliation City: MODESTO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

HWTS:
Name: DENAIR MART
Address: 4700 MAIN ST
Address 2: Not reported
City,State,Zip: DENAIR, CA 95316
EPA ID: CAL000305874
Inactive Date: 06/30/2009
Create Date: 04/24/2006
Last Act Date: 04/12/2011
Mailing Name: Not reported
Mailing Address: PO BOX 658
Mailing Address 2: Not reported
Mailing City,State,Zip: DENAIR, CA 953160658
Owner Name: BALBIR KAUR
Owner Address: 4700 MAIN ST D PO BOX 658
Owner Address 2: Not reported
Owner City,State,Zip: DENAIR, CA 953160000
Contact Name: BALBIR KAUR
Contact Address: 341 E MONTE VISTA #46
Contact Address 2: Not reported
City,State,Zip: TURLOCK, CA 953820000

NAICS:
EPA ID: CAL000305874

DENAIR MART (Continued) **S103480220**

Create Date:	2006-04-24 11:21:33.620
NAICS Code:	446199
NAICS Description:	All Other Health and Personal Care Stores
Issued EPA ID Date:	2006-04-24 11:21:33.56000
Inactive Date:	2009-06-30 00:00:00
Facility Name:	DENAIR MART
Facility Address:	4700 MAIN ST
Facility Address 2:	Not reported
Facility City:	DENAIR
Facility County:	Not reported
Facility State:	CA
Facility Zip:	95316

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5 **OASIS GAS STATION** **LUST** **S104735704**
WSW **4601 MAIN** **Cortese** **N/A**
1/4-1/2 **DENAIR, CA 95316** **CERS**
0.422 mi.
2229 ft.

Relative: **Lower**

Actual: **123 ft.**

LUST:

Name:	OASIS GAS STATION
Address:	4601 MAIN
City,State,Zip:	DENAIR, CA 95316
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609993665
Global Id:	T0609993665
Latitude:	37.52664
Longitude:	-120.796339
Status:	Completed - Case Closed
Status Date:	02/04/2020
Case Worker:	BJL
RB Case Number:	500498
Local Agency:	Not reported
File Location:	Local Agency
Local Case Number:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Benzene, Toluene, Xylene, Diesel, MTBE / TBA / Other Fuel Oxygenates, Gasoline
Site History:	Open - Site Assessment

LUST:

Global Id:	T0609993665
Contact Type:	Regional Board Caseworker
Contact Name:	BENJAMIN LEHMANN
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 Sun Center Drive #200
City:	RANCHO CORDOVA
Email:	benjamin.lehmann@waterboards.ca.gov
Phone Number:	9164644760

LUST:

Global Id:	T0609993665
Action Type:	ENFORCEMENT
Date:	11/28/2005
Action:	Staff Letter

OASIS GAS STATION (Continued) **S104735704**

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 08/17/2009
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 05/11/2007
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 08/06/2009
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 01/23/2015
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 04/20/2004
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 09/12/2003
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 01/30/2004
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 09/16/2002
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 06/13/2003
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 09/04/2002
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 04/04/2000
Action: Notice of Responsibility

Global Id: T0609993665
Action Type: ENFORCEMENT

OASIS GAS STATION (Continued) **S104735704**

Date: 08/07/2003
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 04/21/2010
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 03/11/2015
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 10/06/2010
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 12/20/2010
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 03/01/2000
Action: Unauthorized Release Form

Global Id: T0609993665
Action Type: RESPONSE
Date: 05/01/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 05/30/2017
Action: Technical Correspondence / Assistance / Other

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 01/24/2017
Action: Verbal Communication

Global Id: T0609993665
Action Type: RESPONSE
Date: 11/12/2012
Action: Pilot Study / Treatability Workplan - Regulator Responded

Global Id: T0609993665
Action Type: RESPONSE
Date: 07/08/2013
Action: Tank Removal Workplan - Regulator Responded

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 10/29/2007
Action: Staff Letter

OASIS GAS STATION (Continued) **S104735704**

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 11/01/2016
Action: Email Correspondence

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 10/22/2015
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 01/11/2017
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 05/25/2018
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 12/28/2018
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 10/12/2018
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 02/04/2020
Action: Closure/No Further Action Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 05/29/2019
Action: Staff Letter

Global Id: T0609993665
Action Type: RESPONSE
Date: 03/28/2003
Action: Sensitive Receptor Survey Report

Global Id: T0609993665
Action Type: RESPONSE
Date: 03/02/2015
Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 04/30/2008
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT

OASIS GAS STATION (Continued) **S104735704**

Date: 04/04/2008
Action: File review

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 02/28/2019
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 09/03/2019
Action: Staff Letter

Global Id: T0609993665
Action Type: Other
Date: 03/01/2000
Action: Leak Discovery

Global Id: T0609993665
Action Type: Other
Date: 03/01/2000
Action: Leak Stopped

Global Id: T0609993665
Action Type: RESPONSE
Date: 08/21/2003
Action: Preliminary Site Assessment Workplan

Global Id: T0609993665
Action Type: RESPONSE
Date: 12/06/2006
Action: Site Assessment Report

Global Id: T0609993665
Action Type: RESPONSE
Date: 12/11/2003
Action: Site Assessment Report

Global Id: T0609993665
Action Type: RESPONSE
Date: 02/19/2009
Action: Soil Vapor Intrusion Investigation Workplan

Global Id: T0609993665
Action Type: RESPONSE
Date: 12/21/2018
Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0609993665
Action Type: RESPONSE
Date: 04/05/2019
Action: Request for Closure - Regulator Responded

Global Id: T0609993665
Action Type: RESPONSE
Date: 08/15/2018
Action: Request for Closure - Regulator Responded

OASIS GAS STATION (Continued) **S104735704**

Global Id: T0609993665
Action Type: Other
Date: 03/01/2000
Action: Leak Reported

Global Id: T0609993665
Action Type: RESPONSE
Date: 04/03/2009
Action: CAP/RAP - Feasibility Study Report

Global Id: T0609993665
Action Type: RESPONSE
Date: 04/20/2006
Action: Pilot Study / Treatability Workplan

Global Id: T0609993665
Action Type: RESPONSE
Date: 03/07/2008
Action: Well Installation Workplan

Global Id: T0609993665
Action Type: RESPONSE
Date: 08/27/1999
Action: Other Report / Document

Global Id: T0609993665
Action Type: RESPONSE
Date: 03/22/2004
Action: Soil and Water Investigation Workplan

Global Id: T0609993665
Action Type: RESPONSE
Date: 06/27/2007
Action: Well Installation Workplan

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 12/19/2012
Action: Staff Letter

Global Id: T0609993665
Action Type: REMEDIATION
Date: 07/01/2009
Action: Free Product Removal

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 12/23/2008
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 02/03/2009
Action: File review

Global Id: T0609993665
Action Type: ENFORCEMENT

OASIS GAS STATION (Continued) **S104735704**

Date: 04/24/2009
Action: Staff Letter

Global Id: T0609993665
Action Type: RESPONSE
Date: 07/30/2016
Action: Monitoring Report - Semi-Annually

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 11/09/2010
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 03/13/2009
Action: Staff Letter

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 12/13/2013
Action: Technical Correspondence / Assistance / Other

Global Id: T0609993665
Action Type: ENFORCEMENT
Date: 03/10/2014
Action: Staff Letter

LUST:
Global Id: T0609993665
Status: Open - Case Begin Date
Status Date: 08/27/1999

Global Id: T0609993665
Status: Open - Site Assessment
Status Date: 08/27/1999

Global Id: T0609993665
Status: Open - Verification Monitoring
Status Date: 08/31/2018

Global Id: T0609993665
Status: Open - Eligible for Closure
Status Date: 09/03/2019

Global Id: T0609993665
Status: Completed - Case Closed
Status Date: 02/04/2020

LUST REG 5:
Name: OASIS GAS STATION
Address: 4601 MAIN
City: DENAIR
Region: 5
Status: Preliminary site assessment workplan submitted

OASIS GAS STATION (Continued) **S104735704**

Case Number: 500498
Case Type: Drinking Water Aquifer affected
Substance: Not reported
Staff Initials: MTS
Lead Agency: Local
Program: LUST
MTBE Code: N/A

CORTESE:

Name:	OASIS GAS STATION
Address:	4601 MAIN
City,State,Zip:	DENAIR, CA 95316
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0609993665
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

CERS:

Name:	OASIS GAS STATION
Address:	4601 MAIN
City,State,Zip:	DENAIR, CA 95316
Site ID:	195258
CERS ID:	T0609993665
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	BENJAMIN LEHMANN - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title:	Not reported
Affiliation Address:	11020 Sun Center Drive #200
Affiliation City:	RANCHO CORDOVA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9164644760

B6 **DENAIR LUMBER CO** **SWEEPS UST** **U001560011**
WSW **4501 MAIN ST** **HIST UST** **N/A**
1/4-1/2 **DENAIR, CA 95316** **HIST CORTESE**
0.489 mi. **HWTS**
2580 ft. **Site 1 of 2 in cluster B**

Relative:
Lower

Actual:
122 ft.

SWEEPS UST:

Name:	DENAIR LUMBER CO.
Address:	4501 MAIN ST
City:	DENAIR
Status:	Not reported
Comp Number:	4497
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	50-000-004497-000001
Tank Status:	Not reported
Capacity:	350
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	LEADED
Number Of Tanks:	1

HIST UST:

Name:	DENAIR LUMBER CO
Address:	4501 MAIN ST
City,State,Zip:	DENAIR, CA 95316
File Number:	00021DBA
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00021DBA.pdf
Region:	STATE
Facility ID:	00000004497
Facility Type:	Other
Other Type:	LUMBER YARD
Contact Name:	BRIAN KELLEY
Telephone:	2096322494
Owner Name:	DENAIR LUMBER CO.
Owner Address:	4501 MAIN ST
Owner City,St,Zip:	DENAIR, CA 95316
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000350
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

HIST CORTESE:

edr_fname:	DENAIR LUMBER
edr_fadd1:	4501 MAIN

DENAIR LUMBER CO (Continued) **U001560011**

City,State,Zip: DENAIR, CA 95316
Region: CORTESE
Facility County Code: 50
Reg By: LTNKA
Reg Id: 500097

HWTS:
Name: DENAIR LUMBER CO
Address: 4501 MAIN ST
Address 2: Not reported
City,State,Zip: DENAIR, CA 953169547
EPA ID: CAL000315389
Inactive Date: Not reported
Create Date: 01/16/2007
Last Act Date: 12/08/2020
Mailing Name: Not reported
Mailing Address: PO BOX 248
Mailing Address 2: 4501 MAIN ST
Mailing City,State,Zip: DENAIR, CA 95316
Owner Name: DENAIR LUMBER CO A CORP
Owner Address: 4501 MAIN ST
Owner Address 2: PO BOX 248
Owner City,State,Zip: DENAIR, CA 953169547
Contact Name: DARIN KELLEY
Contact Address: PO BOX 248
Contact Address 2: 4501 MAIN ST
City,State,Zip: DENAIR, CA 95316

NAICS:
EPA ID: CAL000315389
Create Date: 2007-01-16 08:40:44.147
NAICS Code: 811111
NAICS Description: General Automotive Repair
Issued EPA ID Date: 2007-01-16 08:40:44.08300
Inactive Date: Not reported
Facility Name: DENAIR LUMBER CO
Facility Address: 4501 MAIN ST
Facility Address 2: Not reported
Facility City: DENAIR
Facility County: Not reported
Facility State: CA
Facility Zip: 953169547

B7 **DENAIR LUMBER CO** **LUST** **S105032740**
WSW **4501 MAIN** **Cortese** **N/A**
1/4-1/2 **DENAIR, CA 95316**
0.489 mi.
2580 ft. **Site 2 of 2 in cluster B**

Relative: **Lower**
Actual: **122 ft.**

LUST:
Name: DENAIR LUMBER CO
Address: 4501 MAIN
City,State,Zip: DENAIR, CA 95316
Lead Agency: STANISLAUS COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609900082
Global Id: T0609900082

DENAIR LUMBER CO (Continued) **S105032740**

Latitude:	37.5289041
Longitude:	-120.7996159
Status:	Completed - Case Closed
Status Date:	12/17/1998
Case Worker:	ND
RB Case Number:	500097
Local Agency:	STANISLAUS COUNTY
File Location:	Not reported
Local Case Number:	77
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0609900082
Contact Type:	Local Agency Caseworker
Contact Name:	NICOLE DAMIN
Organization Name:	STANISLAUS COUNTY
Address:	3800 CORNUCOPIA WAY STE# C
City:	MODESTO
Email:	ndamin@envres.org
Phone Number:	Not reported

Global Id:	T0609900082
Contact Type:	Regional Board Caseworker
Contact Name:	VERA J. FISCHER
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	vera.fischer@waterboards.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0609900082
Action Type:	ENFORCEMENT
Date:	06/23/1988
Action:	Notice of Responsibility

Global Id:	T0609900082
Action Type:	Other
Date:	03/30/1988
Action:	Leak Reported

Global Id:	T0609900082
Action Type:	REMEDIATION
Date:	08/28/1991
Action:	Pump & Treat (P&T) Groundwater

Global Id:	T0609900082
Action Type:	REMEDIATION
Date:	08/28/1991
Action:	Soil Vapor Extraction (SVE)

LUST:

Global Id:	T0609900082
Status:	Open - Case Begin Date
Status Date:	03/30/1988

DENAIR LUMBER CO (Continued) **S105032740**

Global Id: T0609900082
Status: Completed - Case Closed
Status Date: 12/17/1998

LUST REG 5:
Name: DENAIR LUMBER CO
Address: 4501 MAIN
City: DENAIR
Region: 5
Status: Case Closed
Case Number: 500097
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: MTS
Lead Agency: Local
Program: LUST
MTBE Code: N/A

CORTESE:
Name: DENAIR LUMBER CO
Address: 4501 MAIN
City,State,Zip: DENAIR, CA 95316
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0609900082
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

8
WSW
1/2-1
0.882 mi.
4658 ft.

LESTER ROAD/ZEERING ROAD **ENVIROSTOR** **S107736607**
SOUTHWESTERN CORNER OF ZEERING & LESTER ROADS **SCH** **N/A**
DENAIR, CA 95316

Relative:
Lower

Actual:
123 ft.

ENVIROSTOR:
Name: LESTER ROAD/ZEERING ROAD
Address: SOUTHWESTERN CORNER OF ZEERING & LESTER ROADS
City,State,Zip: DENAIR, CA 95316
Facility ID: 60000252
Status: No Further Action

LESTER ROAD/ZEERING ROAD (Continued) **S107736607**

Status Date: 07/17/2007
Site Code: 104530
Site Type: School Investigation
Site Type Detailed: School
Acres: 13.5
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Mark Malinowski
Division Branch: Northern California Schools & Santa Susana
Assembly: 12
Senate: 08
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 37.52552
Longitude: -120.8047
APN: 024012026000
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Arsenic Chlordane DDD DDE DDT Endrin Lead Polychlorinated biphenyls (PCBs Polynuclear aromatic hydrocarbons (PAHs TPH-MOTOR OIL
Confirmed COC: 30001-NO 30004-NO 30006-NO 30007-NO 30008-NO 30010-NO 30013-NO No Contaminants found 30019-NO 3002502-NO 30018-NO
Potential Description: SED, SOIL
Alias Name: 024012026000
Alias Type: APN
Alias Name: 104530
Alias Type: Project Code (Site Code)
Alias Name: 60000252
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 11/15/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 08/08/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 11/20/2007
Comments: DTSC issued a CRU Memo to Accounting to close-out the project.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 04/03/2006
Comments: DTSC approved the Phase I and issued a PEA required determination. PM sent the District rep and consultants an e-mail regarding moving

LESTER ROAD/ZEERING ROAD (Continued) **S107736607**

forward with the PEA for this site.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	11/08/2006
Comments:	DTSC approved the PEA WP.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	07/17/2007
Comments:	DTSC approved the PEA report with a no further action determination.

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Name:	LESTER ROAD/ZEERING ROAD
Address:	SOUTHWESTERN CORNER OF ZEERING & LESTER ROADS
City,State,Zip:	DENAIR, CA 95316
Facility ID:	60000252
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	13.5
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Site Code:	104530
Assembly:	12
Senate:	08
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	07/17/2007
Restricted Use:	NO
Funding:	School District
Latitude:	37.52552
Longitude:	-120.8047
APN:	024012026000
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Arsenic, Arsenic, Chlordane, DDD, DDE, DDT, Endrin, Lead, Polychlorinated biphenyls (PCBs, Polynuclear aromatic hydrocarbons (PAHs, TPH-MOTOR OIL
Confirmed COC:	30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO, 30010-NO,

LESTER ROAD/ZEERING ROAD (Continued) **S107736607**

30013-NO, No Contaminants found, 30019-NO, 3002502-NO, 30018-NO
Potential Description: SED, SOIL
Alias Name: 024012026000
Alias Type: APN
Alias Name: 104530
Alias Type: Project Code (Site Code)
Alias Name: 60000252
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 11/15/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 08/08/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 11/20/2007
Comments: DTSC issued a CRU Memo to Accounting to close-out the project.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 04/03/2006
Comments: DTSC approved the Phase I and issued a PEA required determination. PM sent the District rep and consultants an e-mail regarding moving forward with the PEA for this site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 11/08/2006
Comments: DTSC approved the PEA WP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/17/2007
Comments: DTSC approved the PEA report with a no further action determination.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

9
WSW
1/2-1
0.998 mi.
5271 ft.

ADDITION TO LESTER/ZEERING ROAD SITE
LESTER ROAD/MONTE VISTA ROAD
DENAIR, CA 95316

ENVIROSTOR SCH | **S118757156 N/A**

Relative:
Lower

Actual:
122 ft.

ENVIROSTOR:

Name:	ADDITION TO LESTER/ZEERING ROAD SITE
Address:	LESTER ROAD/MONTE VISTA ROAD
City,State,Zip:	DENAIR, CA 95316
Facility ID:	60000721
Status:	No Action Required
Status Date:	04/23/2008
Site Code:	104597
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	6
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Assembly:	12
Senate:	08
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	37.52555
Longitude:	-120.8069
APN:	024012026000
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Polychlorinated biphenyls (PCBs
Confirmed COC:	30018-NO No Contaminants found
Potential Description:	SOIL
Alias Name:	024012026000
Alias Type:	APN
Alias Name:	104597
Alias Type:	Project Code (Site Code)
Alias Name:	60000721
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	10/31/2007
Comments:	DTSC approved the Phase I with an Adddendum required determination for PCB sampling beneath pole-mounted transformers.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1 Addendum
Completed Date:	04/23/2008
Comments:	DTSC completed the Phase I Addendum review. PCB results were non-detect at concentrations below the CHHSL. DTSC approved the Phase I addendum with a no action determination.
Completed Area Name:	PROJECT WIDE

ADDITION TO LESTER/ZEERING ROAD SITE (Continued) **S118757156**

Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	05/07/2008
Comments:	Completed E-stor review and CRU to close-out project.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Name:	ADDITION TO LESTER/ZEERING ROAD SITE
Address:	LESTER ROAD/MONTE VISTA ROAD
City,State,Zip:	DENAIR, CA 95316
Facility ID:	60000721
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	6
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Site Code:	104597
Assembly:	12
Senate:	08
Special Program Status:	Not reported
Status:	No Action Required
Status Date:	04/23/2008
Restricted Use:	NO
Funding:	School District
Latitude:	37.52555
Longitude:	-120.8069
APN:	024012026000
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Polychlorinated biphenyls (PCBs
Confirmed COC:	30018-NO, No Contaminants found
Potential Description:	SOIL
Alias Name:	024012026000
Alias Type:	APN
Alias Name:	104597
Alias Type:	Project Code (Site Code)
Alias Name:	60000721
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

ADDITION TO LESTER/ZEERING ROAD SITE (Continued) **S118757156**

Completed Document Type:	Phase 1
Completed Date:	10/31/2007
Comments:	DTSC approved the Phase I with an Adddendum required determination for PCB sampling beneath pole-mounted transformers.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1 Addendum
Completed Date:	04/23/2008
Comments:	DTSC completed the Phase I Addendum review. PCB results were non-detect at concentrations below the CHHSL. DTSC approved the Phase I addendum with a no action determination.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	05/07/2008
Comments:	Completed E-stor review and CRU to close-out project.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Count: 4 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
DENAIR	S107541262		ZEERING RD (1/4 MI W OF LESTER	95316	CDL
TURLOCK	S107535234		6000 BLOCK OF ZEERING, BLOCK F		CDL
TURLOCK	S106842934	TURLOCK PCE INVESTIGATION	MAIN E. & OLIVE STS & WEST MAI		CPS-SLIC
TURLOCK	S107541263		ZEERING RD EAST OF SAITH HOME		CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 03/30/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 35
Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 5
Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 5
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 5
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 39

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/08/2021
Next Scheduled EDR Contact: 05/24/2021
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/18/2020
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/23/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/18/2020
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/23/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/15/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 7

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/15/2020
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/26/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/26/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/09/2020
Date Data Arrived at EDR: 11/10/2020
Date Made Active in Reports: 01/14/2021
Number of Days to Update: 65

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/09/2021
Next Scheduled EDR Contact: 05/24/2021
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29
Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/30/2020
Date Data Arrived at EDR: 12/22/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/02/2020
Date Data Arrived at EDR: 12/18/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 84

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/05/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 04/01/2021
Number of Days to Update: 23
Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86
Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/02/2020
Date Data Arrived at EDR: 12/18/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 84
Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 12/15/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/30/2020
Date Data Arrived at EDR: 12/22/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/22/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/26/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/09/2021
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/11/2020
Date Data Arrived at EDR: 12/11/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/16/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/23/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/08/2021
Next Scheduled EDR Contact: 05/24/2021
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/29/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/26/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78
Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/08/2020
Date Made Active in Reports: 02/22/2021
Number of Days to Update: 76
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 11/05/2020
Date Data Arrived at EDR: 11/06/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 81

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 11/24/2020
Date Data Arrived at EDR: 11/30/2020
Date Made Active in Reports: 02/10/2021
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/12/2021
Number of Days to Update: 73
Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/03/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/16/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 85
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/24/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78
Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 47

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/17/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/09/2021
Next Scheduled EDR Contact: 05/24/2021
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 85
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/02/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/05/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/02/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 60
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 35
Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/02/2020
Date Data Arrived at EDR: 11/12/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 74
Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35
Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/05/2021
Number of Days to Update: 50
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 03/11/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/19/2020
Date Data Arrived at EDR: 01/08/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 73
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/10/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 59
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 70
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/05/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/02/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/05/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/27/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/13/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 68

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 02/02/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/18/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 11/24/2020
Date Data Arrived at EDR: 11/30/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 56

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 03/01/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 63

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/24/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/11/2020
Date Data Arrived at EDR: 12/11/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 81

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/10/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 33

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/03/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/02/2021
Date Data Arrived at EDR: 01/08/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 73
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/17/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/17/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/17/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/09/2021
Number of Days to Update: 82
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/12/2021
Next Scheduled EDR Contact: 05/24/2021
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 11/23/2020
Date Data Arrived at EDR: 11/24/2020
Date Made Active in Reports: 02/10/2021
Number of Days to Update: 78

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/17/2020
Date Data Arrived at EDR: 11/18/2020
Date Made Active in Reports: 02/04/2021
Number of Days to Update: 78

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 11/23/2020
Date Data Arrived at EDR: 11/25/2020
Date Made Active in Reports: 02/10/2021
Number of Days to Update: 77

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/09/2021
Number of Days to Update: 79

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 11/13/2020
Date Made Active in Reports: 01/29/2021
Number of Days to Update: 77
Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/08/2021
Next Scheduled EDR Contact: 05/24/2021
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78
Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/13/2020
Date Data Arrived at EDR: 11/13/2020
Date Made Active in Reports: 02/01/2021
Number of Days to Update: 80
Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/17/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/13/2020
Date Data Arrived at EDR: 11/13/2020
Date Made Active in Reports: 02/01/2021
Number of Days to Update: 80
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/17/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/05/2021
Date Data Arrived at EDR: 01/05/2021
Date Made Active in Reports: 03/18/2021
Number of Days to Update: 72
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 10/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/12/2021
Number of Days to Update: 73
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/03/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/09/2020
Date Data Arrived at EDR: 11/10/2020
Date Made Active in Reports: 01/27/2021
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/09/2021
Next Scheduled EDR Contact: 05/24/2021
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/12/2021
Number of Days to Update: 73
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/03/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 12/10/2020
Number of Days to Update: 1
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 62
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/12/2021
Number of Days to Update: 73

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 03/03/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/08/2021
Date Data Arrived at EDR: 04/09/2021
Date Made Active in Reports: 04/20/2021
Number of Days to Update: 11

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 03/17/2021
Date Data Arrived at EDR: 03/18/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 7

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/17/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 10/19/2020
Date Data Arrived at EDR: 10/22/2020
Date Made Active in Reports: 01/12/2021
Number of Days to Update: 82

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/15/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 12/24/2020
Number of Days to Update: 8

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 80

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 01/28/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/22/2020
Date Data Arrived at EDR: 11/03/2020
Date Made Active in Reports: 01/20/2021
Number of Days to Update: 78

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 02/08/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/14/2021
Date Data Arrived at EDR: 01/15/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 80

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/18/2020
Date Data Arrived at EDR: 11/19/2020
Date Made Active in Reports: 02/04/2021
Number of Days to Update: 77

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 10/29/2020
Date Data Arrived at EDR: 10/30/2020
Date Made Active in Reports: 01/15/2021
Number of Days to Update: 77

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 01/28/2021
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 02/10/2021
Date Data Arrived at EDR: 02/12/2021
Date Made Active in Reports: 03/11/2021
Number of Days to Update: 27

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/11/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 72

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/11/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/26/2021
Number of Days to Update: 73

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/13/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 42

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 10/19/2020
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/26/2021
Number of Days to Update: 73

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 09/11/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 77

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/19/2021
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/21/2020
Date Data Arrived at EDR: 12/21/2020
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 79

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/04/2021
Date Data Arrived at EDR: 02/09/2021
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 9

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 01/29/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 11/16/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/22/2021
Next Scheduled EDR Contact: 06/06/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 01/08/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 72

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/26/2020
Date Data Arrived at EDR: 10/28/2020
Date Made Active in Reports: 01/15/2021
Number of Days to Update: 79

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 09/01/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 09/01/2020
Date Data Arrived at EDR: 11/06/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 81

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/05/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/02/2021
Date Made Active in Reports: 04/20/2021
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/02/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 11/24/2020
Date Data Arrived at EDR: 11/24/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 1

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/15/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/15/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 10/30/2020
Date Made Active in Reports: 01/15/2021
Number of Days to Update: 77

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/16/2020
Date Data Arrived at EDR: 11/18/2020
Date Made Active in Reports: 02/04/2021
Number of Days to Update: 78

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/16/2021
Number of Days to Update: 77

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/03/2021
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 11/05/2020
Date Data Arrived at EDR: 11/06/2020
Date Made Active in Reports: 01/27/2021
Number of Days to Update: 82

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/05/2020
Date Data Arrived at EDR: 11/06/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 81

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 11/13/2020
Date Made Active in Reports: 02/01/2021
Number of Days to Update: 80

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/08/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 11/20/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/05/2021
Number of Days to Update: 74

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/22/2021
Next Scheduled EDR Contact: 06/06/2021
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/16/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 12/03/2020
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 77

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 12/15/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 7

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/05/2021
Date Data Arrived at EDR: 01/06/2021
Date Made Active in Reports: 03/18/2021
Number of Days to Update: 71

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 10/06/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 77

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 11/23/2020
Date Data Arrived at EDR: 11/24/2020
Date Made Active in Reports: 02/10/2021
Number of Days to Update: 78

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/26/2021
Next Scheduled EDR Contact: 06/14/2021
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/30/2020
Date Data Arrived at EDR: 11/03/2020
Date Made Active in Reports: 01/20/2021
Number of Days to Update: 78

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 02/01/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/28/2020
Date Data Arrived at EDR: 10/22/2020
Date Made Active in Reports: 01/12/2021
Number of Days to Update: 82

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/08/2021
Next Scheduled EDR Contact: 05/24/2021
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/28/2020
Date Data Arrived at EDR: 10/22/2020
Date Made Active in Reports: 01/12/2021
Number of Days to Update: 82

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/21/2020
Date Data Arrived at EDR: 12/23/2020
Date Made Active in Reports: 01/04/2021
Number of Days to Update: 12

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/26/2021
Date Data Arrived at EDR: 01/28/2021
Date Made Active in Reports: 02/03/2021
Number of Days to Update: 6

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 02/23/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 10/20/2020
Date Made Active in Reports: 11/02/2020
Number of Days to Update: 13

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/12/2021
Next Scheduled EDR Contact: 05/24/2021
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/29/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 02/24/2021
Number of Days to Update: 13

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/09/2021
Next Scheduled EDR Contact: 05/31/2021
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/08/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PROPOSED RESIDENTIAL PROPERTY
EAST ZEERING ROAD
DENAIR, CA 95316

TARGET PROPERTY COORDINATES

Latitude (North):	37.530752 - 37° 31' 50.71''
Longitude (West):	120.788054 - 120° 47' 16.99''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	695451.3
UTM Y (Meters):	4155847.5
Elevation:	127 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5639976 DENAIR, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

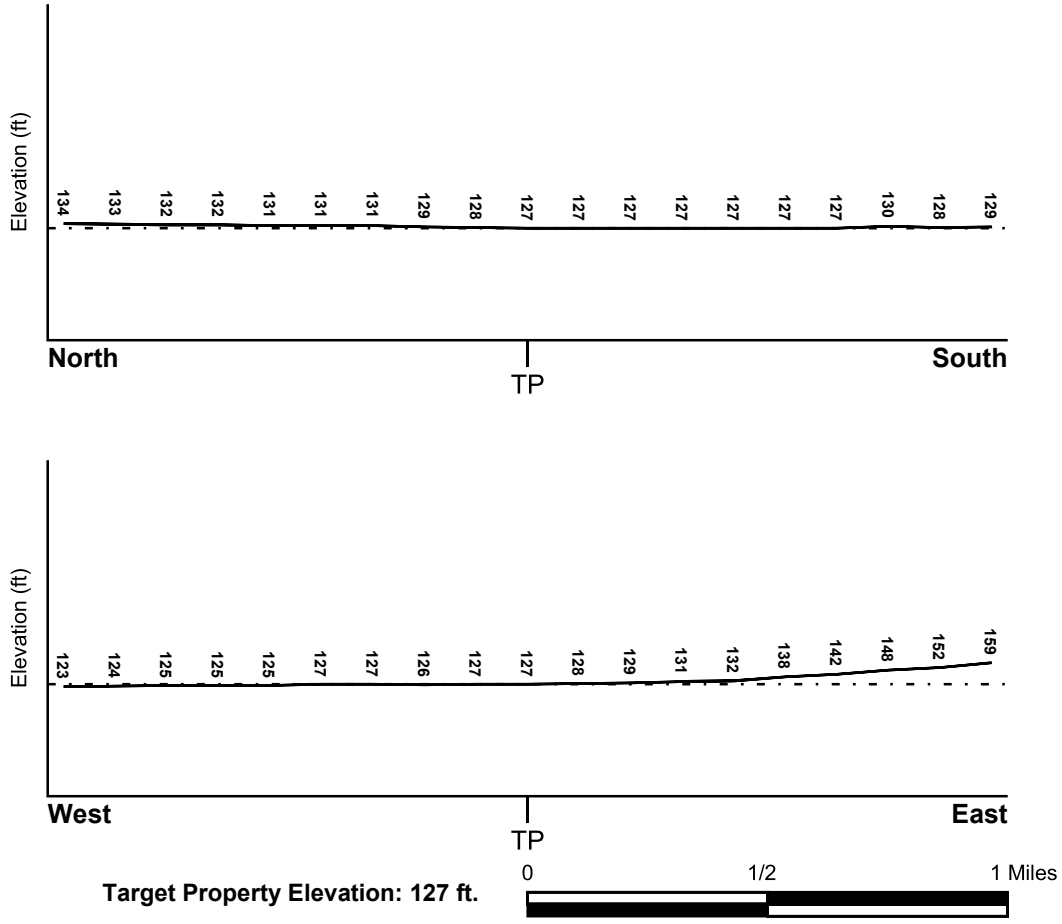
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06099C0600E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
Not Reported	

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
DENAIR	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

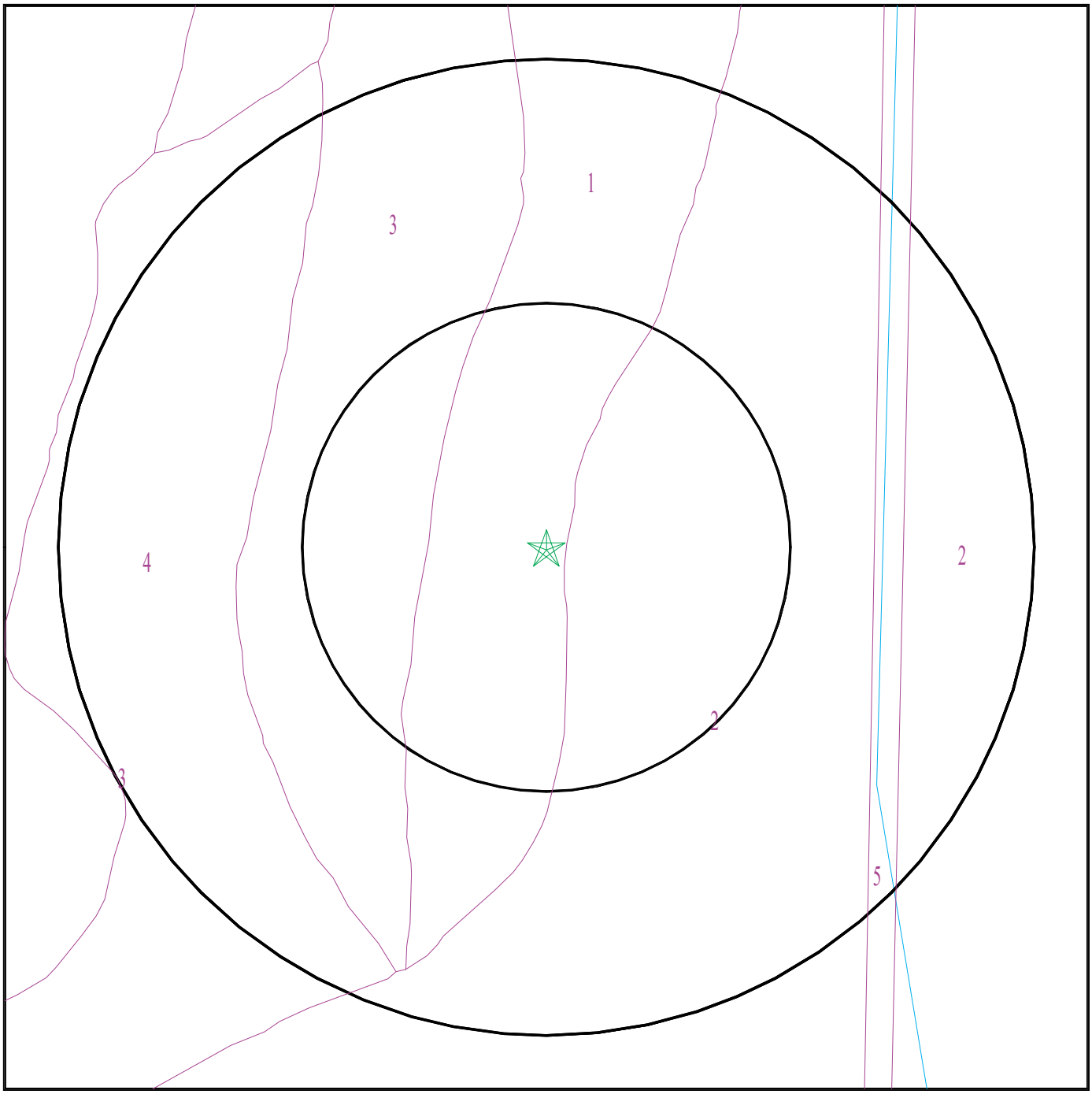
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6460076.2s



SITE NAME:	Proposed Residential Property	CLIENT:	Krazan & Associates, Inc.
ADDRESS:	East Zeering Road Denair CA 95316	CONTACT: INQUIRY #:	William Vick 6460076.2s
LAT/LONG:	37.530752 / 120.788054	DATE:	April 21, 2021 1:31 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Greenfield

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
2	20 inches	40 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
3	40 inches	59 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:

Soil Map ID: 2

Soil Component Name: Madera

Soil Surface Texture: sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
2	9 inches	18 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
3	18 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
4	29 inches	35 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
5	35 inches	59 inches	stratified coarse sandy loam to clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: Hanford

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
2	11 inches	59 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1

Soil Map ID: 4

Soil Component Name: Dinuba

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
2	9 inches	29 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
3	29 inches	59 inches	stratified very fine sand to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9

Soil Map ID: 5

Soil Component Name: Water

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
6	USGS40000183601	1/4 - 1/2 Mile NW
B10	USGS40000183579	1/4 - 1/2 Mile SSE
C18	USGS40000183620	1/4 - 1/2 Mile NNE
G38	USGS40000183660	1/2 - 1 Mile NNW
F43	USGS40000183664	1/2 - 1 Mile NNW
F44	USGS40000183665	1/2 - 1 Mile NNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E26	CA5000129	1/2 - 1 Mile WSW

Note: PWS System location is not always the same as well location.

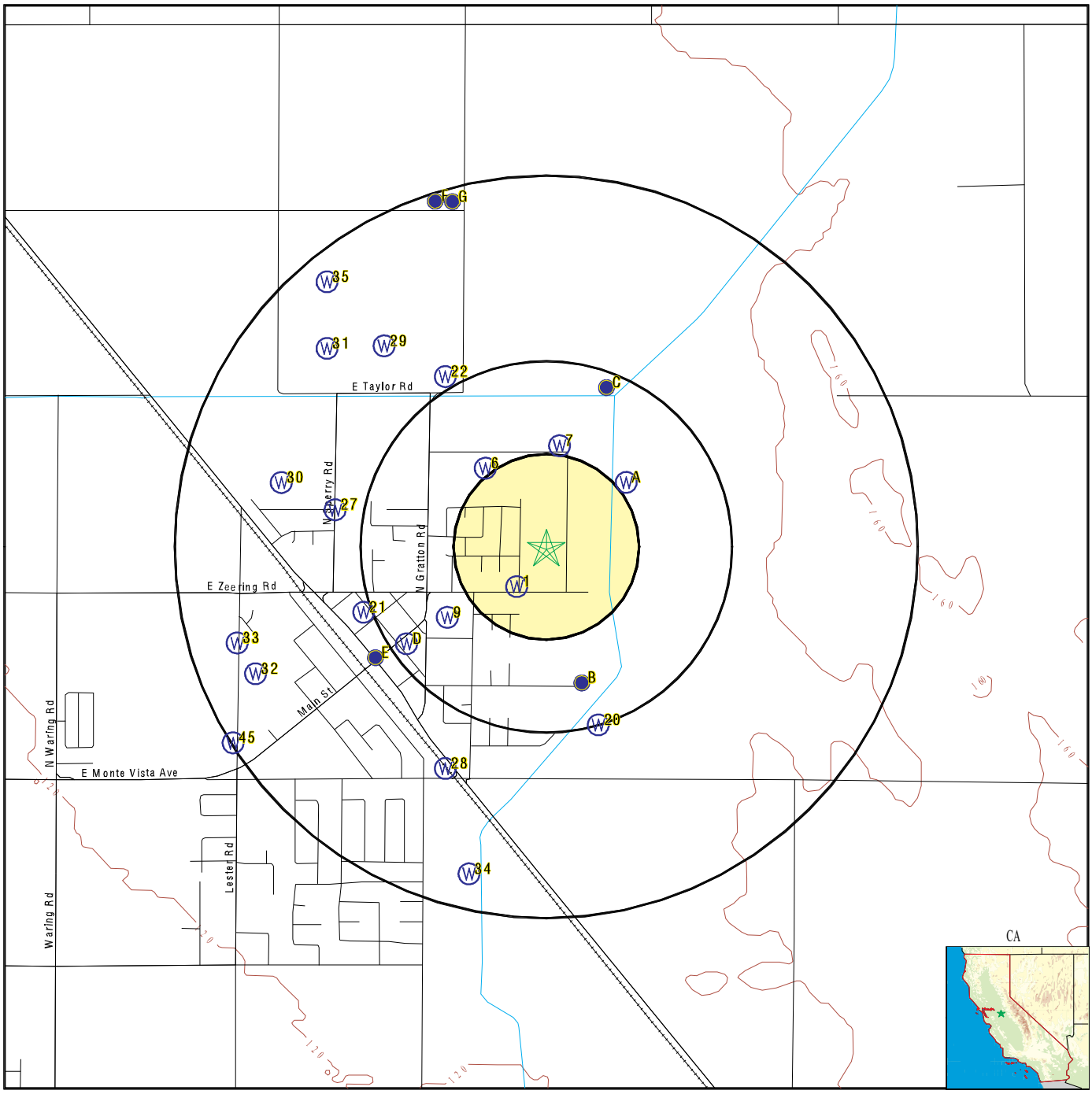
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CADDW0000002869	1/8 - 1/4 Mile SW
A2	6297	1/4 - 1/2 Mile NE
A3	6298	1/4 - 1/2 Mile NE
A4	6296	1/4 - 1/2 Mile NE
A5	6294	1/4 - 1/2 Mile NE
7	CAEDF0000019228	1/4 - 1/2 Mile North
A8	CADDW0000002140	1/4 - 1/2 Mile NE
9	CADDW0000006308	1/4 - 1/2 Mile SW
B11	CAUSGSN00006832	1/4 - 1/2 Mile SSE
C12	CADWR8000035026	1/4 - 1/2 Mile NNE
D13	CAEDF0000077839	1/4 - 1/2 Mile SW
D14	CAEDF0000002707	1/4 - 1/2 Mile SW
D15	CAEDF0000086227	1/4 - 1/2 Mile SW
D16	CAEDF0000006641	1/4 - 1/2 Mile SW
D17	CAEDF0000097515	1/4 - 1/2 Mile SW

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
D19	CAEDF0000122483	1/4 - 1/2 Mile SW
20	CAEDF0000024816	1/4 - 1/2 Mile SSE
21	CADWR8000034981	1/2 - 1 Mile WSW
22	CADWR8000035029	1/2 - 1 Mile NNW
E23	CAEDF0000057955	1/2 - 1 Mile WSW
E24	CAEDF0000055637	1/2 - 1 Mile WSW
E25	CAEDF0000023797	1/2 - 1 Mile WSW
27	CAEDF0000030728	1/2 - 1 Mile West
28	CADWR8000034950	1/2 - 1 Mile SSW
29	CAEDF0000002021	1/2 - 1 Mile NW
30	6299	1/2 - 1 Mile WNW
31	CAEDF0000021022	1/2 - 1 Mile NW
32	CADPR0000000104	1/2 - 1 Mile WSW
33	CADDW0000021205	1/2 - 1 Mile WSW
34	6295	1/2 - 1 Mile SSW
35	CAEDF0000001252	1/2 - 1 Mile NW
F36	CADWR8000035055	1/2 - 1 Mile NNW
G37	CAUSGSN00016597	1/2 - 1 Mile NNW
F39	CAUSGS000002675	1/2 - 1 Mile NNW
F40	CAUSGSN00008636	1/2 - 1 Mile NNW
F41	CAUSGSN00006263	1/2 - 1 Mile NNW
F42	CAUSGS000000608	1/2 - 1 Mile NNW
45	CADDW0000015503	1/2 - 1 Mile WSW

PHYSICAL SETTING SOURCE MAP - 6460076.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Proposed Residential Property ADDRESS: East Zeering Road Denair CA 95316 LAT/LONG: 37.530752 / 120.788054	CLIENT: Krazan & Associates, Inc. CONTACT: William Vick INQUIRY #: 6460076.2s DATE: April 21, 2021 1:31 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
SW
1/8 - 1/4 Mile
Higher

CA WELLS **CADDW0000002869**

Well ID:	5010021-008	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 08	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5010021-008&store_num=		
GeoTracker Data:	Not Reported		

A2
NE
1/4 - 1/2 Mile
Higher

CA WELLS **6297**

Seq:	6297	Prim sta c:	05S/11E-05K03 M
Frds no:	5010021006	County:	50
District:	10	User id:	PTA
System no:	5010021	Water type:	G
Source nam:	WELL 06 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	373200.0	Longitude:	1204700.0
Precision:	8	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5010021	System nam:	Denair Csd
Hqname:	Not Reported	Address:	PO BOX 217 (3850 N GRATTON RD)
City:	DENAIR	State:	Not Reported
Zip:	95316	Zip ext:	Not Reported
Pop serv:	2800	Connection:	1218
Area serve:	DENAIR		

A3
NE
1/4 - 1/2 Mile
Higher

CA WELLS **6298**

Seq:	6298	Prim sta c:	05S/11E-05M01 M
Frds no:	5010021001	County:	50
District:	10	User id:	PTA
System no:	5010021	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	373200.0	Longitude:	1204700.0
Precision:	8	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5010021	System nam:	Denair Csd
Hqname:	Not Reported	Address:	PO BOX 217 (3850 N GRATTON RD)
City:	DENAIR	State:	Not Reported
Zip:	95316	Zip ext:	Not Reported

Pop serv:	2800	Connection:	1218
Area serve:	DENAIR		

A4
NE
1/4 - 1/2 Mile
Higher

CA WELLS **6296**

Seq:	6296	Prim sta c:	05S/11E-05K02 M
Frds no:	5010021005	County:	50
District:	10	User id:	PTA
System no:	5010021	Water type:	G
Source nam:	WELL 05 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	373200.0	Longitude:	1204700.0
Precision:	8	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5010021	System nam:	Denair Csd
Hqname:	Not Reported	Address:	PO BOX 217 (3850 N GRATTON RD)
City:	DENAIR	State:	Not Reported
Zip:	95316	Zip ext:	Not Reported
Pop serv:	2800	Connection:	1218
Area serve:	DENAIR		

A5
NE
1/4 - 1/2 Mile
Higher

CA WELLS **6294**

Seq:	6294	Prim sta c:	05S/11E-05D01 M
Frds no:	5010021004	County:	50
District:	10	User id:	PTA
System no:	5010021	Water type:	G
Source nam:	WELL 04 - ABANDONED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	373200.0	Longitude:	1204700.0
Precision:	8	Status:	AB
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5010021	System nam:	Denair Csd
Hqname:	Not Reported	Address:	PO BOX 217 (3850 N GRATTON RD)
City:	DENAIR	State:	Not Reported
Zip:	95316	Zip ext:	Not Reported
Pop serv:	2800	Connection:	1218
Area serve:	DENAIR		

6
NW
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000183601**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S011E05D001M	Type:	Well

Description:	Not Reported	HUC:	18040005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19670101	Well Depth:	300
Well Depth Units:	ft	Well Hole Depth:	300
Well Hole Depth Units:	ft		

7
North **CA WELLS** **CAEDF0000019228**
1/4 - 1/2 Mile
Higher

Well ID:	AGW080010492-DALY1 HOME	Well Type:	MONITORING
Source:	Agricultural Lands	Other Name:	DALY1 HOME
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=AGLAND&samp_date=&global_id=AGW080010492&assigned_name=DALY1 HOME&store_num=		
GeoTracker Data:	Not Reported		

A8
NE **CA WELLS** **CADDW0000002140**
1/4 - 1/2 Mile
Higher

Well ID:	5010021-004	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 04 - DESTROYED XCLD		
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5010021-004&store_num=		
GeoTracker Data:	Not Reported		

9
SW **CA WELLS** **CADDW0000006308**
1/4 - 1/2 Mile
Lower

Well ID:	5010021-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01 - DESTROYED XCLD		
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5010021-001&store_num=		
GeoTracker Data:	Not Reported		

B10
SSE **FED USGS** **USGS40000183579**
1/4 - 1/2 Mile
Higher

Organization ID:	USGS-CA
Organization Name:	USGS California Water Science Center

Monitor Location:	005S011E05L001M	Type:	Well
Description:	Not Reported	HUC:	18040002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19841030	Well Depth:	115
Well Depth Units:	ft	Well Hole Depth:	143
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1987-05-20
Feet below surface:	62.78	Feet to sea level:	Not Reported
Note:	The site had been pumped recently.		
Level reading date:	1984-10-30	Feet below surface:	45
Feet to sea level:	Not Reported	Note:	Not Reported

B11
SSE
1/4 - 1/2 Mile
Higher

CA WELLS **CAUSGSN00006832**

Well ID:	USGS-373132120470701	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-373132120470701	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-373132120470701&store_num=		
GeoTracker Data:	Not Reported		

C12
NNE
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR8000035026**

State Well #:	04S11E32P001M	Station ID:	5403
Well Name:	TID 189	Well Use:	Other
Well Type:	Single Well	Well Depth:	266
Basin Name:	Turlock	Well Completion Rpt #:	Not Reported

D13
SW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000077839**

Well ID:	T0609900378-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609900378&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609900378&assigned_name=MW-5		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

D14
SW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000002707**

Well ID:	T0609900378-MW-104	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-104
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609900378&assigned_name=MW-104&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609900378&assigned_name=MW-104		

D15
SW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000086227**

Well ID:	T0609900378-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609900378&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609900378&assigned_name=MW-4		

D16
SW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000006641**

Well ID:	T0609900378-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609900378&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609900378&assigned_name=MW-3		

D17
SW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000097515**

Well ID:	T0609900378-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609900378&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609900378&assigned_name=MW-1		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C18
NNE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000183620**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	004S011E32P001M	Type:	Well
Description:	Not Reported	HUC:	18040005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19510101	Well Depth:	168
Well Depth Units:	ft	Well Hole Depth:	226
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1971-01-01
Feet below surface:	28.00	Feet to sea level:	Not Reported
Note:	Not Reported		

D19
SW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000122483**

Well ID:	T0609900378-MW-2
Well Type:	MONITORING
Source:	EDF
Other Name:	MW-2
GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609900378&assigned_name=MW-2&store_num=
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609900378&assigned_name=MW-2

20
SSE
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000024816**

Well ID:	AGW080010958-NEWN
Well Type:	MONITORING
Source:	Agricultural Lands
Other Name:	NEWN
GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=AGLAND&samp_date=&global_id=AGW080010958&assigned_name=NEWN&store_num=
GeoTracker Data:	Not Reported

21
WSW
1/2 - 1 Mile
Lower

CA WELLS **CADWR8000034981**

State Well #:	05S11E06J002M	Station ID:	5667
Well Name:	157	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0

Basin Name:	Turlock	Well Completion Rpt #:	Not Reported

22
NNW
1/2 - 1 Mile
Higher

CA WELLS **CADWR8000035029**

State Well #:	04S11E31R001M	Station ID:	5402
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Turlock	Well Completion Rpt #:	Not Reported

E23
WSW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000057955**

Well ID:	T0609993665-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609993665&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609993665&assigned_name=MW-1		

E24
WSW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000055637**

Well ID:	T0609993665-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609993665&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609993665&assigned_name=MW-2		

E25
WSW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000023797**

Well ID:	T0609993665-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609993665&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609993665&assigned_name=MW-3		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E26
WSW
1/2 - 1 Mile
Lower

FRDS PWS **CA5000129**

Epa region:	09	State:	CA
Pwsid:	CA5000129	Pwsname:	EL REMATITO MARKETPLACE
Cityserved:	Not Reported	Stateserved:	CA
Zipserved:	Not Reported	Fipscounty:	06099
Status:	Active	Retpopsrvd:	100
Pwssvcconn:	1	Psource longname:	Groundwater
Pwstype:	TNCWS	Owner:	Private
Contact:	PEDRO MARQUEZ	Contactorgname:	EL REMATITO MARKETPLACE
Contactphone:	2095453362	Contactaddress1:	5507 PRAIRIE FLOWER RD
Contactaddress2:	Not Reported	Contactcity:	CERES
Contactstate:	CA	Contactzip:	95307
Pwsactivitycode:	A		
PWS ID:	CA5000129	PWS type:	System Owner/Responsible Party
PWS name:	NORMAN SHERMAN	PWS address:	Not Reported
PWS city:	DENAIR	PWS state:	CA
PWS zip:	95316	PWS ID:	CA5000129
Activity status:	Active	Date system activated:	7706
Date system deactivated:	Not Reported	Retail population:	00000025
System name:	C & D SWAP MEET	System address:	NORMAN SHERMAN
System address:	3113 CROWS LANDING RD	System city:	MODESTO
System state:	CA	System zip:	95351
Population served:	Under 101 Persons	Treatment:	Untreated
Latitude:	373135	Longitude:	1204744
Violation id:	1280001	Orig code:	S
State:	CA	Violation Year:	2011
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/2011
Cmp edt:	12/31/2011		
Violation ID:	1280001	Orig Code:	S
Enforcemnt FY:	2012	Enforcement Action:	01/23/2012
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		

27
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000030728**

Well ID:	AGW080010904-HOM3	Well Type:	MONITORING
Source:	Agricultural Lands	Other Name:	HOM3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=AGLAND&samp_date=&global_id=AGW080010904&assigned_name=HOM3&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

28
SSW
1/2 - 1 Mile
Higher

CA WELLS **CADWR8000034950**

State Well #:	05S11E05N001M	Station ID:	29015
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Turlock	Well Completion Rpt #:	Not Reported

29
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000002021**

Well ID:	AGW080010401-MENDONCA	Well Type:	MONITORING
Source:	Agricultural Lands	Other Name:	MENDONCA
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=AGLAND&samp_date=&global_id=AGW080010401&assigned_name=MENDONCA&store_num=		
GeoTracker Data:	Not Reported		

30
WNW
1/2 - 1 Mile
Higher

CA WELLS **6299**

Seq:	6299	Prim sta c:	05S/11E-06K01 M
Frds no:	5010021003	County:	50
District:	10	User id:	PTA
System no:	5010021	Water type:	G
Source nam:	WELL 03 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	373200.0	Longitude:	1204800.0
Precision:	8	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5010021	System nam:	Denair Csd
Hqname:	Not Reported	Address:	PO BOX 217 (3850 N GRATTON RD)
City:	DENAIR	State:	Not Reported
Zip:	95316	Zip ext:	Not Reported
Pop serv:	2800	Connection:	1218
Area serve:	DENAIR		

31
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000021022**

Well ID:	AGW080010905-HOM5	Well Type:	MONITORING
Source:	Agricultural Lands	Other Name:	HOM5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=AGLAND&samp_date=&global_id=AGW080010905&assigned_name=HOM5&store_num=		

GeoTracker Data: Not Reported

32
WSW **CA WELLS** **CADPR0000000104**
1/2 - 1 Mile
Lower

Well ID:	96755	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	96755	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=96755&store_num=		
GeoTracker Data:	Not Reported		

33
WSW **CA WELLS** **CADDW0000021205**
1/2 - 1 Mile
Lower

Well ID:	5010021-010	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL PW-10	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5010021-010&store_num=		
GeoTracker Data:	Not Reported		

34
SSW **CA WELLS** **6295**
1/2 - 1 Mile
Lower

Seq:	6295	Prim sta c:	05S/11E-05E01 M
Frds no:	5010021008	County:	50
District:	10	User id:	PTA
System no:	5010021	Water type:	G
Source nam:	WELL 08	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	373105.0	Longitude:	1204727.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5010021	System nam:	Denair Csd
Hqname:	Not Reported	Address:	PO BOX 217 (3850 N GRATTON RD)
City:	DENAIR	State:	Not Reported
Zip:	95316	Zip ext:	Not Reported
Pop serv:	2800	Connection:	1218
Area serve:	DENAIR		

Sample date:	30-MAR-18	Finding:	7.03
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	12-MAR-18	Finding:	3.e-002
Chemical:	DIBROMOCHLOROPROPANE (DBCP)	Report units:	UG/L

Dlr:	1.e-002		
Sample date:	21-AUG-17	Finding:	6.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-MAY-17	Finding:	6.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-MAR-17	Finding:	20.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	355.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	108.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	132.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	7.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-MAR-17	Finding:	105.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	29.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	8.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	23.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	4.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	16.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	22.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	22-MAR-17	Finding:	4.
Chemical:	ARSENIC	Report units:	UG/L
Dlr:	2.		
Sample date:	22-MAR-17	Finding:	116.
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	22-MAR-17	Finding:	46.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	22-MAR-17	Finding:	232.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	0.11
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	22-MAR-17	Finding:	11.59
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	22-MAR-17	Finding:	7.2
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-MAR-17	Finding:	2.e-002
Chemical:	DIBROMOCHLOROPROPANE (DBCP)	Report units:	UG/L
Dlr:	1.e-002		
Sample date:	21-FEB-17	Finding:	6.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	28-NOV-16	Finding:	7.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-AUG-16	Finding:	7.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-AUG-15	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-DEC-14	Finding:	4.4
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	11-AUG-14	Finding:	27.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-JUN-14	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-MAR-14	Finding:	4.5
Chemical:	POTASSIUM	Report units:	MG/L

Dlr:	0.		
Sample date:	03-MAR-14	Finding:	12.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	03-MAR-14	Finding:	15.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	03-MAR-14	Finding:	100.9
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	03-MAR-14	Finding:	213.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	03-MAR-14	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-MAR-14	Finding:	0.15
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	03-MAR-14	Finding:	11.97
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	03-MAR-14	Finding:	6546.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	03-MAR-14	Finding:	24.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	03-MAR-14	Finding:	9.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	03-MAR-14	Finding:	29.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	03-MAR-14	Finding:	109.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	03-MAR-14	Finding:	156.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	03-MAR-14	Finding:	128.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	03-MAR-14	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		

Sample date:	03-MAR-14	Finding:	343.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	03-MAR-14	Finding:	20.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	03-MAR-14	Finding:	3.6
Chemical:	ARSENIC	Report units:	UG/L
Dlr:	2.		
Sample date:	12-DEC-13	Finding:	27.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	01-AUG-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-AUG-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

35
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000001252**

Well ID:	AGW080010906-HOME4	Well Type:	MONITORING
Source:	Agricultural Lands	Other Name:	HOME4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=AGLAND&samp_date=&global_id=AGW080010906&assigned_name=HOME4&store_num=		
GeoTracker Data:	Not Reported		

F36
NNW
1/2 - 1 Mile
Higher

CA WELLS **CADWR8000035055**

State Well #:	04S11E31J001M	Station ID:	5401
Well Name:	TID 81	Well Use:	Irrigation
Well Type:	Single Well	Well Depth:	112
Basin Name:	Turlock	Well Completion Rpt #:	Not Reported

G37
NNW
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00016597**

Well ID:	USGS-373239120473001	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-373239120473001	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-373239120473001&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G38
NNW
1/2 - 1 Mile
Higher | **FED USGS** | **USGS40000183660**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	004S011E31H001M	Type:	Well
Description:	NAWQA GWSI data entry verif. by krburow on 6/6/01		
HUC:	18040002	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Central Valley aquifer system
Formation Type:	Quaternary Alluvium	Aquifer Type:	Unconfined single aquifer
Construction Date:	Not Reported	Well Depth:	195
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	13	Level reading date:	2005-01-19
Feet below surface:	57.43	Feet to sea level:	Not Reported
Note:	The site had been pumped recently.		
Level reading date:	2004-11-08	Feet below surface:	60.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-08-31	Feet below surface:	68.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-08-05	Feet below surface:	73.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-07-26	Feet below surface:	72.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-05-12	Feet below surface:	66.1
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.
Level reading date:	2004-05-11	Feet below surface:	66.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-04-20	Feet below surface:	62.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-01-23	Feet below surface:	56.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-01-22	Feet below surface:	56.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-10-28	Feet below surface:	66.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-07-28	Feet below surface:	67.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-07-07	Feet below surface:	66.38
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F39
NNW
1/2 - 1 Mile
Higher

CA WELLS **CAUSGS000002675**

Well ID:	TRLKMW-04	Well Type:	MUNICIPAL
Source:	United States Geological Survey		
Other Name:	TRLKMW-04	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGS&samp_date=&global_id=&assigned_name=TRLKMW-04&store_num=		
GeoTracker Data:	Not Reported		

F40
NNW
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00008636**

Well ID:	USGS-373240120473202	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-373240120473202	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-373240120473202&store_num=		
GeoTracker Data:	Not Reported		

F41
NNW
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00006263**

Well ID:	USGS-373240120473201	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-373240120473201	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-373240120473201&store_num=		
GeoTracker Data:	Not Reported		

F42
NNW
1/2 - 1 Mile
Higher

CA WELLS **CAUSGS000000608**

Well ID:	TRLKMW-03	Well Type:	MUNICIPAL
Source:	United States Geological Survey		
Other Name:	TRLKMW-03	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGS&samp_date=&global_id=&assigned_name=TRLKMW-03&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F43
NNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000183664**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	004S011E31H002M	Type:	Well
Description:	NAWQA GWSI data entry verif. by krburow on 6/6/01		
HUC:	18040002	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Central Valley aquifer system
Formation Type:	Quaternary Alluvium	Aquifer Type:	Unconfined single aquifer
Construction Date:	Not Reported	Well Depth:	171
Well Depth Units:	ft	Well Hole Depth:	198
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	7	Level reading date:	2005-01-19
Feet below surface:	56.47	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2004-11-08	Feet below surface:	60.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-08-31	Feet below surface:	67.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-07-26	Feet below surface:	73.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-05-12	Feet below surface:	66.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-01-23	Feet below surface:	55.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-08-10	Feet below surface:	69.05
Feet to sea level:	Not Reported	Note:	Not Reported

F44
NNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000183665**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	004S011E31H003M	Type:	Well
Description:	NAWQA GWSI data entry verif. by krburow on 6/6/01		
HUC:	18040002	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Central Valley aquifer system
Formation Type:	Quaternary Alluvium	Aquifer Type:	Unconfined single aquifer
Construction Date:	Not Reported	Well Depth:	101
Well Depth Units:	ft	Well Hole Depth:	102
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	9	Level reading date:	2005-01-19

Feet below surface:	56.27	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2004-11-08	Feet below surface:	59.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-08-31	Feet below surface:	67.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-07-26	Feet below surface:	72.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-05-12	Feet below surface:	65.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-01-23	Feet below surface:	55.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-08-22	Feet below surface:	66.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-10-17	Feet below surface:	63.77
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1994-08-10	Feet below surface:	68.93
Feet to sea level:	Not Reported	Note:	Not Reported

45
WSW
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000015503**

Well ID:	5010021-007	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 07	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5010021-007&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95316	2	0

Federal EPA Radon Zone for STANISLAUS County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for STANISLAUS COUNTY, CA

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.725 pCi/L	92%	8%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.250 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Appendix G

Krazan & ASSOCIATES, INC.

SITE DEVELOPMENT ENGINEERS

William H. Vick, Ph.D., REA

Environmental Project Manager

AREAS OF EXPERTISE

Phase I Environmental Site Assessments
Environmental Analytical Chemistry
Pollutant Fate and Effects
Site Characterization and Remediation
Physical Characterization of Construction Materials
Quality Assurance/Quality Control Programs

EDUCATION AND CERTIFICATIONS

Bachelor of Science in Molecular Biology
University of Texas - Dallas
Doctor of Philosophy in Environmental Sciences
University of Texas – Dallas
California Environmental Protection Agency
Department of Toxic Substances Control
Registered Environmental Assessor I No. 30165
Asbestos Building Inspector, Certification No. 3370
NICET Certified Construction Materials Testing
CalTrans Certified Construction Materials Testing

PROFESSIONAL AFFILIATIONS

Member, American Society for Testing Materials

RELEVANT PROFESSIONAL EXPERIENCE

2002 to Present

Senior Technical Staff, Krazan & Associates, Inc.
Environmental project manager responsible for design, conduct, and management of site investigations, including Phase I Environmental Site Assessments using state-of-the-art research methods, and surface and subsurface contaminant characterization. Additional responsibilities include direction and management of construction materials testing laboratory, including data review, compliance evaluation, and quality assurance/quality control programs.

1981 to 1987

Principal Investigator, Science Applications, Inc.
Responsible for the design, conduct, and management of environmental research programs for government clients. In this capacity, primary responsibilities included design of multidisciplinary research programs in response to environmental issues of national scope, technical and financial management, design and implementation of project-specific quality assurance/quality control programs, statistical data evaluation/interpretation and report preparation. Representative research programs include development of an analytical chemistry procedure for ultra trace-level analysis of dioxin, investigation of the chronic toxicity of crude

oil to selected marine species, an evaluation of physical encapsulation techniques for remediation of dioxin contaminated soils, and participation in the remedial investigation/feasibility study of the Stringfellow NPL Superfund hazardous waste site.

1979 to 1981

Graduate Research Assistant, University of Texas - Dallas
Responsible for the design and conduct of an EPA-funded research program to assess the effectiveness of activated carbon for removal of trace-level organic pollutants from industrial wastewater. Conducted on-site, pilot-scale technology evaluation, characterized pollutant breakthrough profiles, and evaluated system monitoring techniques. Responsible for QA/QC program and for all data analysis and interpretation.

1977 to 1979

Environmental Chemistry Analyst, Texas Instruments, Inc.
Responsible for analysis of environmental samples for trace-level organic contaminants using mass spectrometry and gas chromatography. As senior analyst on evening shift, responsible for review, interpretation, and management of all data generated.

Krazan & ASSOCIATES, INC.

SITE DEVELOPMENT ENGINEERS

Art Farkas, R.E.A.

Vice President
Environmental Division

AREAS OF EXPERTISE

Project Management and Oversight
Senior Quality Control Review
Staff Development
Information Management
Marketing, Public Relations and Publicity

EDUCATION AND ACCOMPLISHMENTS

California Environmental Protection Agency
Department of Toxic Substances Control
Registered Environmental Assessor I No. 07818
Bachelor of Electronic Engineering Technology,
University of Dayton, Ohio
CEQA Training: University of California Davis Extension
NEPA Training: U.S. Department of Housing and Urban Development Region 9, San Francisco

PROFESSIONAL EXPERIENCE

February 1998 to Present

Vice President, Krazan & Associates, Inc., Environmental Division
CEQA and NEPA project management specialist. Project Manager and senior quality control reviewer for Phase I and Phase II Environmental Site Assessments. Activities include division oversight, business development, regional coordination of technical services and delivery of efficient integrated site development engineering services in conjunction with the Geotechnical and Construction Testing and Inspection Divisions of the firm

Dec. 1994 to Feb. 1998

Executive Director, Downtown Association of Fresno
Responsibilities included management of business association for Central Business District of Fresno; Director of the Fresno Main Street Program; project operations and promotions management; policy formation, budgeting; marketing, public relations; publicity, fundraising and public speaking; management of 18-member Board of Directors for non-profit organization.

Apr. 1974 to Dec. 1994

Operations Manager/Program Director/Air Personality: Radio Broadcasting

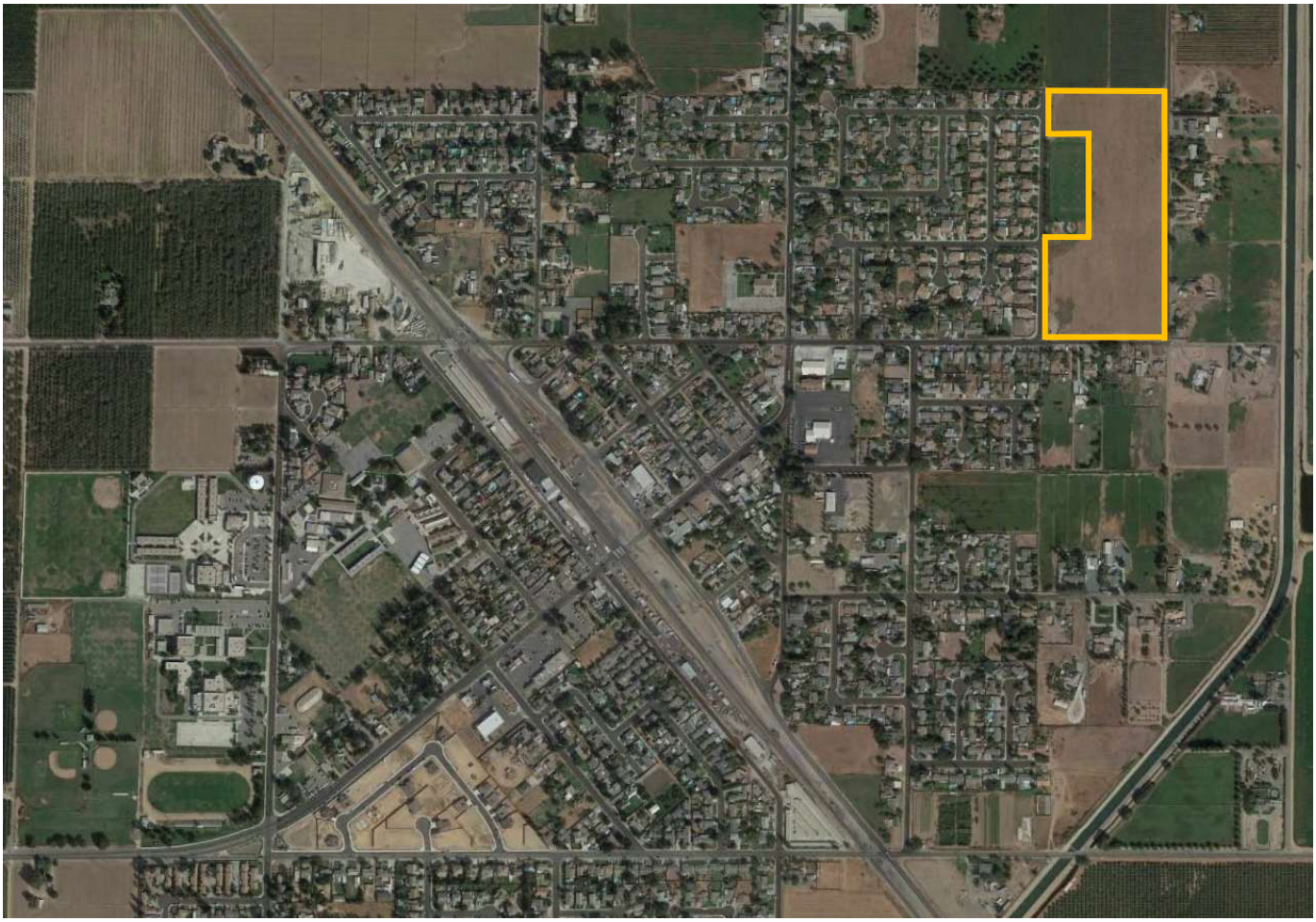
1974 - 1980 KFIG	1981 - 1991 KKDJ
1980 - 1981 KIOY	1991 - 1994 KTHT

Responsibilities included operations management of staff and systems; program direction; on-air performance; production' promotions' public affairs and marketing.

Final Transportation Impact Assessment

Hoffman Ranch Subdivision

Community of Denair, CA



SEPTEMBER 23, 2022

PREPARED FOR

STANISLAUS COUNTY

REDWOOD PARK PROPERTIES, INC.

BTC
BARRIOS
TRANSPORTATION CONSULTING

ATTACHMENT IV

Final Transportation Impact Assessment

Hoffman Ranch Subdivision

Community of Denair, California

Prepared for:
Stanislaus County
Redwood Park Properties, Inc.

Prepared By:

BTC
BARRIOS
TRANSPORTATION CONSULTING

September 23, 2022

BTC-0025

BTC

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1.0 INTRODUCTION

This report presents the analysis and findings of the Transportation Impact Assessment (TIA) for the Hoffman Ranch Subdivision (project) located in the community of Denair, Stanislaus County. This chapter discusses the TIA purpose, study locations and analysis scenarios, analysis methods, and report organization.

1.1 STUDY PURPOSE AND PROJECT DESCRIPTION

The study's purpose is to evaluate the transportation impacts of the project, a residential development. The project, located in the Stanislaus County community of Denair, proposes to construct 76 single-family residential units on a 16-acre parcel. The parcel is located on the north side of Zeering Road between Riopel Avenue and Arnold Road. The project location is presented in **Figure 1-1**. The tentative subdivision map is presented in **Appendix A**. Primary vehicular access to the project site would be provided from Riopel Avenue and Arnold Road. About 8 residential units would have direct access to Zeering Road.

1.2 STUDY LOCATIONS AND ANALYSIS SCENARIOS

The following intersections were evaluated for the peak hour in the morning between 7:00 and 9:00 AM and evening between 4:00 and 6:00 PM:

1. Santa Fe Avenue / Zeering Road
2. Gratton Road / Zeering Road
3. Riopel Avenue / Zeering Road
4. Santa Fe Avenue / Main Street
5. Lester Road / Main Street
6. Santa Fe Avenue / Monte Vista Avenue

The following scenarios were evaluated:

- ***Existing*** – Existing conditions based on recent traffic counts
- ***Existing Plus Project*** – Existing traffic counts plus traffic expected to be generated by the project
- ***Cumulative No Project*** – Forecasts for the cumulative scenario (year 2035) based on an annual traffic growth factor from the Three-County Travel Demand Model
- ***Cumulative with Project*** – Cumulative No Project forecasts plus traffic expected to be generated by the project



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Figure 1-1

Project Vicinity Map

1.3 ANALYSIS METHODS

While vehicle miles of travel (VMT) are required within California for environmental assessments, Stanislaus County still has a policy to maintain level of service (LOS) C or better operations at intersections during the peak hour. These policies are in place to ensure that adequate traffic circulation and mobility are provided in Stanislaus County.

LOS is a qualitative description of traffic flow from a vehicle driver's perspective based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels of service are defined ranging from LOS A (free-flow conditions) to LOS F (over capacity conditions). LOS E corresponds to operations "at capacity." When volumes exceed capacity, stop-and-go conditions result, and operations are designated LOS F. **Appendix B** provides a detailed discussion on the LOS criteria used to evaluate signalized and unsignalized intersections for the peak hour.

1.3.1 VEHICLE MILES OF TRAVEL

In response to Senate Bill 743 (SB 743), the Office of Planning and Research (OPR) has updated the California Environmental Quality Act (CEQA) guidelines to include new transportation-related evaluation metrics. Within California, VMT is the transportation metric for determining project impacts for CEQA: the metric was previously LOS.

1.4 REPORT ORGANIZATION

This report is divided into 8 chapters as described below:

- **Chapter 1 – Introduction** discusses the purpose and organization of the report.
- **Chapter 2 – Existing Conditions** describes the transportation system in the project vicinity, including the surrounding roadway network morning and evening peak period intersection turning movement volumes, existing bicycle and pedestrian facilities, and intersection operations.
- **Chapter 3 – Project Characteristics** presents relevant project information, such as the project components and project trip generation, distribution, and assignment.
- **Chapter 4 – Existing Plus Project Traffic Conditions** addresses the existing conditions with the project.
- **Chapter 5 – Cumulative Traffic Conditions** addresses the future conditions (2035), both without and with the project.

- **Chapter 6 – Vehicle Miles of Travel** presents the results of the VMT assessment conducted for the site.
- **Chapter 7 – Site Plan Review** describes project access and circulation for all travel modes, including an assessment of traffic control at the internal intersections.
- **Chapter 8 – Recommendations and Summary of Findings** provides recommendations and a summary of findings of the transportation impact assessment.

2.0 EXISTING CONDITIONS

This chapter describes the transportation facilities in the project study area, including the surrounding roadway network, pedestrian, and bicycle facilities in the project site vicinity. Existing intersection operations are also described.

2.1 ROADWAY SYSTEM

The following discusses the roadways that would provide access to the site and/or are most likely to experience direct traffic impacts, if any, from the proposed project.

Zeering Road is an east-west two-lane major collector in the vicinity of the project. Zeering Road currently dead-ends immediately to the east of the project site and connects Denair to Turlock. Zeering Road becomes Christoffersen Parkway east of Berkeley Avenue in Turlock. The posted speed limit in the vicinity of the project site is 25 mph.

Riopel Avenue is a north-south two-lane local street that would provide direct access to project on the west side. Riopel Avenue currently dead-ends immediately to the north of the project site and terminates at Zeering Road. The prima facie speed limit in the vicinity of the project site is 25 mph.

Arnold Road is a north-south two-lane local street that would provide direct access to project on the east side. Arnold Road turns into Powell Road an east-west roadway to the north of the project site and terminates at Zeering Road. The prima facie speed limit in the vicinity of the project site is 25 mph.

Gratton Road is a north-south two-lane major collector in the vicinity of the project. Gratton Road extends from Whitmore Avenue to the north and terminates at Santa Fe Avenue to the south. Gratton Road does not cross the Burlington Northern and Santa Fe (BNSF) railway tracks. The posted speed limit in the vicinity of the project site is 25 mph.

Santa Fe Avenue is a north-south two-lane minor arterial in the vicinity of the project. Santa Fe Avenue connects Denair to Modesto in the north and Merced to the south. The posted speed limit in the vicinity of the project site is 45 mph.

Main Street is a two-lane minor arterial that provides primary east-west access through Denair. Main Street extends from the Monte Vista Avenue-Main Street junction and continues easterly past Santa Fe Avenue to Gratton Road where it terminates. The posted speed limit is 35 mph.

Lester Road is a north-south two-lane major collector that extends from Hawkeye Avenue to the south to past Zeering Road to the north where it terminates. The posted speed limit is 25 mph in the project vicinity.

Monte Vista Avenue is an east-west two-lane minor arterial in the vicinity of the project. Monte Vista Avenue connects Denair to Turlock and SR 99 to the west and rural Stanislaus County to the east. The posted speed limit in the vicinity of the project site is 35 mph.

2.2 EXISTING PEDESTRIAN AND BICYCLE FACILITIES

2.2.1 PEDESTRIAN FACILITIES

Pedestrian facilities typically include sidewalks, crosswalks, pedestrian signals and multi-use trails. There is currently no sidewalk on Riopel Avenue, Zeering Road, or Arnold Road along the project's frontage. Zeering Road, the primary pedestrian access to the project site, has several major gaps in sidewalk between Santa Fe Avenue and the project site.

All of the study intersections provide some crosswalks with the exception of the Riopel Avenue/Zeering Road and Santa Fe Avenue/Monte Vista Avenue intersections. There are no multi-use trails in the vicinity of the project.

2.2.2 BICYCLE FACILITIES

Bicycle facilities include the following:

- **Bike paths (Class I)** – Paved trails that are separated from roadways. These trails are sometimes shared with pedestrians.
- **Bike lanes (Class II)** – Lanes on roadways designated for use by bicycles through striping, pavement legends, and signs.
- **Bike routes (Class III)** – Roadways designated for bicycle use by signs only; may or may not include additional pavement width for cyclists.
- **Separated Bikeway (Class IV)** – Separated bikeways, also referred to as cycle tracks or protected bikeways, are bikeways for the exclusive use of bicycles which are physically separated from vehicle traffic. Types of separation may include, but are not limited to, grade separation, flexible posts, physical barriers, or on-street parking.

In the immediate project vicinity, there are no bicycle facilities provided on Riopel Avenue, Zeering Road, or Arnold Road.

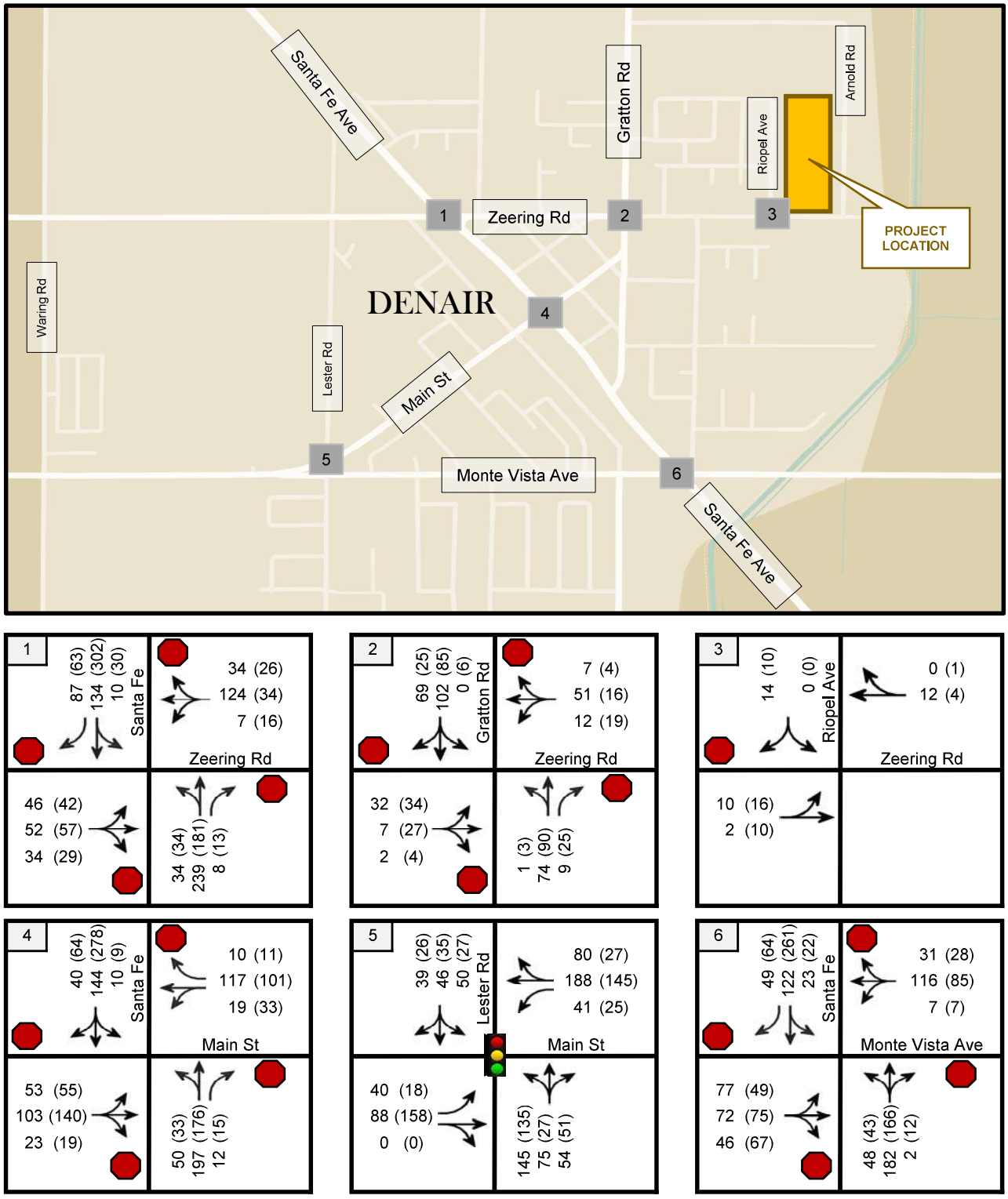
2.3 EXISTING TRAFFIC COUNTS

Weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak period intersection turning movement counts were collected in April 2022, while local schools were in session, at the study intersections except for the Main Street/Lester Road intersection which was collected in September 2021. In addition to vehicle counts, pedestrian and bicycle counts were also collected at the study intersections. **Appendix C** provides the traffic count data. **Figure 2-1** presents the Existing Conditions AM and PM peak hour traffic volumes and lane configurations at the study intersections.

2.4 EXISTING INTERSECTION LEVELS OF SERVICE

Existing intersection lane configurations, signal timings, and peak hour turning movement volumes were used to calculate the levels of service for the study intersections during each peak hour using the Synchro 11.0 software program, as presented in **Table 2-1.** Observed peak hour factors[1] were used at all intersections for the existing analysis. Pedestrian and bicycle activity were also factored into the analysis. All of the study intersections operate at LOS C or better conditions. Detailed intersection LOS calculation worksheets are presented in **Appendix D**.

[1] The peak hour factor is the relationship between the peak 15-minute flow rate and the full hourly volume: PHF = Hourly volume / (4 x (volume during the peak 15 minutes of flow)). The analysis is based on peak rates of flow occurring within the peak hour because substantial short-term fluctuations may occur during a peak hour.



Map Key

1 Study Intersection

Volumes Key

XX (YY) AM (PM) Peak Hour Traffic Volumes

Traffic Control Key

Stop Sign

Traffic Signal

BTC

Figure 2-1

Existing Traffic Volumes and Lane Configurations

Table 2-1: Existing Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Delay[2]	LOS
1. Santa Fe Avenue/Zeering Road	AWSC	AM PM	14 12	B B
2. Gratton Road/Zeering Road	AWSC	AM PM	9 8	A A
3. Riopel Avenue/Zeering Road	SSSC	AM PM	8 (SB) 8 (SB)	A A
4. Santa Fe Avenue/Main Street	AWSC	AM PM	14 18	B C
5. Lester Road/Main Street[3]	Signal	AM PM	29 22	C C
6. Santa Fe Avenue/Monte Vista Avenue	AWSC	AM PM	12 13	B B

Notes:
1. AWSC = all-way stop-control; SSSC = side-street stop-control; Signal = signalized intersection
2. For all-way stop and signalized intersections the overall weighted average delay is reported. For side-street stop-controlled intersections the worst approach/movement delay is reported.
3. The traffic analysis assumes a short right-turn lane on the northbound and westbound approaches even though a right-turn lane is not striped. Based on field observations, right-turning vehicles were consistently observed bypassing through vehicles waiting in queue due to the width of the pavement provided.
Source: BTC, 2022

Ninety-fifth percentile vehicle queues were calculated for each of the study intersections and the results are presented in **Table 2-2**. Detailed queuing reports are provided in Appendix D. With the exception of northbound approach to the Lester Road/Main Street intersection, the existing 95th percentile queues are currently accommodated within the available storage.

Table 2-2: Existing 95th Percentile Queueing Analysis

Intersection	Movement[1]	Available Storage (ft)	AM Peak Hour 95th Percentile Queue (ft)	PM Peak Hour 95th Percentile Queue (ft)
1. Santa Fe Avenue / Zeering Road	NB - LT	290	105	40
	NB - R	125	0	3
	SB - LT	820	35	80
	SB - R	125	15	8
	EB – LTR	260	30	20
	WB – LTR	230	40	10
2. Gratton Road / Zeering Road	NB - LT	360	13	13
	NB - R	100	0	3
	SB - LTR	750	25	15
	EB – LTR	230	5	8
	WB – LTR	290	10	5
3. Riopel Avenue / Zeering Road	SB - LR	470	0	0
	EB – LT	610	0	0
	WB – TR	630	0	0
4. Santa Fe Avenue / Main Street	NB - LT	410	68	55
	NB - R	100	3	3
	SB - LTR	420	45	135
	EB – LTR	300	43	60
	WB – LT	335	30	33
	WB – R	75	3	3
5. Lester Road / Main Street	NB - LTR	75	**199**	**141**
	SB - LTR	>1,000	135	90
	EB – L	125	35	20
	EB – TR	>1,000	86	138
	WB – L	100	35	25
	WB – TR	>1,000	170	127
6. Santa Fe Avenue / Monte Vista Avenue	NB - LTR	>1,000	53	50
	SB - LT	975	30	83
	SB - R	50	8	10
	EB – LTR	510	40	40
	WB – LTR	60	30	23

Notes:
Bold denotes locations that exceed available storage.
1. NB-northbound, SB-southbound, EB-eastbound, WB-westbound, L-left turn, T-through, R-right turn
Source: BTC, 2022

2.5 COLLISION DATA

Table 2-3 summarizes the collision rates at the six study intersections for the five-year period between January 2015 and December 2019 based on the Statewide Integrated Traffic Records System (SWITRS) database. The State average is the basic average crash rate for a similar intersection presented in the *2018 Crash Data on California State Highways*. One of the study intersections (Santa Fe Avenue/Main Street) has a collision rate that is higher than the statewide average for a similar facility.

Table 2-3: Collision History at Existing Intersections (January 2015 to December 2019)

Intersection	Number of Collisions	Collision Rate (collisions/million entering vehicles)	
	Total	Actual	State Average
		Total	Total
1. Santa Fe Avenue/Zeering Road	2	0.13	0.49
2. Gratton Road/Zeering Road	0	0	0.49
3. Riopel Avenue/Zeering Road	0	0	0.25
4. Santa Fe Avenue/Main Street	8	0.51	0.49
5. Lester Road/Main Street	7	0.50	0.54
6. Santa Fe Avenue/Monte Vista Avenue	3	0.20	0.49

Source: Statewide Integrated Traffic Records System (SWITRS); BTC, 2022.

3.0 PROJECT CHARACTERISTICS

This chapter provides an overview of the proposed project components and addresses the proposed project trip generation, distribution, and assignment characteristics, allowing for an evaluation of project impacts on the surrounding roadway network. The amount of traffic associated with the project was estimated using a three-step process:

1. **Trip Generation** – The *amount* of vehicle traffic entering/exiting the project site was estimated.
2. **Trip Distribution** – The *direction* trips would use to approach and depart the site was projected.
3. **Trip Assignment** – Trips were then *assigned* to specific roadway segments and intersection turning movements.

3.1 PROJECT DESCRIPTION

The project, located in the Stanislaus County community of Denair, proposes to construct 76 single-family residential units on a 16-acre parcel. The parcel is located on the north side of Zeering Road between Riopel Avenue and Arnold Road. Primary vehicular access to the project site would be provided from Riopel Avenue and Arnold Road. About 8 residential units would have direct access to Zeering Road.

3.2 PROJECT TRIP GENERATION

Trip generation refers to the process of estimating the amount of vehicular traffic a project would add to the surrounding roadway system. Estimates are created for the daily condition and for the peak one-hour period during the morning and evening commute when traffic volumes on the adjacent streets are typically the highest. Project trip generation was estimated using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition), with the resulting estimates presented in **Table 3-1**. The project is expected to generate approximately 717 new daily vehicle trips, including approximately 58 morning peak hour and 77 evening peak hour trips.

Table 3-1: Vehicle Trip Generation Estimates

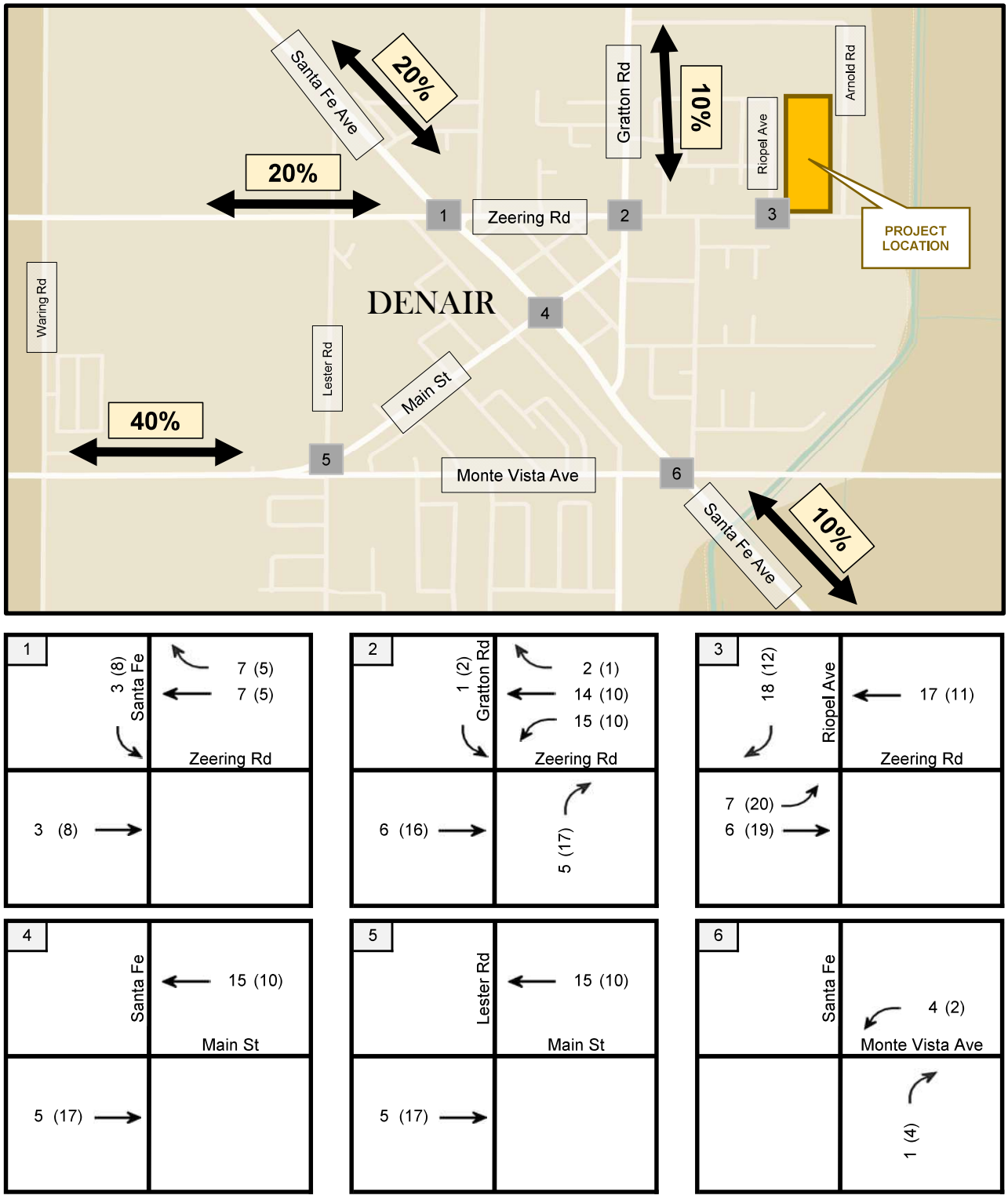
Use	Size	Weekday						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
New Single Family Homes[1]	76 dwelling units	717	15	43	58	49	28	77

1. ITE land use category 210 – Single-Family Homes (Adj Streets, 7-9A, 4-6P):
   Daily: (T) = 9.43 (X)
   AM Peak Hour: Ln(T) = 0.91Ln(X)+0.12; Enter = 26%; Exit = 74%
   PM Peak Hour: Ln(T) = 0.94Ln(X) + 0.27; Enter = 63%; Exit = 37%

Source: *Trip Generation Manual* (11th Edition); BTC, 2022

3.3 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Project trip distribution refers to the directions of approach and departure that vehicles would take to access and leave the site. Estimates of project trip distribution were developed based on engineering judgement using existing traffic count data and land use patterns. The trip distribution percentages and traffic assignment are shown on **Figure 3-1**.



Note: 50% of the Project Trips to/from Gratton Road were assumed to use Arnold Rd.

Map Key

1 Study Intersection

Volumes Key

XX (YY) AM (PM) Peak Hour Traffic Volumes

BTC

Figure 3-1

Project Trip Distribution and Assignment

4.0 EXISTING PLUS PROJECT CONDITIONS

This chapter evaluates potential off-site traffic impacts under Existing Plus Project conditions.

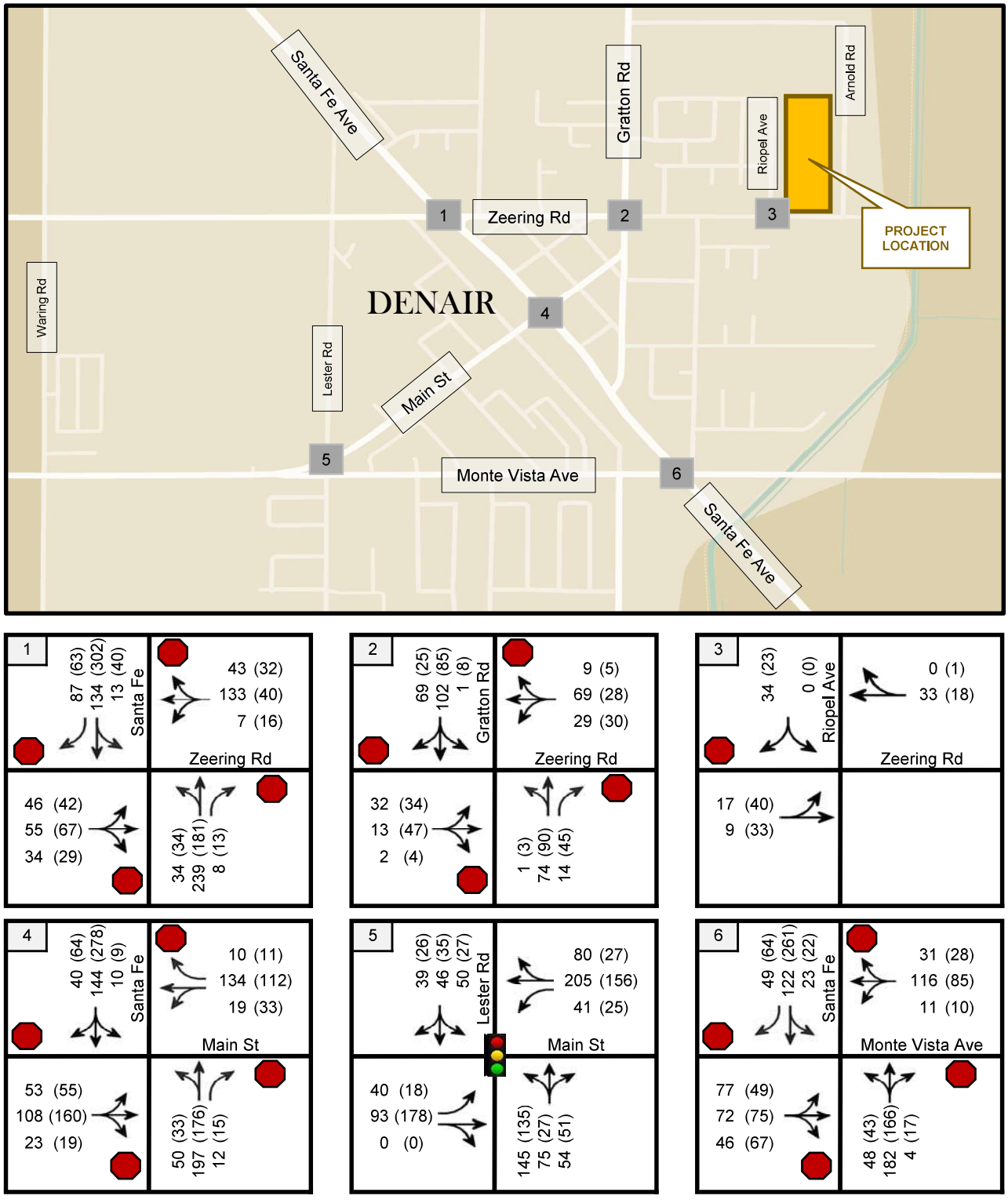
4.1 EXISTING PLUS PROJECT TRAFFIC VOLUMES

The project traffic volumes on **Figure 3-1** were added to the existing traffic volumes from **Figure 2-1** to estimate the Existing Plus Project traffic volumes, as shown on **Figure 4-1**.

4.2 EXISTING PLUS PROJECT CONDITIONS

Existing Plus Project intersection operations were evaluated using the same methods described in Chapter 1. The Existing and Existing Plus Project analysis results are presented in **Table 4-1**, based on the traffic volumes and intersection configurations presented on **Figure 4-1**. Detailed intersection LOS calculation worksheets are presented in **Appendix E**. The project is not expected to add a substantial number of trips to the roadway network and as a result the intersection operations would remain relatively unchanged compared to Existing conditions. All of the study intersections would continue to operate at LOS C or better conditions.

Ninety-fifth percentile vehicle queues were calculated for each of the study intersections under Existing Plus Project conditions and the results are presented in **Table 4-2**. Detailed queuing reports are provided in Appendix E. As shown in Table 4-2, the 95th percentile queues under Existing Plus Project conditions remain relatively unchanged compared to Existing conditions.



Map Key

1 Study Intersection

Volumes Key

XX (YY) AM (PM) Peak Hour Traffic Volumes

Traffic Control Key

Stop Sign

Traffic Signal

BTC

Figure 4-1

Existing Plus Project Traffic Volumes and Lane Configurations

Table 4-1: Existing Plus Project Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Existing		Existing Plus Project	
			Delay[2]	LOS	Delay[2]	LOS
1. Santa Fe Avenue / Zeering Road	AWSC	AM PM	14 12	B B	16 13	C B
2. Gratton Road / Zeering Road	AWSC	AM PM	9 8	A A	9 9	A A
3. Riopel Avenue / Zeering Road	SSSC	AM PM	8 (SB) 8 (SB)	A A	9 (SB) 9 (SB)	A A
4. Santa Fe Avenue / Main Street	AWSC	AM PM	14 18	B C	14 19	B C
5. Lester Road / Main Street[3]	Signal	AM PM	29 22	C C	30 22	C C
6. Santa Fe Avenue / Monte Vista Avenue	AWSC	AM PM	12 13	B B	12 13	B B

Notes:
1. AWSC = all-way stop-control; SSSC = side-street stop-control; Signal = signalized intersection
2. For all-way stop and signalized intersections the overall weighted average delay is reported. For side-street stop-controlled intersections the worst approach/movement delay is reported.
3. The traffic analysis assumes a short right-turn lane on the northbound and westbound approaches even though a right-turn lane is not striped. Based on field observations, right-turning vehicles were consistently observed bypassing through vehicles waiting in queue due to the width of the pavement provided.
Source: BTC, 2022

Table 4-2: Existing Plus Project 95th Percentile Queueing Analysis

Intersection	Movement[1]	Available Storage (ft)	Existing		Existing Plus Project	
			AM Peak Hour 95th Percentile Queue (ft)	PM Peak Hour 95th Percentile Queue (ft)	AM Peak Hour 95th Percentile Queue (ft)	PM Peak Hour 95th Percentile Queue (ft)
1. Santa Fe Avenue / Zeering Road	NB - LT	290	105	40	113	43
	NB - R	125	0	3	3	3
	SB - LT	820	35	80	40	88
	SB - R	125	15	8	18	8
	EB – LTR	260	30	20	33	23
	WB – LTR	230	40	10	50	13
2. Gratton Road / Zeering Road	NB - LT	360	13	13	13	13
	NB - R	100	0	3	3	5
	SB - LTR	750	25	15	28	15

Table 4-2: Existing Plus Project 95th Percentile Queueing Analysis

Intersection	Movement[1]	Available Storage (ft)	Existing		Existing Plus Project	
			AM Peak Hour 95th Percentile Queue (ft)	PM Peak Hour 95th Percentile Queue (ft)	AM Peak Hour 95th Percentile Queue (ft)	PM Peak Hour 95th Percentile Queue (ft)
	EB – LTR	230	5	8	8	13
	WB – LTR	290	10	5	18	8
3. Riopel Avenue / Zeering Road	SB - LR	470	0	0	3	3
	EB – LT	610	0	0	0	3
	WB – TR	630	0	0	0	0
4. Santa Fe Avenue / Main Street	NB - LT	410	68	55	70	58
	NB - R	100	3	3	3	3
	SB - LTR	420	45	135	48	143
	EB – LTR	300	43	60	45	73
	WB – LT	335	30	33	35	35
	WB – R	75	3	3	3	3
5. Lester Road / Main Street	NB - LTR	75	**199**	**141**	**199**	**144**
	SB - LTR	>1,000	135	90	135	92
	EB – L	125	35	20	35	20
	EB – TR	>1,000	86	138	89	155
	WB – L	100	35	25	35	25
	WB – TR	>1,000	170	127	185	136
6. Santa Fe Avenue / Monte Vista Avenue	NB - LTR	>1,000	53	50	55	53
	SB - LT	975	30	83	30	85
	SB - R	50	8	10	8	10
	EB – LTR	510	40	40	40	40
	WB – LTR	60	30	23	30	23

Notes:
Bold denotes locations that exceed available storage.
1. NB-northbound, SB-southbound, EB-eastbound, WB-westbound, L-left turn, T-through, R-right turn
Source: BTC, 2022

5.0 CUMULATIVE CONDITIONS

This chapter evaluates potential off-site traffic impacts under Cumulative No Project and Cumulative Plus Project conditions. Cumulative conditions reflect year 2035 which is the Stanislaus County General Plan horizon year. Under Cumulative No Project conditions all of the study intersections were assumed to remain at their existing configuration.

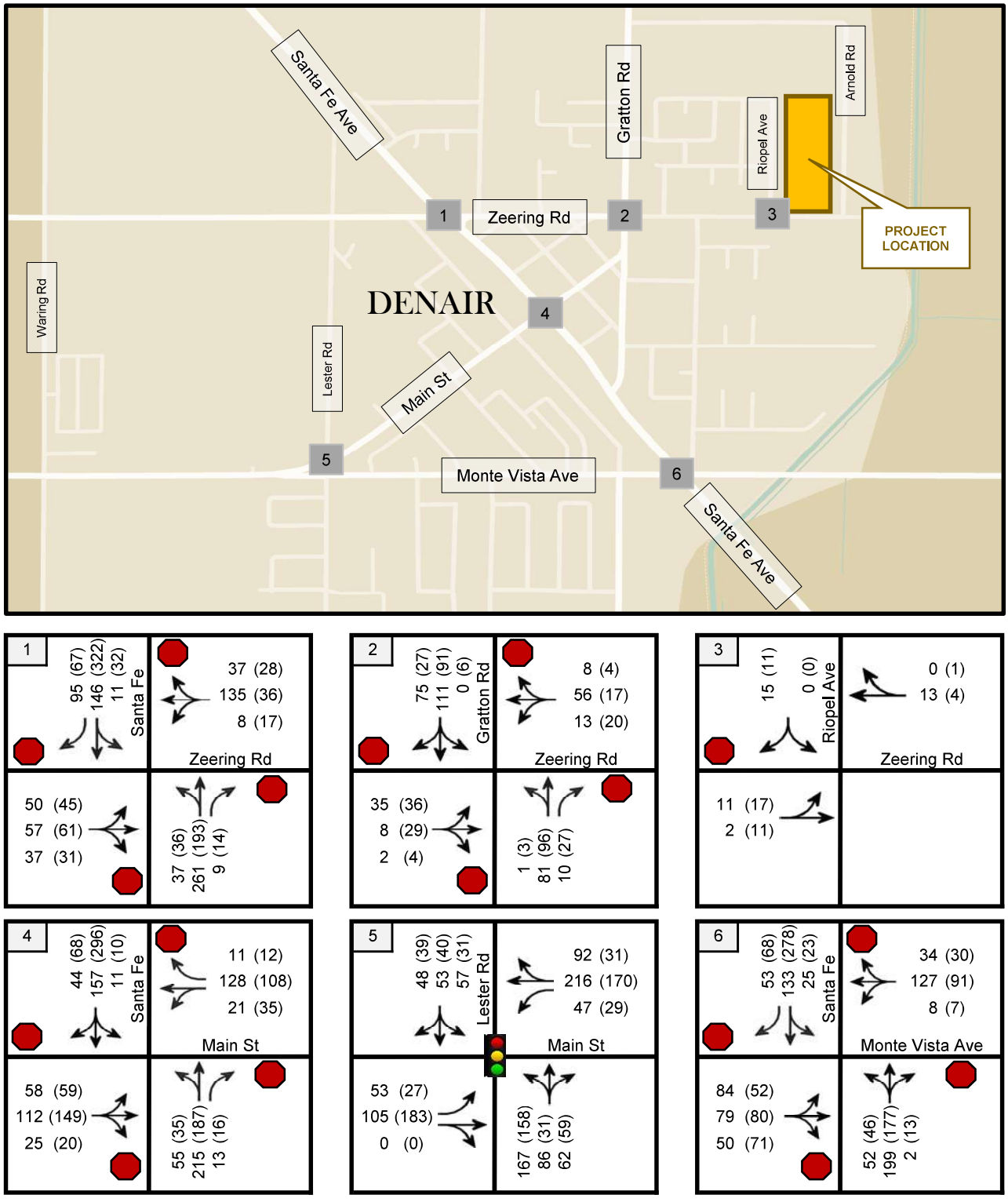
5.1 CUMULATIVE NO PROJECT AND PLUS PROJECT TRAFFIC VOLUMES

The *Final Transportation Impact Assessment for the Monte Vista Collection Subdivision* (April 29, 2022) was used to determine the Cumulative No Project AM and PM peak hour traffic volumes at the Lester Road / Main Street intersection.[2] At the other study locations, the Three-County Travel Demand Model (Three-County TDM) was used to develop an annual growth factor in the project area to estimate AM and PM peak hour traffic volumes for Cumulative No Project conditions. Based on the Three-County TDM, the overall annual growth rate in the AM and PM peak hour is 0.7% per year and 0.5% per year, respectively. Cumulative Plus Project traffic volumes were developed by adding the project trips to the Cumulative No Project traffic volumes. The Cumulative No Project and Cumulative Plus Project traffic volumes are presented on **Figure 5-1** and **Figure 5-2**, respectively.

5.2 CUMULATIVE NO PROJECT AND PLUS PROJECT CONDITIONS

Cumulative No Project and Cumulative Plus Project intersection operations were evaluated using the same methods described in Chapter 1. The Cumulative No Project and Cumulative Plus Project analysis results are presented in **Table 5-1**. Detailed intersection LOS calculation worksheets are presented in **Appendix F**.

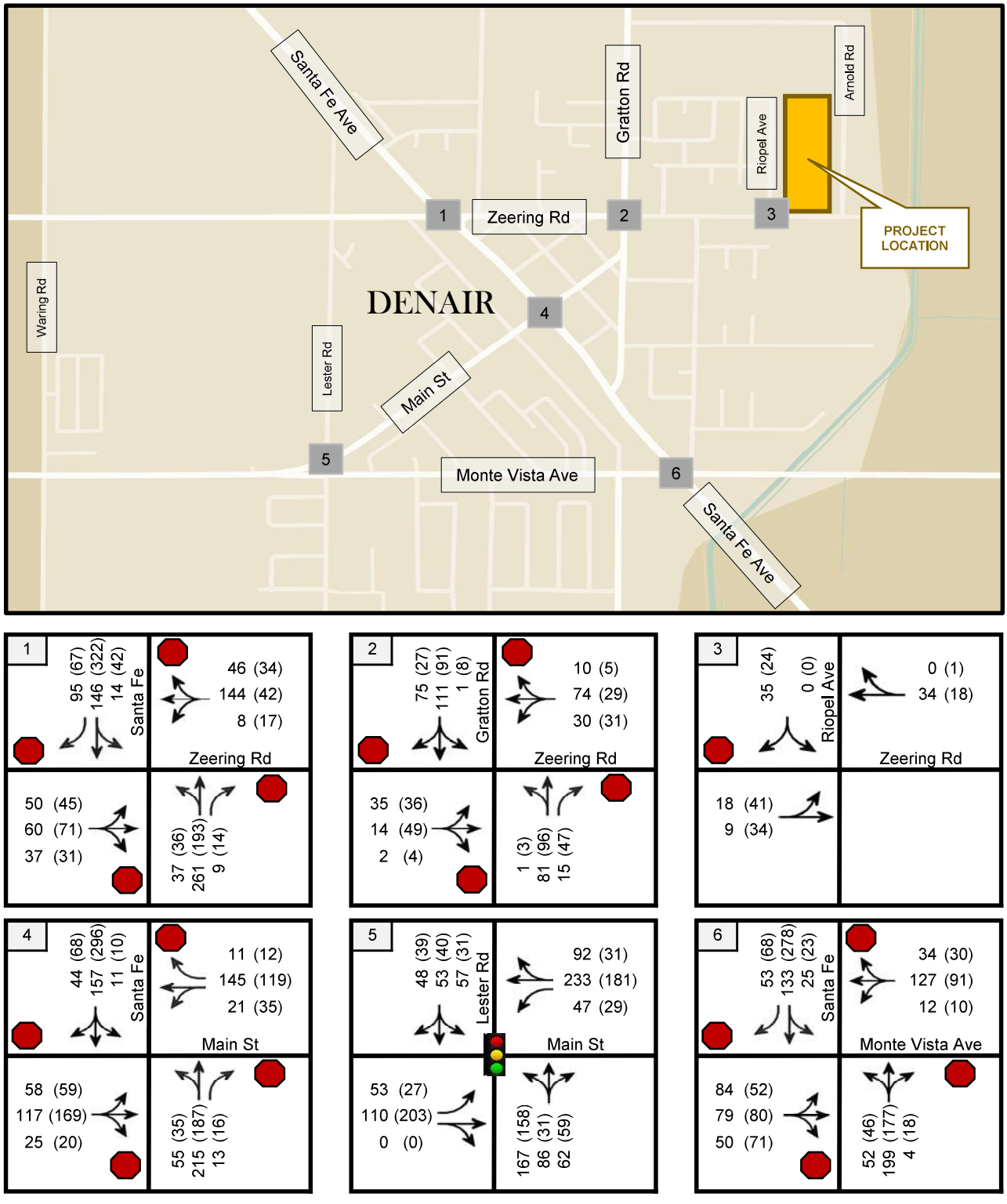
[2] The Cumulative Plus Project (i.e., Monte Vista Collection Subdivision) were assumed to represent the Cumulative No Project conditions for this transportation impact assessment.



BTC

Figure 5-1

Cumulative No Project Traffic Volumes and Lane Configurations



BTC

Figure 5-2

Cumulative Plus Project Traffic Volumes and Lane Configurations

The project is not expected to add a substantial number of trips to the roadway network and as a result the intersection operations would remain relatively unchanged compared to Cumulative No Project conditions. All of the study intersections would continue to operate at LOS C or better conditions.

Table 5-1: Cumulative No Project and Plus Project Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Cumulative No Project		Cumulative Plus Project	
			Delay[2]	LOS	Delay[2]	LOS
1. Santa Fe Avenue / Zeering Road	AWSC	AM PM	17 13	C B	18 14	C B
2. Gratton Road / Zeering Road	AWSC	AM PM	9 8	A A	9 9	A A
3. Riopel Avenue / Zeering Road	SSSC	AM PM	9 (SB) 8 (SB)	A A	9 (SB) 9 (SB)	A A
4. Santa Fe Avenue / Main Street	AWSC	AM PM	16 21	C C	16 22	C C
5. Lester Road / Main Street[3]	Signal	AM PM	34 23	C C	35 24	C C
6. Santa Fe Avenue / Monte Vista Avenue	AWSC	AM PM	13 14	B B	13 15	B B

Notes:
1. AWSC = all-way stop-control; SSSC = side-street stop-control; Signal = signalized intersection
2. For all-way stop and signalized intersections the overall weighted average delay is reported. For side-street stop-controlled intersections the worst approach/movement delay is reported.
3. The traffic analysis assumes a short right-turn lane on the northbound and westbound approaches even though a right-turn lane is not striped. Based on field observations, right-turning vehicles were consistently observed bypassing through vehicles waiting in queue due to the width of the pavement provided.
Source: BTC, 2022

Ninety-fifth percentile vehicle queues were calculated for each of the study intersections under Cumulative No Project and Plus Project conditions and the results are presented in **Table 5-2**. Detailed queuing reports are provided in Appendix F. As shown in Table 5-2, the 95th percentile queues under Cumulative Plus Project conditions remain relatively unchanged compared to Cumulative No Project conditions.

Table 5-2: Cumulative No Project and Plus Project 95th Percentile Queueing Analysis

Intersection	Movement[1]	Available Storage (ft)	Cumulative No Project		Cumulative Plus Project	
			AM Peak Hour 95th Percentile Queue (ft)	PM Peak Hour 95th Percentile Queue (ft)	AM Peak Hour 95th Percentile Queue (ft)	PM Peak Hour 95th Percentile Queue (ft)
1. Santa Fe Avenue / Zeering Road	NB - LT	290	143	48	148	48
	NB - R	125	3	3	3	3
	SB - LT	820	45	93	48	103
	SB - R	125	20	8	20	8
	EB – LTR	260	38	23	40	25
	WB – LTR	230	53	13	63	15
2. Gratton Road / Zeering Road	NB - LT	360	13	15	13	15
	NB - R	100	0	3	3	5
	SB - LTR	750	30	15	33	18
	EB – LTR	230	8	10	8	13
	WB – LTR	290	10	5	18	8
3. Riopel Avenue / Zeering Road	SB - LR	470	3	0	3	3
	EB – LT	610	0	0	0	3
	WB – TR	630	0	0	0	0
4. Santa Fe Avenue / Main Street	NB - LT	410	88	65	90	68
	NB - R	100	3	3	3	3
	SB - LTR	420	58	170	60	180
	EB – LTR	300	53	73	58	88
	WB – LT	335	38	38	43	43
	WB – R	75	3	3	3	3
5. Lester Road / Main Street	NB - LTR	75	**264**	**169**	**264**	**171**
	SB - LTR	>1,000	178	113	178	113
	EB – L	125	46	28	46	28
	EB – TR	>1,000	106	165	110	181
	WB – L	100	42	29	42	29
	WB – TR	>1,000	207	154	224	162

Table 5-2: Cumulative No Project and Plus Project 95th Percentile Queueing Analysis

Intersection	Movement[1]	Available Storage (ft)	Cumulative No Project		Cumulative Plus Project	
			AM Peak Hour 95th Percentile Queue (ft)	PM Peak Hour 95th Percentile Queue (ft)	AM Peak Hour 95th Percentile Queue (ft)	PM Peak Hour 95th Percentile Queue (ft)
6. Santa Fe Avenue / Monte Vista Avenue	NB – LTR	>1,000	65	58	65	60
	SB – LT	975	35	98	35	100
	SB - R	50	8	10	8	10
	EB – LTR	510	48	48	48	48
	WB – LTR	60	35	25	35	28

Notes:
Bold denotes locations that exceed available storage.
1. NB-northbound, SB-southbound, EB-eastbound, WB-westbound, L-left turn, T-through, R-right turn
Source: BTC, 2022

6.0 VEHICLE MILES OF TRAVEL (VMT) EVALUATION

The Hoffman Ranch Subdivision is consistent with the County's adopted General Plan and the Denair Community Plan. Based on the consistency with an existing approved land use plan, a detailed VMT evaluation is not required for this project. Developments consistent with a previously approved land use plan are considered to have a ***less than significant VMT impact***.

7.0 SITE PLAN REVIEW

This chapter analyzes site access and internal circulation for vehicles, pedestrians, bicycles, and emergency vehicles based on the tentative subdivision map presented previously on Appendix A**.** The proposed off-street parking was also reviewed.

7.1 VEHICULAR SITE ACCESS AND CIRCULATION

Access to the project site would be provided via Riopel Avenue and Arnold Road. About eight residential units would have direct access to Zeering Road. In the vicinity of the project, Riopel Avenue, Arnold Road, and Zeering Road are all designated as local roads in the Stanislaus County General Plan. The ultimate configuration of these roadways would require 60' of right-of-way to allow for two travel lanes (one in each direction) and sidewalk on both sides of the roadway. The project proposes to widen Riopel Avenue, Arnold Road, and Zeering Road to provide the ultimate right-of-way.

Chalmer Way and Corona Way are two existing roadways that intersect with Riopel Avenue to the north of Zeering Road. These intersections are currently "T" intersections and provide side-street stop control where traffic on Chalmer Way and Corona Way stop and yield to traffic on Riopel Avenue. As part of the project, Chalmer Way would be extended to the east to connect with Arnold Road. Corona Way would also be extended to the east but would terminate interior to the project site in a cul-de-sac. To mirror the existing roadway signing it is recommended that the new Chalmer Way extension also provide side-street stop control with Riopel Avenue and Arnold Road. Similarly, the new Corona Way extension should also provide side-street stop control with Riopel Avenue.

Recommendation: Provide a STOP (R1-1) sign and associated striping at:

- Westbound approach to Chalmer Way Extension / Riopel Avenue intersection
- Eastbound approach to Chalmer Way Extension / Arnold Road intersection
- Westbound approach to Corona Way Extension / Riopel Avenue intersection

In addition to the new roadway connection to Arnold Road via Chalmer Way the project would also provide two new additional connections to Arnold Road (Court D and Street B). It is also recommended that these new roadway connections provide side-street stop control with Arnold Road.

Recommendation: Provide a STOP (R1-1) sign and associated striping at:

- Eastbound approach to new Court D / Arnold Road intersection

- Eastbound approach to new Street B / Arnold Road intersection

According to the *Standards and Specifications 2014 Edition* (County Standards) prepared by the Stanislaus County Department of Public Works, a left-turn lane and taper may be required if the left-turn ingress volume (50 minimum) and the opposing volume per lane exceed 750 in any peak hour. The project traffic volumes do not meet these requirements. Therefore, exclusive left-turn lanes into the project site are not required.

The internal roadways would provide a 50-foot right-of-way with 32 feet of paved area (not including sidewalk gutter) that is sufficient for two travel lanes (one lane in each direction) and on-street parking on both sides of the roadway. The 50-foot right-of-way and two travel lanes is consistent with the engineering standards presented in the County Standards.

All of the internal intersections to the project site intersect at 90 degrees and provide adequate sight distance. According to the *California Manual on Uniform Traffic Control Devices* (CA MUTCD) the use of YIELD or STOP signs at an intersection should be used if on one or more of the following conditions exist:

- An intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;
- A street entering a designated through highway or street; and/or
- An unsignalized intersection in a signalized area.

Based on the layout of the intersections it does not appear that any of these conditions exist. Therefore, it is recommended that neither YIELD nor STOP signs be provided at the internal intersections to the project site. Based on a review of the tentative subdivision map the project would provide adequate vehicle site access and circulation assuming the recommendations listed above are provided.

7.2 PEDESTRIAN ACCESS AND CIRCULATION

All of the internal roadways are proposed to have the same design and include a five-foot wide sidewalk on both sides of the roadway which is consistent with the County Standard. Along the project's frontage, five-foot sidewalk would be provided on Riopel Avenue, Arnold Road, and Zeering Road. To improve the pedestrian connectivity between the Hoffman Ranch Subdivision, the existing Riopel Subdivision

(located on the west side of Riopel Avenue), and Hunter's Pointe Park the following pedestrian facilities are recommended (also shown in **Exhibit A** below)[3]:

- Riopel Avenue / Corona Way Intersection
    - Provide a crosswalk on the north, west, and east leg of the intersection
    - Provide a curb bulb-out on the northwest, northeast, and southeast quadrant of the intersection
- Chalmer Way / Street A
    - Provide a crosswalk on the south and east leg of the intersection
- Court C / Street A
    - Provide a crosswalk on the north and west leg of the intersection

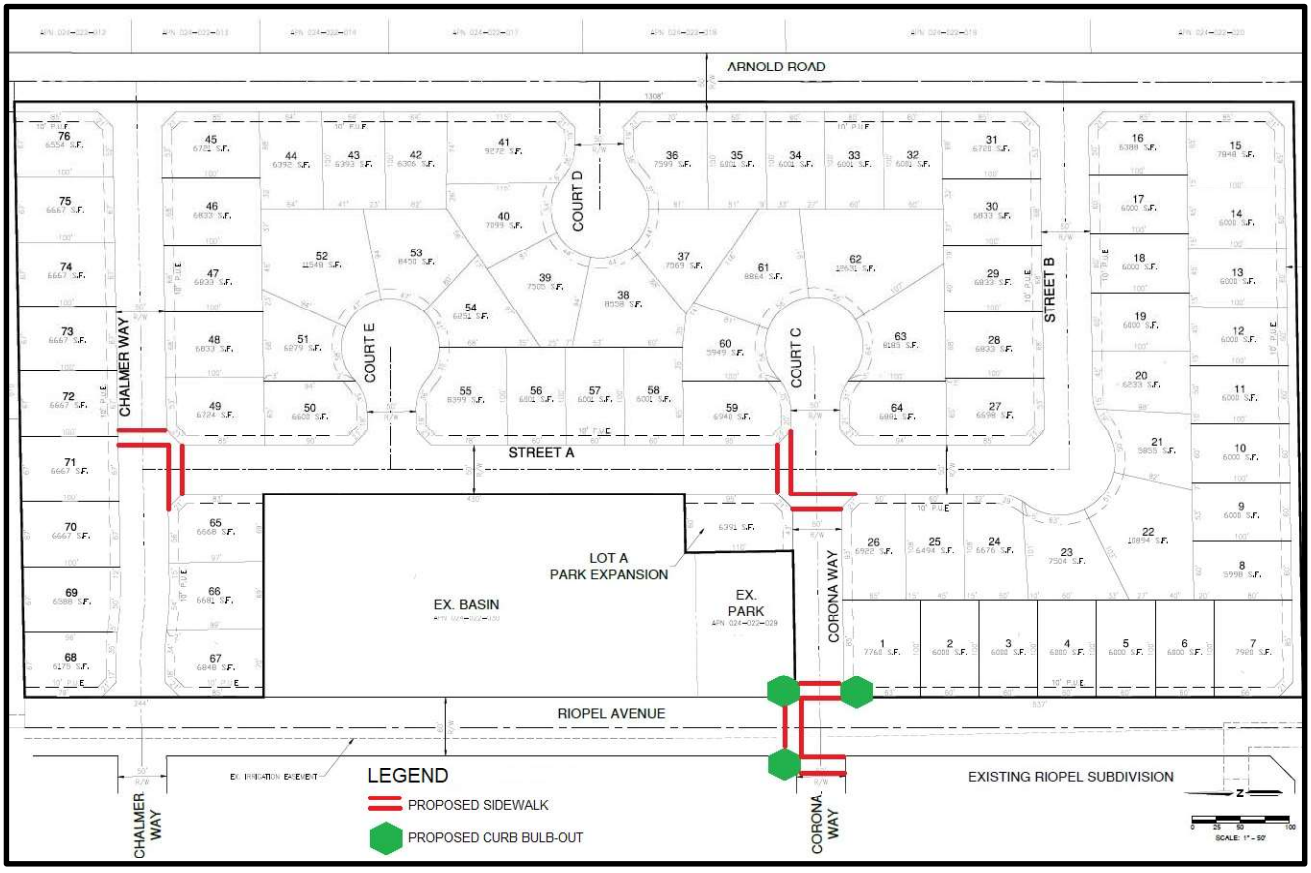


Exhibit A - Recommended Pedestrian Facilities

[3] These recommendations were developed in consultation with Stanislaus County Public Works department.

7.3 BICYCLE ACCESS AND CIRCULATION

The project does not propose to provide any dedicated bicycle facilities. Within the project site, dedicated bicycle facilities are not warranted given the low daily vehicle traffic volumes (less than 600 vehicles per day) and ample pavement width for vehicles and bicyclists to share the road. Along Riopel Avenue, Arnold Road, and Zeering Road there are no County plans to provide dedicated bicycle facilities.

7.4 EMERGENCY VEHICLE ACCESS

Several factors determine whether a project has adequate access for emergency vehicles, including:

1. Number of access points (both public and emergency access only)
2. Width of internal roadways
3. Turnarounds at dead-end streets

Based on the County's Fire Code (adopted from the *2019 California Fire Code*), the minimum number of access roads serving a residential development shall be based upon the number of dwelling units served as follows:

- Development of one or two-family dwellings where the number of dwelling units exceed 30 shall be provided with two separate and approved fire apparatus access roads; where there are more than 30-dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 of the *California Fire Code*, access from two directions shall not be required.

The project (76 dwelling units) would be served by several access roads so adequate access for emergency vehicles would be provided.

Cross-sections for the proposed streets within the project site were reviewed. All street sections provide a minimum of 20-feet of clearway (meaning no obstructions in terms of parked vehicles, landscaping, etc.), such that sufficient width is provided for emergency vehicle access and circulation.

There are several internal roadways (Court C, Court D, and Court E) that dead-end. However, all of these internal roadways provide adequate turnaround areas (cul-de-sac).

7.5 PARKING

Two enclosed parking spaces for each residential unit would be provided. This is consistent with Stanislaus County Zoning Ordinance that requires two off-street parking spaces per single-family dwelling unit.

8.0 RECOMMENDATIONS AND SUMMARY OF FINDINGS

This chapter presents the recommendations and a summary of the findings of the transportation impact assessment.

8.1 RECOMMENDATIONS

The project is well designed and only a few recommendations are provided to improve the project site layout.

Recommendation #1: Provide a STOP (R1-1) sign and associated striping at:

- Westbound approach to Chalmer Way Extension / Riopel Avenue intersection
- Eastbound approach to Chalmer Way Extension / Arnold Road intersection
- Westbound approach to Corona Way Extension / Riopel Avenue intersection
- Eastbound approach to new Court D / Arnold Road intersection
- Eastbound approach to new Street B / Arnold Road intersection

Recommendation #2: Provide the following pedestrian facilities.

- Riopel Avenue / Corona Way Intersection
    - Provide a crosswalk on the north, west, and east leg of the intersection
    - Provide a curb bulb-out on the northwest, northeast, and southeast quadrant of the intersection
- Chalmer Way / Street A
    - Provide a crosswalk on the south and east leg of the intersection
- Court C / Street A
    - Provide a crosswalk on the north and west leg of the intersection

8.2 SUMMARY OF FINDINGS

The key findings of this study are:

1) The project would not have a perceptible increase in traffic delay on the adjacent transportation facilities.

2) The project vehicle, pedestrian, and bicycle circulation are consistent with adopted Stanislaus County standards.
3) The project provides adequate vehicle and emergency vehicle access.
4) The Hoffman Ranch Subdivision is consistent with the County's adopted General Plan and the Denair Community Plan. Based on the consistency with an existing approved land use plan, a detailed VMT evaluation is not required for this project. Developments consistent with a previously approved land use plan are considered to have a ***less than significant VMT impact***.

APPENDIX A
TENTATIVE SUBDIVISION MAP

CONTACT INFORMATION

OWNERS/SUBDIVIDERS: ARTHUR W. AND ANNE L. DUNKLEY MARITAL PROPERTY
239 MAIN STREET, SUITE E
PLEASANTON, CA 94566
(925) 846-7009

ROSALYN M. SIMON REVOCABLE TRUST
239 MAIN STREET, SUITE E
PLEASANTON, CA 94566
(925) 846-7003

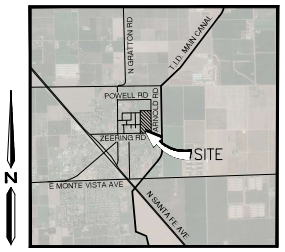
APPLICANT: O'DELL ENGINEERING
1165 SCENIC DRIVE, SUITE A
MODESTO, CA 95350
CONTACT: VONNA J. ADAMS
(209) 571-1765

SUBDIVIDER'S STATEMENT

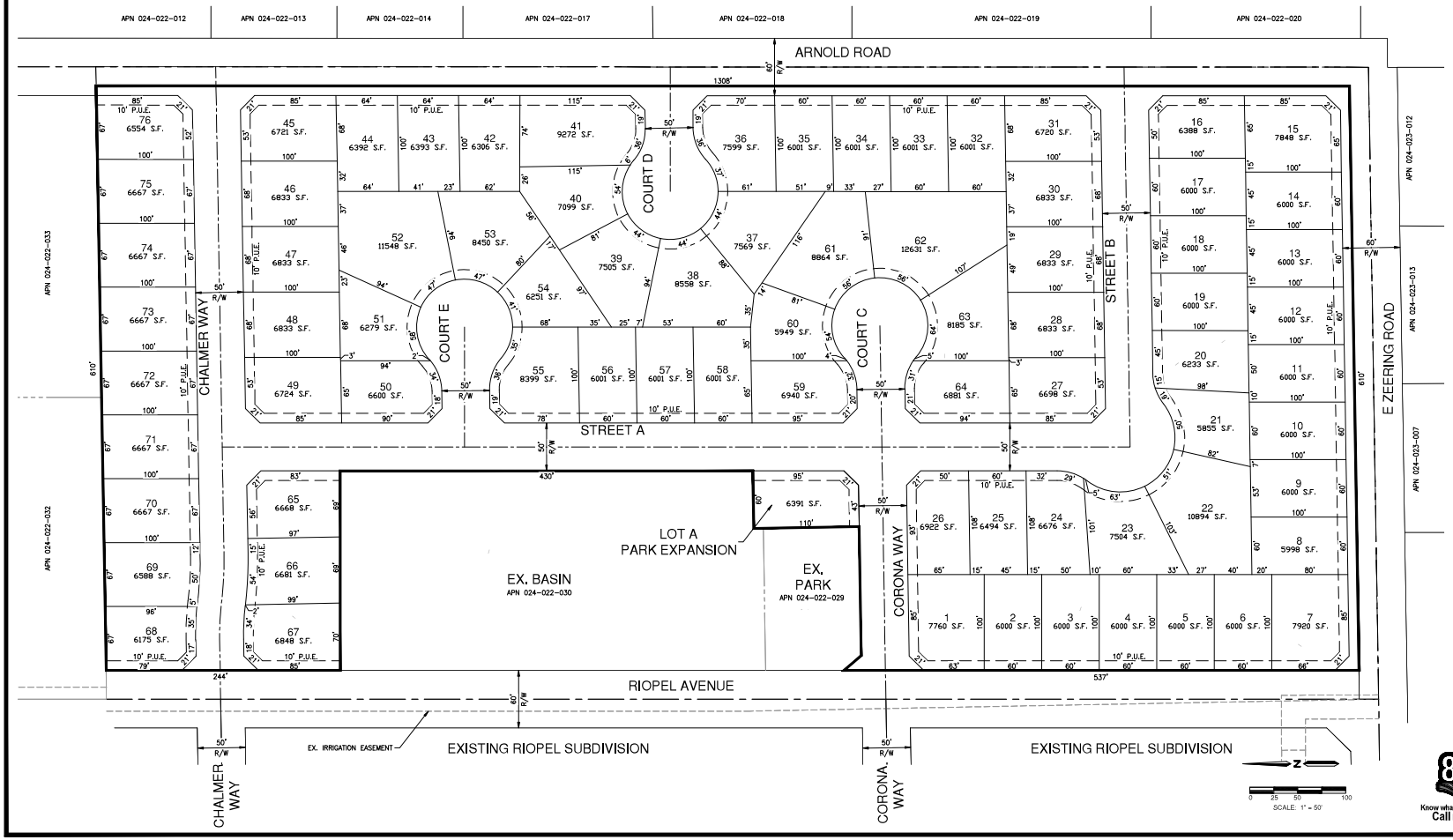
1. 15.9± ACRES
   - 76 RESIDENTIAL LOTS
   - LOT A, PARK EXPANSION
2. GENERAL PLAN DESIGNATION = RESIDENTIAL-LOW
3. ZONING = PD-288 (TO BE REZONED TO R-1)
4. EROSION CONTROL PLAN SHALL BE DONE PER STANISLAUS COUNTY ORDINANCES.
5. MINIMUM BUILDING SETBACK LINES SHALL COMPLY WITH STANISLAUS COUNTY STANDARDS.
6. DOMESTIC WATER SUPPLY SHALL BE BY CONNECTION TO DENAIR COMMUNITY SERVICES DISTRICT WATER SYSTEM.
7. SEWAGE DISPOSAL SHALL BE BY COLLECTION SYSTEM AND CONNECT TO DENAIR COMMUNITY SERVICES DISTRICT SANITARY SEWER SYSTEM.
8. STORM DRAINAGE DISPOSAL SHALL BE BY COLLECTION SYSTEM AND CONNECT TO STANISLAUS COUNTY STORM DRAINAGE SYSTEM.
9. TREE PLANTING SHALL BE PERFORMED IN ACCORDANCE WITH STANISLAUS COUNTY ORDINANCES.
10. THE OWNER PROPOSES TO BUILD ON LOTS, BUT RESERVES THE RIGHT TO SELL LOTS.
11. THIS TENTATIVE SUBDIVISION MAP IS A SUBDIVISION OF PARCEL: 024-022-027.
12. THE OWNER RESERVES THE RIGHT TO PHASE PROJECT PER THE SUBDIVISION MAP ACT.

LEGEND

PROJECT BOUNDARY



VICINITY MAP
N.T.S.



Know what's below. Call before you dig.

PLAN REVISIONS		
NO.	DATE	REVISION

O'DELL ENGINEERING
1165 Scenic Drive, Suite A
Modesto, CA 95350
odellengineering.com

HOFFMAN RANCH SUBDIVISION
DENAIR, CALIFORNIA

VESTING TENTATIVE MAP

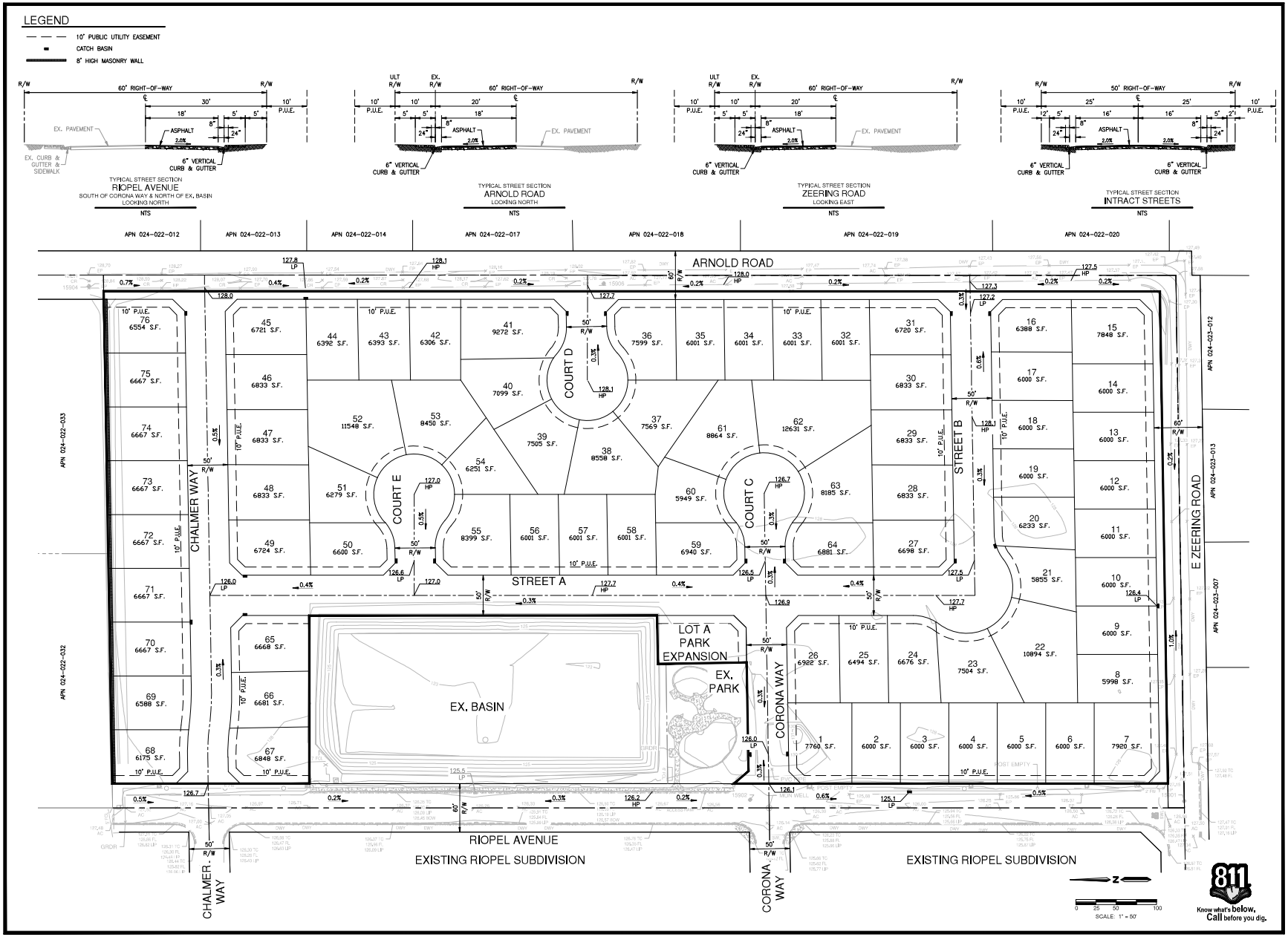
APPROVED:

DESIGNED:	MP/VJA
DRAWN:	EH/VJA
CHECKED:	MP/VJA
SCALE:	AS SHOW
DATE:	5/19/2022
JOB NO.:	39170
FILE NO.:	VTM-DENAIR TENTATIVE MAP-39170.DWG

SHEET NO.
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391

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392

H:\39170-Dunlap Denair Subdivision\Planning\Planning\VTM-Denair Tentative Map-39170.dwg vadams 15:31:19 05/19/2022

PLAN REVISIONS

NO.	DATE	REVISION

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Modesto, CA 95350
odellengineering.com

HOFFMAN RANCH SUBDIVISION

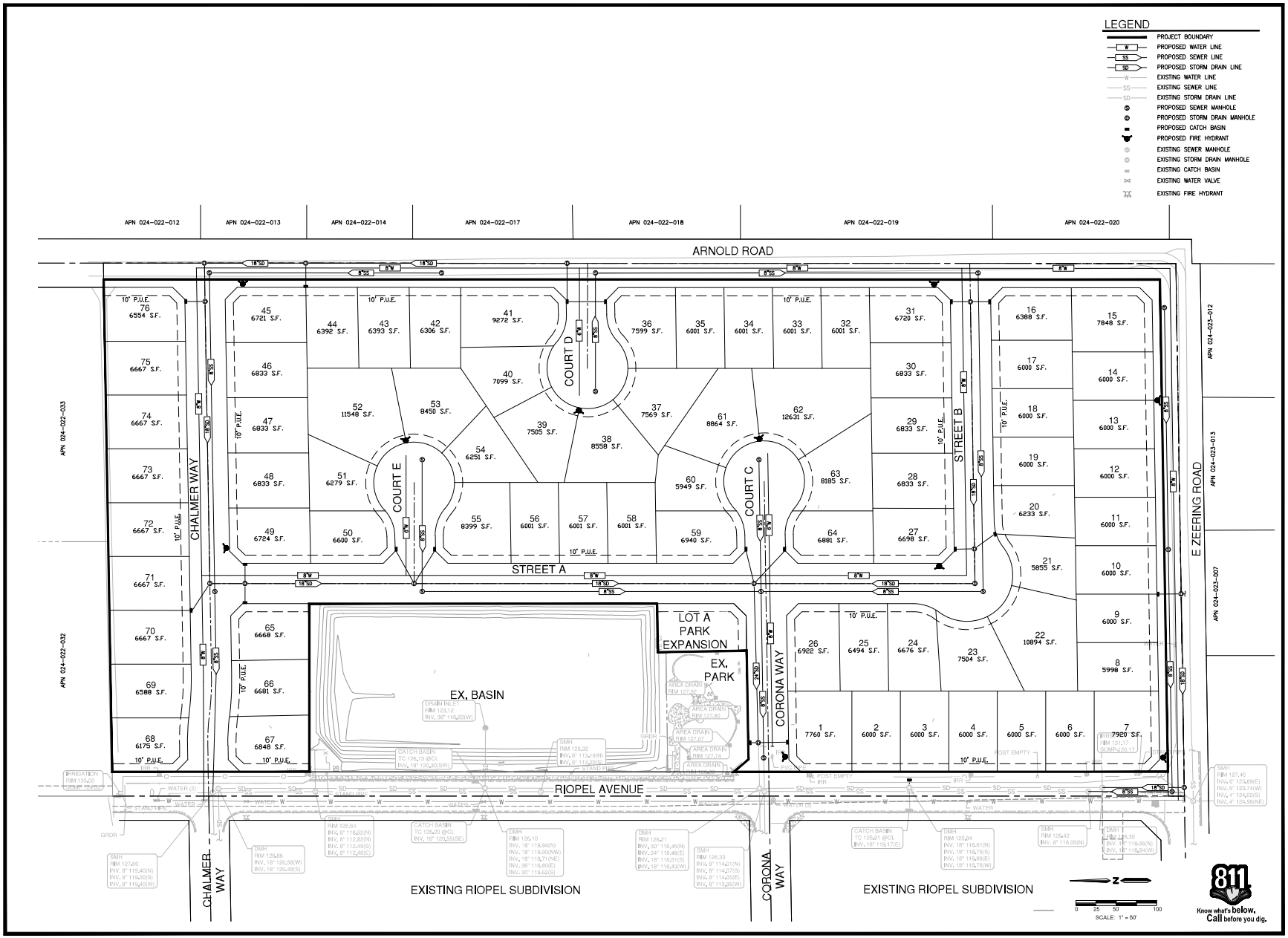
DENAIR, CALIFORNIA

PRELIMINARY GRADING PLAN

APPROVED:

DESIGNED:	MP/VJA
DRAWN:	EH/VJA
CHECKED:	MP/VJA
SCALE:	AS SHOW
DATE:	5/19/2022
JOB NO.:	39170
FILE NO.:	VTM-DENAIR TENTATIVE MAP-39170.DWG

SHEET NO.
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OF
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PLAN REVISIONS

NO.	DATE	REVISION

O'DELL ENGINEERING
1165 Scenic Drive, Suite A
Modesto, CA 95350
odellengineering.com

HOFFMAN RANCH SUBDIVISION

DENAIR, CALIFORNIA

PRELIMINARY UTILITY PLAN

APPROVED:

DESIGNED:	MP/VJA
DRAWN:	EH/VJA
CHECKED:	MP/VJA
SCALE:	AS SHOW
DATE:	5/19/2022
JOB NO.:	39170
FILE NO.:	VTM-DENAIR TENTATIVE MAP-39170.DWG

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APPENDIX B
LOS CRITERIA

Signalized Intersections

Traffic conditions at signalized intersections were evaluated using methods developed by the Transportation Research Board (TRB), as documented in the *Highway Capacity Manual 6th Edition* (2016 HCM) for vehicles using the analysis software Synchro 11.0. The HCM method calculates control delay at an intersection based on inputs such as traffic volumes, lane geometry, signal phasing and timing, pedestrian crossing times, and peak hour factors. Control delay is defined as the delay directly associated with the traffic control device (i.e., a traffic signal or stop sign) and specifically includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The relationship between LOS and control delay for signalized intersections is summarized in **Table A.**

Table A: Signalized Intersection LOS Criteria

Level of Service	Description	Delay in Seconds
A	Progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	< 10.0
B	Progression is good, cycle lengths are short, or both. More vehicles stop than with LOS A, causing higher levels of average delay.	> 10.0 to 20.0
C	Higher congestion may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, though many still pass through the intersection without stopping.	> 20.0 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	> 35.0 to 55.0
E	This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55.0 to 80.0
F	This level is considered unacceptable with oversaturation, which is when arrival flow rates exceed the capacity of the intersection. This level may also occur at high V/C ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to such delay levels.	> 80.0

Source: 2016 *Highway Capacity Manual*

Unsignalized Intersections

For unsignalized (all-way stop controlled and side-street stop controlled) intersections, the HCM 6th Edition method for unsignalized intersections was used. With this method, operations are defined by the average control delay per vehicle (measured in seconds). The control delay incorporates delay associated with deceleration, acceleration, stopping, and moving up in queue. **Table B** summarizes the relationship between LOS and delay for unsignalized intersections. At side-street stop-controlled intersections, the

delay is calculated for each stop-controlled movement. The highest movement/approach delay are reported for side-street stop-controlled intersections.

Table B: Unsignalized Intersection LOS Criteria

Level of Service	Description	Delay in Seconds
A	Little or no delays	≤ 10.0
B	Short traffic delays	> 10.0 to 15.0
C	Average traffic delays	> 15.0 to 25.0
D	Long traffic delays	> 25.0 to 35.0
E	Very long traffic delays	> 35.0 to 50.0
F	Extreme traffic, delays where intersection capacity exceeded	> 50.0

Source: 2016 *Highway Capacity Manual*

APPENDIX C
TRAFFIC COUNTS

National Data & Surveying Services Intersection Turning Movement Count

Location: Lester Rd & Main St
City: Denair
Control: Signalized

Project ID: 21-090082-002
Date: 9/1/2021

Data - Total

NS/EW Streets:	Lester Rd				Lester Rd				Main St				Main St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	31	11	7	0	2	3	3	0	1	9	0	0	3	13	2	0	85
7:15 AM	42	24	15	0	3	1	3	0	6	16	0	0	7	31	8	0	156
7:30 AM	34	24	14	0	17	14	9	0	15	37	0	0	9	36	30	0	239
7:45 AM	40	24	21	0	23	22	22	0	18	21	0	0	11	54	39	0	295
8:00 AM	29	3	4	0	7	9	5	0	1	14	0	0	14	67	3	0	156
8:15 AM	29	6	9	0	2	2	3	0	6	19	0	0	4	45	3	0	128
8:30 AM	19	10	6	0	1	4	2	0	2	14	0	0	5	26	0	0	89
8:45 AM	20	2	3	0	0	3	3	0	3	20	0	0	5	30	1	0	90
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	244	104	79	0	55	58	50	0	52	150	0	0	58	302	86	0	1238
APPROACH %'s :	57.14%	24.36%	18.50%	0.00%	33.74%	35.58%	30.67%	0.00%	25.74%	74.26%	0.00%	0.00%	13.00%	67.71%	19.28%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	145	75	54	0	50	46	39	0	40	88	0	0	41	188	80	0	846
PEAK HR FACTOR :	0.863	0.781	0.643	0.000	0.543	0.523	0.443	0.000	0.556	0.595	0.000	0.000	0.732	0.701	0.513	0.000	0.717
	0.806				0.504				0.615				0.743				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	24	4	4	0	3	12	2	0	2	42	0	0	7	29	2	0	131
4:15 PM	18	4	7	0	3	4	3	0	4	36	0	0	7	38	1	0	125
4:30 PM	26	5	6	0	3	9	3	0	3	31	0	0	5	27	4	0	122
4:45 PM	40	5	18	0	2	8	5	0	5	36	0	0	4	31	3	0	157
5:00 PM	23	7	12	0	8	11	6	0	3	53	0	0	11	33	3	0	170
5:15 PM	38	8	6	0	10	7	8	0	5	32	0	0	5	32	12	0	163
5:30 PM	34	7	15	0	7	9	7	0	5	37	1	0	4	43	8	0	177
5:45 PM	29	5	4	0	4	5	9	0	7	26	0	0	10	31	3	0	133
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	232	45	72	0	40	65	43	0	34	293	1	0	53	264	36	0	1178
APPROACH %'s :	66.48%	12.89%	20.63%	0.00%	27.03%	43.92%	29.05%	0.00%	10.37%	89.33%	0.30%	0.00%	15.01%	74.79%	10.20%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	135	27	51	0	27	35	26	0	18	158	1	0	24	139	26	0	667
PEAK HR FACTOR :	0.844	0.844	0.708	0.000	0.675	0.795	0.813	0.000	0.900	0.745	0.250	0.000	0.545	0.808	0.542	0.000	0.942
	0.845				0.880				0.790				0.859				

National Data & Surveying Services Intersection Turning Movement Count

Location: Santa Fe Ave & Zeering Rd
City: Denair
Control: 4-Way Stop

Project ID: 22-090046-001
Date: 4/6/2022

Data - Total

NS/EW Streets:	Santa Fe Ave				Santa Fe Ave				Zeering Rd				Zeering Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	1	1	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	52	0	0	2	34	10	0	8	5	10	0	3	12	8	0	145
7:15 AM	7	66	1	0	6	24	12	0	8	10	8	0	1	20	14	0	177
7:30 AM	9	67	4	0	0	35	27	0	14	10	6	0	2	46	6	0	226
7:45 AM	15	62	3	0	2	41	36	0	16	21	11	0	2	45	6	0	260
8:00 AM	3	44	0	0	2	34	12	0	8	11	9	0	2	13	8	0	146
8:15 AM	7	52	0	0	2	39	7	0	5	8	12	0	1	10	4	0	147
8:30 AM	3	39	0	0	2	30	8	0	12	7	2	0	2	6	3	0	114
8:45 AM	2	31	0	0	1	40	12	0	3	5	9	0	3	10	5	0	121
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	47	413	8	0	17	277	124	0	74	77	67	0	16	162	54	0	1336
APPROACH %'s :	10.04%	88.25%	1.71%	0.00%	4.07%	66.27%	29.67%	0.00%	33.94%	35.32%	30.73%	0.00%	6.90%	69.83%	23.28%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	34	239	8	0	10	134	87	0	46	52	34	0	7	124	34	0	809
PEAK HR FACTOR :	0.567	0.892	0.500	0.000	0.417	0.817	0.604	0.000	0.719	0.619	0.773	0.000	0.875	0.674	0.607	0.000	0.778
	0.878				0.731				0.688				0.764				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	1	1	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	44	4	0	5	83	15	0	11	18	8	0	3	8	9	0	212
4:15 PM	7	49	5	0	4	86	21	0	11	13	6	0	4	7	2	0	215
4:30 PM	12	49	2	0	13	70	15	0	8	8	3	0	4	7	8	0	199
4:45 PM	12	39	2	0	8	63	12	0	12	18	12	0	5	12	7	0	202
5:00 PM	7	51	5	0	14	73	18	0	6	14	9	0	1	8	1	0	207
5:15 PM	13	42	4	0	9	70	10	0	8	14	7	0	1	16	3	0	197
5:30 PM	7	51	3	0	13	57	13	0	6	9	4	0	4	12	4	0	183
5:45 PM	9	38	10	0	11	62	10	0	4	11	5	0	3	11	5	0	179
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	71	363	35	0	77	564	114	0	66	105	54	0	25	81	39	0	1594
APPROACH %'s :	15.14%	77.40%	7.46%	0.00%	10.20%	74.70%	15.10%	0.00%	29.33%	46.67%	24.00%	0.00%	17.24%	55.86%	26.90%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	35	181	13	0	30	302	63	0	42	57	29	0	16	34	26	0	828
PEAK HR FACTOR :	0.729	0.923	0.650	0.000	0.577	0.878	0.750	0.000	0.875	0.792	0.604	0.000	0.800	0.708	0.722	0.000	0.963
	0.909				0.890				0.762				0.792				

National Data & Surveying Services Intersection Turning Movement Count

Location: Riopel Ave & Zeering Rd
City: Denair
Control: 1-Way Stop (SB)

Project ID: 22-090046-002
Date: 4/6/2022

Data - Total

NS/EW Streets:	Riopel Ave				Riopel Ave				Zeering Rd				Zeering Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:15 AM	0	0	0	0	0	0	4	0	2	1	0	0	0	2	0	0	9
7:30 AM	0	0	0	0	0	0	4	0	3	0	0	0	0	4	0	0	11
7:45 AM	0	0	0	0	0	0	4	0	2	1	0	0	0	2	0	0	9
8:00 AM	0	0	0	0	0	0	2	0	3	0	0	0	0	4	0	0	9
8:15 AM	0	0	0	0	0	0	2	0	2	3	0	0	0	1	0	0	8
8:30 AM	0	0	0	0	0	0	2	0	0	1	0	0	0	2	0	0	5
8:45 AM	0	0	0	0	0	0	1	0	3	2	0	0	0	2	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	19	0	15	9	0	0	0	18	0	0	61
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	62.50%	37.50%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	14	0	10	2	0	0	0	12	0	0	38
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.875	0.000	0.833	0.500	0.000	0.000	0.000	0.750	0.000	0.000	0.864
					0.875				1.000				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	1	0	6	4	0	1	0	1	1	0	14
4:15 PM	0	0	0	0	0	0	5	0	3	2	0	0	0	3	0	0	13
4:30 PM	0	0	0	0	0	0	0	0	6	3	0	0	0	0	0	0	9
4:45 PM	0	0	0	0	0	0	4	0	1	1	0	0	0	0	0	0	6
5:00 PM	0	0	0	0	0	0	3	0	6	1	0	0	0	0	0	0	10
5:15 PM	0	0	0	0	1	0	2	0	5	3	0	0	0	0	0	0	11
5:30 PM	0	0	0	0	0	0	0	0	7	1	0	0	0	2	0	0	10
5:45 PM	0	0	0	0	0	0	1	0	4	3	0	0	0	1	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	16	0	38	18	0	1	0	7	1	0	82
APPROACH %'s :					5.88%	0.00%	94.12%	0.00%	66.67%	31.58%	0.00%	1.75%	0.00%	87.50%	12.50%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	10	0	16	10	0	1	0	4	1	0	42
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.667	0.625	0.000	0.250	0.000	0.333	0.250	0.000	0.750
					0.500				0.614				0.417				

National Data & Surveying Services Intersection Turning Movement Count

Location: Gratton Rd & Zeering Rd
City: Denair
Control: 4-Way Stop

Project ID: 22-090046-003
Date: 4/6/2022

Data - Total

NS/EW Streets:	Gratton Rd				Gratton Rd				Zeering Rd				Zeering Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	9	0	0	0	10	6	0	2	3	1	0	3	8	1	0	44
7:15 AM	0	10	2	0	0	15	18	0	6	3	1	0	4	11	3	0	73
7:30 AM	1	22	3	0	0	28	20	0	7	2	0	0	1	17	1	0	102
7:45 AM	0	20	0	0	0	34	22	0	13	2	1	0	5	17	3	0	117
8:00 AM	0	22	4	0	0	25	9	0	6	0	0	0	2	6	0	0	74
8:15 AM	1	22	3	0	0	19	2	0	4	3	0	0	3	7	0	0	64
8:30 AM	1	8	2	0	0	13	2	0	2	5	0	0	4	5	0	0	42
8:45 AM	1	9	2	0	1	17	7	0	3	1	1	0	2	4	1	0	49
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	122	16	0	1	161	86	0	43	19	4	0	24	75	9	0	565
APPROACH %'s :	3.50%	85.31%	11.19%	0.00%	0.40%	64.92%	34.68%	0.00%	65.15%	28.79%	6.06%	0.00%	22.22%	69.44%	8.33%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	1	74	9	0	0	102	69	0	32	7	2	0	12	51	7	0	366
PEAK HR FACTOR :	0.250	0.841	0.563	0.000	0.000	0.750	0.784	0.000	0.615	0.583	0.500	0.000	0.600	0.750	0.583	0.000	0.782
	0.808				0.763				0.641				0.700				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	24	6	0	2	30	8	0	9	7	0	0	4	6	1	0	98
4:15 PM	0	26	3	0	4	18	3	0	6	9	2	0	5	3	1	0	80
4:30 PM	2	16	10	0	0	24	5	0	10	8	0	0	5	2	0	0	82
4:45 PM	0	24	6	0	0	13	9	0	9	3	2	0	5	5	2	0	78
5:00 PM	1	17	5	0	2	13	3	0	10	12	0	0	6	1	0	0	70
5:15 PM	0	29	9	0	1	16	10	0	11	4	2	0	3	2	0	0	87
5:30 PM	3	27	6	0	3	17	7	0	3	13	1	0	5	5	1	0	91
5:45 PM	0	21	7	0	0	16	8	0	7	12	2	0	4	8	1	0	86
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	184	52	0	12	147	53	0	65	68	9	0	37	32	6	0	672
APPROACH %'s :	2.88%	75.72%	21.40%	0.00%	5.66%	69.34%	25.00%	0.00%	45.77%	47.89%	6.34%	0.00%	49.33%	42.67%	8.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	3	90	25	0	6	85	25	0	34	27	4	0	19	16	4	0	338
PEAK HR FACTOR :	0.375	0.865	0.625	0.000	0.375	0.708	0.694	0.000	0.850	0.750	0.500	0.000	0.950	0.667	0.500	0.000	0.862
	0.952				0.725				0.903				0.813				

National Data & Surveying Services Intersection Turning Movement Count

Location: Santa Fe Ave & Main St
City: Denair
Control: 4-Way Stop

Project ID: 22-090046-004
Date: 4/6/2022

Data - Total

NS/EW Streets:	Santa Fe Ave				Santa Fe Ave				Main St				Main St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	1	0	0	0	1	0	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	44	3	0	2	42	6	0	6	10	6	0	3	11	2	0	139
7:15 AM	7	58	3	0	1	28	4	0	18	8	2	0	3	15	3	0	150
7:30 AM	27	60	2	0	3	32	7	0	18	27	3	0	3	27	1	0	210
7:45 AM	20	53	2	0	2	36	15	0	17	20	9	0	8	34	4	0	220
8:00 AM	2	36	3	0	1	34	10	0	11	31	7	0	5	27	3	0	170
8:15 AM	1	48	5	0	4	42	8	0	7	25	4	0	3	29	2	0	178
8:30 AM	3	35	2	0	2	27	4	0	8	17	2	0	3	20	1	0	124
8:45 AM	5	27	5	0	3	42	10	0	10	14	4	0	6	19	1	0	146
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	69	361	25	0	18	283	64	0	95	152	37	0	34	182	17	0	1337
APPROACH %'s :	15.16%	79.34%	5.49%	0.00%	4.93%	77.53%	17.53%	0.00%	33.45%	53.52%	13.03%	0.00%	14.59%	78.11%	7.30%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	50	197	12	0	10	144	40	0	53	103	23	0	19	117	10	0	778
PEAK HR FACTOR :	0.463	0.821	0.600	0.000	0.625	0.857	0.667	0.000	0.736	0.831	0.639	0.000	0.594	0.860	0.625	0.000	0.884
	0.728				0.898				0.913				0.793				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	1	0	0	0	1	0	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	41	2	0	2	77	14	0	14	36	7	0	7	31	1	0	240
4:15 PM	14	47	3	0	2	74	17	0	15	43	5	0	8	26	3	0	257
4:30 PM	6	48	4	0	5	63	18	0	15	30	4	0	8	27	4	0	232
4:45 PM	5	40	6	0	0	64	15	0	11	31	3	0	10	17	3	0	205
5:00 PM	5	44	3	0	3	67	18	0	12	30	5	0	10	18	7	0	222
5:15 PM	1	45	5	0	1	62	15	0	9	36	4	0	2	18	5	0	203
5:30 PM	7	44	0	0	1	58	13	0	17	36	5	0	3	29	3	0	216
5:45 PM	3	39	5	0	1	59	13	0	15	37	2	0	6	24	5	0	209
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	49	348	28	0	15	524	123	0	108	279	35	0	54	190	31	0	1784
APPROACH %'s :	11.53%	81.88%	6.59%	0.00%	2.27%	79.15%	18.58%	0.00%	25.59%	66.11%	8.29%	0.00%	19.64%	69.09%	11.27%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	33	176	15	0	9	278	64	0	55	140	19	0	33	101	11	0	934
PEAK HR FACTOR :	0.589	0.917	0.625	0.000	0.450	0.903	0.889	0.000	0.917	0.814	0.679	0.000	0.825	0.815	0.688	0.000	0.909
	0.875				0.944				0.849				0.929				

National Data & Surveying Services Intersection Turning Movement Count

Location: Santa Fe Ave & Monte Vista Ave
City: Denair
Control: 4-Way Stop

Project ID: 22-090046-005
Date: 4/6/2022

Data - Total

NS/EW Streets:	Santa Fe Ave				Santa Fe Ave				Monte Vista Ave				Monte Vista Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0	0	0	1	1	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	8	35	4	0	6	43	6	0	19	5	11	0	2	15	3	0	157
7:15 AM	12	46	1	0	5	23	12	0	22	17	8	0	0	27	7	0	180
7:30 AM	16	54	0	0	5	29	10	0	20	19	11	0	4	33	8	0	209
7:45 AM	11	44	0	0	7	34	18	0	23	22	11	0	1	39	12	0	222
8:00 AM	9	38	1	0	6	36	9	0	12	14	16	0	2	17	4	0	164
8:15 AM	11	46	0	0	5	39	4	0	8	9	2	0	2	17	3	0	146
8:30 AM	9	21	0	0	4	26	7	0	3	12	5	0	1	20	7	0	115
8:45 AM	11	34	1	0	10	33	10	0	6	7	7	0	3	15	1	0	138
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	87	318	7	0	48	263	76	0	113	105	71	0	15	183	45	0	1331
APPROACH %'s :	21.12%	77.18%	1.70%	0.00%	12.40%	67.96%	19.64%	0.00%	39.10%	36.33%	24.57%	0.00%	6.17%	75.31%	18.52%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	48	182	2	0	23	122	49	0	77	72	46	0	7	116	31	0	775
PEAK HR FACTOR :	0.750	0.843	0.500	0.000	0.821	0.847	0.681	0.000	0.837	0.818	0.719	0.000	0.438	0.744	0.646	0.000	0.873
	0.829				0.822				0.871				0.740				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0	0	0	1	1	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	9	30	2	0	5	70	20	0	12	22	23	0	1	18	9	0	221
4:15 PM	15	53	3	0	8	69	10	0	14	16	18	0	1	28	7	0	242
4:30 PM	10	35	3	0	4	65	12	0	12	15	14	0	2	18	10	0	200
4:45 PM	9	48	4	0	5	57	22	0	11	22	12	0	3	21	2	0	216
5:00 PM	7	48	2	0	6	63	16	0	7	24	16	0	4	20	1	0	214
5:15 PM	10	41	1	0	3	54	16	0	11	22	18	0	0	17	4	0	197
5:30 PM	14	34	1	0	2	55	15	0	15	21	15	0	1	14	7	0	194
5:45 PM	15	31	5	0	1	51	10	0	11	19	9	0	0	20	7	0	179
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	89	320	21	0	34	484	121	0	93	161	125	0	12	156	47	0	1663
APPROACH %'s :	20.70%	74.42%	4.88%	0.00%	5.32%	75.74%	18.94%	0.00%	24.54%	42.48%	32.98%	0.00%	5.58%	72.56%	21.86%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	43	166	12	0	22	261	64	0	49	75	67	0	7	85	28	0	879
PEAK HR FACTOR :	0.717	0.783	0.750	0.000	0.688	0.932	0.727	0.000	0.875	0.852	0.728	0.000	0.583	0.759	0.700	0.000	0.908
	0.778				0.913				0.838				0.833				

APPENDIX D
EXISTING CONDITIONS ANALYSIS WORKSHEETS

Intersection	
Intersection Delay, s/veh	14.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	46	52	34	7	124	34	10	134	87	34	239	8
Future Vol, veh/h	46	52	34	7	124	34	10	134	87	34	239	8
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	7	7	7	7	7	7	7	7	7	7	7	7
Mvmt Flow	59	67	44	9	159	44	13	172	112	44	306	10
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	12.1	12.8	11.4	18.6
HCM LOS	B	B	B	C

Lane	NWLn1	NWLn2	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	12%	0%	35%	4%	7%	0%
Vol Thru, %	88%	0%	39%	75%	93%	0%
Vol Right, %	0%	100%	26%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	273	8	132	165	144	87
LT Vol	34	0	46	7	10	0
Through Vol	239	0	52	124	134	0
RT Vol	0	8	34	34	0	87
Lane Flow Rate	350	10	169	212	185	112
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.617	0.016	0.296	0.362	0.331	0.177
Departure Headway (Hd)	6.346	5.57	6.293	6.162	6.459	5.71
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	567	638	565	580	554	624
Service Time	4.119	3.343	4.391	4.254	4.242	3.492
HCM Lane V/C Ratio	0.617	0.016	0.299	0.366	0.334	0.179
HCM Control Delay	18.9	8.4	12.1	12.8	12.4	9.7
HCM Lane LOS	C	A	B	B	B	A
HCM 95th-tile Q	4.2	0	1.2	1.6	1.4	0.6

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	7	2	12	51	7	1	74	9	0	102	69
Future Vol, veh/h	32	7	2	12	51	7	1	74	9	0	102	69
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	9	3	15	65	9	1	95	12	0	131	88
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.3	8.4	8.4	8.8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	78%	17%	0%
Vol Thru, %	99%	0%	17%	73%	60%
Vol Right, %	0%	100%	5%	10%	40%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	75	9	41	70	171
LT Vol	1	0	32	12	0
Through Vol	74	0	7	51	102
RT Vol	0	9	2	7	69
Lane Flow Rate	96	12	53	90	219
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.135	0.014	0.072	0.118	0.26
Departure Headway (Hd)	5.059	4.348	4.917	4.718	4.27
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	710	823	728	760	842
Service Time	2.786	2.075	2.95	2.747	2.295
HCM Lane V/C Ratio	0.135	0.015	0.073	0.118	0.26
HCM Control Delay	8.6	7.1	8.3	8.4	8.8
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0	0.2	0.4	1

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	2	12	0	0	14
Future Vol, veh/h	10	2	12	0	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	12	2	14	0	0	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	14	0	-	0	40	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	26	-
Critical Hdwy	4.18	-	-	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	2.272	-	-	-	3.572	3.372
Pot Cap-1 Maneuver	1566	-	-	-	957	1049
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	981	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1566	-	-	-	949	1049
Mov Cap-2 Maneuver	-	-	-	-	949	-
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	981	-

Approach	EB	WB	SB
HCM Control Delay, s	6.1	0	8.5
HCM LOS			A

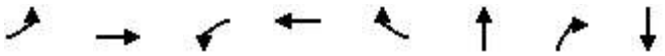
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1566	-	-	-	1049
HCM Lane V/C Ratio	0.007	-	-	-	0.016
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Intersection Delay, s/veh	13.8
Intersection LOS	B

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	144	40	50	197	12	53	103	23	19	117	10
Future Vol, veh/h	10	144	40	50	197	12	53	103	23	19	117	10
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	9	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	11	164	45	57	224	14	60	117	26	22	133	11
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	1

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	2	1	2	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	2	1	1	2
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	2	2	1
HCM Control Delay	13.5	15	13.6	12.1
HCM LOS	B	B	B	B

Lane	NELn1	NWLn1	NWLn2	SELn1	SWLn1	SWLn2
Vol Left, %	30%	20%	0%	5%	14%	0%
Vol Thru, %	58%	80%	0%	74%	86%	0%
Vol Right, %	13%	0%	100%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	179	247	12	194	136	10
LT Vol	53	50	0	10	19	0
Through Vol	103	197	0	144	117	0
RT Vol	23	0	12	40	0	10
Lane Flow Rate	203	281	14	220	155	11
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.374	0.496	0.021	0.389	0.289	0.019
Departure Headway (Hd)	6.622	6.356	5.543	6.352	6.737	5.953
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	541	564	643	564	532	598
Service Time	4.694	4.118	3.304	4.422	4.511	3.726
HCM Lane V/C Ratio	0.375	0.498	0.022	0.39	0.291	0.018
HCM Control Delay	13.6	15.3	8.4	13.5	12.3	8.8
HCM Lane LOS	B	C	A	B	B	A
HCM 95th-tile Q	1.7	2.7	0.1	1.8	1.2	0.1



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	56	122	57	261	111	305	75	187
v/c Ratio	0.15	0.34	0.14	0.63	0.22	0.75	0.15	0.65
Control Delay	18.8	33.2	18.6	38.1	1.1	44.1	0.6	45.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.8	33.2	18.6	38.1	1.1	44.1	0.6	45.5
Queue Length 50th (ft)	20	58	20	136	0	157	0	97
Queue Length 95th (ft)	35	86	35	170	0	199	0	135
Internal Link Dist (ft)		659		1129		725		1464
Turn Bay Length (ft)	125		100		100		25	
Base Capacity (vph)	507	501	538	503	559	482	551	349
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.24	0.11	0.52	0.20	0.63	0.14	0.54

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	88	0	41	188	80	145	75	54	50	46	39
Future Volume (veh/h)	40	88	0	41	188	80	145	75	54	50	46	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.99		0.99	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	56	122	0	57	261	111	201	104	75	69	64	54
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	259	345	0	368	346	291	254	132	323	93	86	73
Arrive On Green	0.06	0.18	0.00	0.06	0.18	0.18	0.21	0.21	0.21	0.14	0.14	0.14
Sat Flow, veh/h	1795	1885	0	1795	1885	1585	1203	622	1527	640	594	501
Grp Volume(v), veh/h	56	122	0	57	261	111	305	0	75	187	0	0
Grp Sat Flow(s),veh/h/ln	1795	1885	0	1795	1885	1585	1825	0	1527	1735	0	0
Q Serve(g_s), s	1.7	3.9	0.0	1.7	9.1	4.3	11.0	0.0	2.8	7.2	0.0	0.0
Cycle Q Clear(g_c), s	1.7	3.9	0.0	1.7	9.1	4.3	11.0	0.0	2.8	7.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.66		1.00	0.37		0.29
Lane Grp Cap(c), veh/h	259	345	0	368	346	291	386	0	323	251	0	0
V/C Ratio(X)	0.22	0.35	0.00	0.15	0.75	0.38	0.79	0.00	0.23	0.74	0.00	0.00
Avail Cap(c_a), veh/h	544	543	0	652	543	456	525	0	439	375	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.3	24.8	0.0	20.8	26.9	24.9	25.9	0.0	22.7	28.5	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.6	0.0	0.2	3.3	0.8	5.7	0.0	0.4	4.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.7	0.0	0.7	4.2	1.6	5.2	0.0	1.0	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	25.4	0.0	21.0	30.2	25.7	31.6	0.0	23.1	32.8	0.0	0.0
LnGrp LOS	C	C	A	C	C	C	C	A	C	C	A	A
Approach Vol, veh/h		178			429			380			187	
Approach Delay, s/veh		24.3			27.8			29.9			32.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	20.2		22.2	9.5	20.3		17.6				
Change Period (Y+Rc), s	5.5	7.5		7.5	5.5	7.5		7.5				
Max Green Setting (Gmax), s	15.0	20.0		20.0	15.0	20.0		15.0				
Max Q Clear Time (g_c+I1), s	3.7	5.9		13.0	3.7	11.1		9.2				
Green Ext Time (p_c), s	0.1	0.4		1.2	0.1	1.2		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		28.8	
HCM 6th LOS		C	

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	77	72	46	7	116	31	23	122	49	48	182	2
Future Vol, veh/h	77	72	46	7	116	31	23	122	49	48	182	2
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	8	8	8	8	8	8	8	8	8	8	8	8
Mvmt Flow	89	83	53	8	133	36	26	140	56	55	209	2
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	11.9	11.1	10.9	13
HCM LOS	B	B	B	B

Lane	NWLn1	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	21%	39%	5%	16%	0%
Vol Thru, %	78%	37%	75%	84%	0%
Vol Right, %	1%	24%	20%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	232	195	154	145	49
LT Vol	48	77	7	23	0
Through Vol	182	72	116	122	0
RT Vol	2	46	31	0	49
Lane Flow Rate	267	224	177	167	56
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.425	0.355	0.283	0.291	0.086
Departure Headway (Hd)	5.739	5.705	5.748	6.29	5.499
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	627	628	623	570	649
Service Time	3.789	3.758	3.803	4.042	3.25
HCM Lane V/C Ratio	0.426	0.357	0.284	0.293	0.086
HCM Control Delay	13	11.9	11.1	11.6	8.8
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	2.1	1.6	1.2	1.2	0.3

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	42	57	29	16	34	26	30	302	63	34	181	13
Future Vol, veh/h	42	57	29	16	34	26	30	302	63	34	181	13
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	44	59	30	17	35	27	31	315	66	35	189	14
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.3	9.7	13.5	11.6
HCM LOS	B	A	B	B

Lane	NWLn1	NWLn2	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	16%	0%	33%	21%	9%	0%
Vol Thru, %	84%	0%	45%	45%	91%	0%
Vol Right, %	0%	100%	23%	34%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	215	13	128	76	332	63
LT Vol	34	0	42	16	30	0
Through Vol	181	0	57	34	302	0
RT Vol	0	13	29	26	0	63
Lane Flow Rate	224	14	133	79	346	66
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.36	0.019	0.213	0.127	0.537	0.088
Departure Headway (Hd)	5.788	4.999	5.748	5.776	5.586	4.833
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	623	716	624	620	650	746
Service Time	3.517	2.729	3.786	3.819	3.286	2.533
HCM Lane V/C Ratio	0.36	0.02	0.213	0.127	0.532	0.088
HCM Control Delay	11.8	7.8	10.3	9.7	14.6	8
HCM Lane LOS	B	A	B	A	B	A
HCM 95th-tile Q	1.6	0.1	0.8	0.4	3.2	0.3

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	27	4	19	16	4	3	90	25	6	85	25
Future Vol, veh/h	34	27	4	19	16	4	3	90	25	6	85	25
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	40	31	5	22	19	5	3	105	29	7	99	29
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.3	8.1	8.3	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	0%	52%	49%	5%
Vol Thru, %	97%	0%	42%	41%	73%
Vol Right, %	0%	100%	6%	10%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	93	25	65	39	116
LT Vol	3	0	34	19	6
Through Vol	90	0	27	16	85
RT Vol	0	25	4	4	25
Lane Flow Rate	108	29	76	45	135
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.15	0.034	0.099	0.06	0.165
Departure Headway (Hd)	4.984	4.265	4.724	4.731	4.402
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	721	841	760	758	816
Service Time	2.702	1.983	2.744	2.752	2.419
HCM Lane V/C Ratio	0.15	0.034	0.1	0.059	0.165
HCM Control Delay	8.6	7.1	8.3	8.1	8.3
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0.1	0.3	0.2	0.6

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	10	4	1	0	10
Future Vol, veh/h	16	10	4	1	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	21	13	5	1	0	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	6	0	-	0	61	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	55	-
Critical Hdwy	4.17	-	-	-	6.47	6.27
Critical Hdwy Stg 1	-	-	-	-	5.47	-
Critical Hdwy Stg 2	-	-	-	-	5.47	-
Follow-up Hdwy	2.263	-	-	-	3.563	3.363
Pot Cap-1 Maneuver	1583	-	-	-	933	1062
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	955	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1583	-	-	-	921	1062
Mov Cap-2 Maneuver	-	-	-	-	921	-
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	955	-

Approach	EB	WB	SB
HCM Control Delay, s	4.5	0	8.4
HCM LOS			A

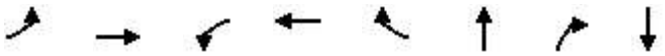
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1583	-	-	-	1062
HCM Lane V/C Ratio	0.013	-	-	-	0.013
HCM Control Delay (s)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Intersection Delay, s/veh	17.9
Intersection LOS	C

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	278	64	33	176	15	55	140	19	33	101	11
Future Vol, veh/h	9	278	64	33	176	15	55	140	19	33	101	11
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	10	305	70	36	193	16	60	154	21	36	111	12
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	1

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	2	1	2	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	2	1	1	2
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	2	2	1
HCM Control Delay	23.2	14.4	16.2	13
HCM LOS	C	B	C	B

Lane	NELn1	NWLn1	NWLn2	SELn1	SWLn1	SWLn2
Vol Left, %	26%	16%	0%	3%	25%	0%
Vol Thru, %	65%	84%	0%	79%	75%	0%
Vol Right, %	9%	0%	100%	18%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	214	209	15	351	134	11
LT Vol	55	33	0	9	33	0
Through Vol	140	176	0	278	101	0
RT Vol	19	0	15	64	0	11
Lane Flow Rate	235	230	16	386	147	12
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.464	0.437	0.028	0.698	0.301	0.022
Departure Headway (Hd)	7.103	6.848	6.052	6.513	7.369	6.526
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	506	526	590	559	487	547
Service Time	5.155	4.596	3.8	4.513	5.125	4.281
HCM Lane V/C Ratio	0.464	0.437	0.027	0.691	0.302	0.022
HCM Control Delay	16.2	14.8	9	23.2	13.3	9.4
HCM Lane LOS	C	B	A	C	B	A
HCM 95th-tile Q	2.4	2.2	0.1	5.5	1.3	0.1



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	19	168	27	154	29	173	54	94
v/c Ratio	0.04	0.37	0.06	0.29	0.05	0.48	0.12	0.32
Control Delay	16.0	27.3	16.0	23.5	0.1	29.5	0.5	30.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.0	27.3	16.0	23.5	0.1	29.5	0.5	30.2
Queue Length 50th (ft)	4	45	6	41	0	47	0	26
Queue Length 95th (ft)	20	138	25	127	0	141	0	90
Internal Link Dist (ft)		659		1129		725		1464
Turn Bay Length (ft)	125		100		100		25	
Base Capacity (vph)	608	672	597	702	706	645	683	472
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.25	0.05	0.22	0.04	0.27	0.08	0.20

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	158	0	25	145	27	135	27	51	27	35	26
Future Volume (veh/h)	18	158	0	25	145	27	135	27	51	27	35	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	19	168	0	27	154	29	144	29	54	29	37	28
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	297	293	0	294	311	263	225	45	233	65	82	62
Arrive On Green	0.03	0.16	0.00	0.04	0.16	0.16	0.15	0.15	0.15	0.12	0.12	0.12
Sat Flow, veh/h	1795	1885	0	1795	1885	1593	1506	303	1557	537	685	518
Grp Volume(v), veh/h	19	168	0	27	154	29	173	0	54	94	0	0
Grp Sat Flow(s),veh/h/ln	1795	1885	0	1795	1885	1593	1810	0	1557	1739	0	0
Q Serve(g_s), s	0.5	4.3	0.0	0.6	3.9	0.8	4.7	0.0	1.6	2.6	0.0	0.0
Cycle Q Clear(g_c), s	0.5	4.3	0.0	0.6	3.9	0.8	4.7	0.0	1.6	2.6	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.83		1.00	0.31		0.30
Lane Grp Cap(c), veh/h	297	293	0	294	311	263	271	0	233	209	0	0
V/C Ratio(X)	0.06	0.57	0.00	0.09	0.50	0.11	0.64	0.00	0.23	0.45	0.00	0.00
Avail Cap(c_a), veh/h	765	724	0	744	724	611	695	0	598	501	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.7	20.4	0.0	17.4	19.8	18.5	20.8	0.0	19.5	21.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.8	0.0	0.1	1.2	0.2	2.5	0.0	0.5	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.8	0.0	0.2	1.6	0.3	2.0	0.0	0.6	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	22.2	0.0	17.6	21.0	18.7	23.3	0.0	20.0	22.8	0.0	0.0
LnGrp LOS	B	C	A	B	C	B	C	A	C	C	A	A
Approach Vol, veh/h		187			210			227			94	
Approach Delay, s/veh		21.7			20.2			22.5			22.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	15.6		15.3	6.9	16.1		13.8				
Change Period (Y+Rc), s	5.5	7.5		7.5	5.5	7.5		7.5				
Max Green Setting (Gmax), s	15.0	20.0		20.0	15.0	20.0		15.0				
Max Q Clear Time (g_c+I1), s	2.6	6.3		6.7	2.5	5.9		4.6				
Green Ext Time (p_c), s	0.0	0.7		0.9	0.0	0.7		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		21.7
HCM 6th LOS		C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	158	0	25	145	27	135	27	51	27	35	26
Future Volume (veh/h)	18	158	0	25	145	27	135	27	51	27	35	26
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	19	168	0	27	154	29	144	29	54	29	37	28
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	297	293	0	294	311	263	225	45	233	65	82	62
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.16	0.00	0.04	0.16	0.16	0.15	0.15	0.15	0.12	0.12	0.12
Unsig. Movement Delay												
Ln Grp Delay, s/veh	17.8	22.2	0.0	17.6	21.0	18.7	23.3	0.0	20.0	22.8	0.0	0.0
Ln Grp LOS	B	C	A	B	C	B	C	A	C	C	A	A
Approach Vol, veh/h		187			210			227			94	
Approach Delay, s/veh		21.7			20.2			22.5			22.8	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	1.1	4.0	12.0	11.0	1.1	3.0		
Phs Duration (G+Y+Rc), s	7.4	15.6	13.8	15.3	6.9	16.1		
Change Period (Y+Rc), s	5.5	7.5	7.5	7.5	5.5	7.5		
Max Green (Gmax), s	15.0	20.0	15.0	20.0	15.0	20.0		
Max Allow Headway (MAH), s	3.8	5.1	5.5	5.2	3.8	4.9		
Max Q Clear (g_c+I1), s	2.6	6.3	4.6	6.7	2.5	5.9		
Green Ext Time (g_e), s	0.0	0.7	0.3	0.9	0.0	0.7		
Prob of Phs Call (p_c)	0.32	1.00	0.75	0.96	0.24	1.00		
Prob of Max Out (p_x)	0.00	0.01	0.04	0.02	0.00	0.01		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1795		537	1506	1795			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1885	685	303		1885		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	518	1557		1593		

Left Lane Group Data								
Assigned Mvmt	1	0	3	7	5	0	0	0
Lane Assignment	L (Pr/Pm)		L+T+R	L+TL (Pr/Pm)				

Lanes in Grp	1	0	1	1	1	0	0	0
Grp Vol (v), veh/h	27	0	94	173	19	0	0	0
Grp Sat Flow (s), veh/h/ln	1795	0	1739	1810	1795	0	0	0
Q Serve Time (g_s), s	0.6	0.0	2.6	4.7	0.5	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.6	0.0	2.6	4.7	0.5	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1227	0	0	0	1208	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	8.1	0.0	0.0	0.0	8.1	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	3.8	0.0	0.0	0.0	4.7	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.31	0.83	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	294	0	209	271	297	0	0	0
V/C Ratio (X)	0.09	0.00	0.45	0.64	0.06	0.00	0.00	0.00
Avail Cap (c_a), veh/h	744	0	501	695	765	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	17.4	0.0	21.3	20.8	17.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.5	2.5	0.1	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	17.6	0.0	22.8	23.3	17.8	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.2	0.0	1.0	1.8	0.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.2	0.0	1.1	2.0	0.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.06	0.00	0.02	0.07	0.04	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	168	0	0	0	154	0	0
Grp Sat Flow (s), veh/h/ln	0	1885	0	0	0	1885	0	0
Q Serve Time (g_s), s	0.0	4.3	0.0	0.0	0.0	3.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.3	0.0	0.0	0.0	3.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	293	0	0	0	311	0	0
V/C Ratio (X)	0.00	0.57	0.00	0.00	0.00	0.50	0.00	0.00
Avail Cap (c_a), veh/h	0	724	0	0	0	724	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	20.4	0.0	0.0	0.0	19.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.0	0.0	1.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.2	0.0	0.0	0.0	21.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	0.0	0.0	1.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	1.8	0.0	0.0	0.0	1.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.00	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	54	0	29	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1557	0	1593	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	1.6	0.0	0.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	1.6	0.0	0.8	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.30	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	233	0	263	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.23	0.00	0.11	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	598	0	611	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.5	0.0	18.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	20.0	0.0	18.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.5	0.0	0.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.6	0.0	0.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.58	0.00	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	49	75	67	7	85	28	22	261	64	43	166	12
Future Vol, veh/h	49	75	67	7	85	28	22	261	64	43	166	12
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	56	86	77	8	98	32	25	300	74	49	191	14
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	12.3	11.1	14.8	13
HCM LOS	B	B	B	B

Lane	NWLn1	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	19%	26%	6%	8%	0%
Vol Thru, %	75%	39%	71%	92%	0%
Vol Right, %	5%	35%	23%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	221	191	120	283	64
LT Vol	43	49	7	22	0
Through Vol	166	75	85	261	0
RT Vol	12	67	28	0	64
Lane Flow Rate	254	220	138	325	74
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.412	0.36	0.235	0.55	0.109
Departure Headway (Hd)	5.844	5.91	6.124	6.09	5.341
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	612	606	582	592	668
Service Time	3.91	3.981	4.203	3.848	3.098
HCM Lane V/C Ratio	0.415	0.363	0.237	0.549	0.111
HCM Control Delay	13	12.3	11.1	16.1	8.8
HCM Lane LOS	B	B	B	C	A
HCM 95th-tile Q	2	1.6	0.9	3.3	0.4

APPENDIX E
EXISTING PLUS PROJECT CONDITIONS ANALYSIS WORKSHEETS

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	46	55	34	7	133	43	13	134	87	34	239	8
Future Vol, veh/h	46	55	34	7	133	43	13	134	87	34	239	8
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	7	7	7	7	7	7	7	7	7	7	7	7
Mvmt Flow	59	71	44	9	171	55	17	172	112	44	306	10
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	12.5	13.7	11.9	19.9
HCM LOS	B	B	B	C

Lane	NWLn1	NWLn2	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	12%	0%	34%	4%	9%	0%
Vol Thru, %	88%	0%	41%	73%	91%	0%
Vol Right, %	0%	100%	25%	23%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	273	8	135	183	147	87
LT Vol	34	0	46	7	13	0
Through Vol	239	0	55	133	134	0
RT Vol	0	8	34	43	0	87
Lane Flow Rate	350	10	173	235	188	112
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.639	0.017	0.313	0.411	0.351	0.184
Departure Headway (Hd)	6.575	5.797	6.509	6.302	6.712	5.952
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	553	620	552	570	539	606
Service Time	4.283	3.506	4.556	4.344	4.425	3.664
HCM Lane V/C Ratio	0.633	0.016	0.313	0.412	0.349	0.185
HCM Control Delay	20.2	8.6	12.5	13.7	13	10
HCM Lane LOS	C	A	B	B	B	A
HCM 95th-tile Q	4.5	0.1	1.3	2	1.6	0.7

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	13	2	29	69	9	1	74	14	1	102	69
Future Vol, veh/h	32	13	2	29	69	9	1	74	14	1	102	69
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	17	3	37	88	12	1	95	18	1	131	88
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.5	8.9	8.6	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	68%	27%	1%
Vol Thru, %	99%	0%	28%	64%	59%
Vol Right, %	0%	100%	4%	8%	40%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	75	14	47	107	172
LT Vol	1	0	32	29	1
Through Vol	74	0	13	69	102
RT Vol	0	14	2	9	69
Lane Flow Rate	96	18	60	137	221
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.139	0.022	0.084	0.183	0.271
Departure Headway (Hd)	5.216	4.505	4.999	4.792	4.425
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	687	792	715	748	809
Service Time	2.956	2.244	3.044	2.83	2.461
HCM Lane V/C Ratio	0.14	0.023	0.084	0.183	0.273
HCM Control Delay	8.8	7.3	8.5	8.9	9.1
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0.1	0.3	0.7	1.1

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	9	33	0	0	34
Future Vol, veh/h	17	9	33	0	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	20	10	38	0	0	40

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	38	0	-	0	88	38
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	50	-
Critical Hdwy	4.18	-	-	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	2.272	-	-	-	3.572	3.372
Pot Cap-1 Maneuver	1534	-	-	-	898	1017
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	957	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1534	-	-	-	886	1017
Mov Cap-2 Maneuver	-	-	-	-	886	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	957	-

Approach	EB	WB	SB
HCM Control Delay, s	4.8	0	8.7
HCM LOS			A

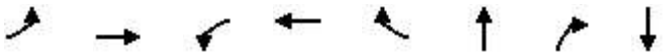
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1534	-	-	-	1017
HCM Lane V/C Ratio	0.013	-	-	-	0.039
HCM Control Delay (s)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	144	40	50	197	12	53	108	23	19	134	10
Future Vol, veh/h	10	144	40	50	197	12	53	108	23	19	134	10
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	9	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	11	164	45	57	224	14	60	123	26	22	152	11
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	1

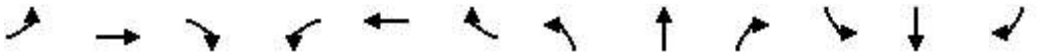
Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	2	1	2	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	2	1	1	2
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	2	2	1
HCM Control Delay	13.8	15.4	14	12.6
HCM LOS	B	C	B	B

Lane	NELn1	NWLn1	NWLn2	SELn1	SWLn1	SWLn2
Vol Left, %	29%	20%	0%	5%	12%	0%
Vol Thru, %	59%	80%	0%	74%	88%	0%
Vol Right, %	12%	0%	100%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	184	247	12	194	153	10
LT Vol	53	50	0	10	19	0
Through Vol	108	197	0	144	134	0
RT Vol	23	0	12	40	0	10
Lane Flow Rate	209	281	14	220	174	11
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.389	0.504	0.021	0.396	0.327	0.019
Departure Headway (Hd)	6.697	6.461	5.648	6.466	6.771	5.995
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	535	556	630	553	529	593
Service Time	4.777	4.232	3.417	4.544	4.551	3.774
HCM Lane V/C Ratio	0.391	0.505	0.022	0.398	0.329	0.019
HCM Control Delay	14	15.7	8.5	13.8	12.8	8.9
HCM Lane LOS	B	C	A	B	B	A
HCM 95th-tile Q	1.8	2.8	0.1	1.9	1.4	0.1



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	56	129	57	285	111	305	75	187
v/c Ratio	0.17	0.33	0.13	0.73	0.23	0.77	0.15	0.66
Control Delay	18.8	32.3	18.4	44.1	1.1	46.2	0.7	47.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.8	32.3	18.4	44.1	1.1	46.2	0.7	47.1
Queue Length 50th (ft)	20	62	20	150	0	161	0	99
Queue Length 95th (ft)	35	89	35	185	0	199	0	135
Internal Link Dist (ft)		659		1129		725		1464
Turn Bay Length (ft)	125		100		100		25	
Base Capacity (vph)	480	486	563	483	545	468	540	338
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.27	0.10	0.59	0.20	0.65	0.14	0.55

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	93	0	41	205	80	145	75	54	50	46	39
Future Volume (veh/h)	40	93	0	41	205	80	145	75	54	50	46	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.99		0.99	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	56	129	0	57	285	111	201	104	75	69	64	54
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	253	365	0	374	366	308	253	131	321	92	86	72
Arrive On Green	0.06	0.19	0.00	0.06	0.19	0.19	0.21	0.21	0.21	0.14	0.14	0.14
Sat Flow, veh/h	1795	1885	0	1795	1885	1585	1203	622	1527	640	594	501
Grp Volume(v), veh/h	56	129	0	57	285	111	305	0	75	187	0	0
Grp Sat Flow(s),veh/h/ln	1795	1885	0	1795	1885	1585	1825	0	1527	1735	0	0
Q Serve(g_s), s	1.7	4.2	0.0	1.7	10.2	4.3	11.2	0.0	2.9	7.3	0.0	0.0
Cycle Q Clear(g_c), s	1.7	4.2	0.0	1.7	10.2	4.3	11.2	0.0	2.9	7.3	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.66		1.00	0.37		0.29
Lane Grp Cap(c), veh/h	253	365	0	374	366	308	384	0	321	250	0	0
V/C Ratio(X)	0.22	0.35	0.00	0.15	0.78	0.36	0.79	0.00	0.23	0.75	0.00	0.00
Avail Cap(c_a), veh/h	532	532	0	651	532	447	515	0	431	367	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.3	24.7	0.0	20.7	27.1	24.8	26.6	0.0	23.3	29.1	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.6	0.0	0.2	4.5	0.7	6.2	0.0	0.4	4.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.8	0.0	0.7	4.7	1.6	5.4	0.0	1.0	3.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	25.3	0.0	20.9	31.6	25.5	32.7	0.0	23.6	33.8	0.0	0.0
LnGrp LOS	C	C	A	C	C	C	C	A	C	C	A	A
Approach Vol, veh/h		185			453			380			187	
Approach Delay, s/veh		24.3			28.8			30.9			33.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	21.2		22.4	9.5	21.3		17.7				
Change Period (Y+Rc), s	5.5	7.5		7.5	5.5	7.5		7.5				
Max Green Setting (Gmax), s	15.0	20.0		20.0	15.0	20.0		15.0				
Max Q Clear Time (g_c+I1), s	3.7	6.2		13.2	3.7	12.2		9.3				
Green Ext Time (p_c), s	0.1	0.5		1.2	0.1	1.2		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		29.5	
HCM 6th LOS		C	

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	77	72	46	11	116	31	23	122	49	48	182	4
Future Vol, veh/h	77	72	46	11	116	31	23	122	49	48	182	4
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	8	8	8	8	8	8	8	8	8	8	8	8
Mvmt Flow	89	83	53	13	133	36	26	140	56	55	209	5
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	11.9	11.2	11	13.1
HCM LOS	B	B	B	B

Lane	NWLn1	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	21%	39%	7%	16%	0%
Vol Thru, %	78%	37%	73%	84%	0%
Vol Right, %	2%	24%	20%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	234	195	158	145	49
LT Vol	48	77	11	23	0
Through Vol	182	72	116	122	0
RT Vol	4	46	31	0	49
Lane Flow Rate	269	224	182	167	56
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.43	0.356	0.291	0.292	0.086
Departure Headway (Hd)	5.753	5.725	5.767	6.313	5.521
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	624	625	621	568	647
Service Time	3.803	3.78	3.824	4.066	3.274
HCM Lane V/C Ratio	0.431	0.358	0.293	0.294	0.087
HCM Control Delay	13.1	11.9	11.2	11.7	8.8
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	2.2	1.6	1.2	1.2	0.3

Intersection	
Intersection Delay, s/veh	12.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	42	67	29	16	40	32	40	302	63	34	181	13
Future Vol, veh/h	42	67	29	16	40	32	40	302	63	34	181	13
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	44	70	30	17	42	33	42	315	66	35	189	14
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.7	9.9	14.3	11.8
HCM LOS	B	A	B	B

Lane	NWLn1	NWLn2	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	16%	0%	30%	18%	12%	0%
Vol Thru, %	84%	0%	49%	45%	88%	0%
Vol Right, %	0%	100%	21%	36%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	215	13	138	88	342	63
LT Vol	34	0	42	16	40	0
Through Vol	181	0	67	40	302	0
RT Vol	0	13	29	32	0	63
Lane Flow Rate	224	14	144	92	356	66
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.367	0.019	0.233	0.149	0.561	0.089
Departure Headway (Hd)	5.901	5.112	5.835	5.84	5.669	4.902
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	609	700	615	613	638	732
Service Time	3.633	2.844	3.876	3.884	3.395	2.628
HCM Lane V/C Ratio	0.368	0.02	0.234	0.15	0.558	0.09
HCM Control Delay	12	7.9	10.7	9.9	15.4	8.1
HCM Lane LOS	B	A	B	A	C	A
HCM 95th-tile Q	1.7	0.1	0.9	0.5	3.5	0.3

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	47	4	30	28	5	3	90	45	8	85	25
Future Vol, veh/h	34	47	4	30	28	5	3	90	45	8	85	25
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	40	55	5	35	33	6	3	105	52	9	99	29
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.6	8.4	8.3	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	0%	40%	48%	7%
Vol Thru, %	97%	0%	55%	44%	72%
Vol Right, %	0%	100%	5%	8%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	93	45	85	63	118
LT Vol	3	0	34	30	8
Through Vol	90	0	47	28	85
RT Vol	0	45	4	5	25
Lane Flow Rate	108	52	99	73	137
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.154	0.064	0.132	0.098	0.174
Departure Headway (Hd)	5.125	4.405	4.808	4.838	4.566
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	701	813	745	741	786
Service Time	2.852	2.132	2.839	2.87	2.594
HCM Lane V/C Ratio	0.154	0.064	0.133	0.099	0.174
HCM Control Delay	8.8	7.4	8.6	8.4	8.6
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0.2	0.5	0.3	0.6

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	33	18	1	0	23
Future Vol, veh/h	40	33	18	1	0	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	53	44	24	1	0	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	25	0	-	0	175	25
Stage 1	-	-	-	-	25	-
Stage 2	-	-	-	-	150	-
Critical Hdwy	4.17	-	-	-	6.47	6.27
Critical Hdwy Stg 1	-	-	-	-	5.47	-
Critical Hdwy Stg 2	-	-	-	-	5.47	-
Follow-up Hdwy	2.263	-	-	-	3.563	3.363
Pot Cap-1 Maneuver	1558	-	-	-	803	1037
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	866	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1558	-	-	-	775	1037
Mov Cap-2 Maneuver	-	-	-	-	775	-
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	866	-

Approach	EB	WB	SB
HCM Control Delay, s	4.1	0	8.6
HCM LOS			A

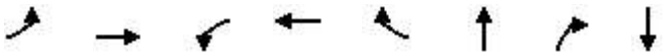
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1558	-	-	-	1037
HCM Lane V/C Ratio	0.034	-	-	-	0.03
HCM Control Delay (s)	7.4	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	18.9
Intersection LOS	C

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	278	64	33	176	15	55	160	19	33	112	11
Future Vol, veh/h	9	278	64	33	176	15	55	160	19	33	112	11
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	10	305	70	36	193	16	60	176	21	36	123	12
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	1

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	2	1	2	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	2	1	1	2
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	2	2	1
HCM Control Delay	24.6	15	17.7	13.6
HCM LOS	C	B	C	B

Lane	NELn1	NWLn1	NWLn2	SELn1	SWLn1	SWLn2
Vol Left, %	24%	16%	0%	3%	23%	0%
Vol Thru, %	68%	84%	0%	79%	77%	0%
Vol Right, %	8%	0%	100%	18%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	234	209	15	351	145	11
LT Vol	55	33	0	9	33	0
Through Vol	160	176	0	278	112	0
RT Vol	19	0	15	64	0	11
Lane Flow Rate	257	230	16	386	159	12
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.515	0.449	0.029	0.713	0.331	0.022
Departure Headway (Hd)	7.206	7.044	6.247	6.652	7.487	6.652
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	499	510	572	544	480	537
Service Time	5.257	4.796	3.999	4.697	5.245	4.409
HCM Lane V/C Ratio	0.515	0.451	0.028	0.71	0.331	0.022
HCM Control Delay	17.7	15.4	9.2	24.6	13.9	9.6
HCM Lane LOS	C	C	A	C	B	A
HCM 95th-tile Q	2.9	2.3	0.1	5.7	1.4	0.1



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	19	189	27	166	29	173	54	94
v/c Ratio	0.04	0.40	0.06	0.31	0.05	0.49	0.12	0.33
Control Delay	15.9	27.3	15.9	23.4	0.1	30.1	0.5	30.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.9	27.3	15.9	23.4	0.1	30.1	0.5	30.8
Queue Length 50th (ft)	5	52	6	45	0	48	0	26
Queue Length 95th (ft)	20	155	25	136	0	144	0	92
Internal Link Dist (ft)		659		1129		725		1464
Turn Bay Length (ft)	125		100		100		25	
Base Capacity (vph)	607	664	595	699	703	638	677	466
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.28	0.05	0.24	0.04	0.27	0.08	0.20

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	178	0	25	156	27	135	27	51	27	35	26
Future Volume (veh/h)	18	178	0	25	156	27	135	27	51	27	35	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	19	189	0	27	166	29	144	29	54	29	37	28
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	289	293	0	279	311	263	225	45	233	65	82	62
Arrive On Green	0.03	0.16	0.00	0.04	0.16	0.16	0.15	0.15	0.15	0.12	0.12	0.12
Sat Flow, veh/h	1795	1885	0	1795	1885	1593	1506	303	1557	537	685	518
Grp Volume(v), veh/h	19	189	0	27	166	29	173	0	54	94	0	0
Grp Sat Flow(s),veh/h/ln	1795	1885	0	1795	1885	1593	1810	0	1557	1739	0	0
Q Serve(g_s), s	0.5	4.9	0.0	0.6	4.2	0.8	4.7	0.0	1.6	2.6	0.0	0.0
Cycle Q Clear(g_c), s	0.5	4.9	0.0	0.6	4.2	0.8	4.7	0.0	1.6	2.6	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.83		1.00	0.31		0.30
Lane Grp Cap(c), veh/h	289	293	0	279	311	263	271	0	233	209	0	0
V/C Ratio(X)	0.07	0.65	0.00	0.10	0.53	0.11	0.64	0.00	0.23	0.45	0.00	0.00
Avail Cap(c_a), veh/h	756	724	0	729	724	611	695	0	598	501	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.7	20.7	0.0	17.5	19.9	18.5	20.8	0.0	19.5	21.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	2.4	0.0	0.1	1.4	0.2	2.5	0.0	0.5	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.1	0.0	0.2	1.8	0.3	2.0	0.0	0.6	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	23.0	0.0	17.6	21.3	18.7	23.3	0.0	20.0	22.8	0.0	0.0
LnGrp LOS	B	C	A	B	C	B	C	A	C	C	A	A
Approach Vol, veh/h		208			222			227			94	
Approach Delay, s/veh		22.6			20.5			22.5			22.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	15.6		15.3	6.9	16.1		13.8				
Change Period (Y+Rc), s	5.5	7.5		7.5	5.5	7.5		7.5				
Max Green Setting (Gmax), s	15.0	20.0		20.0	15.0	20.0		15.0				
Max Q Clear Time (g_c+I1), s	2.6	6.9		6.7	2.5	6.2		4.6				
Green Ext Time (p_c), s	0.0	0.7		0.9	0.0	0.7		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		22.0	
HCM 6th LOS		C	

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	13.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	49	75	67	10	85	28	22	261	64	43	166	17
Future Vol, veh/h	49	75	67	10	85	28	22	261	64	43	166	17
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	56	86	77	11	98	32	25	300	74	49	191	20
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	12.4	11.2	14.8	13.2
HCM LOS	B	B	B	B

Lane	NWLn1	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	19%	26%	8%	8%	0%
Vol Thru, %	73%	39%	69%	92%	0%
Vol Right, %	8%	35%	23%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	226	191	123	283	64
LT Vol	43	49	10	22	0
Through Vol	166	75	85	261	0
RT Vol	17	67	28	0	64
Lane Flow Rate	260	220	141	325	74
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.422	0.362	0.242	0.553	0.11
Departure Headway (Hd)	5.853	5.941	6.157	6.118	5.368
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	613	602	580	589	664
Service Time	3.92	4.015	4.239	3.876	3.126
HCM Lane V/C Ratio	0.424	0.365	0.243	0.552	0.111
HCM Control Delay	13.2	12.4	11.2	16.2	8.8
HCM Lane LOS	B	B	B	C	A
HCM 95th-tile Q	2.1	1.6	0.9	3.4	0.4

APPENDIX F
CUMULATIVE NO PROJECT AND PLUS PROJECT ANALYSIS WORKSHEETS

Intersection	
Intersection Delay, s/veh	16.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	50	57	37	8	135	37	11	146	95	37	261	9
Future Vol, veh/h	50	57	37	8	135	37	11	146	95	37	261	9
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	7	7	7	7	7	7	7	7	7	7	7	7
Mvmt Flow	64	73	47	10	173	47	14	187	122	47	335	12
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	13.3	14.4	12.5	23.7
HCM LOS	B	B	B	C

Lane	NWLn1	NWLn2	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	12%	0%	35%	4%	7%	0%
Vol Thru, %	88%	0%	40%	75%	93%	0%
Vol Right, %	0%	100%	26%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	298	9	144	180	157	95
LT Vol	37	0	50	8	11	0
Through Vol	261	0	57	135	146	0
RT Vol	0	9	37	37	0	95
Lane Flow Rate	382	12	185	231	201	122
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.709	0.019	0.345	0.422	0.383	0.206
Departure Headway (Hd)	6.682	5.904	6.736	6.578	6.845	6.092
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	543	606	534	547	525	588
Service Time	4.424	3.646	4.789	4.624	4.591	3.839
HCM Lane V/C Ratio	0.703	0.02	0.346	0.422	0.383	0.207
HCM Control Delay	24.2	8.8	13.3	14.4	13.8	10.4
HCM Lane LOS	C	A	B	B	B	B
HCM 95th-tile Q	5.7	0.1	1.5	2.1	1.8	0.8

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	8	2	13	56	8	1	81	10	0	111	75
Future Vol, veh/h	35	8	2	13	56	8	1	81	10	0	111	75
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	10	3	17	72	10	1	104	13	0	142	96
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.5	8.6	8.5	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	78%	17%	0%
Vol Thru, %	99%	0%	18%	73%	60%
Vol Right, %	0%	100%	4%	10%	40%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	82	10	45	77	186
LT Vol	1	0	35	13	0
Through Vol	81	0	8	56	111
RT Vol	0	10	2	8	75
Lane Flow Rate	105	13	58	99	238
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.149	0.016	0.08	0.131	0.287
Departure Headway (Hd)	5.119	4.409	5.006	4.795	4.326
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	701	811	714	746	830
Service Time	2.848	2.138	3.046	2.832	2.351
HCM Lane V/C Ratio	0.15	0.016	0.081	0.133	0.287
HCM Control Delay	8.7	7.2	8.5	8.6	9.1
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0	0.3	0.4	1.2

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	2	13	0	0	15
Future Vol, veh/h	11	2	13	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	13	2	15	0	0	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	15	0	-	0	43	15
Stage 1	-	-	-	-	15	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	4.18	-	-	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	2.272	-	-	-	3.572	3.372
Pot Cap-1 Maneuver	1565	-	-	-	953	1047
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	979	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1565	-	-	-	945	1047
Mov Cap-2 Maneuver	-	-	-	-	945	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	979	-

Approach	EB	WB	SB
HCM Control Delay, s	6.2	0	8.5
HCM LOS			A

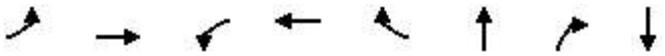
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1565	-	-	-	1047
HCM Lane V/C Ratio	0.008	-	-	-	0.017
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	15.5
Intersection LOS	C

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	11	157	44	55	215	13	58	112	25	21	128	11
Future Vol, veh/h	11	157	44	55	215	13	58	112	25	21	128	11
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	9	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	13	178	50	63	244	15	66	127	28	24	145	13
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	1

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	2	1	2	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	2	1	1	2
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	2	2	1
HCM Control Delay	15.1	17.5	15.2	13.1
HCM LOS	C	C	C	B

Lane	NELn1	NWLn1	NWLn2	SELn1	SWLn1	SWLn2
Vol Left, %	30%	20%	0%	5%	14%	0%
Vol Thru, %	57%	80%	0%	74%	86%	0%
Vol Right, %	13%	0%	100%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	195	270	13	212	149	11
LT Vol	58	55	0	11	21	0
Through Vol	112	215	0	157	128	0
RT Vol	25	0	13	44	0	11
Lane Flow Rate	222	307	15	241	169	12
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.43	0.57	0.024	0.45	0.334	0.022
Departure Headway (Hd)	6.985	6.687	5.871	6.726	7.11	6.323
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	516	543	612	537	506	566
Service Time	5.025	4.397	3.58	4.738	4.851	4.064
HCM Lane V/C Ratio	0.43	0.565	0.025	0.449	0.334	0.021
HCM Control Delay	15.2	17.9	8.7	15.1	13.4	9.2
HCM Lane LOS	C	C	A	C	B	A
HCM 95th-tile Q	2.1	3.5	0.1	2.3	1.5	0.1



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	74	146	65	300	128	351	86	220
v/c Ratio	0.23	0.35	0.15	0.73	0.27	0.82	0.17	0.73
Control Delay	21.1	34.1	20.1	45.9	3.1	53.3	0.8	54.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.1	34.1	20.1	45.9	3.1	53.3	0.8	54.5
Queue Length 50th (ft)	30	78	26	177	0	209	0	130
Queue Length 95th (ft)	46	106	42	207	0	264	0	178
Internal Link Dist (ft)		659		1129		725		1464
Turn Bay Length (ft)	125		100		100		25	
Base Capacity (vph)	362	615	472	613	626	479	535	360
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.24	0.14	0.49	0.20	0.73	0.16	0.61

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	105	0	47	216	92	167	86	62	57	53	48
Future Volume (veh/h)	53	105	0	47	216	92	167	86	62	57	53	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.99		0.99	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	74	146	0	65	300	128	232	119	86	79	74	67
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	247	390	0	365	384	323	277	142	352	101	95	86
Arrive On Green	0.06	0.21	0.00	0.06	0.20	0.20	0.23	0.23	0.23	0.16	0.16	0.16
Sat Flow, veh/h	1795	1885	0	1795	1885	1586	1206	619	1530	622	583	528
Grp Volume(v), veh/h	74	146	0	65	300	128	351	0	86	220	0	0
Grp Sat Flow(s),veh/h/ln	1795	1885	0	1795	1885	1586	1825	0	1530	1733	0	0
Q Serve(g_s), s	2.6	5.4	0.0	2.3	12.3	5.7	14.9	0.0	3.7	9.9	0.0	0.0
Cycle Q Clear(g_c), s	2.6	5.4	0.0	2.3	12.3	5.7	14.9	0.0	3.7	9.9	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.66		1.00	0.36		0.30
Lane Grp Cap(c), veh/h	247	390	0	365	384	323	419	0	352	281	0	0
V/C Ratio(X)	0.30	0.37	0.00	0.18	0.78	0.40	0.84	0.00	0.24	0.78	0.00	0.00
Avail Cap(c_a), veh/h	371	660	0	495	660	555	516	0	432	383	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.0	27.7	0.0	23.3	30.7	28.1	29.9	0.0	25.6	32.7	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.6	0.0	0.2	3.5	0.8	9.7	0.0	0.4	7.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.4	0.0	0.9	5.7	2.1	7.5	0.0	1.4	4.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	28.3	0.0	23.5	34.1	28.8	39.6	0.0	25.9	39.8	0.0	0.0
LnGrp LOS	C	C	A	C	C	C	D	A	C	D	A	A
Approach Vol, veh/h		220			493			437			220	
Approach Delay, s/veh		27.1			31.4			36.9			39.8	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.1	24.4		26.2	10.4	24.1		20.7				
Change Period (Y+Rc), s	5.5	7.5		7.5	5.5	7.5		7.5				
Max Green Setting (Gmax), s	10.5	28.5		23.0	10.5	28.5		18.0				
Max Q Clear Time (g_c+I1), s	4.3	7.4		16.9	4.6	14.3		11.9				
Green Ext Time (p_c), s	0.1	0.7		1.3	0.1	1.8		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		33.8	
HCM 6th LOS		C	

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	12.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	84	79	50	8	127	34	25	133	53	52	199	2
Future Vol, veh/h	84	79	50	8	127	34	25	133	53	52	199	2
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	8	8	8	8	8	8	8	8	8	8	8	8
Mvmt Flow	97	91	57	9	146	39	29	153	61	60	229	2
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	13	11.9	11.6	14.4
HCM LOS	B	B	B	B

Lane	NWLn1	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	21%	39%	5%	16%	0%
Vol Thru, %	79%	37%	75%	84%	0%
Vol Right, %	1%	23%	20%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	253	213	169	158	53
LT Vol	52	84	8	25	0
Through Vol	199	79	127	133	0
RT Vol	2	50	34	0	53
Lane Flow Rate	291	245	194	182	61
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.48	0.403	0.323	0.328	0.097
Departure Headway (Hd)	5.946	5.923	5.981	6.508	5.715
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	602	605	596	550	623
Service Time	4.019	3.998	4.061	4.285	3.492
HCM Lane V/C Ratio	0.483	0.405	0.326	0.331	0.098
HCM Control Delay	14.4	13	11.9	12.5	9.1
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	2.6	1.9	1.4	1.4	0.3

Intersection	
Intersection Delay, s/veh	12.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	45	61	31	17	36	28	32	322	67	36	193	14
Future Vol, veh/h	45	61	31	17	36	28	32	322	67	36	193	14
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	47	64	32	18	38	29	33	335	70	38	201	15
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.7	9.9	14.7	12.1
HCM LOS	B	A	B	B

Lane	NWLn1	NWLn2	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	16%	0%	33%	21%	9%	0%
Vol Thru, %	84%	0%	45%	44%	91%	0%
Vol Right, %	0%	100%	23%	35%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	229	14	137	81	354	67
LT Vol	36	0	45	17	32	0
Through Vol	193	0	61	36	322	0
RT Vol	0	14	31	28	0	67
Lane Flow Rate	239	15	143	84	369	70
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.391	0.021	0.233	0.139	0.579	0.095
Departure Headway (Hd)	5.898	5.109	5.889	5.933	5.654	4.901
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	611	700	609	603	638	731
Service Time	3.63	2.841	3.931	3.98	3.382	2.628
HCM Lane V/C Ratio	0.391	0.021	0.235	0.139	0.578	0.096
HCM Control Delay	12.4	8	10.7	9.9	15.9	8.1
HCM Lane LOS	B	A	B	A	C	A
HCM 95th-tile Q	1.9	0.1	0.9	0.5	3.7	0.3

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	29	4	20	17	4	3	96	27	6	91	27
Future Vol, veh/h	36	29	4	20	17	4	3	96	27	6	91	27
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	42	34	5	23	20	5	3	112	31	7	106	31
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.4	8.1	8.4	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	0%	52%	49%	5%
Vol Thru, %	97%	0%	42%	41%	73%
Vol Right, %	0%	100%	6%	10%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	99	27	69	41	124
LT Vol	3	0	36	20	6
Through Vol	96	0	29	17	91
RT Vol	0	27	4	4	27
Lane Flow Rate	115	31	80	48	144
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.16	0.037	0.106	0.063	0.177
Departure Headway (Hd)	5.011	4.293	4.771	4.783	4.43
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	717	835	752	749	812
Service Time	2.729	2.011	2.794	2.808	2.448
HCM Lane V/C Ratio	0.16	0.037	0.106	0.064	0.177
HCM Control Delay	8.7	7.2	8.4	8.1	8.4
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.6	0.1	0.4	0.2	0.6

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	11	4	1	0	11
Future Vol, veh/h	17	11	4	1	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	23	15	5	1	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	6	0	-	0	67	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	61	-
Critical Hdwy	4.17	-	-	-	6.47	6.27
Critical Hdwy Stg 1	-	-	-	-	5.47	-
Critical Hdwy Stg 2	-	-	-	-	5.47	-
Follow-up Hdwy	2.263	-	-	-	3.563	3.363
Pot Cap-1 Maneuver	1583	-	-	-	926	1062
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	949	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1583	-	-	-	912	1062
Mov Cap-2 Maneuver	-	-	-	-	912	-
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	949	-

Approach	EB	WB	SB
HCM Control Delay, s	4.4	0	8.4
HCM LOS			A

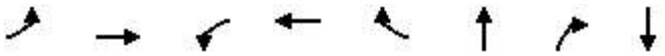
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1583	-	-	-	1062
HCM Lane V/C Ratio	0.014	-	-	-	0.014
HCM Control Delay (s)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Intersection Delay, s/veh	20.7
Intersection LOS	C

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	296	68	35	187	16	59	149	20	35	108	12
Future Vol, veh/h	10	296	68	35	187	16	59	149	20	35	108	12
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	11	325	75	38	205	18	65	164	22	38	119	13
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	1

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	2	1	2	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	2	1	1	2
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	2	2	1
HCM Control Delay	28.4	15.8	18	13.9
HCM LOS	D	C	C	B

Lane	NELn1	NWLn1	NWLn2	SELn1	SWLn1	SWLn2
Vol Left, %	26%	16%	0%	3%	24%	0%
Vol Thru, %	65%	84%	0%	79%	76%	0%
Vol Right, %	9%	0%	100%	18%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	228	222	16	374	143	12
LT Vol	59	35	0	10	35	0
Through Vol	149	187	0	296	108	0
RT Vol	20	0	16	68	0	12
Lane Flow Rate	251	244	18	411	157	13
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.513	0.481	0.031	0.765	0.334	0.025
Departure Headway (Hd)	7.369	7.105	6.307	6.697	7.654	6.809
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	489	505	566	538	468	524
Service Time	5.429	4.866	4.068	4.748	5.419	4.574
HCM Lane V/C Ratio	0.513	0.483	0.032	0.764	0.335	0.025
HCM Control Delay	18	16.3	9.3	28.4	14.2	9.8
HCM Lane LOS	C	C	A	D	B	A
HCM 95th-tile Q	2.9	2.6	0.1	6.8	1.5	0.1



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	29	195	31	181	33	201	63	117
v/c Ratio	0.07	0.45	0.07	0.42	0.06	0.52	0.13	0.38
Control Delay	17.3	29.6	17.3	29.2	0.3	30.9	0.5	32.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.3	29.6	17.3	29.2	0.3	30.9	0.5	32.5
Queue Length 50th (ft)	8	61	8	56	0	62	0	37
Queue Length 95th (ft)	28	165	29	154	0	169	0	113
Internal Link Dist (ft)		659		1129		725		1464
Turn Bay Length (ft)	125		100		100		25	
Base Capacity (vph)	579	673	577	673	685	646	684	469
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.29	0.05	0.27	0.05	0.31	0.09	0.25

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	183	0	29	170	31	158	31	59	31	40	39
Future Volume (veh/h)	27	183	0	29	170	31	158	31	59	31	40	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	29	195	0	31	181	33	168	33	63	33	43	41
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	278	284	0	271	288	243	243	48	250	62	81	77
Arrive On Green	0.04	0.15	0.00	0.04	0.15	0.15	0.16	0.16	0.16	0.13	0.13	0.13
Sat Flow, veh/h	1795	1885	0	1795	1885	1592	1512	297	1557	486	633	603
Grp Volume(v), veh/h	29	195	0	31	181	33	201	0	63	117	0	0
Grp Sat Flow(s),veh/h/ln	1795	1885	0	1795	1885	1592	1810	0	1557	1722	0	0
Q Serve(g_s), s	0.7	5.3	0.0	0.8	4.9	1.0	5.7	0.0	1.9	3.4	0.0	0.0
Cycle Q Clear(g_c), s	0.7	5.3	0.0	0.8	4.9	1.0	5.7	0.0	1.9	3.4	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.84		1.00	0.28		0.35
Lane Grp Cap(c), veh/h	278	284	0	271	288	243	291	0	250	221	0	0
V/C Ratio(X)	0.10	0.69	0.00	0.11	0.63	0.14	0.69	0.00	0.25	0.53	0.00	0.00
Avail Cap(c_a), veh/h	706	699	0	696	699	590	671	0	577	479	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.2	21.7	0.0	18.2	21.4	19.8	21.4	0.0	19.8	22.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	2.9	0.0	0.2	2.2	0.3	2.9	0.0	0.5	2.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.3	0.0	0.3	2.1	0.3	2.5	0.0	0.7	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	24.6	0.0	18.4	23.7	20.0	24.3	0.0	20.3	24.0	0.0	0.0
LnGrp LOS	B	C	A	B	C	C	C	A	C	C	A	A
Approach Vol, veh/h		224			245			264			117	
Approach Delay, s/veh		23.8			22.5			23.4			24.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	15.6		16.2	7.6	15.8		14.4				
Change Period (Y+Rc), s	5.5	7.5		7.5	5.5	7.5		7.5				
Max Green Setting (Gmax), s	15.0	20.0		20.0	15.0	20.0		15.0				
Max Q Clear Time (g_c+I1), s	2.8	7.3		7.7	2.7	6.9		5.4				
Green Ext Time (p_c), s	0.0	0.8		1.1	0.0	0.8		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		23.3	
HCM 6th LOS		C	

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	14.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	52	80	71	7	91	30	23	278	68	46	177	13
Future Vol, veh/h	52	80	71	7	91	30	23	278	68	46	177	13
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	60	92	82	8	105	34	26	320	78	53	203	15
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	13.2	11.7	16.3	14.1
HCM LOS	B	B	C	B

Lane	NWLn1	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	19%	26%	5%	8%	0%
Vol Thru, %	75%	39%	71%	92%	0%
Vol Right, %	6%	35%	23%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	236	203	128	301	68
LT Vol	46	52	7	23	0
Through Vol	177	80	91	278	0
RT Vol	13	71	30	0	68
Lane Flow Rate	271	233	147	346	78
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.453	0.395	0.263	0.599	0.119
Departure Headway (Hd)	6.01	6.088	6.429	6.235	5.485
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	594	586	562	574	647
Service Time	4.107	4.188	4.429	4.021	3.271
HCM Lane V/C Ratio	0.456	0.398	0.262	0.603	0.121
HCM Control Delay	14.1	13.2	11.7	18	9
HCM Lane LOS	B	B	B	C	A
HCM 95th-tile Q	2.3	1.9	1	3.9	0.4

Intersection	
Intersection Delay, s/veh	17.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	50	60	37	8	144	46	14	146	95	37	261	9
Future Vol, veh/h	50	60	37	8	144	46	14	146	95	37	261	9
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	7	7	7	7	7	7	7	7	7	7	7	7
Mvmt Flow	64	77	47	10	185	59	18	187	122	47	335	12
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	13.8	15.4	13	25
HCM LOS	B	C	B	C

Lane	NWLn1	NWLn2	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	12%	0%	34%	4%	9%	0%
Vol Thru, %	88%	0%	41%	73%	91%	0%
Vol Right, %	0%	100%	25%	23%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	298	9	147	198	160	95
LT Vol	37	0	50	8	14	0
Through Vol	261	0	60	144	146	0
RT Vol	0	9	37	46	0	95
Lane Flow Rate	382	12	188	254	205	122
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.724	0.019	0.36	0.468	0.399	0.211
Departure Headway (Hd)	6.823	6.044	6.873	6.638	7.003	6.241
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	531	591	522	541	513	574
Service Time	4.573	3.793	4.932	4.691	4.758	3.995
HCM Lane V/C Ratio	0.719	0.02	0.36	0.47	0.4	0.213
HCM Control Delay	25.5	8.9	13.8	15.4	14.4	10.7
HCM Lane LOS	D	A	B	C	B	B
HCM 95th-tile Q	5.9	0.1	1.6	2.5	1.9	0.8

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	14	2	30	74	10	1	81	15	1	111	75
Future Vol, veh/h	35	14	2	30	74	10	1	81	15	1	111	75
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	18	3	38	95	13	1	104	19	1	142	96
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.7	9.1	8.8	9.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	69%	26%	1%
Vol Thru, %	99%	0%	27%	65%	59%
Vol Right, %	0%	100%	4%	9%	40%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	82	15	51	114	187
LT Vol	1	0	35	30	1
Through Vol	81	0	14	74	111
RT Vol	0	15	2	10	75
Lane Flow Rate	105	19	65	146	240
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.154	0.024	0.093	0.198	0.299
Departure Headway (Hd)	5.28	4.569	5.093	4.87	4.483
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	677	780	700	734	798
Service Time	3.027	2.315	3.149	2.919	2.524
HCM Lane V/C Ratio	0.155	0.024	0.093	0.199	0.301
HCM Control Delay	9	7.4	8.7	9.1	9.4
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0.1	0.3	0.7	1.3

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	9	34	0	0	35
Future Vol, veh/h	18	9	34	0	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	21	10	40	0	0	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	40	0	-	0	92	40
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	52	-
Critical Hdwy	4.18	-	-	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	2.272	-	-	-	3.572	3.372
Pot Cap-1 Maneuver	1532	-	-	-	894	1014
Stage 1	-	-	-	-	967	-
Stage 2	-	-	-	-	955	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1532	-	-	-	881	1014
Mov Cap-2 Maneuver	-	-	-	-	881	-
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	955	-

Approach	EB	WB	SB
HCM Control Delay, s	4.9	0	8.7
HCM LOS			A

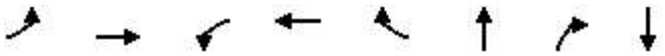
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1532	-	-	-	1014
HCM Lane V/C Ratio	0.014	-	-	-	0.04
HCM Control Delay (s)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	16
Intersection LOS	C

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	11	157	44	55	215	13	58	117	25	21	145	11
Future Vol, veh/h	11	157	44	55	215	13	58	117	25	21	145	11
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	9	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	13	178	50	63	244	15	66	133	28	24	165	13
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	1

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	2	1	2	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	2	1	1	2
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	2	2	1
HCM Control Delay	15.5	18	15.7	13.9
HCM LOS	C	C	C	B

Lane	NELn1	NWLn1	NWLn2	SELn1	SWLn1	SWLn2
Vol Left, %	29%	20%	0%	5%	13%	0%
Vol Thru, %	58%	80%	0%	74%	87%	0%
Vol Right, %	12%	0%	100%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	200	270	13	212	166	11
LT Vol	58	55	0	11	21	0
Through Vol	117	215	0	157	145	0
RT Vol	25	0	13	44	0	11
Lane Flow Rate	227	307	15	241	189	12
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.447	0.578	0.025	0.457	0.375	0.022
Departure Headway (Hd)	7.079	6.787	6.005	6.834	7.157	6.377
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	509	531	600	528	504	561
Service Time	5.118	4.522	3.705	4.874	4.897	4.117
HCM Lane V/C Ratio	0.446	0.578	0.025	0.456	0.375	0.021
HCM Control Delay	15.7	18.4	8.9	15.5	14.2	9.3
HCM Lane LOS	C	C	A	C	B	A
HCM 95th-tile Q	2.3	3.6	0.1	2.4	1.7	0.1



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	74	153	65	324	128	351	86	220
v/c Ratio	0.24	0.35	0.15	0.76	0.26	0.83	0.17	0.74
Control Delay	21.1	33.9	19.9	47.2	3.0	54.6	0.8	55.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.1	33.9	19.9	47.2	3.0	54.6	0.8	55.6
Queue Length 50th (ft)	30	82	26	195	0	213	0	132
Queue Length 95th (ft)	46	110	42	224	0	264	0	178
Internal Link Dist (ft)		659		1129		725		1464
Turn Bay Length (ft)	125		100		100		25	
Base Capacity (vph)	350	606	478	605	620	472	530	355
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.25	0.14	0.54	0.21	0.74	0.16	0.62

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	110	0	47	233	92	167	86	62	57	53	48
Future Volume (veh/h)	53	110	0	47	233	92	167	86	62	57	53	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	74	153	0	65	324	128	232	119	86	79	74	67
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	242	411	0	371	405	341	275	141	349	100	94	85
Arrive On Green	0.06	0.22	0.00	0.06	0.21	0.21	0.23	0.23	0.23	0.16	0.16	0.16
Sat Flow, veh/h	1795	1885	0	1795	1885	1586	1206	619	1530	622	583	528
Grp Volume(v), veh/h	74	153	0	65	324	128	351	0	86	220	0	0
Grp Sat Flow(s),veh/h/ln	1795	1885	0	1795	1885	1586	1825	0	1530	1733	0	0
Q Serve(g_s), s	2.6	5.7	0.0	2.3	13.6	5.7	15.3	0.0	3.8	10.1	0.0	0.0
Cycle Q Clear(g_c), s	2.6	5.7	0.0	2.3	13.6	5.7	15.3	0.0	3.8	10.1	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.66		1.00	0.36		0.30
Lane Grp Cap(c), veh/h	242	411	0	371	405	341	417	0	349	280	0	0
V/C Ratio(X)	0.31	0.37	0.00	0.18	0.80	0.38	0.84	0.00	0.25	0.79	0.00	0.00
Avail Cap(c_a), veh/h	362	646	0	497	646	543	504	0	423	375	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.1	27.7	0.0	23.1	31.0	27.9	30.7	0.0	26.3	33.5	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.6	0.0	0.2	3.7	0.7	10.5	0.0	0.4	7.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.6	0.0	0.9	6.3	2.2	7.8	0.0	1.4	4.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	28.3	0.0	23.4	34.7	28.6	41.2	0.0	26.6	41.3	0.0	0.0
LnGrp LOS	C	C	A	C	C	C	D	A	C	D	A	A
Approach Vol, veh/h		227			517			437			220	
Approach Delay, s/veh		27.1			31.8			38.3			41.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	25.6		26.5	10.4	25.4		20.9				
Change Period (Y+Rc), s	5.5	7.5		7.5	5.5	7.5		7.5				
Max Green Setting (Gmax), s	10.5	28.5		23.0	10.5	28.5		18.0				
Max Q Clear Time (g_c+I1), s	4.3	7.7		17.3	4.6	15.6		12.1				
Green Ext Time (p_c), s	0.1	0.7		1.3	0.1	1.9		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			34.6									
HCM 6th LOS			C									

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	12.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	84	79	50	12	127	34	25	133	53	52	199	4
Future Vol, veh/h	84	79	50	12	127	34	25	133	53	52	199	4
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	8	8	8	8	8	8	8	8	8	8	8	8
Mvmt Flow	97	91	57	14	146	39	29	153	61	60	229	5
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	13	12.1	11.6	14.6
HCM LOS	B	B	B	B

Lane	NWLn1	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	20%	39%	7%	16%	0%
Vol Thru, %	78%	37%	73%	84%	0%
Vol Right, %	2%	23%	20%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	255	213	173	158	53
LT Vol	52	84	12	25	0
Through Vol	199	79	127	133	0
RT Vol	4	50	34	0	53
Lane Flow Rate	293	245	199	182	61
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.485	0.404	0.331	0.33	0.097
Departure Headway (Hd)	5.962	5.947	6.001	6.534	5.741
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	601	602	595	547	620
Service Time	4.035	4.023	4.083	4.309	3.516
HCM Lane V/C Ratio	0.488	0.407	0.334	0.333	0.098
HCM Control Delay	14.6	13	12.1	12.5	9.1
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	2.6	1.9	1.4	1.4	0.3

Intersection	
Intersection Delay, s/veh	13.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	45	71	31	17	42	34	42	322	67	36	193	14
Future Vol, veh/h	45	71	31	17	42	34	42	322	67	36	193	14
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	47	74	32	18	44	35	44	335	70	38	201	15
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	11.1	10.2	15.6	12.4
HCM LOS	B	B	C	B

Lane	NWLn1	NWLn2	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	16%	0%	31%	18%	12%	0%
Vol Thru, %	84%	0%	48%	45%	88%	0%
Vol Right, %	0%	100%	21%	37%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	229	14	147	93	364	67
LT Vol	36	0	45	17	42	0
Through Vol	193	0	71	42	322	0
RT Vol	0	14	31	34	0	67
Lane Flow Rate	239	15	153	97	379	70
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.399	0.021	0.254	0.161	0.607	0.097
Departure Headway (Hd)	6.016	5.226	5.98	6.001	5.763	4.996
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	599	684	599	596	626	717
Service Time	3.754	2.964	4.031	4.057	3.494	2.727
HCM Lane V/C Ratio	0.399	0.022	0.255	0.163	0.605	0.098
HCM Control Delay	12.7	8.1	11.1	10.2	17	8.3
HCM Lane LOS	B	A	B	B	C	A
HCM 95th-tile Q	1.9	0.1	1	0.6	4.1	0.3

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	49	4	31	29	5	3	96	47	8	91	27
Future Vol, veh/h	36	49	4	31	29	5	3	96	47	8	91	27
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	42	57	5	36	34	6	3	112	55	9	106	31
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.7	8.5	8.4	8.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	0%	40%	48%	6%
Vol Thru, %	97%	0%	55%	45%	72%
Vol Right, %	0%	100%	4%	8%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	99	47	89	65	126
LT Vol	3	0	36	31	8
Through Vol	96	0	49	29	91
RT Vol	0	47	4	5	27
Lane Flow Rate	115	55	103	76	147
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.165	0.067	0.14	0.103	0.187
Departure Headway (Hd)	5.155	4.436	4.86	4.893	4.597
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	695	807	737	732	779
Service Time	2.887	2.168	2.895	2.929	2.63
HCM Lane V/C Ratio	0.165	0.068	0.14	0.104	0.189
HCM Control Delay	8.9	7.5	8.7	8.5	8.7
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.6	0.2	0.5	0.3	0.7

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	34	18	1	0	24
Future Vol, veh/h	41	34	18	1	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	55	45	24	1	0	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	25	0	-	0	180	25
Stage 1	-	-	-	-	25	-
Stage 2	-	-	-	-	155	-
Critical Hdwy	4.17	-	-	-	6.47	6.27
Critical Hdwy Stg 1	-	-	-	-	5.47	-
Critical Hdwy Stg 2	-	-	-	-	5.47	-
Follow-up Hdwy	2.263	-	-	-	3.563	3.363
Pot Cap-1 Maneuver	1558	-	-	-	798	1037
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	861	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1558	-	-	-	769	1037
Mov Cap-2 Maneuver	-	-	-	-	769	-
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	861	-

Approach	EB	WB	SB
HCM Control Delay, s	4	0	8.6
HCM LOS			A

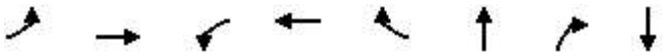
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1558	-	-	-	1037
HCM Lane V/C Ratio	0.035	-	-	-	0.031
HCM Control Delay (s)	7.4	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	22.3
Intersection LOS	C

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	296	68	35	187	16	59	169	20	35	119	12
Future Vol, veh/h	10	296	68	35	187	16	59	169	20	35	119	12
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	11	325	75	38	205	18	65	186	22	38	131	13
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	1

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	2	1	2	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	2	1	1	2
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	2	2	1
HCM Control Delay	30.9	16.6	20	14.6
HCM LOS	D	C	C	B

Lane	NELn1	NWLn1	NWLn2	SELn1	SWLn1	SWLn2
Vol Left, %	24%	16%	0%	3%	23%	0%
Vol Thru, %	68%	84%	0%	79%	77%	0%
Vol Right, %	8%	0%	100%	18%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	248	222	16	374	154	12
LT Vol	59	35	0	10	35	0
Through Vol	169	187	0	296	119	0
RT Vol	20	0	16	68	0	12
Lane Flow Rate	273	244	18	411	169	13
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.566	0.496	0.032	0.786	0.366	0.025
Departure Headway (Hd)	7.482	7.314	6.515	6.884	7.786	6.949
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	480	490	547	526	460	512
Service Time	5.555	5.086	4.287	4.948	5.565	4.728
HCM Lane V/C Ratio	0.569	0.498	0.033	0.781	0.367	0.025
HCM Control Delay	20	17.1	9.5	30.9	15	9.9
HCM Lane LOS	C	C	A	D	B	A
HCM 95th-tile Q	3.5	2.7	0.1	7.2	1.7	0.1



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	29	216	31	193	33	201	63	117
v/c Ratio	0.07	0.48	0.07	0.43	0.06	0.52	0.13	0.38
Control Delay	17.1	29.9	17.2	29.0	0.2	31.4	0.5	33.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.1	29.9	17.2	29.0	0.2	31.4	0.5	33.0
Queue Length 50th (ft)	8	68	8	60	0	64	0	38
Queue Length 95th (ft)	28	181	29	162	0	171	0	113
Internal Link Dist (ft)		659		1129		725		1464
Turn Bay Length (ft)	125		100		100		25	
Base Capacity (vph)	579	667	577	667	681	640	680	465
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.32	0.05	0.29	0.05	0.31	0.09	0.25

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	203	0	29	181	31	158	31	59	31	40	39
Future Volume (veh/h)	27	203	0	29	181	31	158	31	59	31	40	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	29	216	0	31	193	33	168	33	63	33	43	41
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	281	305	0	268	309	261	242	47	249	62	80	77
Arrive On Green	0.04	0.16	0.00	0.04	0.16	0.16	0.16	0.16	0.16	0.13	0.13	0.13
Sat Flow, veh/h	1795	1885	0	1795	1885	1593	1512	297	1557	485	633	603
Grp Volume(v), veh/h	29	216	0	31	193	33	201	0	63	117	0	0
Grp Sat Flow(s),veh/h/ln	1795	1885	0	1795	1885	1593	1810	0	1557	1721	0	0
Q Serve(g_s), s	0.7	6.0	0.0	0.8	5.2	1.0	5.8	0.0	1.9	3.5	0.0	0.0
Cycle Q Clear(g_c), s	0.7	6.0	0.0	0.8	5.2	1.0	5.8	0.0	1.9	3.5	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.84		1.00	0.28		0.35
Lane Grp Cap(c), veh/h	281	305	0	268	309	261	289	0	249	219	0	0
V/C Ratio(X)	0.10	0.71	0.00	0.12	0.62	0.13	0.69	0.00	0.25	0.53	0.00	0.00
Avail Cap(c_a), veh/h	701	687	0	684	687	580	659	0	567	470	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.1	21.8	0.0	18.1	21.4	19.6	21.8	0.0	20.2	22.4	0.0	0.0
Incr Delay (d2), s/veh	0.2	3.0	0.0	0.2	2.1	0.2	3.0	0.0	0.5	2.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.6	0.0	0.3	2.2	0.3	2.5	0.0	0.7	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	24.8	0.0	18.3	23.4	19.8	24.8	0.0	20.7	24.5	0.0	0.0
LnGrp LOS	B	C	A	B	C	B	C	A	C	C	A	A
Approach Vol, veh/h		245			257			264			117	
Approach Delay, s/veh		24.0			22.4			23.8			24.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	16.4		16.3	7.6	16.5		14.5				
Change Period (Y+Rc), s	5.5	7.5		7.5	5.5	7.5		7.5				
Max Green Setting (Gmax), s	15.0	20.0		20.0	15.0	20.0		15.0				
Max Q Clear Time (g_c+I1), s	2.8	8.0		7.8	2.7	7.2		5.5				
Green Ext Time (p_c), s	0.0	0.8		1.1	0.0	0.9		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		23.5	
HCM 6th LOS		C	

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	14.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	52	80	71	10	91	30	23	278	68	46	177	18
Future Vol, veh/h	52	80	71	10	91	30	23	278	68	46	177	18
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	60	92	82	11	105	34	26	320	78	53	203	21
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	SE	NW
Opposing Approach	WB	EB	NW	SE
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SE	NW	WB	EB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NW	SE	EB	WB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	13.4	11.9	16.5	14.3
HCM LOS	B	B	C	B

Lane	NWLn1	EBLn1	WBLn1	SELn1	SELn2
Vol Left, %	19%	26%	8%	8%	0%
Vol Thru, %	73%	39%	69%	92%	0%
Vol Right, %	7%	35%	23%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	241	203	131	301	68
LT Vol	46	52	10	23	0
Through Vol	177	80	91	278	0
RT Vol	18	71	30	0	68
Lane Flow Rate	277	233	151	346	78
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.463	0.403	0.27	0.602	0.12
Departure Headway (Hd)	6.132	6.223	6.466	6.363	5.513
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	590	581	559	571	642
Service Time	4.132	4.223	4.476	4.063	3.312
HCM Lane V/C Ratio	0.469	0.401	0.27	0.606	0.121
HCM Control Delay	14.3	13.4	11.9	18.2	9.1
HCM Lane LOS	B	B	B	C	A
HCM 95th-tile Q	2.4	1.9	1.1	4	0.4

Stanislaus County

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
1010 10TH Street, Suite 3400, Modesto, CA 95354
Planning Phone: (209) 525-6330 Fax: (209) 525-5911
Building Phone: (209) 525-6557 Fax: (209) 525-7759

MITIGATED NEGATIVE DECLARATION

NAME OF PROJECT: Rezone and Vesting Tentative Map Application No. PLN2021-0101 – Hoffman Ranch

LOCATION OF PROJECT: East Keyes Road, between North Golden State Boulevard and State Route 99, in the Community of Keyes.
APN: 024-022-027

PROJECT DEVELOPER: Dan Dunkley

DESCRIPTION OF PROJECT: This is a request to rezone a 15.9± ac parcel from (P-D) (288) to a new P-D & to subdivide the project site into 76 parcels, ranging in size from 5,855 sq-ft to 12,631 sq-ft & a 6,391± sq-ft park site expansion.

Based upon the Initial Study, dated **February 22, 2023 (as updated on April 26, 2023)**, the Environmental Coordinator finds as follows:

1. This project does not have the potential to degrade the quality of the environment, nor to curtail the diversity of the environment.

2. This project will not have a detrimental effect upon either short-term or long-term environmental goals.

3. This project will not have impacts which are individually limited but cumulatively considerable.

4. This project will not have environmental impacts which will cause substantial adverse effects upon human beings, either directly or indirectly.

The aforementioned findings are contingent upon the following mitigation measures (if indicated) which shall be incorporated into this project:

1. If ground disturbing activity or construction commences between March 1 and September 15, pre-construction surveys for nesting Swainson's hawks (SWHA) shall be conducted by a qualified biologist. SWHA surveys shall be conducted a maximum of 10 days prior to the onset of grading or construction activities, within 0.5 miles of the project site area, in accordance with protocol developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC, 2000). If active nests are found, a qualified biologist, in consultation with the California Department of Fish and Wildlife (CDFW), shall determine the need (if any) for temporal restrictions on construction, including but not limited to a minimum no-disturbance buffer of 0.5 miles to be maintained around active nests prior to and during any ground-disturbing activities until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. If take cannot be avoided, take authorization through the issuance of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA. The determination shall utilize criteria set forth by CDFW (CDFG, 1994).

The Initial Study and other environmental documents are available for public review at the Department of Planning and Community Development, 1010 10th Street, Suite 3400, Modesto, California, 95354.

Initial Study prepared by: Kristen Anaya, Associate Planner

Submit comments to: Stanislaus County
Planning and Community Development Department
1010 10th Street, Suite 3400
Modesto, California, 95354

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
1010 10th Street, Suite 3400, Modesto, CA 95354
Planning Phone: (209) 525-6330 Fax: (209) 525-5911
Building Phone: (209) 525-6557 Fax: (209) 525-7759

Stanislaus County

Planning and Community Development

Mitigation Monitoring and Reporting Program

Adapted from CEQA Guidelines sec. 15097 Final Text, October 26, 1998

February 22, 2023

1. Project title and location:	Rezone and Vesting Tentative Subdivision Map Application No. PLN2021-0101 – Hoffman Ranch 4325 Arnold Road & 4302 Riopel Avenue, between East Zeering and Powell Roads, in the Community of Denair (APN: 024-022-027).
2. Project Applicant name and address:	Dan Dunkley 239 Main Street, Suite E Pleasanton, CA 94566
3. Person Responsible for Implementing Mitigation Program (Applicant Representative):	Dan Dunkley
4. Contact person at County:	Kristen Anaya, Associate Planner (209) 525-6330

MITIGATION MEASURES AND MONITORING PROGRAM:

List all Mitigation Measures by topic as identified in the Mitigated Negative Declaration and complete the form for each measure.

IV. BIOLOGICAL RESOURCES

Mitigation Measure No. 1: If ground disturbing activity or construction commences between March 1 and September 15, pre-construction surveys for nesting Swainson's hawks (SWHA) shall be conducted by a qualified biologist. SWHA surveys shall be conducted a maximum of 10 days prior to the onset of grading or construction activities, within 0.5 miles of the project site area, in accordance with protocol developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC, 2000). If active nests are found, a qualified biologist, in consultation with the California Department of Fish and Wildlife (CDFW), shall determine the need (if any) for temporal restrictions on construction, including but not limited to a minimum no-disturbance buffer of 0.5 miles to be maintained around active nests prior to and during any ground-disturbing activities until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. If take cannot be avoided, take authorization through the issuance of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA. The determination shall utilize criteria set forth by CDFW (CDFG, 1994).

Who Implements the Measure:	Applicant/Developer
When should the measure be implemented:	Prior to ground disturbing activities
When should it be completed:	Upon completion of ground-disturbing activities
Who verifies compliance:	Stanislaus County Planning Department, in consultation with California Department of Fish & Wildlife

Other Responsible Agencies: California Department of Fish & Wildlife

I, the undersigned, do hereby certify that I understand and agree to be responsible for implementing the Mitigation Program for the above listed project.

Signature on file.	February 22, 2023
Person Responsible for Implementing Mitigation Program	Date

March 30, 2023

From : Donald Rajewich
[redacted]

To: Kristen Anaya, Associate Planner
Stanislaus County Department of Planning
1010 10th Street, Suite 3400
Modesto, CA 95354
planning@stancounty.com

RE: Planned Development **PLN2021-0101 – HOFFMAN RANCH**

Subject: **Rezoning to allow increased building footprint coverage to 50% from the current 40%.**

Dear Ms Anaya:

The purpose of this letter is to request that the Planning Department fully disclose the impacts of the zoning change to increase building footprints from 40 to 50 percent.

Page 21 of PLN2021-0101 states the following:

"*The applicant has proposed the resulting parcels be permitted to develop a cumulative building footprint of up to 50% of the total lot size, an increase of 10% from the current R-1 zoning district allowances. The applicant has requested this to achieve a greater flexibility in siting the housing product offered*".

Anyone who has done some house shopping at a model homes showcase knows that all things considered equal, the bigger the house, the higher the price. The real reason for this zoning change is not "flexibility;" this zoning change is to allow developers to build bigger homes and earn greater profits for construction on the same parcel of land.

EXHIBIT G

Recognizing this benefit, some jurisdictions have adopted mandatory inclusion of affordable housing within planned developments. This issue was raised at your Hoffman Ranch presentation to the February 2023 Denair MAC meeting, and your response was that Stanislaus County has no such policy.

This is not the first time in recent times that Denair developments have requested this 40- to- 50 zoning change. Wenstrand Ranch, located in the triangle between Main and Monte Vista, was originally approved in 2005. However, construction did not begin in earnest until their request for 40-to-50 was approved in December 2018.

In 2022, the same Wenstrand Ranch developer requested a similar zoning change for his Elmwood Estates planned development. At the December 2022 public hearing for Elmwood Estates before the Stanislaus County Supervisors, moments before he voted to approve the Elmwood Estates zoning change, Supervisor Vito Chiesa complained that his children could not afford to purchase a home in Stanislaus County.

Was our Supervisor, a champion of affordable housing, aware that his vote was contributing to the lack of affordable housing in Stanislaus County? Unfortunately, nowhere in any of the aforementioned planned development documents does the Stanislaus County Planning Department truthfully disclose the cumulative socioeconomic impact of this 40-to-50 **epidemic**.

Therefore, I am requesting the Planning Department change the wording on page 21 in PLN2022-0101 to include this black-box warning:

"The applicant has requested this to be able to build bigger houses on the same parcels, and thereby achieve greater profits. This zoning change will also result in less affordable new housing for the citizens of Stanislaus County."

Sincerely,

[redacted]

Donald Rajewich

CC : chiesav@stancounty.com Vito Chiesa, Supervisor District 2

BTC
BARRIOS
TRANSPORTATION CONSULTING

Memorandum

Date: April 18, 2023

To: Dan Dunkley, Redwood Park Properties

From: Eddie Barrios, P.E.

Subject: Response to Traffic Comments Received at Denair Municipal Advisory Council Meeting for Hoffman Ranch Subdivision

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The purpose of this memorandum is to provide a response to two traffic comments received at the Denair Municipal Advisory Council (MAC) meeting on March 7, 2023, on the Hoffman Ranch Subdivision (project). The project, located in the Stanislaus County community of Denair, proposes to construct 76 single-family residential units on a 16-acre parcel. The parcel is located on the north side of Zeering Road between Riopel Avenue and Arnold Road.

Comment #1: The project would direct traffic onto Arnold Road and Powell Road. The roadways are narrow and not fully built out (i.e., no curb, gutter, or sidewalk).

Response #1: The project is improving Arnold Road along its frontage. The project would provide curb and gutter with 5′ sidewalk and 20′ of paved roadway for two-way traffic. Arnold Road and Powell Road would remain at their existing configuration outside the project frontage area and for this reason it is likely that project traffic would avoid using these streets unless they are a part of a specific travel route and the travel route would provide a travel time advantage over other alternate travel routes.

The most likely travel route that would use Arnold Road and Powell Road would be project traffic to/from the north via Gratton Road. Based on the project trip distribution about 10% of the project traffic is expected to travel to/from the north via Gratton Road. Based on the project site layout and competing travel routes (e.g., Zeering Road to/from Gratton Road) it is estimated that no more than 5% of project traffic would be expected to use Arnold Road and Powell Road. Based on the project daily trip generation (717 vehicle trips), it is estimated that about 36 daily vehicles (on average 1 vehicle every 40 minutes) would use Arnold Road and Powell Road. This level of additional traffic on Arnold Road and Powell Road is unlikely to impact the quality of life of the current residents on these roadways.

Comment #2: Speeding is an issue on Zeering Road.

Response #2: The speed limit on Zeering Road in the project vicinity is 25 mph. It is our understanding that speed data is not readily available so BTC is unable to determine the extent of speeding (i.e., the median and 85th percentile speeds). However, BTC did collect collision history for five years (January 2015 to December 2019) at three intersections along Zeering Road (Santa Fe Avenue, Gratton Road, and Riopel Avenue). As shown in Table 1, a total of two collisions were reported at Santa Fe Avenue and no collisions were reported at Gratton Road and Riopel Avenue. Based on the collision history along Zeering Road it appears that speeding, if occurring, is not resulting in collision rates that are above the statewide average for similar facilities.

Table 1 - Collision History at Existing Intersections (January 2015 to December 2019)

Intersection	Number of Collisions	Collision Rate (collisions/million entering vehicles)	
	Total	Actual	State Average
		Total	Total
1. Santa Fe Avenue/Zeering Road	2	0.13	0.49
2. Gratton Road/Zeering Road	0	0	0.49
3. Riopel Avenue/Zeering Road	0	0	0.25

Source: Statewide Integrated Traffic Records System (SWITRS); BTC, 2022.

Local residents that want to discourage/stop speeding on Zeering Road should work directly with local law enforcement. Speeding is a traffic law violation; therefore, deterrence through law enforcement can be a strategy used to control speeding. Alternatively, local residents can work with Stanislaus County Public Works staff to identify potential engineering solutions to speeding such as traffic calming devices. For example, vertical deflections (speed humps, speed tables, and raised intersections), horizontal shifts, and roadway narrowing are intended to reduce speed and enhance the street environment for non-motorists.

SUMMARY OF RESPONSES FOR ENVIRONMENTAL REVIEW REFERRALS

PROJECT: REZ TM APP NO. PLN2021-0101 - HOFFMAN RANCH

REFERRED TO:				RESPONDED		RESPONSE			MITIGATION MEASURES		CONDITIONS	
	2 WK	30 DAY	PUBLIC HEARING NOTICE	YES	NO	WILL NOT HAVE SIGNIFICANT IMPACT	MAY HAVE SIGNIFICANT IMPACT	NO COMMENT NON CEQA	YES	NO	YES	NO
CA DEPT OF FISH & WILDLIFE	X	X	X		X							
CA OPR STATE CLEARINGHOUSE	X	X	X		X							
CA WATER RESOURCES CONTROL BOARD: DIV 10.	X	X	X		X							
CA RWQCB CENTRAL VALLEY REGION	X	X	X	X				X		X	X	
CITY OF: TURLOCK	X	X	X		X							
COMMUNITY SERVICES DIIST: DENAIR	X	X	X	X				X		X	X	
COOPERATIVE EXTENSION	X	X	X		X							
FIRE PROTECTION DIST: DENAIR	X	X	X		X							
GSA: TURLOCK	X	X	X		X							
IRRIGATION DISTRICT: TID	X	X	X	X				X		X	X	
MOSQUITO DISTRICT: TURLOCK	X	X	X		X							
MT VALLEY EMERGENCY MEDICAL	X	X	X		X							
MUNICIPAL ADVISORY COUNCIL: DENAIR	X	X	X	X				X		X	X	
PACIFIC GAS & ELECTRIC	X	X	X		X							
POSTMASTER: DENAIR	X	X	X		X							
RAILROAD: BNSF	X	X	X		X							
SAN JOAQUIN VALLEY APCD	X	X	X	X			X				X	
SCHOOL DISTRICT 1: DENAIR UNIFIED	X	X	X		X							
STAN CO AG COMMISSIONER	X	X	X		X							
STAN CO BUILDING PERMITS DIVISION	X	X	X	X				X		X	X	
STAN CO CEO	X	X	X		X							
STAN CO DER	X	X	X	X				X		X	X	
STAN CO ERC	X	X	X	X			X			X		X
STAN CO HAZARDOUS MATERIALS	X	X	X	X				X		X	X	
STAN CO PARKS & RECREATION	X	X	X	X				X		X	X	
STAN CO PUBLIC WORKS	X	X	X	X			X		X		X	
STAN CO SHERIFF	X	X	X		X							
STAN CO SUPERVISOR DIST 2: CHIESA	X	X	X		X							
STAN COUNTY COUNSEL	X	X	X		X							
STANISLAUS FIRE PREVENTION BUREAU	X	X	X		X							
STANISLAUS LAFCO	X	X	X		X							
SURROUNDING LAND OWNERS		X	X	X				X		X		X
TELEPHONE COMPANY: ATT	X	X	X		X							
TRIBAL CONTACTS (CA Government Code §65352.3)	X	X	X		X							

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EXHIBIT I