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

Referral
Amended Early Consultation

Date: **February 4, 2021**

To: **Distribution List (See Attachment A)**

From: **Kristin Doud, Principal Planner, Planning and Community Development**

Subject: **REZONE & WILLIAMSON ACT CANCELLATION APPLICATION NO. PLN2019-0061 – BRONCO WINE COMPANY**

Respond By: **February 19, 2021**

****PLEASE REVIEW REFERRAL PROCESS POLICY****

The Stanislaus County Department of Planning and Community Development is soliciting comments from responsible agencies under the Early Consultation process to determine: a) whether or not the project is subject to CEQA and b) if specific conditions should be placed upon project approval.

Therefore, please contact this office by the response date if you have any comments pertaining to the proposal. Comments made identifying potential impacts should be as specific as possible and should be based on supporting data (e.g., traffic counts, expected pollutant levels, etc.). Your comments should emphasize potential impacts in areas which your agency has expertise and/or jurisdictional responsibilities.

These comments will assist our Department in preparing a staff report to present to the Planning Commission. Those reports will contain our recommendations for approval or denial. They will also contain recommended conditions to be required should the project be approved. Therefore, please list any conditions that you wish to have included for presentation to the Commission as well as any other comments you may have. Please return all comments and/or conditions as soon as possible or no later than the response date referenced above.

Thank you for your cooperation. Please call (209) 525-6330 if you have any questions.

Applicant: **Bronco Wine Company**

Project Location: **6342 Bystrum Road, 800 E. Keyes Road, 1000 and 1130 E. Keyes Road in the Ceres area.**

APN: **041-046-012, 041-046-013 and 041-046-021**

Williamson Act Contract: **1974-1790; 1972-0838**

General Plan: **Agriculture**

Current Zoning: **P-D (336) (Planned Development) and A-2-40 (General Agriculture)**

Project Description: **Request to rezone three parcels to allow for the abandonment of Bystrum Road, to develop a private road to provide access from E. Keyes Road, aligning with Morgan Road, to the existing Bronco Winery facility, and to allow full build-out of the development included in Rezone Application No. PLN2016-0066. The proposed Rezone will also allow for two new driveways along E. Keyes Road and an expansion of the wine tanks and shallow checks on two parcels, totaling 38.82 acres in size, located adjacent to the existing development on the northeast. A cancellation of the Williamson Act Contracts for the proposed 38.82 acre expansion area to the northeast is also included in this request.**

Full document with attachments available for viewing at:
http://www.stancounty.com/planning/pl/act-projects.shtm

REZONE & WILLIAMSON ACT CANCELLATION APPLICATION NO. PLN2019-0061 – BRONCO WINE COMPANY

Attachment A

Distribution List

X	CA DEPT OF CONSERVATION Land Resources		STAN CO ALUC
X	CA DEPT OF FISH & WILDLIFE		STAN CO ANIMAL SERVICES
	CA DEPT OF FORESTRY (CAL FIRE)	X	STAN CO BUILDING PERMITS DIVISION
X	CA DEPT OF TRANSPORTATION DIST 10	X	STAN CO CEO
X	CA OPR STATE CLEARINGHOUSE		STAN CO CSA
X	CA RWQCB CENTRAL VALLEY REGION	X	STAN CO DER
	CA STATE LANDS COMMISSION	X	STAN CO ERC
	CEMETERY DISTRICT	X	STAN CO FARM BUREAU
	CENTRAL VALLEY FLOOD PROTECTION	X	STAN CO HAZARDOUS MATERIALS
	CITY OF:		STAN CO PARKS & RECREATION
	COMMUNITY SERVICES/SANITARY DIST	X	STAN CO PUBLIC WORKS
X	COOPERATIVE EXTENSION		STAN CO RISK MANAGEMENT
	COUNTY OF:	X	STAN CO SHERIFF
X	FIRE PROTECTION DIST: KEYES FIRE	X	STAN CO SUPERVISOR DIST 2: CHIESA
	HOSPITAL DIST:	X	STAN COUNTY COUNSEL
X	IRRIGATION DIST: TURLOCK		StanCOG
X	MOSQUITO DIST: TURLOCK	X	STANISLAUS FIRE PREVENTION BUREAU
X	MOUNTIAN VALLEY EMERGENCY MEDICAL SERVICES	X	STANISLAUS LAFCO
	MUNICIPAL ADVISORY COUNCIL:		SURROUNDING LAND OWNERS
X	PACIFIC GAS & ELECTRIC	X	TELEPHONE COMPANY: AT&T
	POSTMASTER:		TRIBAL CONTACTS (CA Government Code §65352.3)
X	RAILROAD: UNION PACIFIC		TUOLUMNE RIVER TRUST
X	SAN JOAQUIN VALLEY APCD		US ARMY CORPS OF ENGINEERS
X	SCHOOL DIST 1: CERES UNIFIED	X	US FISH & WILDLIFE
	SCHOOL DIST 2:		US MILITARY (SB 1462) (4 agencies)
	STAN ALLIANCE		USDA NRCS
X	STAN CO AG COMMISSIONER		WATER DIST:

STANISLAUS COUNTY
CEQA REFERRAL RESPONSE FORM

TO: **Stanislaus County Planning & Community Development**
1010 10th Street, Suite 3400
Modesto, CA 95354

FROM: _____

SUBJECT: **REZONE & WILLIAMSON ACT CANCELLATION APPLICATION NO.PLN2019-0061 – BRONCO WINE COMPANY**

Based on this agency's particular field(s) of expertise, it is our position the above described project:

_____ Will not have a significant effect on the environment.
_____ May have a significant effect on the environment.
_____ No Comments.

Listed below are specific impacts which support our determination (e.g., traffic general, carrying capacity, soil types, air quality, etc.) – (attach additional sheet if necessary)

1.
2.
3.
4.

Listed below are possible mitigation measures for the above-listed impacts: *PLEASE BE SURE TO INCLUDE WHEN THE MITIGATION OR CONDITION NEEDS TO BE IMPLEMENTED (PRIOR TO RECORDING A MAP, PRIOR TO ISSUANCE OF A BUILDING PERMIT, ETC.):*

1.
2.
3.
4.

In addition, our agency has the following comments (attach additional sheets if necessary).

_____

_____

Response prepared by:

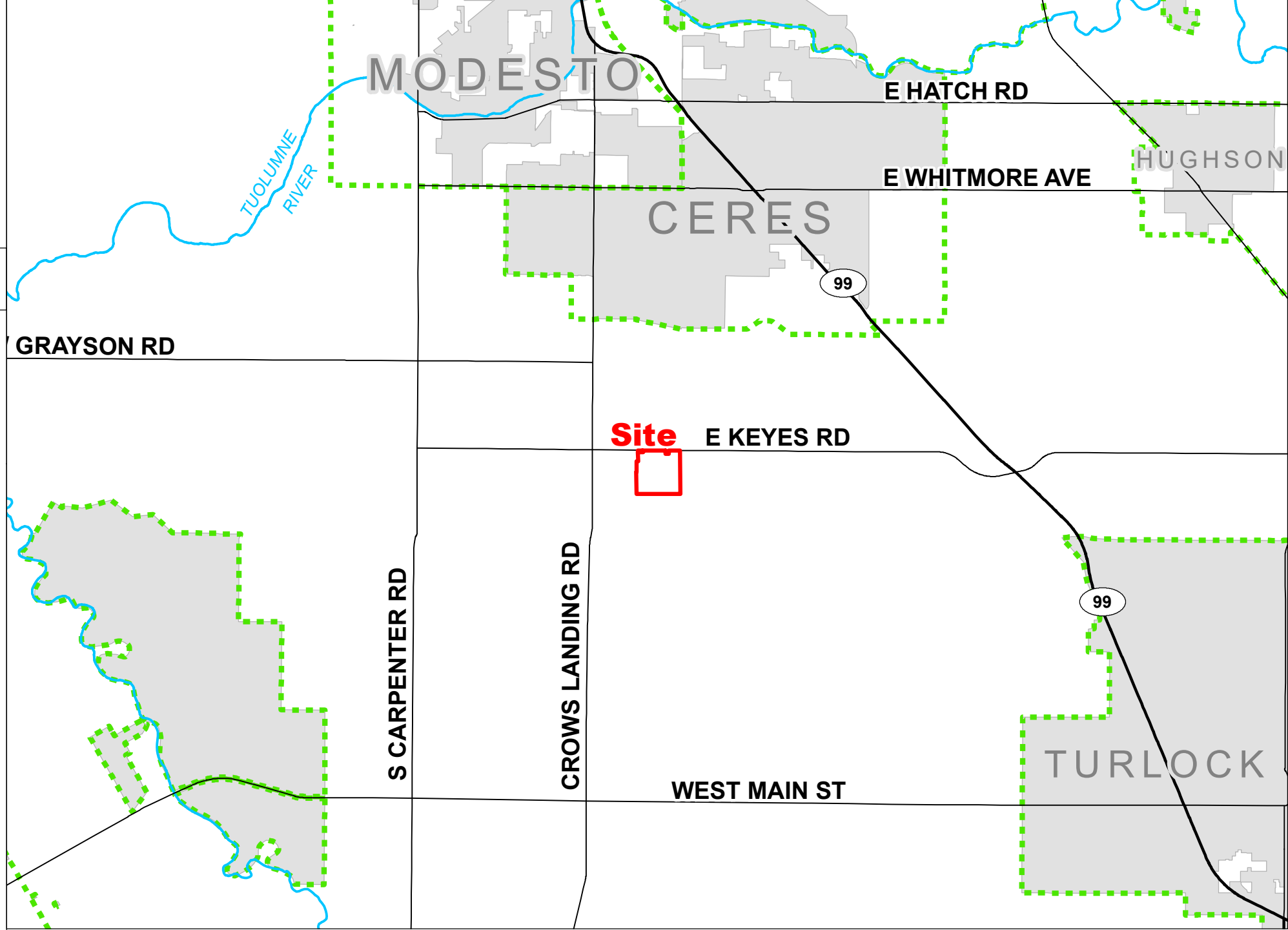
_____

Name Title Date

BRONCO WINERY GROUP

REZ WA-CAN
PLN2019-0061

AREA MAP



LEGEND

- Project Site
- Sphere of Influence
- City
- Road
- River

N

0 2 Miles

0 2,000 m

Source: Planning Department GIS

Date: 2/4/2021

BRONCO WINERY GROUP
REZ WA-CAN
PLN2019-0061

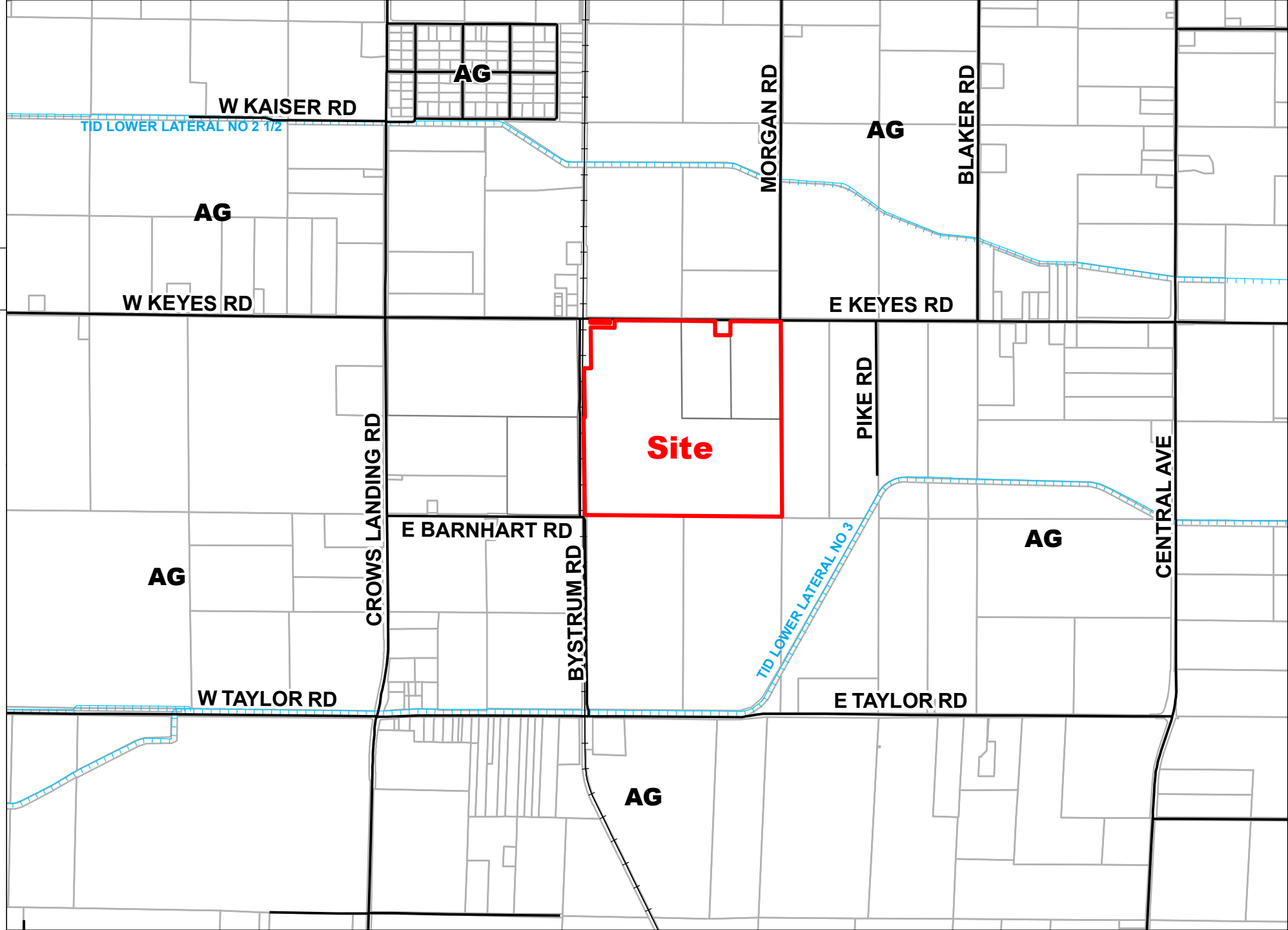
GENERAL PLAN MAP

LEGEND

- Project Site
- Parcel
- Road
- Railroad
- Canal

General Plan

- AG — Agriculture



N

0 2,000 ft

0 400 m

Source: Planning Department GIS

Date: 2/4/2021

BRONCO WINERY GROUP
REZ WA-CAN
PLN2019-0061

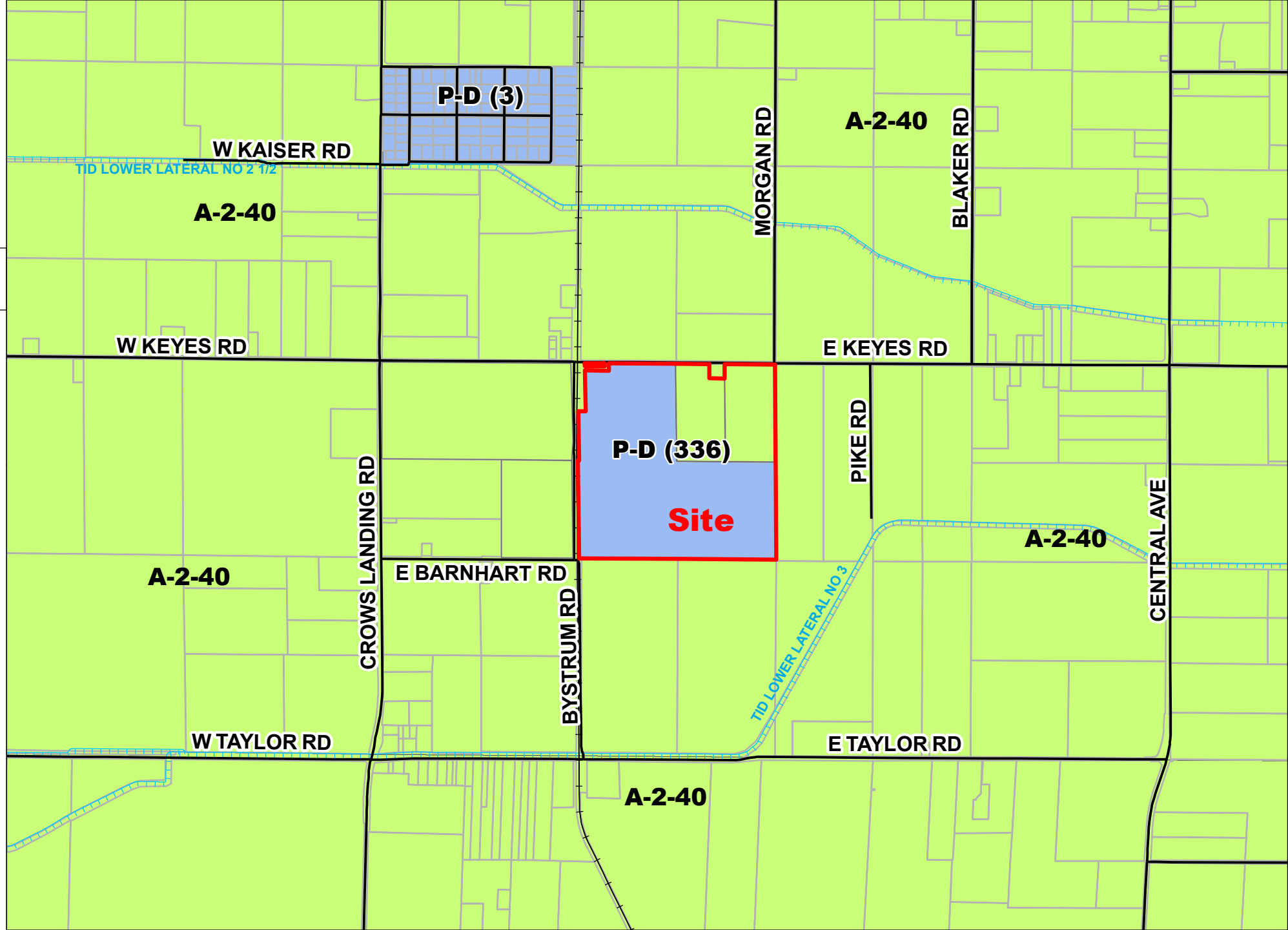
ZONING MAP

L E G E N D

- Project Site
- Parcel
- Road
- Railroad
- Canal

Zoning Designation

- A-2-40 — General Agriculture 40 Acre
- P-D — Planned Development



N

0 2,000 ft

0 400 m

Source: Planning Department GIS

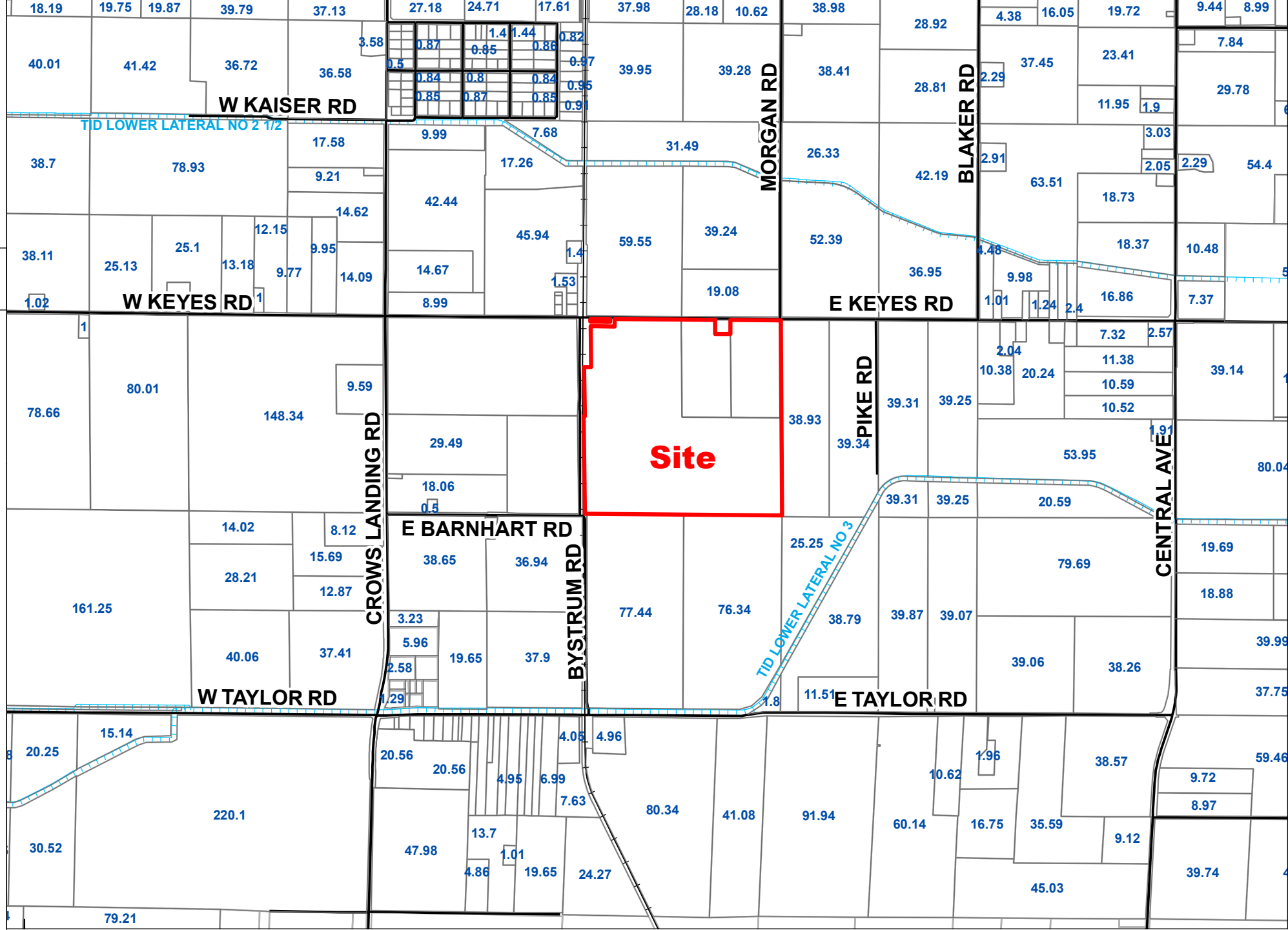
Date: 2/4/2021

BRONCO WINERY GROUP
REZ WA-CAN
PLN2019-0061

ACREAGE MAP

LEGEND

- Project Site
- # Parcel
- Road
- Railroad
- Canal



N

0 2,000 ft

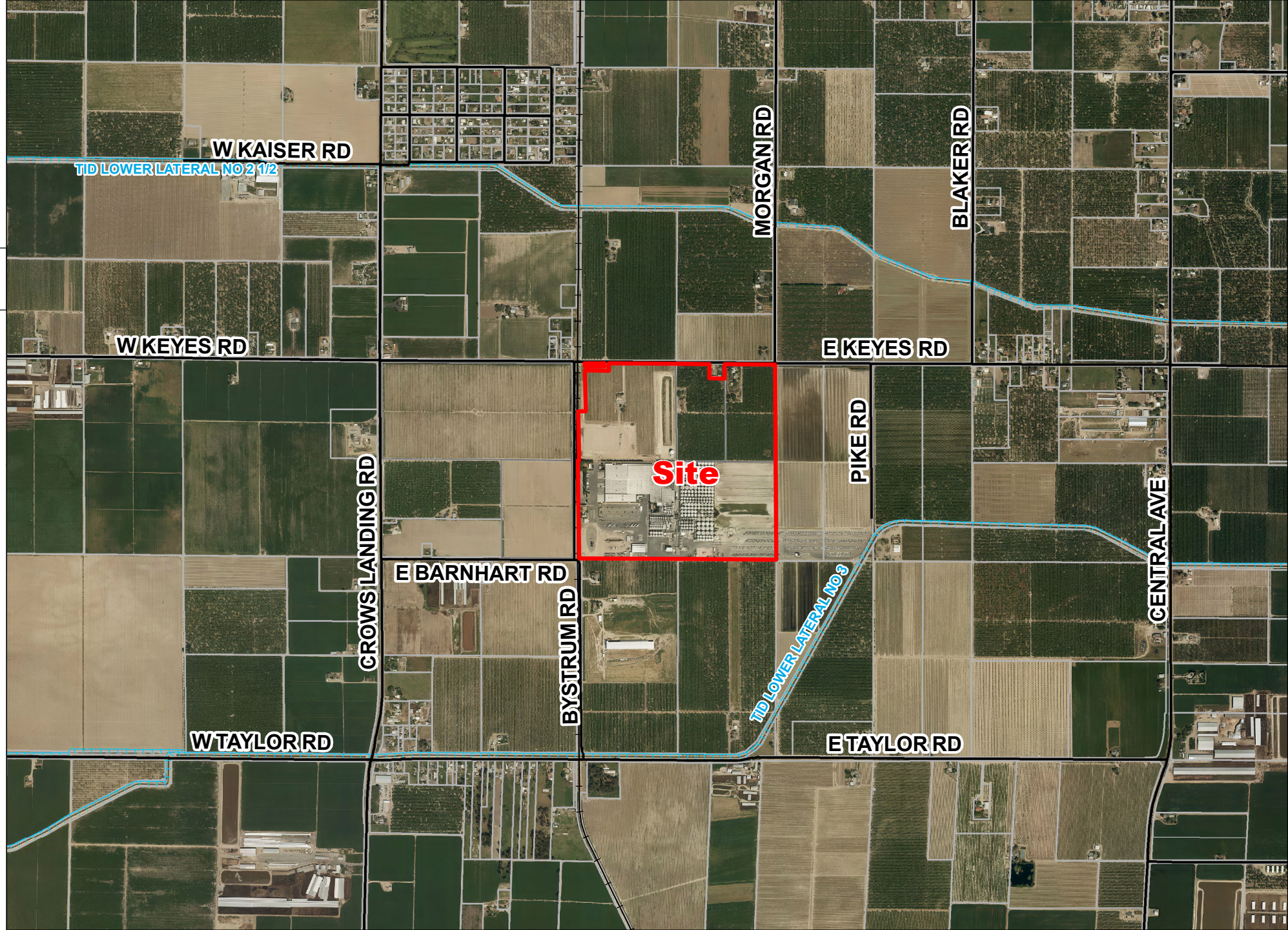
0 400 m

Source: Planning Department GIS

Date: 2/4/2021

BRONCO WINERY GROUP
REZ WA-CAN
PLN2019-0061

2017 AERIAL AREA MAP



LEGEND

- Project Site
- Road
- Railroad
- Canal

N

0 2,000 ft

0 400 m

Source: Planning Department GIS

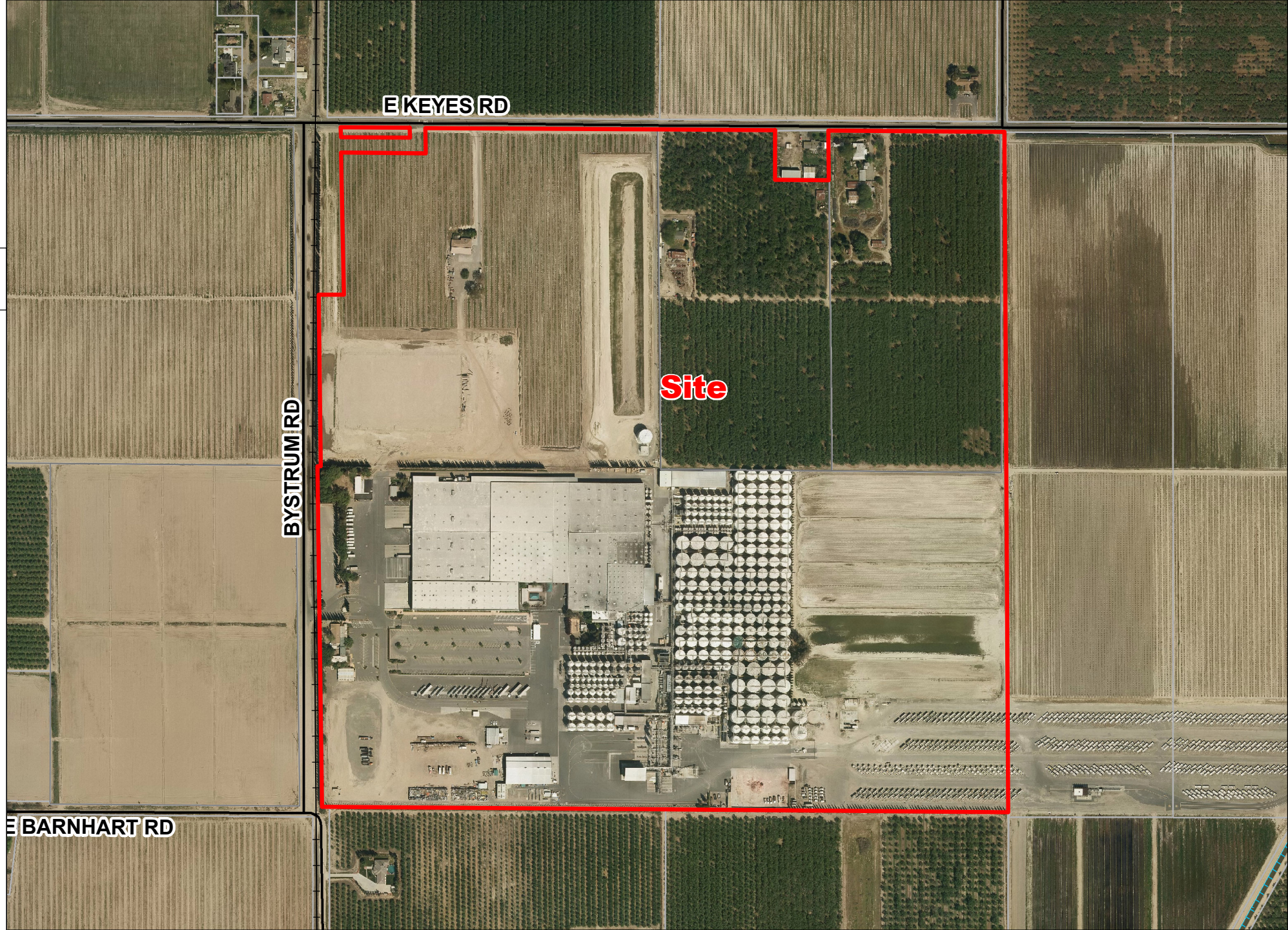
Date: 2/4/2021

BRONCO WINERY GROUP
REZ WA-CAN
PLN2019-0061

2017 AERIAL SITE MAP

LEGEND

- Project Site
- Road
- Railroad



N

0 1,000 ft

0 200 m

Source: Planning Department GIS

Date: 2/4/2021

BRONCO WINE COMPANY

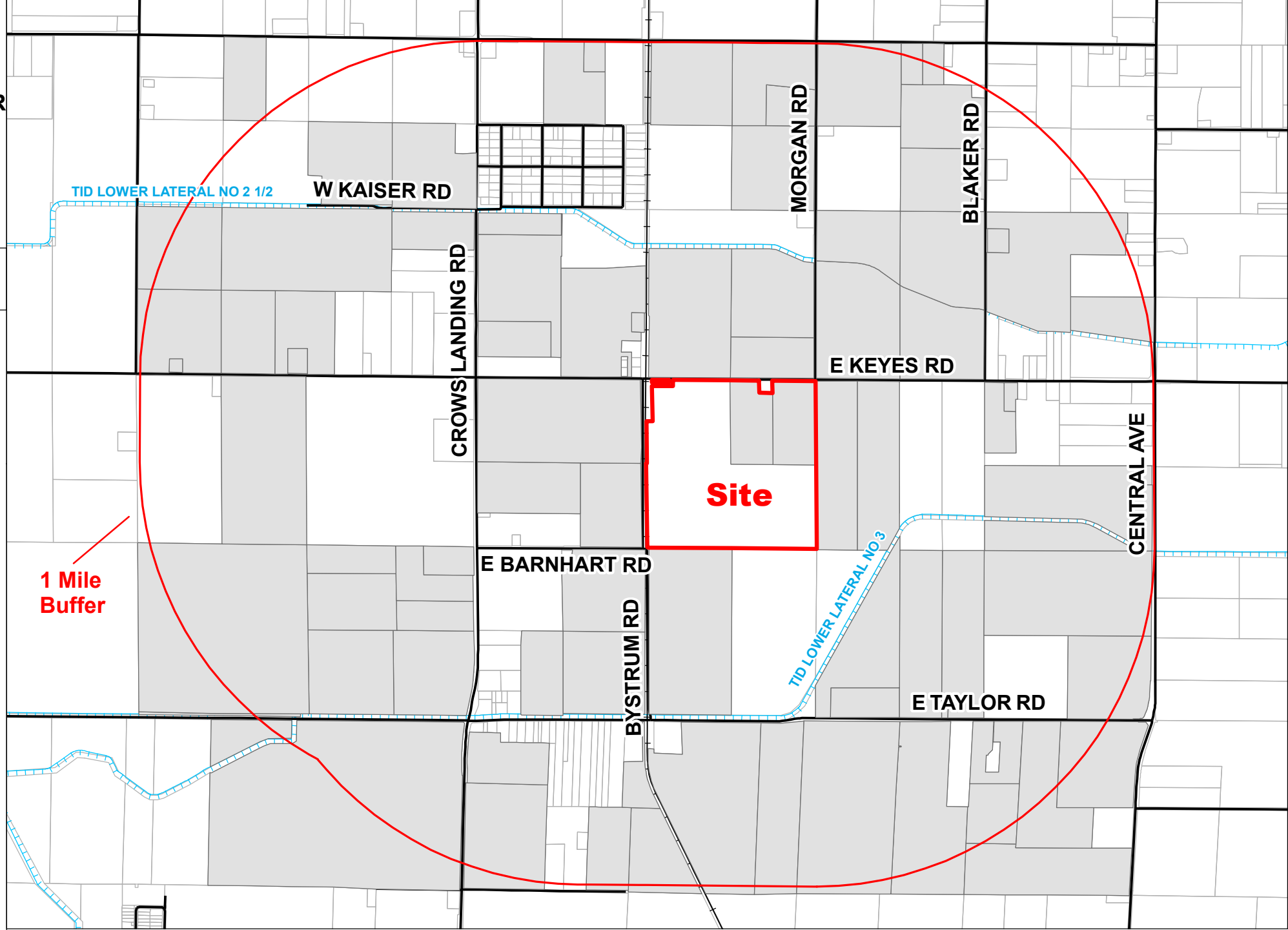
SURROUNDING PARCELS UNDER WILLIAMSON ACT CONTRACT

REZ WA-CAN PLN2019-0061

ACREAGE MAP

LEGEND

- Project Site
- Williamson Act Parcels (85)
- Road
- Railroad
- Canal



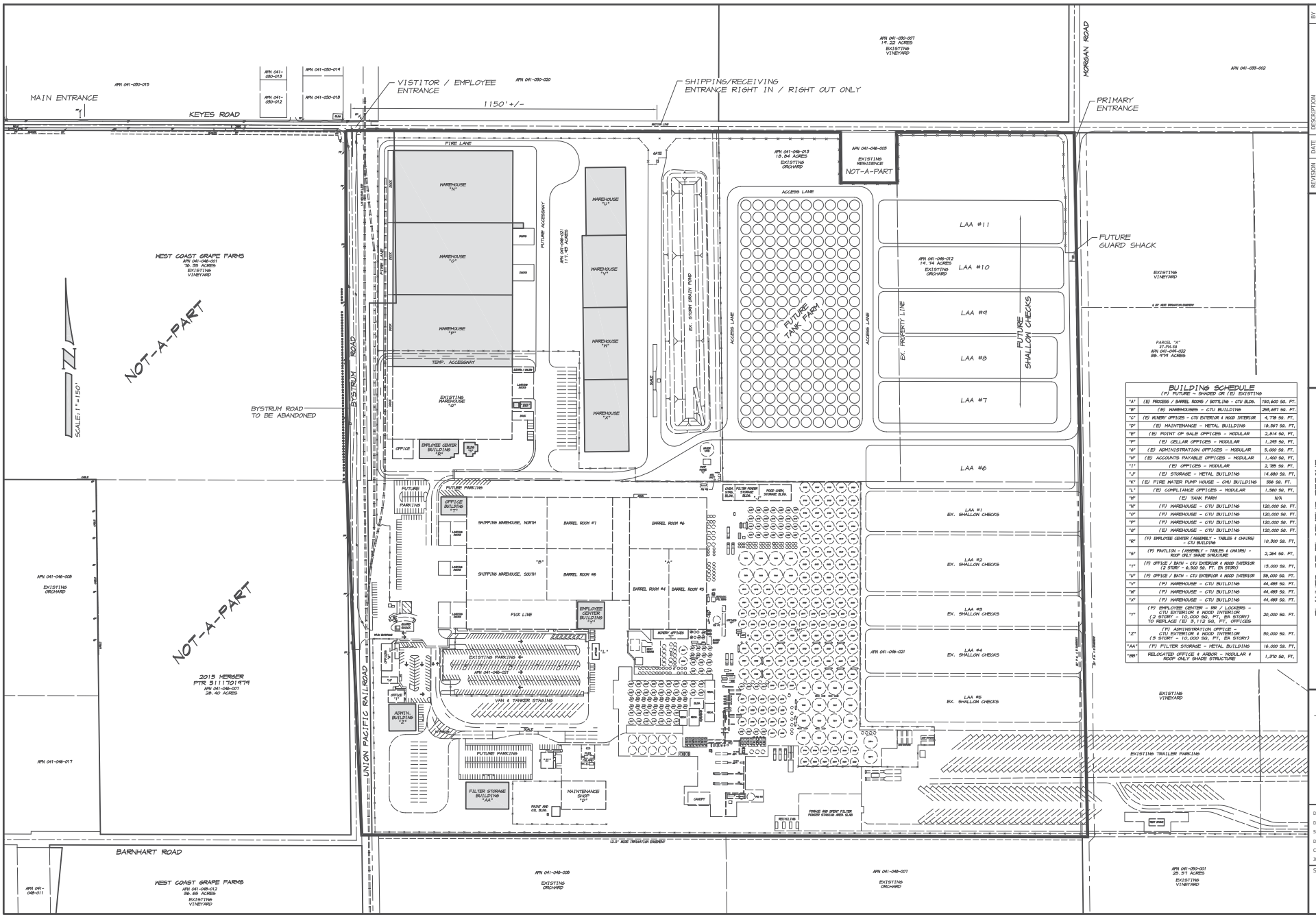
N

0 3,000 ft

0 1,000 m

Source: Planning Department GIS

Date: 2/4/2021



BUILDING SCHEDULE
(P) FUTURE - SHADED OR (E) EXISTING

"A"	(E) PROCESS / BARREL ROOMS / BOTTLING - CTU BLDG.	150,602 SQ. FT.
"B"	(E) WAREHOUSES - CTU BUILDING	259,671 SQ. FT.
"C"	(E) WINERY OFFICES - CTU EXTERIOR & WOOD INTERIOR	4,719 SQ. FT.,
"D"	(E) MAINTENANCE - METAL BUILDING	18,967 SQ. FT.,
"E"	(E) POINT OF SALE OFFICES - MODULAR	2,814 SQ. FT.,
"F"	(E) CELLAR OFFICES - MODULAR	1,248 SQ. FT.,
"G"	(E) ADMINISTRATION OFFICES - MODULAR	5,000 SQ. FT.,
"H"	(E) ACCOUNTS PAYABLE OFFICES - MODULAR	1,400 SQ. FT.,
"I"	(E) OFFICES - MODULAR	2,785 SQ. FT.,
"J"	(E) STORAGE - METAL BUILDING	14,680 SQ. FT.,
"K"	(E) FIRE WATER PUMP HOUSE - CMU BUILDING	556 SQ. FT.
"L"	(E) COMPLIANCE OFFICES - MODULAR	1,560 SQ. FT.,
"M"	(E) TANK FARM	N/A
"N"	(P) WAREHOUSE - CTU BUILDING	120,000 SQ. FT.
"O"	(P) WAREHOUSE - CTU BUILDING	120,000 SQ. FT.
"P"	(P) WAREHOUSE - CTU BUILDING	120,000 SQ. FT.
"Q"	(E) WAREHOUSE - CTU BUILDING	120,000 SQ. FT.
"R"	(P) EMPLOYEE CENTER (ASSEMBLY - TABLES & CHAIRS) - CTU BUILDING	10,900 SQ. FT.,
"S"	(P) PAVILION - (ASSEMBLY - TABLES & CHAIRS) - ROOF ONLY SHADE STRUCTURE	2,264 SQ. FT.,
"T"	(P) OFFICE / BATH - CTU EXTERIOR & WOOD INTERIOR (2 STORY - 6,500 SQ. FT. EA STORY)	13,000 SQ. FT.,
"U"	(P) OFFICE / BATH - CTU EXTERIOR & WOOD INTERIOR	38,000 SQ. FT.
"V"	(P) WAREHOUSE - CTU BUILDING	44,483 SQ. FT.
"W"	(P) WAREHOUSE - CTU BUILDING	44,483 SQ. FT.
"X"	(P) WAREHOUSE - CTU BUILDING	44,483 SQ. FT.
"Y"	(P) EMPLOYEE CENTER - RR / LOCKERS - CTU EXTERIOR & WOOD INTERIOR (2 STORY - 10,000 SQ. FT. EA STORY) TO REPLACE (E) 3,112 SQ. FT. OFFICES	20,000 SQ. FT.
"Z"	(P) ADMINISTRATION OFFICE - CTU EXTERIOR & WOOD INTERIOR (3 STORY - 10,000 SQ. FT. EA STORY)	30,000 SQ. FT.
"AA"	(P) FILTER STORAGE - METAL BUILDING	16,000 SQ. FT.,
"BB"	RELOCATED OFFICE & ARBOR - MODULAR & ROOF ONLY SHADE STRUCTURE	1,370 SQ. FT.,

REVISION	DATE	DESCRIPTION	BY

ASSOCIATED ENGINEERING GROUP
4205 TECHNOLOGY DRIVE, SUITE A, MODESTO, CA 95356
PHONE (209) 549-3300 FAX (209) 549-3979 www.aegcompanies.com

PLANNED DEVELOPMENT REZONE

OVERALL SITE PLAN

BRONCO WINE COMPANY

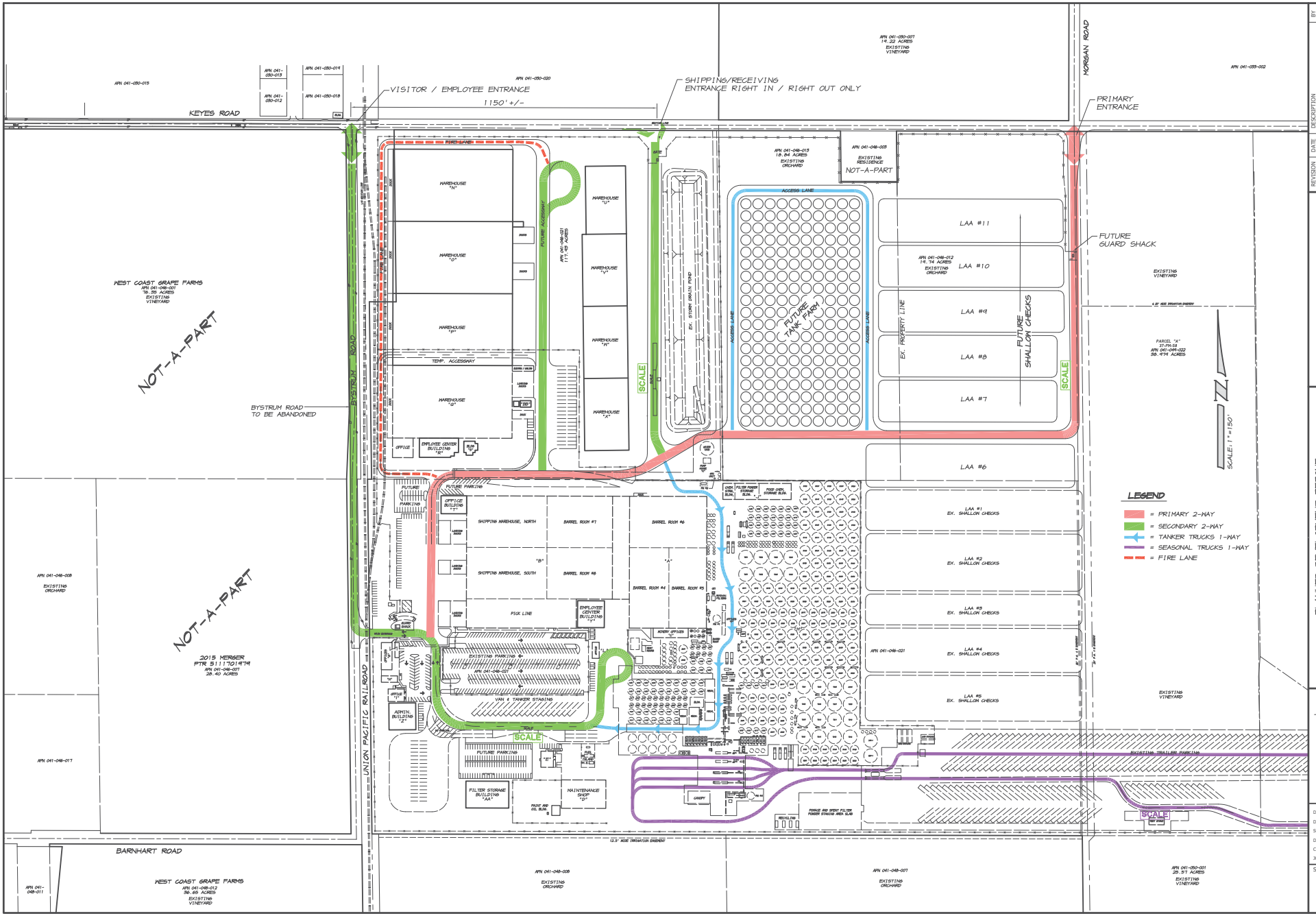
CALIFORNIA

STANISLAUS COUNTY

RYAN CARREL, R.C.E. 61619
DAVE SKIDMORE, L.S. 7126

DRAWN BY: KW/JF
DATE: 1/12/21 12:02
SCALE: NOTED
DWG: 906B-SITE_REV
CHECKED:
JOB #: 906C-18

SHEET 1 OF



REVISION	DATE	DESCRIPTION	BY

ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE A, MODESTO, CA 95356
PHONE (209) 545-3300 FAX (209) 545-3093 www.aegcompanies.com

PLANNED DEVELOPMENT REZONE
CIRCULATION PLAN
BRONCO WINERY
STANISLAUS COUNTY CALIFORNIA

RYAN CARREL, R.C.E. 61619
DAVE SKIDMORE, L.S. 7126

DRAWN BY: KM/JF
DATE: 1/6/21 8:35
SCALE: NOTED
DWG: 4066-CIRC_REV
CHECKED:
JOB #: 4066-18

SHEET 2 OF





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
Form Available Online: http://www.stancounty.com/planning/applications.shtm

APPLICATION QUESTIONNAIRE

Please Check all applicable boxes

APPLICATION FOR:

Staff is available to assist you with determining which applications are necessary

- ☐ General Plan Amendment
- ☒ Rezone
- ☒ NA Use Permit
- ☐ Variance
- ☐ Historic Site Permit
- ☐ Subdivision Map
- ☐ Parcel Map
- ☐ Exception
- ☐ Williamson Act Cancellation
- ☐ Other _____

PLANNING STAFF USE ONLY:

Application No(s): REZ PLN2019-0061
Date: 7/5/19
S 33 **T** 4 **R** 9
GP Designation: AG
Zoning: P-D 336 & A-2-40
Fee: $11,642
Receipt No. 550631
Received By: KCO
Notes: _____

In order for your application to be considered COMPLETE, please answer all applicable questions on the following pages, and provide all applicable information listed on the checklist on pages i – v. Under State law, upon receipt of this application, staff has 30 days to determine if the application is complete. We typically do not take the full 30 days. It may be necessary for you to provide additional information and/or meet with staff to discuss the application. Pre-application meetings are not required, but are highly recommended. An incomplete application will be placed on hold until all the necessary information is provided to the satisfaction of the requesting agency. An application will not be accepted without all the information identified on the checklist.

Please contact staff at (209) 525-6330 to discuss any questions you may have. Staff will attempt to help you in any way we can.

PROJECT INFORMATION

PROJECT DESCRIPTION: (Describe the project in detail, including physical features of the site, proposed improvements, proposed uses or business, operating hours, number of employees, anticipated customers, etc. – Attach additional sheets as necessary)

****Please note: A detailed project description is essential to the reviewing process of this request. In order to approve a project, the Planning Commission or the Board of Supervisors must decide whether there is enough information available to be able to make very specific statements about the project. These statements are called "Findings". It is your responsibility as an applicant to provide enough information about the proposed project, so that staff can recommend that the Commission or the Board make the required Findings. Specific project Findings are shown on pages 17 – 19 and can be used as a guide for preparing your project description. (If you are applying for a Variance or Exception, please contact staff to discuss special requirements).***

Attached Project Description

PROJECT SITE INFORMATION

Complete and accurate information saves time and is vital to project review and assessment. Please complete each section entirely. If a question is not applicable to your project, please indicated this to show that each question has been carefully considered. Contact the Planning & Community Development Department Staff, 1010 10th Street – 3rd Floor, (209) 525-6330, if you have any questions. Pre-application meetings are highly recommended.

ASSESSOR'S PARCEL NUMBER(S): **Book** 041 **Page** 046 **Parcel** 021

Additional parcel numbers: 041-046-007, 041-046-012, 041-046-013 and a portion of 041-046-001

Project Site Address or Physical Location: 6342 Bystrum Road

Property Area: Acres: 220 +/- or Square feet: _____

Current and Previous Land Use: (Explain existing and previous land use(s) of site for the last ten years)

Vineyard and Winery

List any known previous projects approved for this site, such as a Use Permit, Parcel Map, etc.: (Please identify project name, type of project, and date of approval)

PLN2009-04 (rezone & Extension) ; PLN2016-0066 (Rezone)

Existing General Plan & Zoning: General Agricultural

Proposed General Plan & Zoning: Planned Development (P-D) & General Agricultural (A-2)
(if applicable)

ADJACENT LAND USE: (Describe adjacent land uses within 1,320 feet (1/4 mile) and/or two parcels in each direction of the project site)

East: Vineyard

West: Vineyard & Orchard

North: Orchard & Resident

South: Orchard & Chicken Operation

WILLIAMSON ACT CONTRACT:

Yes ☒ **No** ☐

Is the property currently under a Williamson Act Contract?
Contract Number: 1986-4069, 1978-3407, 1974-1790 & 1972-0838

If yes, has a Notice of Non-Renewal been filed?

Date Filed: _____

Yes ☒ No ☐ Do you propose to cancel any portion of the Contract?

Yes ☐ No ☒ Are there any agriculture, conservation, open space or similar easements affecting the use of the project site. (Such easements do not include Williamson Act Contracts)

If yes, please list and provide a recorded copy: _____

_____

SITE CHARACTERISTICS: (Check one or more) Flat ☒ Rolling ☐ Steep ☐

VEGETATION: What kind of plants are growing on your property? (Check one or more)

Field crops ☐ Orchard ☒ Pasture/Grassland ☐ Scattered trees ☐

Shrubs ☐ Woodland ☐ River/Riparian ☐ Other ☒

Explain Other: Vineyard

Yes ☒ No ☐ Do you plan to remove any trees? (If yes, please show location of trees planned for removal on plot plan and provide information regarding transplanting or replanting.)

GRADING:

Yes ☒ No ☐ Do you plan to do any grading? (If yes, please indicate how many cubic yards and acres to be disturbed. Please show areas to be graded on plot plan.) _____

_____

STREAMS, LAKES, & PONDS:

Yes ☐ No ☒ Are there any streams, lakes, ponds or other watercourses on the property? (If yes, please show on plot plan)

Yes ☒ No ☐ Will the project change any drainage patterns? (If yes, please explain – provide additional sheet if needed) As related to site development stormdrainage will be collected and disposed of

pursuant to Stanislaus County Standards (storm drainage pond)

Yes ☐ No ☒ Are there any gullies or areas of soil erosion? (If yes, please show on plot plan)

Yes ☐ No ☒ Do you plan to grade, disturb, or in any way change swales, drainages, ditches, gullies, ponds, low lying areas, seeps, springs, streams, creeks, river banks, or other area on the site that carries or holds water for any amount of time during the year? (If yes, please show areas to be graded on plot plan)

Please note: If the answer above is yes, you may be required to obtain authorization from other agencies such as the Corps of Engineers or California Department of Fish and Game.

STRUCTURES:

Yes ☒ **No** ☐ Are there structures on the site? (If yes, please show on plot plan. Show a relationship to property lines and other features of the site.

Yes ☒ **No** ☐ Will structures be moved or demolished? (If yes, indicate on plot plan.)

Yes ☒ **No** ☐ Do you plan to build new structures? (If yes, show location and size on plot plan.)

Yes ☐ **No** ☒ Are there buildings of possible Historical significance? (If yes, please explain and show location and size on plot plan.) _____

PROJECT SITE COVERAGE:

Existing Building Coverage: 577,670 Sq. Ft. Landscaped Area: _____ Sq. Ft.

Proposed Building Coverage: 640,383 Sq. Ft. Paved Surface Area: _____ Sq. Ft.

BUILDING CHARACTERISTICS:

Size of new structure(s) or building addition(s) in gross sq. ft.: (Provide additional sheets if necessary) See Project Description

Number of floors for each building: One (1) story for proposed warehouses, two-three (2-3) story for office buildings

Building height in feet (measured from ground to highest point): (Provide additional sheets if necessary) No building will exceed 45 feet in height. The majority of building (namely the warehouse will be 26 feet in height.

Height of other appurtenances, excluding buildings, measured from ground to highest point (i.e., antennas, mechanical equipment, light poles, etc.): (Provide additional sheets if necessary) Existing and proposed tank farms are 45-60 feet high, typically.

Proposed surface material for parking area: (Provide information addressing dust control measures if non-asphalt/concrete material to be used) Asphalt or concrete in primary parking areas. Seasonal parking and storage yards to be aggregate base rock.

UTILITIES AND IRRIGATION FACILITIES:

Yes ☒ **No** ☐ Are there existing public or private utilities on the site? Includes telephone, power, water, etc. (If yes, show location and size on plot plan)

Who provides, or will provide the following services to the property?

Electrical: Turlock Irrigation District Sewer*: Private on-site

Telephone: AT&T Gas/Propane: Pacific Gas and Electric

Water**: Private on-site Irrigation: Turlock Irrigation District

***Please Note: A "will serve" letter is required if the sewer service will be provided by City, Sanitary District, Community Services District, etc.**

****Please Note: A "will serve" letter is required if the water source is a City, Irrigation District, Water District, etc., and the water purveyor may be required to provide verification through an Urban Water Management Plan that an adequate water supply exists to service your proposed development.**

Will any special or unique sewage wastes be generated by this development other than that normally associated with resident or employee restrooms? Industrial, chemical, manufacturing, animal wastes? (Please describe:)

No

Please Note: Should any waste be generated by the proposed project other than that normally associated with a single family residence, it is likely that Waste Discharge Requirements will be required by the Regional Water Quality Control Board. Detailed descriptions of quantities, quality, treatment, and disposal may be required.

Yes ☒ **No** ☐ Are there existing irrigation, telephone, or power company easements on the property? (If yes, show location and size on plot plan.)

Yes ☒ **No** ☐ Do the existing utilities, including irrigation facilities, need to be moved? (If yes, show location and size on plot plan.)

Yes ☐ **No** ☒ Does the project require extension of utilities? (If yes, show location and size on plot plan.)

AFFORDABLE HOUSING/SENIOR:

Yes ☐ **No** ☒ Will the project include affordable or senior housing provisions? (If yes, please explain)

RESIDENTIAL PROJECTS: (Please complete if applicable – Attach additional sheets if necessary)

Total No. Lots:_____ Total Dwelling Units:_____ Total Acreage:_____

Net Density per Acre: _____ Gross Density per Acre: _____

(complete if applicable)	Single Family	Two Family Duplex	Multi-Family Apartments	Multi-Family Condominium/ Townhouse
Number of Units:				
Acreage:				

COMMERCIAL, INDUSTRIAL, MANUFACTURING, RETAIL, USE PERMIT, OR OTHER PROJECTS: (Please complete if applicable – Attach additional sheets if necessary)

Square footage of each existing or proposed building(s): Existing Structures: 577,670 sq. ft. Proposed: 640,383 sq. ft.

Type of use(s): Warehouse, business offices, employee center and pavilion (covered employee area)

Days and hours of operation: Non-seasonal: Monday-Friday, 24 hours; seasonal 7 days a week, 24 hours

Seasonal operation (i.e., packing shed, huller, etc.) months and hours of operation: Winery's seasonal operation is from mid-July to mid-November

Occupancy/capacity of building: Warehouses, Offices, Assembly (employee areas)

Number of employees: (Maximum Shift): 289 (Minimum Shift): 186

Estimated number of daily customers/visitors on site at peak time: 20

Other occupants: Contractor employees: 24 (varies seasonal)

Estimated number of truck deliveries/loadings per day: no change from PLN2016-066

Estimated hours of truck deliveries/loadings per day: 24 hours, 5 days a week; 24/7 seasonally

Estimated percentage of traffic to be generated by trucks: no change from PLN2016-066

Estimated number of railroad deliveries/loadings per day: no change from PLN2016-066

Square footage of:

Office area: 101,000 sq. ft. Warehouse area: 629,449 sq. ft.

Sales area: N/A Storage area: N/A

Loading area: 24,304 sq. ft. Manufacturing area: N/A

Other: (explain type of area) Cafeteria/conference & pavillion employee area: 12,564 sq. ft.

Yes ☐ No ☒ Will the proposed use involve toxic or hazardous materials or waste? (Please explain)

ROAD AND ACCESS INFORMATION:

What County road(s) will provide the project's main access? (Please show all existing and proposed driveways on the plot plan)

E. Keyes Road; Bystrum Road will be abandoned with this application

Yes ☒ No ☐ Are there private or public road or access easements on the property now? (If yes, show location and size on plot plan)

Yes ☐ No ☒ Do you require a private road or easement to access the property? (If yes, show location and size on plot plan)

Yes ☒ No ☐ Do you require security gates and fencing on the access? (If yes, show location and size on plot plan)

Please Note: Parcels that do not front on a County-maintained road or require special access may require approval of an Exception to the Subdivision Ordinance. Please contact staff to determine if an exception is needed and to discuss the necessary Findings.

STORM DRAINAGE:

How will your project handle storm water runoff? (Check one) ☒ Drainage Basin ☐ Direct Discharge ☐ Overland

☐ Other: (please explain) _____

If direct discharge is proposed, what specific waterway are you proposing to discharge to? _____

_____

Please Note: If direct discharge is proposed, you will be required to obtain a NPDES permit from the Regional Water Quality Control Board, and must provide evidence that you have contacted them regarding this proposal with your application.

EROSION CONTROL:

If you plan on grading any portion of the site, please provide a description of erosion control measures you propose to implement.

Best Management Practices (BMP)

_____

Please note: You may be required to obtain an NPDES Storm Water Permit from the Regional Water Quality Control Board and prepare a Storm Water Pollution Prevention Plan.

ADDITIONAL INFORMATION:

Please use this space to provide any other information you feel is appropriate for the County to consider during review of your application. (Attach extra sheets if necessary)

_____

_____

_____

_____

_____

_____

_____

BRONCO WINE COMPANY

Current request (PLN 2019-0061)

Request to rezone three parcels, consisting of 157.98 acres, from Planned Development (PD) 336 and A-2 (General Agriculture) to a new PD to allow for:

- Build out of the 2016 Rezone, beyond Phase 1, which approved an expansion of the existing Bronco Wine Facility located on 117.93 acres to include the following:
    - Four120,000 square-foot warehouses, two with 10 additional truck docks each
    - Four 44,483 square-foot warehouses
    - A 13,000 square-foot office
    - A 38,000 square-foot office
    - A 10,300 square-foot employee center (commercial kitchen, cafeteria, and conference area)
    - A 2,264 square-foot pavilion (roof only shade structure)
    - A 20,000 square-foot employee center (lockers and restrooms)
    - A 30,000 square-foot administration building
    - A 16,000 square-foot filter storage building
    - Construction of one rail spurs to be utilized for deliveries
  - Construction of one 120,000 square foot warehouse, one rail spur, and truck parking were permitted with Phase 1.
  - Construction of the additional approved uses cannot be completed without first completing an Air Impact Assessment and dedicated left turn lane improvements at the Keyes and Bystrum Road intersection.
- Expansion onto two parcels, 38.58 acres, to the northeast of the existing facility
  - Proposed construction of up to 190 wine storage tanks and seven shallow checks northeast of the existing facility.
- Driveways
  - Proposed construction of two new driveways taking access from Keyes Road including:
    - A driveway located along the new and proposed warehouses on the developed property; and
    - A driveway located along the eastern edge of the proposed shallow check and wine tank expansion area.
  - The portion of Bystrum Road along the west side of the existing facility is proposed to be abandoned and possibly developed with second rail spur.

- Williamson Act Cancellation
  - A cancellation of the Williamson Act Contracts for the proposed 38.58 acre expansion area to the northeast is required for the property is to be rezoned, as Williamson Act Contracts are only permitted under the A-2 (General Agriculture) Zoning Designation.

Mitchell Air Quality Consulting

Air Quality Analysis Report
Bronco Winery Expansion Project
County of Stanislaus, California

Prepared for:
Bronco Wine Company
6342 Bystrum Road
Ceres, CA 95307
209.538.8074
Contact: John Franzia

Prepared by:
Mitchell Air Quality Consulting
1164 E. Decatur Avenue
Fresno, CA 93720
559.246.3732
Contact: Dave Mitchell, Senior Air Quality Scientist

June 25, 2019

Mitchell Air Quality Consulting

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June 25, 2019

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ACRONYMS AND ABBREVIATIONS

$\mu g/m^3$	micrograms per cubic meter
AB	Assembly Bill
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
CO	carbon monoxide
District	San Joaquin Valley Air Pollution Control District
DPM	diesel particulate matter
EMFAC	EMission FACtors Model
EPA	United States Environmental Protection Agency
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
MAQC	Mitchell Air Quality Consulting
MMBtu	million British thermal units
NO_X	nitrogen oxides
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppb	parts per billion
ppm	parts per million
ROG	reactive organic gases
SB	Senate Bill
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO_X	sulfur oxides
VOC	volatile organic compounds

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SECTION 1: EXECUTIVE SUMMARY

1.1—Purpose and Methods of Analysis

The following air quality and greenhouse gas (GHG) analysis was prepared to evaluate whether the estimated criteria air pollutant and GHG emissions generated from the Bronco Winery Expansion Project (project) would cause significant impacts to air resources in the project area. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The methodology follows the Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) prepared by the San Joaquin Valley Air Pollution Control District (SJVAPCD or District) for quantification of emissions and evaluation of potential impacts to air resources (SJVAPCD 2015a).

1.2—Project Description

The project site was rezoned in 2017 from Planned Development P-D (6) and P-D (321) zones to a new Planned Development (P-D) zone to allow for the expansion of an existing winery and bottling facility developed on 82.15 acres of the project site. The expansion includes 14 buildings, totaling 743,013 square feet, the construction of two rail spurs, and the addition of a fleet of 53-foot trucks and tanker trucks.

The project is proposed to be constructed in phases. Phase 1 includes construction of a 120,000-square-foot warehouse to be utilized for the storage of bottled wine stock, construction of two rail spurs to be utilized for deliveries, a fleet of 53-foot trucks and tanker trucks, and fencing around the perimeter of the new warehouse. Phase 1 was approved separately, but with a condition to perform additional air quality analysis prior to proceeding with later phases. Phase 1 construction has been completed and the new facilities are operational. The timing of future phases will depend on market demand, but for analysis purposes all remaining development is assumed to be constructed at once. The air quality analysis for project operations includes the total impact of all phases including the already completed Phase 1.

The rail spur allows a substantial increase in shipping to be handled by rail instead of new truck trips. Rail service is expected 4 days per week with 5 train cars per pick up for a total of 20 train cars per week. The project traffic study indicates a net increase in trucks accessing the site is 25 per day or 50 round trips.

The project would increase full-time employment at the facility from 396 to 426 or 30 employees at buildout. No increase in seasonal employment is anticipated with the project.

The project's regional vicinity location is shown in Figure 1; an aerial view of the local vicinity is provided in Figure 2; and the site plan is provided in Figure 3.

1.3—Summary of Analysis Results

The following is a summary of the analysis results. As shown below, the project would result in less than significant impacts for all air quality and GHG impact criteria analyzed.

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. **Less than significant impact.**

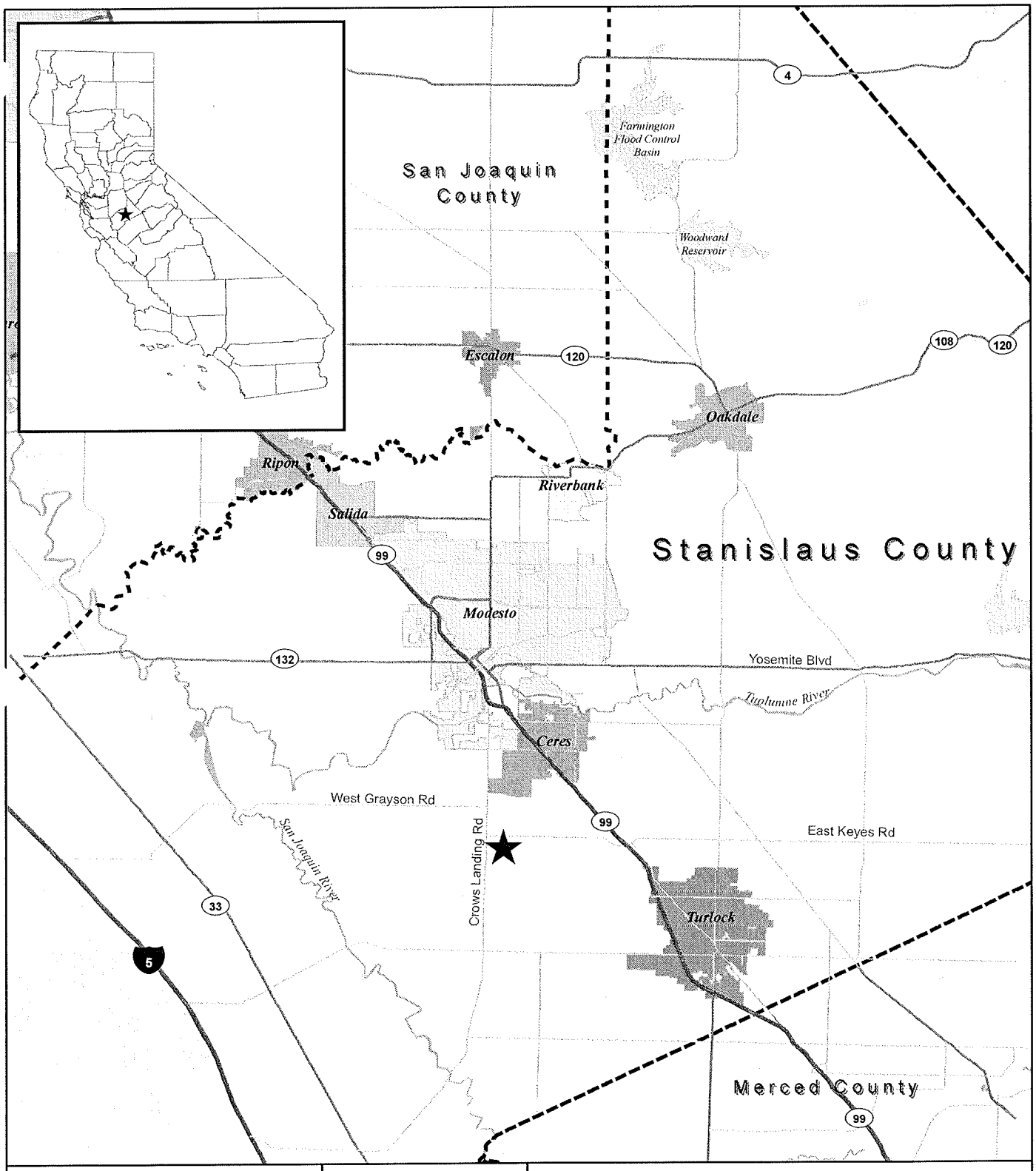
Impact AIR-2: The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors). **Less than significant impact.**

Impact AIR-3: The project would not expose sensitive receptors to substantial pollutant concentrations. **Less than significant impact.**

Impact AIR-4: The project would not create objectionable odors affecting a substantial number of people. **Less than significant impact.**

1.4—Standard Conditions and Mitigation Measures Applied to the Project

No mitigation measures beyond compliance with regulation are required.



BRONCO WINE COMPANY
AIR QUALITY ANALYSIS REPORT
BRONCO WINERY EXPANSION

Figure 1. Regional Location Map

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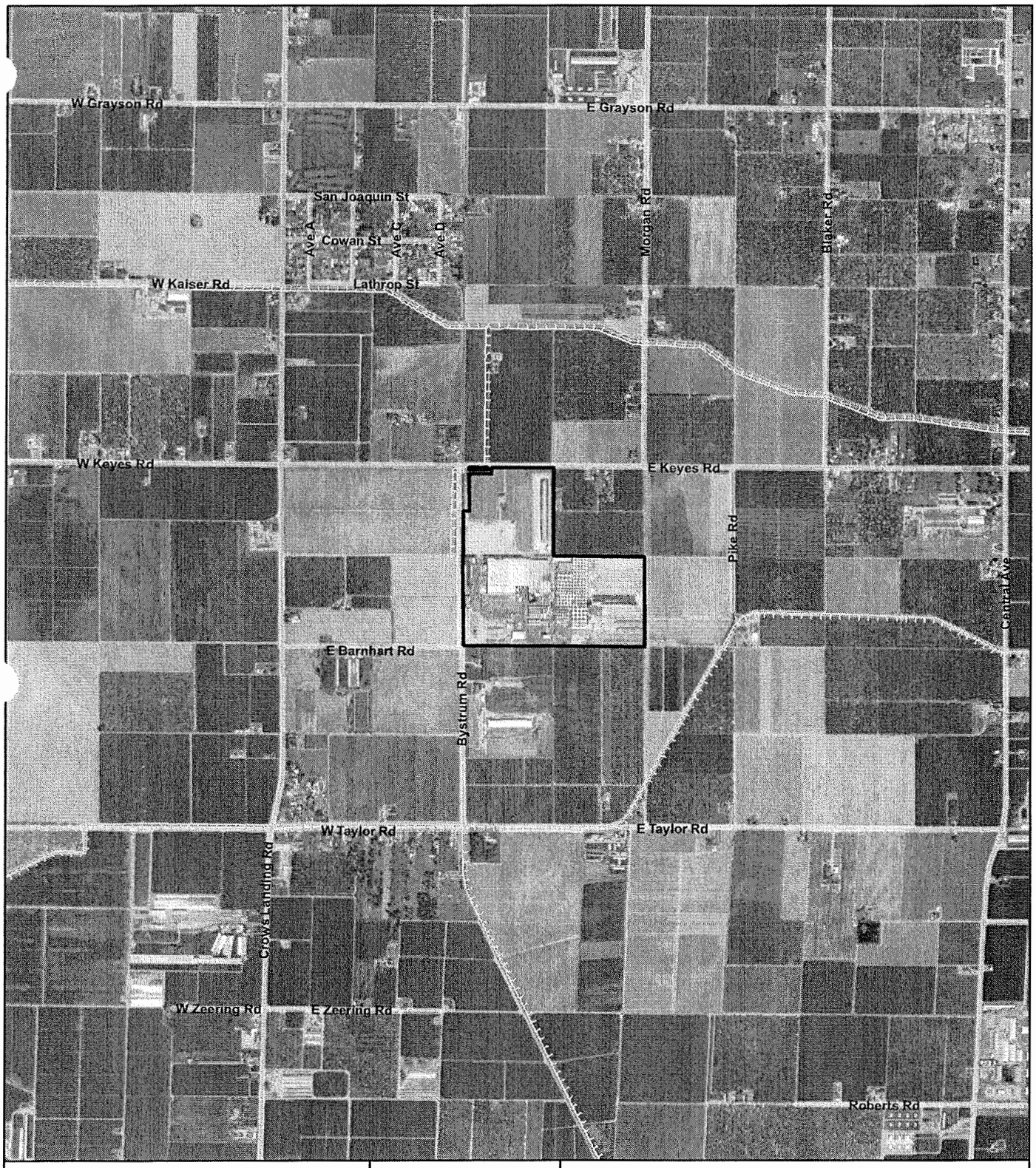

Legend

Project Boundary

Canal

NORTH

0 1,000 2,000

Feet

Source: Fresno County; USGS NHD; ArcGIS Online World Imagery Map Service. Map date: May 31, 2019.

BRONCO WINE COMPANY
AIR QUALITY ANALYSIS REPORT
BRONCO WINERY EXPANSION

Figure 2. Local Vicinity Map

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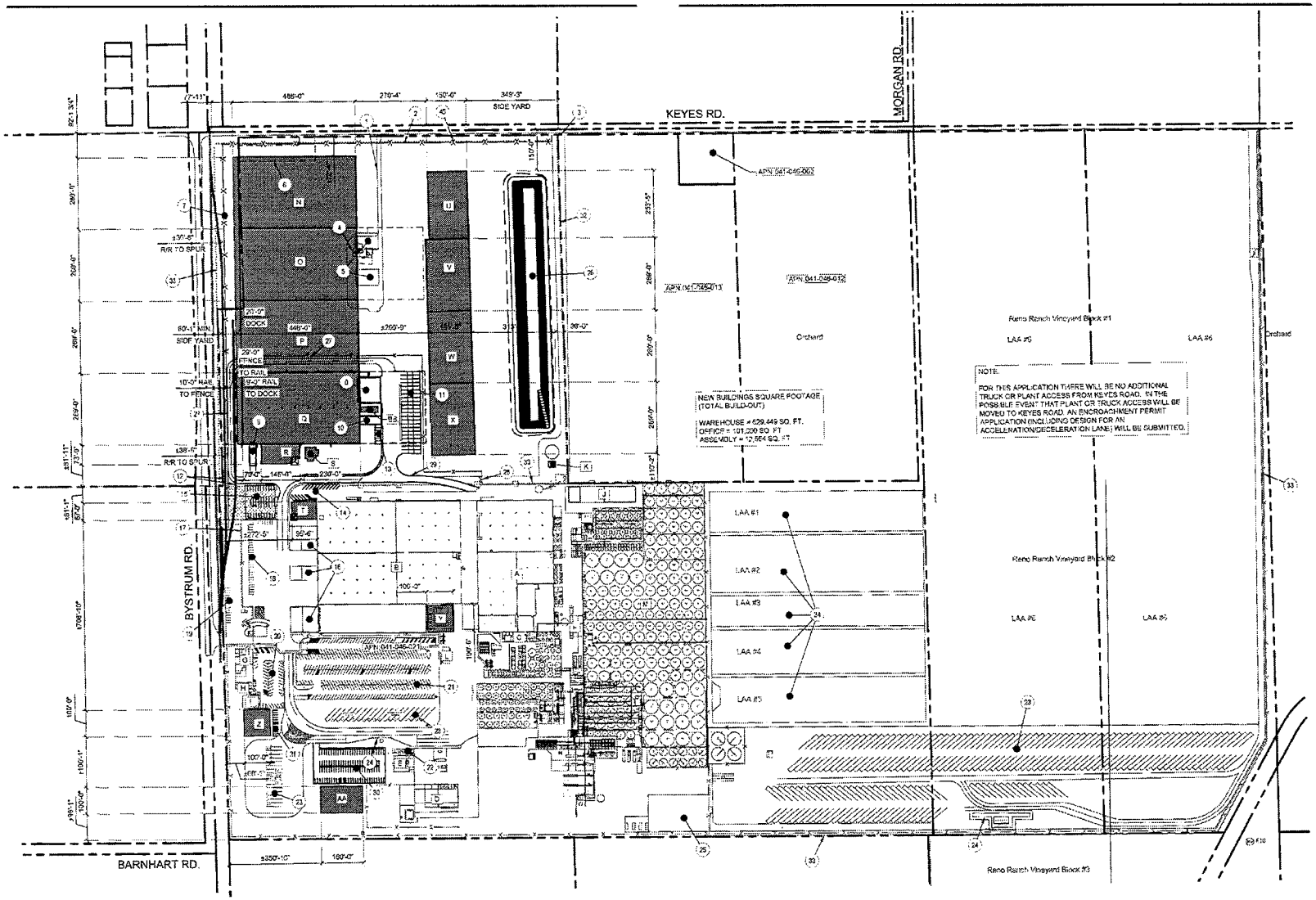

NORTH

0 250 500

Feet

BRONCO WINE COMPANY
AIR QUALITY ANALYSIS REPORT
BRONCO WINERY EXPANSION

Figure 3. Site Plan

Source: CB Engineering Incorporated, Site Plan, 7/14/15. Map date: May 29, 2019.

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SECTION 2: AIR QUALITY SETTING

2.1—Environmental Setting

Air quality impacts are both local and regional. Regional and local air quality is impacted by topography, dominant airflows, atmospheric inversions, location, and season. The project is located in the San Joaquin Valley Air Basin, which experiences some of the challenging environmental conditions for air quality in the nation. The following section describes these conditions as they pertain to the Air Basin. The information in this section is primarily from the District's GAMAQI (SJVAPCD 2015a).

2.1.1 - San Joaquin Valley Air Basin

Topography

The topography of a region is important for air quality because mountains can block airflow that would help disperse pollutants, and can channel air from upwind areas that transports pollutants to downwind areas. The SJVAPCD covers the entirety of the Air Basin. The Air Basin is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation).

Climate

The climate is important for air quality because of differences in the atmosphere's ability to trap pollutants close to the ground, which creates adverse air quality; inversely, the atmosphere's ability to rapidly disperse pollutants over a wide area prevents high concentrations from accumulating under different climatic conditions. The Air Basin has an "inland Mediterranean" climate and is characterized by long, hot, dry summers and short, foggy winters. Sunlight can be a catalyst in the formation of some air pollutants (such as ozone); the Air Basin averages over 260 sunny days per year.

Inversion layers are significant in determining pollutant concentrations. Concentration levels can be related to the amount of mixing space below the inversion. Temperature inversions that occur on the summer days are usually encountered 2,000 to 2,500 feet above the valley floor. In winter months, overnight inversions occur 500 to 1,500 feet above the valley floor.

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the Air Basin form natural horizontal barriers to the dispersion of air contaminants. The wind generally flows south-southeast through the valley, through the Tehachapi Pass and into the Mojave Desert Air Basin portion of Kern County. As the wind moves through the Air Basin, it mixes with the air pollution generated locally, generally transporting air pollutants from the north to the south in the summer and in a reverse flow in the winter.

The winds and unstable air conditions experienced during the passage of winter storms result in periods of low pollutant concentrations and excellent visibility. Between winter storms, high

pressure and light winds allow cold moist air to pool on the San Joaquin Valley floor. This creates strong, low-level temperature inversions and very stable air conditions, which can lead to Tule fog. Wintertime conditions favorable to fog formation are also conditions favorable to high concentrations of $PM_{2.5}$ and PM_{10}.

2.2—Regulatory Setting

Air pollutants are regulated to protect human health and for secondary effects such as visibility and building soiling. The Clean Air Act of 1970 tasks the United States Environmental Protection Agency (EPA) with setting air quality standards. The State of California also sets air quality standards, which are in some cases more stringent than federal standards, in addition to addressing additional pollutants. The following section describes these federal and state standards and the health effects of the regulated pollutants.

2.2.1 - Clean Air Act

Congress established much of the basic structure of the Clean Air Act (CAA) in 1970, and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants) are addressed in the CAA: particulate matter, ground-level ozone, carbon monoxide (CO), sulfur oxides (SO_X), nitrogen oxides (NO_X), and lead. The EPA labels these pollutants as criteria air pollutants because they are regulated by developing human health-based and/or environmentally based criteria (science-based guidelines), which sets permissible levels. The set of limits based on human health are called primary standards. Another set of limits intended to prevent environmental and property damage are called secondary standards (EPA 2014). The federal standards are called National Ambient Air Quality Standards (NAAQS). The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The criteria pollutants are:

- Ozone
- Nitrogen dioxide (NO_2)
- Lead
- Particulate matter (PM_{10} and $PM_{2.5}$)
- Carbon monoxide (CO)
- Sulfur dioxide

The federal standards were set to protect public health, including that of sensitive individuals; thus, the EPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health (ARB 2016).

2.2.2 - California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and continue to be some of the most severe in the nation, and required additional actions beyond the federal mandates. The California Air Resources Board (ARB) administers California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 state air pollutants are the six federal standards listed above as well visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal

regulations implementing the CAA. Generally, the planning requirements of the CCAA are less stringent than the federal CAA; therefore, consistency with the CAA will also demonstrate consistency with the CCAA.

2.2.3 - Toxic Air Contaminants

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. There are no ambient air quality standards for TAC emissions. TACs are regulated in terms of health risks to individuals and populations exposed to the pollutants. The 1990 Clean Air Act Amendments significantly expanded the EPA's authority to regulate hazardous air pollutants (HAP). Section 112 of the Clean Air Act lists 187 hazardous air pollutants to be regulated by source category. Authority to regulate these pollutants was delegated to individual states. ARB and local air districts regulate TACs and HAPs in California.

2.2.4 - Air Pollutant Description and Health Effects

The federal and state ambient air quality standards, relevant effects, properties, and sources of the pollutants are summarized in Table 1.

Table 1: Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1 Hour	0.09 ppm	—	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), NO_X, and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO_X) are mobile sources (on-road and off-road vehicle exhaust).
	8 Hour	0.070 ppm	0.070 ppm[f]			
Carbon monoxide (CO)	1 Hour	20 ppm	35 ppm	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.
	8 Hour	9.0 ppm	9 ppm			
Nitrogen dioxide[b] (NO_2)	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides— NO_X (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4, and N_2O_5). NO_X is a precursor to ozone, PM_{10}, and $PM_{2.5}$ formation. NO_X can react with compounds to form nitric acid and related small particles and result in PM-related health effects.	NO_X is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide (NO_2) forms quickly from NO_X emissions. NO_2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.
	Annual	0.030 ppm	0.053 ppm			

Table 1 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfur dioxide[c] (SO_2)	1 Hour	0.25 ppm	0.075 ppm	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO_x) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM_{10}.	Human caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethylsulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.
	3 Hour	—	0.5 ppm			
	24 Hour	0.04 ppm	0.14 (for certain areas)			
	Annual	—	0.030 ppm (for certain areas)			
Particulate matter (PM_{10})	24 Hour	50 $\mu g/m^3$	150 $\mu g/m^3$	• Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravates existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. • Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} refers to particulate matter that is between 2.5 and 10 microns in diameter (1 micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal; and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.
	Mean	20 $\mu g/m^3$	—			
Particulate matter ($PM_{2.5}$)	24 Hour	—	35 $\mu g/m^3$			
	Annual	12 $\mu g/m^3$	12.0 $\mu g/m^3$			
Visibility-reducing particles	8 Hour	See note below[d]				

Table 1 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfates	24 Hour	25 $\mu g/m^3$	—	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) degradation of visibility; (f) Property damage.	The sulfate ion is a polyatomic anion with the empirical formula SO_4^{2-}. Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead[e]	30-day	1.5 $\mu g/m^3$	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQ.	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded state or federal standards at any monitoring station since 1982.	Lead ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	—	1.5 $\mu g/m^3$			
	Rolling 3-month average	—	0.15 $\mu g/m^3$			
Vinyl chloride[e]	24 Hour	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, ARB identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.

Table 1 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Hydrogen sulfide	1 Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Hydrogen sulfide (H_2S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur-containing fuels (oil and coal).
Volatile organic compounds (VOC)		There are no state or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants.	Reactive organic gases (ROG), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROG and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility.
Diesel particulate matter (DPM)		There are no ambient air quality standards for DPM.		Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk	DPM is a source of $PM_{2.5}$—diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their derivatives, and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.

Table 1 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
				of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.	aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust.	

Notes:

ppm = parts per million (concentration) $\mu g/m^3$ = micrograms per cubic meter Annual = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter

[a] Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3 hour SO_2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[b] To attain the 1-hour NO_2 national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb) (0.100 ppm).

[c] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[d] Visibility-reducing particles: In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

[e] The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[f] The EPA Administrator approved a revised 8-hour ozone standard of 0.07 ppb on October 1, 2015. The new standard will go into effect 60 days after publication of the Final Rule in the Federal Register. The Final Rule was published in the Federal Register on October 26, 2015 and became effective on December 28, 2015.

Source of effects, properties, and sources: South Coast Air Quality Management District 2007; California Environmental Protection Agency 2002; California Air Resources Board 2009a; U.S. Environmental Protection Agency 2003, 2009, 2010, 2011, 2012a and 2012b; National Toxicology Program 2011 and 2016.

Source of standards: California Air Resources Board 2013a.

Several pollutants listed in Table 1 are not addressed in this analysis. Analysis of lead is not included in this report because no new sources of lead emissions are anticipated with the project. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed as PM_{10} and $PM_{2.5}$. No components of the project would result in vinyl chloride or hydrogen sulfide emissions in any substantial quantity.

Toxic Air Contaminants Health Effects

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The California Almanac of Emissions and Air Quality presents the relevant concentration and cancer risk data for the 10 TACs that pose the most substantial health risk in California based on available data. The 10 TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program (ARB 1998) demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increased risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause a cough, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance, but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on: engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the ARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of DPM.

Health risks attributable to the top 10 TACs listed above are available from the ARB as part of its California Almanac of Emissions and Air Quality—2009 Edition (ARB 2009b). As shown therein for data collected at the First Street air monitoring station in Fresno, cancer risks attributable to all of the listed TACs above with the exception of DPM have declined about 70 percent from the mid-1990s to 2007. Risks associated with DPM emissions are provided only for the year 2000 and have not been updated in the Almanac. Although more recent editions of the Almanac do not provide estimated risk, they do provide emission inventories for DPM for later years. The 2013 Almanac provides emission inventory trends for DPM from 2000 through 2035. The same Almanac reports that DPM emissions were reduced in the SJVAB from 16 tons per day in 2000 to 11 tons per day in 2010, a 31 percent decrease. DPM emissions in the San Joaquin Valley are projected to decrease to six tons per day by 2015, a 62 percent reduction from year 2000 levels. ARB predicts a reduction to

three tons per day by 2035, which would be an 81 percent reduction from year 2000 levels. Continued implementation of the ARB's Diesel Risk Reduction Plan is expected to provide continued reductions in DPM through 2020 and beyond through regulations on this source (ARB 2013b).

Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present.

2.3—Existing Air Quality Conditions

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project area. Table 2 summarizes 2015 through 2017 published monitoring data, which is the most recent three-year period available. The table displays data from the Modesto-14th Street monitoring station (located approximately 6.4 miles north of the project site), and the S. Minaret Avenue monitoring station (located approximately 8.9 miles southeast of the project site. The data shows that during the past few years, the project area has exceeded the standards for ozone (state and national), PM_{10} (state), and $PM_{2.5}$ (national). The data in the table reflect the concentration of the pollutants in the air, measured using air monitoring equipment. This differs from emissions, which are calculations of a pollutant being emitted over a certain period. No recent monitoring data for Stanislaus County or the San Joaquin Valley Air Basin were available for CO or SO_2. Generally, no monitoring is conducted for pollutants that are no longer likely to exceed ambient air quality standards.

Table 2: Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2015	2016	2017
Ozone[1]	1 Hour	Max 1 Hour (ppm)	**0.111**	**0.105**	**0.111**
		Days > State Standard (0.09 ppm)	5	4	3
Ozone	8 Hour	Max 8 Hour (ppm)	**0.093**	**0.091**	**0.098**
		Days > State Standard (0.07 ppm)	23	21	21
		Days > National Standard (0.070 ppm)	23	21	31
Carbon monoxide (CO)	8 Hour	Max 8 Hour (ppm)	ND	ND	ND
		Days > State Standard (9.0 ppm)	ND	ND	ND
		Days > National Standard (9 ppm)	ND	ND	ND

Table 2 (cont.): Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2015	2016	2017
Nitrogen dioxide (NO_2)[2]	Annual	Annual Average (ppm)	0.009	0.009	0.009
	1 Hour	Max 1 Hour (ppm)	0.042	0.0472	0.0586
		Days > State Standard (0.18 ppm)	0	0	0
Sulfur dioxide (SO_2)	Annual	Annual Average (ppm)	ND	ND	ND
	24 Hour	Max 24 Hour (ppm)	ND	ND	ND
		Days > State Standard (0.04 ppm)	ND	ND	ND
Inhalable coarse particles (PM_{10})[1]	Annual	Annual Average ($\mu g/m^3$)	27.0	27.6	31.4
	24 hour	24 Hour ($\mu g/m^3$)	**85.6**	**83.5**	**129.3**
		Days > State Standard (50 $\mu g/m^3$)	31.1	ID	58.2
		Days > National Standard (150 $\mu g/m^3$)	0	0	0
Fine particulate matter ($PM_{2.5}$)[1]	Annual	Annual Average ($\mu g/m^3$)	4	11.1	12.6
	24 Hour	24 Hour ($\mu g/m^3$)	**44.0**	**53.3**	**74.5**
		Days > National Standard (35 $\mu g/m^3$)	ID	9.0	25.1

Notes:
> = exceed ppm = parts per million $\mu g/m^3$ = micrograms per cubic meter
ID = insufficient data ND = no data max = maximum
Bold = exceedance
State Standard = California Ambient Air Quality Standard
National Standard = National Ambient Air Quality Standard
[1] Modesto 814 14th Street monitoring station
[2] Turlock 1034 S. Minaret Street monitoring station
Source: California Air Resources Board 2017a

The health impacts of the various air pollutants of concern can be presented in a number of ways. The clearest of these is comparable with the state and federal ozone standards. If concentrations are below the standard, it is safe to say that no health impact would occur to anyone. When concentrations exceed the standard, impacts will vary based on the amount by which the standard is exceeded. The EPA developed the Air Quality Index (AQI) as an easy-to-understand measure of health impacts compared with concentrations in the air. Table 3 provides a description of the health impacts of ozone at different concentrations.

Table 3: Air Quality Index and Health Effects from Ozone

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI 51–100—Moderate	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 55–70 ppb	**Health Effects Statements**: Unusually sensitive individuals may experience respiratory symptoms.
	Cautionary Statements: Unusually sensitive people should consider limiting prolonged outdoor exertion.
AQI 101–150—Unhealthy for Sensitive Groups	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 71–85 ppb	**Health Effects Statements**: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults and people with respiratory disease, such as asthma.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
AQI 151–200—Unhealthy	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 86–105 ppb	**Health Effects Statements**: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
AQI 201–300—Very Unhealthy	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 106–200 ppb	**Health Effects Statements**: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
Source: Air Now 2015.	

The AQI for the 8-hour ozone standard reflects the current NAAQS of 70 parts per billion (ppb). Based on the AQI scale for the 8-hour ozone standard, the project area experienced no days in the last three years that would be categorized as very unhealthy (AQI 201–250), and as many as 65 days that were unhealthy (AQI 151–200) or unhealthy for sensitive groups (AQI 101–150), violating the 70-ppb standard as measured at the Modesto 14th Street monitoring station. The highest reading was 98 parts per billion (ppb) in 2017 (AQI 182), compared with the 105-ppb cutoff point for unhealthy (AQI 200). The most days over the standard were 23 days in 2015.

The other nonattainment pollutant of concern is $PM_{2.5}$. An AQI of 100 or lower is considered moderate and would be triggered by a 24-hour average concentration of 12.1 to 35.4 $\mu g/m^3$. An AQI of 101 to 105 or 35.5-55.4 $\mu g/m^3$ is considered unhealthful for sensitive groups. When concentrations reach this amount, it is considered an exceedance of the federal $PM_{2.5}$ standard. The monitoring station nearest the project exceeded the standard on approximately 34 days in the two-year period spanning from 2016 to 2017. People with respiratory or heart disease, the elderly and children are the groups most at risk. Unusually sensitive people should consider reducing prolonged or heavy exertion. The AQI of 151 to 200 is classified as unhealthy for everyone. This AQI classification is triggered when $PM_{2.5}$ concentration ranges from 55.4 to 150.4 $\mu g/m^3$. At this concentration, there is increasing likelihood of respiratory symptoms in sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and in the elderly. People with respiratory or heart disease, the elderly, and children should limit prolonged exertion. Everyone else should reduce prolonged or heavy exertion. The highest concentration recorded at the Modesto 14th Street monitoring station in the last three years was 74.5 $\mu g/m^3$ (AQI 161) in 2017. At this concentration, increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly, and increased respiratory effects in general population would occur. People with respiratory or heart disease, the elderly, and children should avoid prolonged exertion; everyone else should limit prolonged exertion when the AQI exceeds this level. The relationship of the AQI to health effects in shown Table 4.

Table 4: Air Quality Index and Health Effects of Particulate Pollution

Air Quality Index/ $PM_{2.5}$ Concentration	Health Effects Description
AQI 51–100—Moderate	**Sensitive Groups**: People with respiratory or heart disease, the elderly and children are the groups most at risk.
Concentration 12.1–35.4 $\mu g/m^3$	**Health Effects Statements**: Unusually sensitive people should consider reducing prolonged or heavy exertion.
	Cautionary Statements: Unusually sensitive people: Consider reducing prolonged or heavy exertion. Watch for symptoms such as coughing or shortness of breath. These are signs to take it easier.
AQI 101–150—Unhealthy for Sensitive Groups	**Sensitive Groups**: Sensitive groups include people with heart or lung disease, older adults, children, and teenagers.
Concentration 35.5–55.4 $\mu g/m^3$	**Health Effects Statements**: Increasing likelihood of respiratory symptoms in sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and the elderly.
	If you have heart disease: Symptoms such as palpitations, shortness of breath, or unusual fatigue may indicate a serious problem. If you have any of these, contact your health care provider.
AQI 151–200—Unhealthy	**Sensitive Groups**: Everyone
Concentration 55.5–150.4 $\mu g/m^3$	**Health Effects Statements**: Increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; increased respiratory effects in general population.
	Cautionary Statements: Sensitive groups: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling. Everyone else: Reduce prolonged or heavy exertion. Take more breaks during outdoor activities.

Table 4 (cont.): Air Quality Index and Health Effects of Particulate Pollution

Air Quality Index/ $PM_{2.5}$ Concentration	Health Effects Description
AQI 201–300—Very Unhealthy	**Sensitive Groups**: Everyone
Concentration 150.5–250.4 $\mu g/m^3$	**Health Effects Statements**: Significant aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; significant increase in respiratory effects in general population.
	Cautionary Statements: Sensitive groups: Avoid all physical activity outdoors. Move activities indoors or reschedule to a time when air quality is better. Everyone else: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling to a time when air quality is better.

2.3.1 - Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

Each standard has a different definition, or "form" of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

The current attainment designations for the Air Basin are shown in Table 5. The Air Basin is designated as nonattainment for ozone, PM_{10}, and $PM_{2.5}$.

Table 5: San Joaquin Valley Air Basin Attainment Status

Pollutant	State Status	National Status
Ozone—One Hour	Nonattainment/Severe	No Standard
Ozone—Eight Hour	Nonattainment	Nonattainment/Extreme
Carbon monoxide	Attainment/Unclassified	Merced, Madera, and Kings Counties are unclassified; others are in Attainment
Nitrogen dioxide	Attainment	Attainment/Unclassified
Sulfur dioxide	Attainment	Attainment/Unclassified
PM_{10}	Nonattainment	Attainment

Table 5 (cont.): San Joaquin Valley Air Basin Attainment Status

Pollutant	State Status	National Status
$PM_{2.5}$	Nonattainment	Nonattainment
Lead	Attainment	No Designation/Classification
Source of State status: California Air Resources Board (ARB 2013c). Source of National status: U.S. Environmental Protection Agency (EPA 2016a). Source of Additional Status Information (SJVAPCD 2017a).		

2.4—Air Quality Plans and Regulations

Air pollutants are regulated at the national, state, and air basin or county level, and each agency has a different level of regulatory responsibility: the EPA regulates at the national level, the ARB at the state level, and the SJVAPCD at the air basin level.

The EPA is responsible for national and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Ambient Air Quality Standards—also known as the federal standards described earlier.

A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The State Implementation Plan for the State of California is administered by the ARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's State Implementation Plan incorporates individual federal attainment plans for regional air districts; specifically, an air district prepares their federal attainment plan, which is sent to ARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms. The ARB then submits the to the EPA for approval. After reviewing submitted SIPs, the EPA proposes to approve or disapprove all or part of each plan. The public has an opportunity to comment on the EPA's proposed action. EPA considers public input before taking final action on a state's plan. If EPA approves all or part of a SIP, those control measures are enforceable in federal court. If a state fails to submit an approvable plan or if EPA disapproves a plan, the EPA is required to develop a federal implementation plan (FIP). The most recent federally approved attainment plans for the SJVAPCD are the 2007 8-hour Ozone Attainment Plan and the 2012 $PM_{2.5}$ Plan for the 2006 $PM_{2.5}$ standard.

Areas designated nonattainment must develop air quality plans and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For many areas of California, however, additional state and local regulation is required to achieve the standards. Regulations adopted by California are described below.

2.4.1 - California Regulations

Low-Emission Vehicle Program

The ARB first adopted Low-Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan. In 2012, ARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and GHGs for new passenger vehicles (ARB 2012a).

On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, as well as test procedures. ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others (ARB 2013b).

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low-use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks (ARB 2015).

ARB Truck and Bus Regulation

The latest amendments to the Truck and Bus regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low-use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks (ARB 2015).

ARB Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the ARB adopted a regulation to reduce DPM and nitrous oxide (NO_X) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in

construction, mining, and industrial operations. The regulation limits idling to no more than five consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. The ARB is enforcing that part of the rule with fines up to $10,000 per day for each vehicle in violation. Performance requirements of the rule are based on a fleet's average NO_X emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements, making the first compliance deadline January 1, 2014 for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501–5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

ARB Airborne Toxic Control Measure for Asbestos

In July 2001, the ARB approved an Air Toxic Control Measure for construction, grading, quarrying, and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of best management practices to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than 1 acre in size. These projects require the submittal of a "Dust Mitigation Plan" and approval by the air district prior to the start of a project.

Construction sometimes requires the demolition of existing buildings where construction occurs. The project includes demolition of a house and several associated shed structures. Buildings often include materials containing asbestos. Asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

The ARB has an Air Toxic Control Measure for construction, grading, quarrying, and surface mining operations, requiring the implementation of mitigation measures to minimize emissions of asbestos-laden dust. The measure applies to road construction and maintenance, construction and grading operations, and quarries and surface mines when the activity occurs in an area where naturally occurring asbestos is likely to be found. Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity. Review of the Department of Conservation maps indicates that no ultramafic rock has been found near the project site.

Diesel Risk Reduction Plan

The ARB's Diesel Risk Reduction Plan has led to the adoption of state regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by

about 90 percent overall from year 2000 levels. The projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010, and 85 percent by 2020 (ARB 2000).

2.4.2 - San Joaquin Valley Air Pollution Control District

The District is responsible for controlling emissions primarily from stationary sources. The District, in coordination with the eight countywide transportation agencies, is also responsible for developing, updating, and implementing air quality attainment plans for the Air Basin. The District also has roles under CEQA.

Ozone Plans

The Air Basin is designated nonattainment of state and federal health-based air quality standards for ozone. To meet Clean Air Act requirements for the one-hour ozone standard, the District adopted an Extreme Ozone Attainment Demonstration Plan in 2004, with an attainment date of 2010. Although the EPA revoked the federal 1-hour ozone standard effective June 15, 2005 and replaced it with an 8-hour standard, the requirement to submit a plan for that standard remained in effect for the San Joaquin Valley.

The planning requirements for the 1-hour plan remain in effect until replaced by a federal 8-hour ozone attainment plan. On March 8, 2010, the EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan, including revisions to the plan, effective April 7, 2010. However, the Air Basin failed to attain the standard in 2010 and was subject to a $29-million Clean Air Act penalty. The penalty is being collected through an additional $12 motor vehicle registration surcharge for each passenger vehicle registered in the Air Basin that will be applied to pollution reduction programs in the region. The District also instituted a more robust ozone episodic program to reduce emissions on days with the potential to exceed the ozone standards. On July 18, 2016, the EPA published in the Federal Register a final action determining that the San Joaquin Valley has attained the 1-hour ozone national ambient air quality standard. This determination is based on the most recent three-year period (2012–2014) of sufficient, quality-assured, and certified data. The penalty fees remain in place pending submittal of a demonstration that the San Joaquin Valley will maintain the 1-hour standard for 10 years (EPA 2016b).

The EPA originally classified the Air Basin as serious nonattainment for the 1997 federal 8-hour ozone standard with an attainment date of 2013. On April 30, 2007, the District's Governing Board adopted the 2007 Ozone Plan, which contained analysis showing a 2013 attainment target to be infeasible. The 2007 Ozone Plan details the plan for achieving attainment on schedule with an "extreme nonattainment" deadline of 2024. At its adoption of the 2007 Ozone Plan, the District also requested a reclassification to extreme nonattainment. ARB approved the plan in June 2007, and the EPA approved the request for reclassification to extreme nonattainment on April 15, 2010.

The 2007 Ozone Plan contains measures to reduce ozone and particulate matter precursor emissions to bring the Basin into attainment with the federal 8-hour ozone standard. The 2007 Ozone Plan calls for a 75 percent reduction of NO_X and a 25 percent reduction of reactive organic gases (ROG). Figure 4 displays the anticipated NO_X reductions attributed in the 2007 Ozone Plan. The plan, with innovative measures and a "dual path" strategy, assures expeditious attainment of the federal 8-hour

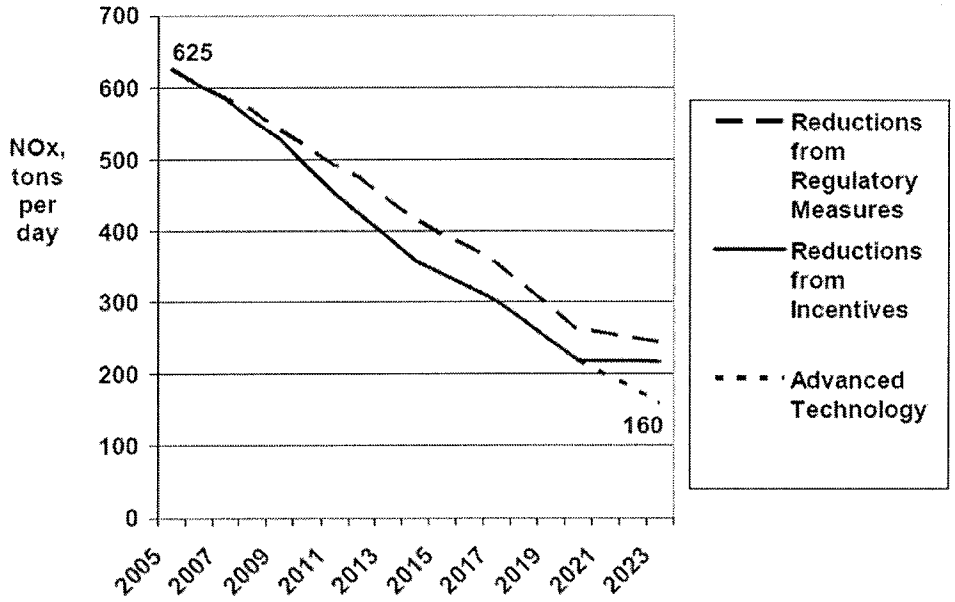
ozone standard for all Air Basin residents. The District Governing Board adopted the 2007 Ozone Plan on April 30, 2007. The ARB approved the plan on June 14, 2007. The 2007 Ozone Plan requires yet to be determined "Advanced Technology" to achieve additional reductions after 2021, in order to attain the standard at all monitoring stations in the Air Basin by 2024 as allowed for areas designated extreme nonattainment by the federal Clean Air Act.

The Air Basin is designated as an extreme ozone nonattainment area for the EPA's 2008 8-hour ozone standard of 75 ppb. The District's Governing Board approved the 2016 Plan for the 2008 8-Hour Ozone Standard on June 16, 2016. The ARB approved the attainment demonstration plan for the San Joaquin Valley on July 21, 2016 and transmitted the plan to EPA on August 24, 2016. The comprehensive strategy in this plan will reduce NO_X emissions by over 60 percent between 2012 and 2031, and will bring the San Joaquin Valley into attainment of the EPA's 2008 8-hour ozone standard as expeditiously as practicable, no later than December 31, 2031. The 2016 Ozone Plan predicts attainment of the 2008 standard by 2031 (SJVAPCD 2018a). To ensure that the plan is approvable with the necessary contingencies, the plan includes a "Black Box" that will require implementation of new advanced technologies and controls prior to the 2031 deadline.

The EPA Administrator signed the Final Rule revising the 8-hour ozone standard to 70 ppm on October 1, 2015. The new standard will require the SJVAPCD to prepare a new attainment to achieve the more stringent emission level within 20 years from the effective date of designation (EPA 2018).

State ozone standards do not have an attainment deadline but require implementation of all feasible measures to achieve attainment at the earliest date possible. This is achieved through compliance with the federal deadlines and control measure requirements.

Figure 4: San Joaquin Valley NO_X Emissions Forecast



(Source: 2007 Ozone Plan.)

Particulate Matter Plans

The Air Basin was designated nonattainment of state and federal health-based air quality standards for PM_{10}. The Air Basin is also designated nonattainment of state and federal standards for $PM_{2.5}$.

To meet Clean Air Act requirements for the PM_{10} standard, the District adopted a PM_{10} Attainment Demonstration Plan (Amended 2003 PM_{10} Plan and 2006 PM_{10} Plan), which has an attainment date of 2010. The District adopted the 2007 PM_{10} Maintenance Plan in September 2007 to assure the San Joaquin Valley's continued attainment of the EPA's PM_{10} standard. The EPA designated the valley as an attainment/maintenance area for PM_{10} on September 25, 2008. Although the San Joaquin Valley has exceeded the standard since then, those days were considered exceptional events that are not considered a violation of the standard for attainment purposes.

The 2008 $PM_{2.5}$ Plan builds upon the comprehensive strategy adopted in the 2007 Ozone Plan to bring the Air Basin into attainment of the 1997 national standards for $PM_{2.5}$. The EPA has identified NO_X and SO_2as precursors that must be addressed in air quality plans for the 1997 $PM_{2.5}$ standards. The 2008 $PM_{2.5}$ Plan is a continuation of the District's strategy to improve the air quality in the Air Basin. The EPA issued final approval of the 2008 $PM_{2.5}$ Plan on November 9, 2011, which became effective on January 9, 2012. The EPA approved the emissions inventory, the reasonably available control measures/reasonably available control technology demonstration, reasonable further progress demonstration, attainment demonstration and associated air quality modeling, and the transportation conformity motor vehicle emissions budgets. The EPA also granted California's request to extend the attainment deadline for the San Joaquin Valley to April 5, 2015 and approved commitments to measures and reductions by the District and the ARB. Finally, it disapproved the State Implementation Plan's contingency provisions and issued a protective finding for transportation conformity determinations.

In December 2012, the District adopted the 2012 $PM_{2.5}$ Plan to bring the San Joaquin Valley into attainment of the EPA's 2006 24-hour $PM_{2.5}$ standard of 35 $\mu g/m^3$. The ARB approved the District's 2012 $PM_{2.5}$ Plan for the 2006 standard at a public hearing on January 24, 2013 (SJVAPCD 2012). This plan seeks to bring the Valley into attainment with the standard by 2019, with the expectation that most areas will achieve attainment before that time.

The 2015 Plan for the 1997 $PM_{2.5}$ Standard approved by the District Governing Board on April 16, 2015—will bring the Valley into attainment of the EPA's 1997 $PM_{2.5}$ standard as expeditiously as practicable, but no later than December 31, 2020. The plan was required to request reclassification to Serious nonattainment and to extend the attainment date from 2018 to 2020 (SJVAPCD 2015b).

The 2016 Moderate Area Plan for the 2012 $PM_{2.5}$ Standard was adopted on September 15, 2016. This plan includes an attainment impracticability demonstration and request for reclassification of the Valley from Moderate nonattainment to Serious nonattainment. The 2016 $PM_{2.5}$ Plan is under ARB review (SJVAPCD 2017b).

The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards on November 15, 2018. This plan provides a combined strategy to address the EPA federal 1997 annual $PM_{2.5}$ standard of 15 $\mu g/m^3$ and 24-hour $PM_{2.5}$ standard of 65 $\mu g/m^3$; the 2006 24-hour $PM_{2.5}$ standard of 35 $\mu g/m^3$;

and the 2012 annual $PM_{2.5}$ standard of 12 $\mu g/m^3$. This plan demonstrates attainment of the federal $PM_{2.5}$ standards as expeditiously as practicable (SJVAPCD 2018b).

SJVAPCD Rules and Regulations

The SJVAPCD rules and regulations that may apply to the project include but are not limited to the following:

Rule 2201—New and Modified Stationary Source Review Rule. The review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission trade-offs by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards. Permits may be required if the project includes a diesel emergency generator.

Rule 2520 – Federally Mandated Operating Permits provides a mechanism for issuing operating permits for new and modified sources of air contaminants, renewing operating permits for sources of air contaminants, revising, reopening, revoking, and terminating operating permits for sources of air contaminants, and incorporating requirements authorized by preconstruction permits issued under District Rule 2201 in accordance with requirements of 40 CFR Part 70, renewing permits

Rule 4001 – New Source Performance Standards establishes specific standards, criteria, and requirements that new sources of air pollution or modification of existing sources must comply with.

Rule 4002 – National Emissions Standards for Hazardous Air Pollutants. The purpose of the rule is to incorporate the National Emission Standards for Hazardous Air Pollutants from Part 61, Chapter I, Subchapter C, Title 40, Code of Federal Regulations and the National Emission Standards for Hazardous Air Pollutants for Source Categories from Part 63, Chapter I, Subchapter C, Title 40, Code of Federal Regulations to protect the health and safety of the public from hazardous air pollutants, such as asbestos.

Rule 4102—Nuisance. The purpose of this rule is to protect the health and safety of the public, and applies to any source operation that emits or may emit air contaminants or other materials. Agricultural activities are exempt from the nuisance rule. The rule is enforced on a complaint basis.

Rule 4601—Architectural Coatings. The purpose of this rule is to limit Volatile Organic Compounds (VOC) emissions from architectural coatings. Emissions are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling. Non-compliant coatings may not be sold in the San Joaquin Valley.

Rule 4641—Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641. This measure is enforced by Air District permits on asphalt plants supplying the paving contractors.

Rule 4702—Internal Combustion Engines. The purpose of this rule is to limit the emissions of NO_X, carbon monoxide (CO), VOC, and sulfur oxides (SO_X) from internal combustion engines.

Regulation VIII—Fugitive PM_{10} Prohibitions. Rules 8011–8081 are designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and trackout, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules. The project will require a Dust Control Plan prior to commencing soil-disturbing activities.

CEQA

The District has three roles under CEQA:

1. **Lead Agency:** Responsible for preparing environmental analyses for its own projects (adoption of rules, regulations, or plans) or permit projects filed with the District where the District has primary approval authority over the project.
2. **Responsible Agency:** The discretionary authority of a responsible agency is more limited than a lead agency; having responsibility for mitigating or avoiding only the environmental effects of those parts of the project which it decides to approve, carry out, or finance. The District defers to the lead agency for preparation of environmental documents for land use projects that also have discretionary air quality permits, unless no document is prepared by the lead agency and potentially significant impacts related to the permit are possible. The District regularly submits comments on documents prepared by lead agencies to ensure that District concerns are addressed.
3. **Commenting Agency:** The District reviews and comments on air quality analyses prepared by other public agencies (such as the project).

The District also provides guidance and thresholds for CEQA air quality and GHG analyses. The result of this guidance, as well as state regulations to control air pollution, is an overall improvement in the Air Basin. In particular, the District's 2015 GAMAQI states the following:

1. The District's Air Quality Attainment Plans include measures to promote air quality elements in county and city general plans as one of the primary indirect source programs. The general plan is the primary long-range planning document used by cities and counties to direct development. Since air districts have no authority over land use decisions, it is up to cities and counties to ensure that their general plans help achieve air quality goals. Section 65302.1 of the California Government Code requires cities and counties in the San Joaquin Valley to amend appropriate elements of their general plans to include data, analysis, comprehensive goals, policies, and feasible implementation strategies to improve air quality in their next housing element revisions.
2. The Air Quality Guidelines for General Plans (AQGGP), adopted by the District in 1994 and amended in 2005, is a guidance document containing goals and policy examples that cities and counties may want to incorporate into their General Plans to satisfy Section 65302.1. When adopted in a general plan and implemented, the suggestions in the AQGGP can reduce vehicle trips and miles traveled and improve air quality. The specific suggestions in the AQGGP are voluntary. The District strongly encourages cities and counties to use their land use and transportation planning authority to help achieve air quality goals by adopting the suggested policies and programs.

2.4.3 - Local

The Stanislaus County General Plan was adopted in August 2016 (Stanislaus County 2016). The applicable air quality goals and policies from the General Plan are listed below.

Relevant General Plan Air Quality-related Policies and Implementation Measures

Policy Eighteen

The County will promote effective communication, cooperation, and coordination among agencies involved in developing and operating local and regional air quality programs.

Implementation Measures

1. Refer discretionary projects under CEQA review to the San Joaquin Valley Air Pollution Control District (SJVAPCD), neighboring jurisdictions and other affected agencies for review and comment.
2. Work with other agencies in the San Joaquin Valley to establish coordinated air quality programs and implementation measures.

Policy Nineteen

The County will strive to accurately determine and fairly mitigate the local and regional air quality impacts of proposed projects.

Implementation Measures

1. Require all development proposals, where appropriate, to include reasonable air quality mitigation measures.
2. Minimize case-by-case analysis of air quality impacts through the use of standard criteria for determining significant environmental effects, a uniform method of calculating project emissions, and standard mitigation methods to reduce air quality impacts.

Policy Twenty

The County shall strive to reduce motor vehicle emissions by reducing vehicle trips and vehicle miles traveled and increasing average vehicle ridership.

Implementation Measures

1. Through strategies identified in the Circulation Element, ensure that circulation systems are designed and maintained to minimize traffic congestion and vehicle emissions.
2. Support a broad range of transportation modes, including public transit, bicycling and pedestrian travel, through the strategies identified in the Circulation Element.
3. Help achieve a jobs/housing balance by working with appropriate organizations to attract employers to Stanislaus County.

Policy Twenty-One

The County will support efforts to increase public awareness of air quality problems and solutions.

Implementation Measures

1. Support and participate in the air quality education programs of the SJVAPCD to the greatest extent possible.
2. Support education programs that increase public awareness of techniques to reduce particulate matter emissions.
3. Work with the local building industry, utilities, and the SJVAPCD to educate developers and builders on the benefits of energy-efficient designs and the use of low-emission equipment for new residential and commercial construction.

2.4.4 - Existing Sources of Toxic Emissions

No existing or planned sources of toxic emissions were identified that exceed ARB recommendations in its Air Quality Land Use Handbook for siting sensitive land uses that would impact the project.

2.4.5 - ARB Air Quality Land Use Handbook

The following is a list of land uses that may result in impacts to sensitive land uses when located near specific sources of air pollution (ARB 2005):

- High traffic freeways and roads
- Distribution centers
- Rail yards
- Ports
- Refineries
- Chrome plating facilities
- Dry cleaners
- Large gas dispensing facilities

The project includes diesel trucks and freight trains that may impact sensitive receptors (residences) close to the project site. The analysis examines the potential impacts from these pollution sources on sensitive receptors to determine if a potentially significant impact from TAC emissions may occur.

SECTION 3: MODELING PARAMETERS AND ASSUMPTIONS

3.1—Model Selection and Guidance

Air pollutant emissions can be estimated by using emission factors and a level of activity. Emission factors represent the emission rate of a pollutant given the activity over time; for example, grams of NO_X per horsepower-hour or grams of NO_X per vehicle mile traveled. The ARB has published emission factors for on-road mobile vehicles/trucks in the EMFAC mobile source emissions model and emission factors for off-road equipment and vehicles in the OFFROAD emissions model. An air emissions model (or calculator) combines the emission factors and the various levels of activity and outputs the emissions for the various pieces of equipment.

The California Emissions Estimator Model (CalEEMod) version 2016.3.2 was developed by the South Coast Air Quality Management District in cooperation with other air districts throughout the State. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with construction and operation from a variety of land uses.

The modeling follows District guidance where applicable from its GAMAQI. The models used in this analysis are summarized as follows:

- Construction emissions: CalEEMod, version 2016.3.2
- Operational emissions: CalEEMod, version 2016.3.2

3.2—Air Pollutants Assessed

3.2.1 - Criteria Pollutants Assessed

The following air pollutants are assessed in this analysis:

- Reactive organic gases (ROG)
- Nitrogen oxides (NO_X)
- Carbon monoxide (CO)
- Sulfur dioxide (SO_2)
- Particulate matter less than 10 microns in diameter (PM_{10})
- Particulate matter less than 2.5 microns in diameter ($PM_{2.5}$)

Note that the project would emit ozone precursors ROG and NO_X. However, the project would not directly emit ozone, since it is formed in the atmosphere during the photochemical reaction of ozone precursors.

As noted previously, the project would emit ultrafine particles. However, there is currently no standard separate from the $PM_{2.5}$ standards for ultrafine particles and there is no accepted methodology to quantify or assess the significance of such particles.

3.3—Construction Modeling Assumptions

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM_{10}) from disturbed soil. Additionally, paving operations and application of architectural coatings would release VOC emissions. Off-site emissions are caused by motor vehicle exhaust from customer vehicles, worker traffic, and road dust (PM_{10} and $PM_{2.5}$).

3.3.1 - Project Schedule

The first phase of the project began construction in 2017 and became operational in 2018. To ensure the full impact of the entire project including the future phases is fully addressed, the emissions from Phase 1 were added to the emissions from the future phases when making significance determinations. Construction in Phase 2 and later portions of the project were assumed to start in September 2019 and to continue until all buildings identified in the project description are complete. This is a conservative assumption since construction start dates for later buildings are likely to be later. Full buildout is assumed to occur by June 2021, based on the CalEEMod default schedule. First occupancy of Phase 2 and later was assumed to occur in 2020. Although the project is expected to be constructed in phases and could take several more years to buildout, the analysis assumed the entire project would be operational by 2020 as a conservative assumption. The detailed construction schedule and modeling results can be reviewed in the modeling results included in Appendix A of this report.

3.3.2 - Construction Equipment Emission Factors

CalEEMod contains an inventory of construction equipment that incorporates estimates of the number of equipment, age, horsepower, and equipment tier from which rates of emissions are developed. The CalEEMod default equipment emission factors were used. CalEEMod's off-road emission factors and load factors are from the ARB OFFROAD model were used in the analysis.

3.3.3 - Site Preparation

Site preparation involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading. During site preparation, emissions are generated from the use of diesel construction equipment. Fugitive dust is generated during soil-disturbing activities and truck loading and unloading.

3.3.4 - Grading

During grading activities, fugitive dust can be generated from the movement of dirt on the project site. CalEEMod estimates dust from dozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading dirt into haul trucks. Each of those activities is calculated differently in CalEEMod, based on the number of acres traversed by the grading equipment.

Only some pieces of equipment generate fugitive dust in CalEEMod. The CalEEMod manual identifies various equipment and the acreage disturbed in an 8-hour day:

- Crawler tractors, graders, and rubber-tired dozers: 0.5 acre per 8-hour day
- Scrapers: 1 acre per 8-hour day

Therefore, the following acres are the total quantities disturbed per day, per phase, according to the acreage disturbed quantities listed above:

- Demolition = 1 acre per day
- Site preparation = 3.5 acres per day
- Grading = 2.5 acres per day

3.3.5 - Building Construction, and Paving

The analysis uses default modeling assumptions in CalEEMod for construction equipment during building construction, and paving.

3.3.6 - Construction Off-site Trips

Worker trips are accounted for during the construction phases, based on 1.25 trips per piece of equipment (the CalEEMod default). The CalEEMod default worker trip length of 16.8 miles for rural project sites was retained. The CalEEMod default vehicle fleet (LD Mix) was used for employee trips.

Vendor trips for the building construction phase are calculated from a study performed by the Sacramento Metropolitan Air Quality Management District based on land use and size. The CalEEMod defaults for vendor trips, trip length, and vehicle fleet (Heavy Duty Truck Vehicle Fleet Mix) were used.

It was assumed that soil would be balanced on-site, and, therefore, there would be no soil imported or exported from the project site. Details regarding the modeling assumptions are provided in Appendix A.

3.4—Operation

Operational emissions are those emissions that occur when the project is occupied. The major sources of emissions are summarized below.

3.4.1 - Motor Vehicles

Motor vehicle emissions refers to exhaust and road dust emissions from the automobiles and trucks that would travel to and from the project site. The analysis used a project-specific trip generation rates that were included in the Traffic Impact Study prepared by KD Anderson and Associates in March 2017. The analysis used CalEEMod default trip lengths for employee trips and an SJVAPCD recommended trip length of 50 miles for heavy duty truck trips.

The vehicle fleet mix is defined as the mix of motor vehicle classes active during the operation of the project. Emission factors are assigned to the expected vehicle mix as a function of vehicle class, speed, and fuel use (gasoline- and diesel-powered vehicles). The CalEEMod default vehicle fleet mix was adjusted based on the use of passenger vehicles for employee trips and heavy-duty trucks for the truck modeling runs.

Train operations are estimated using data from the project description and traffic study regarding volume and timing of the operations. Locomotive emission factors from EPA and ARB were used to calculate train emissions during train maneuvering and idling that would occur during the drop off of empty train cars and the pick-up of fully loaded train cars. The project is expected to use 4 trains per week with 5 cars added per train for a total of 20 train cars per week. The facility train spur is on an existing Union Pacific rail line that serves this area of Stanislaus County. The trains currently operate on this route, so new emissions are generated only when the trains are dropping off or picking up the train cars.

The analysis assesses the impacts of diesel particulate emissions using SJVAPCD Prioritization Screening Tool. The sources of DPM emissions includes diesel trucks and the locomotives serving the project site. The project description identified an increase of 25 trucks on-site or 50 round trips per day. The analysis identified idle points at the warehouse loading docks and on-site travel along the planned access road serving the warehouses. Train idling and travel would occur on the rail spur adjacent to the project site along Bystrum Road.

The project is expected to increase employment by 30 persons at buildout. Each employee was assumed to make one round trip from home to work each day. A separate CalEEMod run was prepared for employee trips and for truck trips.

3.4.2 - Architectural Coatings (Painting)

Paints release VOC emissions during application and drying. The project is required to comply with the SJVAPCD Rule 4601—Architectural Coatings. The rule requires flat paints to meet a standard of 50 grams per liter (g/l) and gloss paints 100 g/l by 2012. This rule is enforced at the point of sale. Most of the coatings used for exterior and interior painting are flat paints. An average VOC content of 65 g/l was assumed in the analysis.

3.4.3 - Consumer Products

Consumer products are various solvents used in non-industrial applications that emit VOCs during their product use. "Consumer Product" means a chemically formulated product used by household and institutional consumers, including but not limited to detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. It does not include other paint products, furniture coatings, or architectural coatings (ARB 2011). The default emission factor developed for CalEEMod was used.

3.4.4 - Landscape Equipment

CalEEMod estimated the landscaping equipment using the default assumptions in the model.

3.4.5 - Natural Gas

The project would generate emissions from the combustion of natural gas for water heaters, heat, etc. CalEEMod has two categories for natural gas consumption: Title 24 and non-Title 24. CalEEMod defaults were used.

SECTION 4: AIR QUALITY IMPACT ANALYSIS

This section calculates the expected emissions from construction and operation of the project as a necessary requisite for assessing the regulatory significance of project emissions on a regional and localized level.

4.1—CEQA Guidelines

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on air quality, the type, level, and impact of emissions generated by the project must be evaluated.

The following air quality significance thresholds are contained in Appendix G of the CEQA Guidelines effective December 28, 2018. A significant impact would occur if the project would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable national or state ambient air quality standard;

c) Expose sensitive receptors to substantial pollutant concentrations; or

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people.

While the final determination of whether a project is significant is within the purview of the lead agency pursuant to Section 15064(b) of the CEQA Guidelines, the SJVAPCD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If the lead agency finds that the project has the potential to exceed these air pollution thresholds, the project should be considered to have significant air quality impacts. The applicable thresholds and methodologies are contained under each impact statement below.

4.2—Impact Analysis

4.2.1 - Consistency with Air Quality Plan

Impact AIR-1: **The project would not conflict with or obstruct implementation of the applicable air quality plan.**

Impact Analysis

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI does not provide specific guidance on analyzing conformity with the Air Quality Plan (AQP). Therefore, this document proposes the following criteria for determining project consistency with the current AQPs:

1. Will the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs? This measure is determined by comparison to the regional and localized thresholds identified by the District for Regional and Local Air Pollutants.
2. Will the project comply with applicable control measures in the AQPs?

The use of the criteria listed above is a standard approach for CEQA analysis of projects in the District's jurisdiction, as well as within other air districts, for the following reasons:

- Significant contribution to existing or new exceedances of the air quality standards would be inconsistent with the goal of attaining the air quality standards.
- AQP emissions inventories and attainment modeling are based on growth assumptions for the area within the air district's jurisdiction.
- AQPs rely on a set of air district-initiated control measures as well as implementation of federal and state measures to reduce emissions within their jurisdictions, with the goal of attaining the air quality standards.

AQPs are plans for reaching attainment of air quality standards. The growth assumptions, emission inventory, and control measures to reduce emissions are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards by the schedule required by the federal Clean Air Act. In order to show attainment of the standards, the District analyzes the growth projections in the valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The District then formulates a control strategy to reach attainment that includes both state and district regulations and other local programs and measures.

Contribution to Air Quality Violations

A measure for determining if the project is consistent with the air quality plans is if the project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. Regional air quality impacts and attainment of standards are the result of the cumulative impacts of all emission sources within the air basin. Individual projects are generally not large enough to contribute measurably to an existing violation of air quality standards. Therefore, the cumulative impact of the project is based on its cumulative contribution. Because of the region's nonattainment status for ozone, $PM_{2.5}$, and PM_{10}—if project-generated emissions of either of the ozone precursor pollutants (ROG and NO_X), PM_{10}, or $PM_{2.5}$ would exceed the District's significance thresholds—then the project would be considered to contribute to violations of the applicable standards and conflict with the attainment plans.

As discussed in Impact AIR-2 below, emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ associated with the construction and operation of the project would not exceed the District's significance thresholds. As shown in Impact AIR-3, the project would not result in CO hotspots that would violate CO standards. Therefore, the project would not contribute to air quality violations.

Air Quality Plan Control Measures

Compliance with Applicable Control Measures

The AQP contains a number of control measures, which are enforceable requirements through the adoption of rules and regulations. A description of rules and regulations that may apply to this project is provided below.

Rule 2201—New and Modified Stationary Source Review Rule. The review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission trade-offs by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards. The project would be required to comply with this rule if the buildings included diesel emergency generators or installed processing equipment that emits more than 2 pounds per day of any criteria pollutant.

Rule 4641—Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641. This measure is enforced by Air District permits on asphalt plants supplying the paving contractors.

Regulation VIII—Fugitive PM_{10} Prohibitions is a control measure that is one main strategies from the 2006 PM_{10} for reducing the PM_{10} emissions that are part of fugitive dust. Projects over 10 acres are required to file a Dust Control Plan (DCP) containing dust control practices sufficient to comply with Regulation VIII. The project is required to prepare a DCP to comply with Regulation VIII.

Another control measure that applies to the project is Rule 4601—Architectural Coatings, which limits the VOC content of all types of paints and coatings sold in the San Joaquin Valley. These measures are enforced at the point of sale.

Conclusion

The project's emissions would be less than significant for all criteria pollutants after compliance with SJVAPCD regulations and would not result in inconsistency with the AQP for this criterion. The project complies with all applicable rules and regulations from the applicable air quality plans; therefore, the project is not considered inconsistent with the AQP, and the impact would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

4.2.2 - Cumulative Criteria Pollutant Impacts

Impact AIR-2: **The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.**

Impact Analysis

To result in a less than significant impact, the following criteria must be true:

1. Regional analysis: emissions of nonattainment pollutants must be below the District's regional significance thresholds. This is an approach recommended by the District in its GAMAQI.
2. Summary of projections: the project must be consistent with current air quality attainment plans including control measures and regulations. This is an approach consistent with Section 15130(b) of the CEQA Guidelines.
3. Cumulative health impacts: the project must result in less than significant cumulative health effects from the nonattainment pollutants. This approach correlates the significance of the regional analysis with health effects, consistent with the court decision, *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1219-20.

Regional Emissions

Air pollutant emissions have both regional and localized effects. This analysis assesses the regional effects of the project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities and long-term operation of the project. Localized emissions from project construction and operation are addressed under Impact AIR-3 using concentration-based SJVAPCD pound-per-day thresholds that determine if the project would result in a localized exceedance of any ambient air quality standards or would make a cumulatively considerable contribution to an existing exceedance at the nearest sensitive receptor location. The SJVAPCP AQP includes a summary of projections of all growth anticipated in the San Joaquin Valley Air Basin and controls required to meet air quality standards. This criterion is met through the AQP consistency analysis included under Impact AIR-1.

The primary pollutants of concern during project construction and operation are ROG, NO_X, PM_{10}, and $PM_{2.5}$. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO_X, ROG, SO_X, PM_{10}, and $PM_{2.5}$.

Ozone is a secondary pollutant that can be formed miles from the source of emissions, through reactions of ROG and NO_X emissions in the presence of sunlight. Therefore, ROG and NO_X are termed ozone precursors. The Air Basin often exceeds the state and national ozone standards. Therefore, if the project emits a substantial quantity of ozone precursors, the project may contribute to an exceedance of the ozone standard. The Air Basin also exceeds air quality standards for PM_{10}, and $PM_{2.5}$; therefore, substantial project emissions may contribute to an exceedance for these pollutants. The District's annual emission significance thresholds used for the project define the substantial contribution for both operational and construction emissions as follows:

- 100 tons per year CO
- 10 tons per year NO_X
- 10 tons per year ROG
- 27 tons per year SO_X
- 15 tons per year PM_{10}
- 15 tons per year $PM_{2.5}$

The project does not contain sources that would produce substantial quantities of SO_2 emissions during construction and operation. Modeling conducted for the project show that SO_2 emissions are well below the SJVAPCD GAMAQI thresholds, as shown in the modeling results contained in Appendix A. No further analysis of SO_2 is required.

Construction Emissions

Construction emissions associated with the project are shown in Table 6. The emissions from all phases of construction that occur in a year were compared with the significance threshold. The determination is based on highest emissions in any year of construction. For assumptions in estimating the emissions, please refer to Section 4, Modeling Parameters and Assumptions. As shown in Table 6, the emissions are below the significance thresholds. Therefore, the emissions would be less than significant on a project basis.

Table 6: Construction Air Pollutant Emissions (Annual)

Year	Emissions (tons per year)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Phase 1 Construction Emissions 2017	0.66	5.09	4.35	0.73	0.36
Phase 1 Construction Emissions 2018	0.99	3.43	3.30	0.53	0.23
Phase 2 Construction Emissions 2019	0.20	1.98	1.36	0.26	0.15
Phase 2 Construction Emissions 2020	0.64	4.97	4.82	0.87	0.34
Phase 2 Construction Emissions 2021	4.60	1.65	1.71	0.30	0.12
Total Project Construction Emissions	**7.09**	**17.12**	**15.54**	**2.69**	**1.20**
Highest in any Year	**4.60**	**5.09**	**4.82**	**0.87**	**0.36**
Significance threshold (tons/year)	10	10	100	15	15
Exceed threshold—significant impact?	No	No	No	No	No

Notes:
PM_{10} and $PM_{2.5}$ emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions.
ROG = reactive organic gases NO_X = nitrogen oxides PM_{10} and $PM_{2.5}$ = particulate matter
Calculations use unrounded numbers.
Source: CalEEMod output (Appendix A).

Operational Emissions

Operational emissions occur over the lifetime of the project and are from three main sources: motor vehicles, locomotives, and energy use. The analysis assumes that the entire project will be operational in 2020. Consistent with SJVAPCD guidance, the annual operational emissions are considered separately from construction emissions.

For assumptions in estimating the emissions, please refer to Section 4, Modeling Parameters and Assumptions and Appendix A. The emissions modeling results for project operation are summarized

in Table 7. As shown in Table 7, the operational emissions are below the SJVAPCD significance thresholds and, therefore, would result in a less than significant impact.

Table 7: Operational Air Pollutant Emissions (2020)

Source	Emissions (tons per year)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Phase 1 Area	0.62	0.00	0.00	0.00	0.00
Phase 1 Energy	0.01	0.11	0.07	0.01	0.01
Phase 2 Area	2.64	0.00	0.00	0.00	0.00
Phase 2 Energy	0.06	0.52	0.44	0.04	0.04
Phase 2 Mobile (Employee)	0.02	0.35	0.00	0.09	0.02
Phase 2 Mobile (Truck)	0.16	5.00	0.78	0.42	0.13
Train Operations	0.01	0.11	0.01	0.00	0.00
Total All Phases	**3.51**	**6.09**	**1.29**	**0.56**	**0.20**
Significance threshold	10	10	100	15	15
Exceed threshold—significant impact?	No	No	No	No	No

Notes:
ROG = reactive organic gases NO_X = nitrogen oxides PM_{10} and $PM_{2.5}$ = particulate matter
Area source emissions include emissions from natural gas, and landscape.
Source: CalEEMod output (Appendix A).

Project Health Impacts

In the 5th District Court of Appeal case *Sierra Club v. County of Fresno (Friant Ranch, L.P.)*, the Court found the project EIR deficient because it did not identify specific health related effects resulting from the estimated amount of pollutants generated by the project. The ruling stated that the EIR should give a "sense of the nature and magnitude of the 'health and safety problems' caused by a project's air pollution. The EIR should translate the emission numbers into adverse impacts or to understand why such translation is not possible at this time (and what limited translation is, in fact, possible)."

The standard measure of the severity of impact is the concentration of pollutant in the atmosphere compared to the ambient air quality standard for the pollutant for a specified period of time. The severity of the impact increases with the concentration and the amount of time that people are exposed to the pollutant. The change in health impacts with concentration is described in Table 3 and Table 4. The pollutants of concern in the Friant Ranch ruling were regional criteria pollutants ozone, and PM_{10}. It is important to note that the potential for localized impacts can be addressed through dispersion modeling. The SJVAPCD includes screening criteria that if exceeded would require dispersion modeling to determine if project emissions would result in a significant health impact. For this project, no significant localized health impacts would occur. Regional pollutants require more complex modeling as described below.

Ozone concentrations are estimated using regional photochemical models because ozone formation is subject to temperature, inversion strength, sunlight, emissions transport over long distances, dispersion, and the regional nature of the precursor emissions. The emissions from individual projects are too small to produce a measurable change in ozone concentrations – it is the cumulative contribution of emissions from existing and new development that is accounted for in the photochemical model. Ozone concentrations vary widely throughout the day and year even with the same amount of daily emissions. The SJVAPCD indicated in an Amicus Brief on Friant Ranch that running the photochemical model with just Friant Ranch emissions (109.5 tons/year NO_X) is not likely to yield valid information given the relative scale involved. A copy of the SJVAPCD brief is included in Appendix B. The NO_X inventory for the San Joaquin Valley is 224 tons per day in 2019 or 81,760 tons per year. Friant Ranch would result in 0.13 percent increase in NO_X emissions. A project emitting at the SJVAPCD CEQA threshold of 10 tons per year would result in a 0.01 percent increase in NO_X emissions. Most project emissions are generated by motor vehicle travel distributed on regional roadways miles from the project site, and these emissions are not conducive to project-level modeling.

Emissions throughout the San Joaquin Valley are projected to markedly decline in the coming decade. The SJVAPCD 2016 Ozone Plan predicts NO_X emissions will decline to 103 tons per day by 2029 or 54 percent from 2019 levels through implementation of control measures included in the plan. This means that ozone health impacts to residents of the San Joaquin Valley will be lower than currently experienced and most areas of the San Joaquin Valley will have attained ozone air quality standards. The plan accounts for growth in population at rates projected by the State of California for the San Joaquin Valley, so only cumulative projects that would exceed regional growth projections would potentially delay attainment and prolong the time and the number of people would experience health impacts. It is unlikely that anyone would experience greater impacts from regional emissions than currently occur. The federal transportation conformity regulation provides a means of ensuring growth in emissions does not exceed emission budgets for each County. Regional Transportation Plans and Regional Transportation Improvement Plans must provide a conformity analysis based on the latest planning assumptions that demonstrates that budgets will be not be exceeded. If budgets are exceeded, the San Joaquin Valley may be subject to Clean Air Act sanctions until the deficiency is addressed.

Particulate emission impacts can be localized and regional. Particulates can be directly emitted and can be formed in the atmosphere with chemical reactions. Small directly emitted particles such as diesel emissions and other combustion emissions can remain in the atmosphere for a long time and can be transported over long distances. Large particles such as fugitive dust tend to be deposited a short distance from where emitted but can also travel long distances during periods of high winds. Particulates can be washed out of the atmosphere by rain and deposited on surfaces. Secondary particulates formed in the atmosphere such as ammonium nitrate require NO_X and ammonia, and they require low inversion levels and certain ranges of temperature and humidity to result in substantial concentrations. These complications make modeling project particulate emissions to determine concentration feasible only for directly emitted particles at receptor locations close to the project site. Regional particulate concentrations are modeled using a gridded inventory (emissions in tons/day are placed a 4-kilometer, three-dimensional grid to spatially allocate the emissions geographically and vertically in the atmosphere) and an atmospheric chemistry component to

simulate the chemical reactions. The model uses relative reduction factors to determine the amount of reductions of each PM component will be needed to attain the air quality standards on the days with the conditions most favorable to high particulate concentrations. A small project would not produce sufficient emissions to determine a project's individual contribution to the particulate concentration.

Cumulative Health Impacts

The Air Basin is in nonattainment for ozone, PM_{10} (State only), and $PM_{2.5}$, which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The air quality standards were set to protect public health, including the health of sensitive individuals (such as children, the elderly, and the infirm). Therefore, when the concentration of those pollutants exceeds the standard, it is likely that some sensitive individuals in the population would experience health effects that were described in Table 1. However, the health effects are a factor of the dose-response curve. Concentration of the pollutant in the air (dose), the length of time exposed, and the response of the individual are factors involved in the severity and nature of health impacts. If a significant health impact results from project emissions, it does not mean that 100 percent of the population would experience health effects.

Since the Basin is nonattainment for ozone, PM_{10}, and $PM_{2.5}$, it is considered to have an existing significant cumulative health impact without the project. When this occurs, the analysis considers whether the project's contribution to the existing violation of air quality standards is cumulatively considerable. The SJVAPCD regional thresholds for NO_X, VOC, PM_{10}, or $PM_{2.5}$ are applied as cumulative contribution thresholds. Projects that exceed the regional thresholds would have a cumulatively considerable health impact. As shown in Table 7 and Table 8, the regional analysis of construction and operational emissions indicates that the project would not exceed the District's significance thresholds and the project is consistent with the applicable Air Quality Attainment Plan. Therefore, the project would not result in significant cumulative health impacts.

The SJVAPCD Air Quality Attainment Plans predict that nonattainment pollutant emissions will continue to decline each year as regulations adopted to reduce these emissions are implemented, accounting for growth projected for the region. Therefore, the cumulative health impact will also decline even with the project's emission contribution.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

4.2.3 - Sensitive Receptors

Impact AIR-3: The project would not expose sensitive receptors to substantial pollutant concentrations.

Impact Analysis

Sensitive Receptors

Those who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. The District considers a sensitive receptor a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The closest sensitive receptor is a house located at the northeast corner of Keyes Road and Bystrum Road, approximately 175 meters (574 feet) northeast of new rail spur.

Localized Pollutant Analysis

Emissions occurring at or near the project site have the potential to create a localized impact, also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard.

The SJVAPCD's GAMAQI includes screening thresholds for identifying projects that need detailed analysis for localized impacts. Projects with on-site emission increases from construction activities or operational activities that exceed the 100 pounds per day screening level of any criteria pollutant after implementation of all enforceable mitigation measures would require preparation of an ambient air quality analysis using dispersion modeling to determine pollutant concentrations. The criteria pollutants of concern for localized impact in the SJVAB are PM_{10}, $PM_{2.5}$, NO_X, and CO. There is no localized emission standard for ROG and most types of ROG are not toxic and have no health-based standard; however, ROG was included for informational purposes.

An analysis of maximum daily emissions during construction and operation was conducted to determine if emissions would exceed 100 pounds per day for any pollutant of concern. The maximum daily construction emissions occurred during Phase 1. Maximum NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions would occur in site grading activities. Maximum ROG emissions would occur during application of architectural coatings. The maximum daily operational emissions would occur at project buildout. Operational emissions include those generated on-site by area sources such as consumer products, and landscape maintenance, energy use from natural gas combustion, and motor vehicle operation at the project site. Most motor vehicle emissions would occur distant from the site and would not contribute to a violation of ambient air quality standards. Motor vehicle emissions are adjusted to reflect only those emissions that occur within 0.5 mile of the site entrance. The results of the screening analysis are presented in Table 8 and Table 9.

Table 8: Maximum Daily Air Pollutant Emissions during Construction

Maximum Daily Emissions	Emissions (pounds per day)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Construction Emissions	52.36	68.09	50.55	11.24	7.18
Screening threshold	100	100	100	100	100
Exceed screening threshold?	N/A	No	No	No	No

Notes:
NO_X = nitrogen oxides CO = carbon monoxide PM_{10} and $PM_{2.5}$ = particulate matter N/A = Not applicable
Summer emissions were used except for NOx, which is higher in winter. There is no ambient air quality standard for ROG.
Source: CalEEMod output (Appendix A).

Table 9: Maximum Daily Air Pollutant Emissions during Operations

Maximum Daily Emissions	Emissions (pounds per day)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Phase 1					
Area	0.66	5.09	4.35	0.85	0.42
Energy	0.99	3.43	3.30	0.53	0.23
Total Phase 1	**1.64**	**8.52**	**7.65**	**1.38**	**0.65**
Phase 2					
Area	14.47	0.00	0.06	0.00	0.00
Energy	0.32	2.87	2.41	0.22	0.22
Mobile (employee and visitor)	0.01	0.01	0.08	0.02	0.00
Mobile (Truck)	0.01	0.33	0.05	0.03	0.01
Train Operations	0.06	1.01	0.06	0.04	0.04
Total Phase 2	**14.86**	**4.22**	**2.66**	**0.31**	**0.27**
Daily Operational Emissions, All Phases	**16.50**	**12.74**	**10.31**	**1.69**	**0.92**
Screening threshold	—	100	100	100	100
Exceed screening threshold?	N/A	No	No	No	No

Notes:
NO_X = nitrogen oxides CO = carbon monoxide PM_{10} and $PM_{2.5}$ = particulate matter N/A = Not applicable
The emissions are from the highest of either summer or winter model runs for each pollutant. There is no ambient air quality standard for ROG.
Source: CalEEMod output (Appendix A).

The project would not exceed SJVAPCD screening thresholds for localized criteria pollutant impacts; therefore, the project's localized criteria pollutant impacts would be less than significant.

Carbon Monoxide Hot Spot Analysis

Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. The SJVAPCD provides screening criteria to determine when to quantify local CO concentrations based on impacts to the level of service (LOS) of intersections in the project vicinity.

Construction of the project would result in minor increases in traffic for the surrounding road network during the duration of construction. Motor vehicles accessing the site when it becomes operational would result in a minor increase in daily trips that would not substantially reduce the LOS. The project is in a location with low traffic volumes. No congested conditions that would result in a CO hotspot are possible. The project traffic impact study indicates that all intersection would operate at LOS C or better with the project at buildout. In addition, the highest background 8-hour average of carbon monoxide during the latest year CO was monitored is 2.06 ppm, which is 78 percent lower than the state ambient air quality standard of 9.0 ppm. Therefore, the project would not significantly contribute to an exceedance of state or federal CO standards.

Construction: Toxic Air Contaminants

Project construction would involve the use of diesel-fueled vehicles and equipment that emit DPM, which is considered a TAC. The SJVAPCD's latest threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in a million (formerly 10 in a million). The SJVAPCD's 2015 GAMAQI does not currently recommend analysis of TAC emissions from project construction activities, but instead focuses on projects with operational emissions that would expose sensitive receptors over a typical lifetime of 70 years. The site preparation and grading phases that use large quantities of diesel equipment would take place over less than 3 months. In addition, the project is in a rural area that would not expose substantial numbers of persons to TAC emissions during construction. Therefore, no additional construction modeling was prepared.

Operation: Toxic Air Contaminants

The SJVAPCD recommends use of its health risk prioritization tool as a screening method to estimate the impacts of TAC emissions on sensitive receptors. Projects that exceed a prioritization score of 10 would be required to conduct dispersion modeling and prepare a full health risk assessment. The prioritization tool generates risk estimates at various distances from the emission sources. The emissions concentrations and related risk declines rapidly with distance from the source due to dispersion, so the distance between the source and the receptor is a critical factor.

The project is expected to generate TAC emissions from diesel trucks and diesel locomotives serving the facility. Emissions from trucks include on-site travel along access routes to the new warehouses and idling points at the warehouses. The project is expected to generate approximately 50 new truck round trips per day. The project will use trains to transport products, which results in the use of fewer trucks than would otherwise be the case. Each train car eliminates the need for 3 trucks or about 60 truck trips per week. The facility anticipates that it will use 4 trains per week with 5 train cars per train at buildout or 20 train cars per week. The train emission analysis includes train maneuvering for dropping off empty train cars and picking up full train cars for shipment, and idling while the trains are assembled. The analysis assumed that each drop-off and each pickup would require 15 minutes. The full modeling assumptions and screening results are provided in Appendix A.

The sensitive receptor nearest to the new TAC emission sources resulting from the project was identified using Google Earth. The largest source of TAC emissions is from the locomotives used assemble the trains used to haul products from the Bronco Winery. The next-largest source is on-site truck idling and travel, followed by the off-site truck travel near the site.

The highest impact on sensitive receptors would occur at residences located at the northwest corner of Keyes Road and Bystrum Road. The residences are approximately 175 meters from the rail spur idling area and less than 100 meters from the closest point where the trains would be maneuvering during train car pick-ups. The residences are also the closest receptors to off-site truck travel (167 meters) and are the second closest receptor to new on-site idling areas at the warehouses (285 meters). The receptor closest to the truck idling area is located approximately 205 meters directly east of the new warehouses but this receptor is over 400 meters from the largest emission sources (the train spur, and off-site truck travel) and would experience substantially lower impacts.

The screening tool estimates of total risk scores from each source on the nearest sensitive receptor were added together to determine the total risk for the entire project. The results for the most impacted receptor are presented in Table 10.

Table 10: Prioritization Tool Health Risk Screening Results

Source	Cancer Risk Prioritization Score	Chronic Risk Score
Train Maneuvering and Idling	4.89	0.010
On-site Truck Travel	0.02	0.000
On-site Truck Idling	0.23	0.001
Off-site Truck Travel	0.23	0.001
Total risk from project	**5.35**	**0.011**
Screening Threshold	10	1

Note:
Individual scores were calculated for each source based on distance to the nearest receptor location.
Source: SJVAPCD Health Risk Prioritization Calculator.

The largest source of the cancer risk is from train operations, which comprise about 91 percent of the risk resulting from the project. The screening tool results show that the project's cancer risk and chronic risk would be less than significant.

Valley Fever

Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

The San Joaquin Valley is considered an endemic area for Valley fever. By geographic region, hospitalizations for Valley fever in the San Joaquin Valley increased from 230 (6.9 per 100,000 population) in 2000 to 701 (17.7 per 100,000 population) in 2007. Within the region, Kern County

reported the highest hospitalization rates, increasing from 121 (18.2 per 100,000 population) in 2000 to 285 (34.9 per 100,000 population) in 2007, and peaking in 2005 at 353 hospitalizations (45.8 per 100,000 population). The Centers for Disease Control and Prevention indicates that 752 of the 8,657 persons (8.7 percent) hospitalized in California between 2000 and 2007 for Valley fever died (CDC 2009). California experienced 7,466 new cases of Valley fever in 2017. (CDPH 2018). In Stanislaus County there were 118 cases reported in 2017 through November 25. In 2016, a total of 88 cases were reported across Stanislaus County, compared with 54 in 2015 and 35 in 2014, a greater than 50 percent increase each year (Stanislaus County Health Services Agency 2017).

The distribution of *C. immitis* within endemic areas is not uniform and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for *C. immitis* growth. Avoidance, when possible, of sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of *C. immitis*:

1) Rodent burrows (often a favorable site for *C. immitis*, perhaps because temperatures are more moderate and humidity higher than on the ground surface)
2) Old (prehistoric) Indian campsites near fire pits
3) Areas with sparse vegetation and alkaline soils
4) Areas with high salinity soils
5) Areas adjacent to arroyos (where residual moisture may be available)
6) Packrat middens
7) Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils
8) Sandy, well-aerated soil with relatively high water-holding capacities

Sites within endemic areas less favorable for the occurrence of *C. immitis* include:

1) Cultivated fields
2) Heavily vegetated areas (e.g. grassy lawns)
3) Higher elevations (above 7,000 feet)
4) Areas where commercial fertilizers (e.g. ammonium sulfate) have been applied
5) Areas that are continually wet
6) Paved (asphalt or concrete) or oiled areas
7) Soils containing abundant microorganisms
8) Heavily urbanized areas where there is little undisturbed virgin soil (USGS 2000).

The project site is situated on previously disturbed farmland that does not provide suitable habitat for the spores. Therefore, implementation of the project would have a low probability of the site having *C. immitis* growth sites and exposure to the spores from disturbed soil.

Although conditions are not favorable, construction activities could generate fugitive dust that contain *C. immitis* spores. The project will minimize the generation of fugitive dust during construction activities by complying with the District's Regulation VIII. Therefore, this regulation, combined with the relatively low probability of the presence of *C. immitis* spores, would reduce Valley fever impacts to less than significant.

During operations, dust emissions are anticipated to be relatively small, because most of the project area would be occupied by buildings, paved surfaces, landscaping, and concrete. This condition would lessen the possibility that the project would provide suitable habitat for *C. immitis* spores and generate fugitive dust that may contribute to Valley fever exposure. Impacts would be less than significant.

Naturally Occurring Asbestos

Review of the map of areas where naturally occurring asbestos in California are likely to occur (U.S. Geological Survey 2011) found no such areas in the project area. Therefore, development of the project is not anticipated to expose receptors to naturally occurring asbestos. Impacts would be less than significant.

Impact Summary

Localized impacts from criteria pollutant emissions would not exceed SJVAPCD screening thresholds. The project does not include substantial amounts of diesel equipment and truck trips that would result in a significant increase in cancer risk, chronic risk, and acute risk due to TAC emissions. Impacts from Valley fever exposure and naturally occurring asbestos would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

4.2.4 - Objectionable Odors

Impact AIR-4: **The project would not result in other emissions such as those leading to odors affecting a substantial number of people.**

Impact Analysis

Thresholds of Significance

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas. The project is located near residences but is situated in an agricultural area where similar odors are common.

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. The project is of the first type, since it involves a new potential odor source.

The project is a food processing facility listed on the District's screening table for common land use types that are known to produce odors in the Air Basin; however, no changes to the food processing aspects of the facility are proposed. The screening levels for these land use types are shown in Table 11.

Table 11: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source: SJVAPCD 2015a.	

Project Analysis

Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, feed lots, coffee roasters, asphalt batch plants, and rendering plants. The production activities at the existing winery could result in odors. However, the project is constructing warehouse, office, and administrative buildings that would not engage in new activities that would be expected to generate odors. Therefore, the project would not be considered a generator of objectionable odors during operations.

During construction, the various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and would not likely be noticeable for extended periods of time beyond the project's site boundaries. The potential for diesel odor impacts would therefore be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

SECTION 5: REFERENCES

The following references were used in the preparation of this analysis and are referenced in the text and/or were used to provide the author with background information necessary for the preparation of thresholds and content.

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Appendix A:
Modeling Assumptions and Output

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Modeling Assumptions

Modeling Assumptions Bronco Winery Expansion

Bronco Wine Company	
Address	6342 Bystrum Avenue
APN	041-046-021
Stanislaus County	
County Permit Required	Use Permit for Project Approved by 2017 Zone Change

Default Construction Schedule					
Construction Start Date	1-Jan-19				
Operational Date	1-Feb-19				
Site Size (Acres)	117.93				
		SF per Bldg	**Total SF**	**Warehouse SF**	**Office/Admin**
Proposed Buildings	14				
Warehouses	4	120,000	480,000	360,000	
Warehouses	3	44,843	134,529	134,529	
Office	1	13,000	13,000		13,000
Office	1	38,000	38,000		38,000
Employee Center	1	10,300	10,300		10,300
Admin Building (3 story)	1	30,000	30,000		30,000
Employee Center (2 story)	1	20,000	20,000		20,000
Filter Storage Bldg	1	16,000	16,000	16,000	
			741,829		
Pavillion - Shade Structure	1	2,264			
			621,829	510,529	111300
Increase with Phase 1 and Future Phases			741,829	630,529	111300

Other Construction Projects

Storm Water Drainage Basin	Complete
Rail Spur	Complete

Buildings in Developed Area	**SF**	**Acres**	
Building R	10,300	0.24	
Building T	13,000	0.30	
Building Y	20,000	0.46	
Building Z (30,000 sf in 3 stories)	10,000	0.23	
Building AA	16,000	0.37	
		1.59	
Phase 1 Disturbed Area (acres)	19.6		10.3
Phase 1 Bulding Area SF	120,000	2.75	
Phase 1 Drainage Basin	3.8		
Phase 1 Parking	2.8		
Phase 2 and Later Disturbed Area	18.9	20.49	
Phase 2 and Later Warehouse Area SF	510,529	11.72	
Phase 2 New Bldgs in Existing Area	1.59		
Phase 2 Offices and Admin (SF)	111,300	2.56	
Area covered by buildings		14.28	
Area for parking and landscaping		6.22	

	Current	With Project	Increase
Employees	396	426	30
Seasonal	90	90	0
Total Employees	486	516	30
Truck Trips From Expansion			
Shipping Trucks/Day	25		
Truck Trips/Day	50		
Train Operations			
Trains per Week	4		
Train cars per train	5		
Train cars per week	20		
Trains per Year	208		
Minutes per Train car dropoff	15		
Minutes per Train car pickup	15		
Minutes per day	30		
Minutes per week	120		
Hours per week	2		
Hours per year	**104**		

Fleet Mix Allocation Spreadsheets

Project Fleet Mix Allocation

Heavy Duty Truck Trips/Day (HHD) 25.0

Employee Trips 60

Land Use Assumptions

LandUseType	LandUseSubType	LandUseUnitAmou	LandUseSizeMetric
Industrial	Warehouse	510.529	KSF
		0.12	Trips/KSF

Project Trip Generation

VehicleTripsLandUseSubType	VehicleTripsLandUseSize	WD_TR	ST_TR	SU_TR	Daily Avg Tr	LU SF	Trip Gen
Industrial	Light Industrial	1.68	1.68	1.68	1.68	510.529	857.68872
Total Trips							857.68872

Adjusted Fleet Mix for No HDT Trucks	**LDA**	**LDT1**	**LDT2**	**MDV**	**Total**		**LHD1 Frac**	**LHD2 Frac**	**MHD Frac**	**HHD Frac**	**OBUS**	**UBUS**	**SBUS**	**Diff to Allocate**
Default Fleet Mix	0.501303	0.035285	0.172289	0.136094	0.844971	Vehicles Removed	**0.00000**	**0.00000**	**0.00000**	**0.00000**	0	0	0	0.00000
Adjusted Fleet Mix	0.589760	0.041511	0.202690	0.160108	0.994069	Default Frac	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.000869	0.149098
					0.149098	Allocation Fraction								**0.149098**

2020 CalEEMod Default Fleet Mix for Stanislaus County

	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
Default Fleet Mix	FleetMix	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.00182	0.001183	0.004865	0.000869	0.001067	
Revised Fleet Mix		**0.589760**	**0.041511**	**0.202690**	**0.160108**	**0**	**0**	**0**	**0**	0	0	0.004865	0	0.001067	1.000001

Truck Trip CalEEMod Input

	Trips/Day	Fleet Fraction
HHD Trucks Trips/Day	50	1.000000
	50	

Truck Trips per KSF **0.10**
Employee Trips 60
Trips/ksf 0.118

Truck Trip Length 50

Appendix A

Modeling Results

Locomotive Emission Calculations

Locomotive Emissions

Locomotive Activity Assumptions and Emission Factors

	Running Time	Idling Time
Southbound Trains Drop Empty Cars	10	5
Northbound Trains Add Full Cars	10	5
Total Time	20	10

Trains pass the spur and back into the spur to pick up and drop off train cars
Applicant stattes that entire dropoff process takes 10-15 minutes

Locomotive Diesel Emission Factors (grams/hour)

Throttle Setting	Switchers	GP-3x	GP-4x	GP-50	GP-60	GP-60	SD-7x	SD-7x	SD-7x	SD-7x	SD-90	Dash 7	Dash 8	Dash 9	Dash 9	Dash 9	Dash 9	C60-A	Total	Line Haul Average Rate g/hr
Idle	31.0	38.0	47.9	26.0	48.6	21.1	24.0	14.8	29.2	55.4	61.1	65.0	37.0	32.1	33.8	16.9	7.7	71.0	629.6	**37.0**
DB	56.0	72.0	80.0	64.1	98.5	25.4	4.8	15.1	31.8	59.5	108.5	180.5	147.5	53.9	50.7	88.4	42.0	83.9	1206.6	71.0
N1	23.0	31.0	35.7	51.3	48.7	37.6	41.0	36.8	37.1	38.3	50.1	108.2	86.0	54.2	56.1	62.1	69.3	68.6	912.1	**53.7**
N2	76.0	110.0	134.3	142.5	131.7	75.5	65.7	61.1	66.2	134.2	99.1	121.2	133.1	108.1	117.4	140.2	145.8	78.6	1864.7	**109.7**
N3	136.9	184.5	224.5	299.0	282.1	237.4	155.5	228.5	217.5	269.4	253.7	352.7	285.9	215.7	224.9	298.2	298.5	272.6	4300.6	253.0
N4	156.6	208.8	254.6	306.5	294.9	346.9	239.4	374.1	291.5	295.9	417.3	323.1	289.1	285.1	260.1	378.1	359.9	230.8	5156.1	303.3
N5	197.4	262.2	330.0	386.9	368.5	508.5	315.4	442.7	428.9	329.2	551.5	327.1	323.3	365.6	607.7	418.3	399.8	272.3	6637.9	390.5
N6	303.4	410.8	543.7	653.9	636.1	714.0	369.2	853.3	702.6	543.3	324.4	293.7	366.4	429.3	562.9	510.2	410.4	305.4	8629.6	507.6
N7	341.2	457.9	631.6	717.3	735.4	1113.4	469.9	1007.8	774.5	664.6	255.3	325.3	453.5	469.7	587.4	526.2	496.1	220.3	9906.2	582.7
N8	442.9	601.1	812.1	917.4	931.0	1304.9	582.6	1093.2	838.1	696.2	923.1	405.4	593.8	681.2	546.9	751.1	586.4	350.1	12614.6	742.0

EPA Regulatory Support Document, Locomotive Emissions Regulation, Appendix B, 12/17/1997, as tabulated by ARB and ENVIRON.
Emission Factors From the UP Stockton Health Risk Assessment, 2007

Emissions for Car Drop Offs SB

	Minutes	Hours	Emissions (grams/ dropoff or pickup)	Dropoffs	Emission g/day	Emissions lbs/day	Dropoffs and Pickups/ Week	Dropoffs and Pickups /Year	Emission lbs/Year	Emission at <100 M	Emissions at 100-250 M	Emissions at 250-500 M	Emission s at 500-1000 M	Cancer Risk <100 M	Cancer Risk 100-250 M	Cancer Risk 250-500 M	Cancer Risk 500-1,000 M
Idling	5	0.08	3.09	1	3.086	0.007	4	208	1.415			1.415		3.27	0.817	0.131	
N1	8	0.13	7.15	1	7.154	0.016	4	208	3.280			0.394	2.887	7.58	1.89	0.303	
N2	2	0.03	3.66	1	3.656	0.008	4	208	1.677				1.677	3.87	0.968	0.155	0.0426
Total	15					**0.031**			**6.372**								

Convert g to lbs 0.00220462

Emissions for Car Pick Ups NB

	Minutes	Hours	Emissions (grams/ dropoff or pickup)	Pickups	Emission g/day	Emissions lbs/day	Dropoffs and Pickups/ Week	Dropoffs and Pickups /Year	Emission lbs/Year	Emission at <100 M	Emissions at 100-250 M	Emissions at 250-500 M	Emission s at 500-1000 M	Cancer Risk <100 M	Cancer Risk 100-250 M	Cancer Risk 250-500 M	Cancer Risk 500-1,000 M
Idling	5	0.08	3.09	1	3.086	0.007	4	208	1.415	0.000	1.415	0.000	0.000	3.27	**0.817**	0.131	
N1	8	0.13	7.15	1	7.154	0.016	4	208	3.280	0.422	2.858	0.000	0.000	7.58	1.89	0.303	
N2	2	0.03	3.66	1	3.656	0.008	4	208	1.677	0.000	1.677	0.000	0.000	3.87	0.968	0.155	0.0426
Total	15					**0.031**			**6.372**								

Idling would occur when the train is coupling or decoupling the cars
Notch 1 is used for most slow speed manuvering
Notch 2 is used for acceleration when leaving the site.

Boxcars Length	60
Average Boxcars/Train	10
Length of Train (feet)	600

Locomotive is located 600 feet from the dropoff and pickup points when idling
The boxcars will be positioned in on the spur in front of the warehouses.

Train Diesel Risk at Receptor 1

Northbound Trains	Cancer Risk <100 M	Cancer Risk 100-250 M	Total Risk	Chronic Risk Score	Chronic Risk Score	Total Chronic Score
Idling	0	0.817	0.817	0.00242	0	0.00242
N1	0.975	1.65	2.625	0.00289	0.00489	0.00778
N2	0	0.968	0.968	0	0.00287	0.00287
Total Risk Northbound Train			**4.41**			**0.01307**

Southbound Trains	Cancer Risk 250-500 M	Cancer Risk 500-1000 M	Total Risk	Chronic Risk Score	Chronic Risk Score	Total Chronic Score
Idling	0.131	0	0.131	0.000388	0	0.000388
N1	0.0364	0.0734	0.1098	0.000108	0.000218	0.000326
N2	0	0.0426	0.0426	0	0.000126	0.000126
Total Risk SB Train			**0.2834**			**0.00084**
Total Risk from Trains			**4.6934**			**0.01391**

Offsite Train Travel by Distance Receptor 1

	<100 M	100-250 M	250-500	500+	Total
Northbound	170	1150			1320
Miles	0.03	0.22			0.25
Time in Each Radius	1.03	6.97			8.00
Fraction of Time in N1	0.13	0.87			2.00
Fraction of Time in N2		1.00			
Southbound			139	1181	1320
Miles			0.03	0.22	0.25
Time in Each Radius					10
Fraction of Time in N1			0.12	0.88	
Fraction of Time in N2				1	

Total Miles by Distance

Offsite Train Idling Receptor 1

	<100 M	100-250 M	250-500	500+	Total
Idle Pts by Distance		1	1		

Emissions by Distance from Receptor

	<100 M	100-250 M	250-500	500+
Train Idling		1.415	1.415	
Train Manuevering N1 (80%)				
Train Manuevering N2 (20%)				

Train Criteria Pollutant Emissions

	Pre-Tier	Tier 0	Tier 0+	Tier 1	Tier 1+	Tier 2	Tier 2+	Tier 3	Tier 3+	Wt Avg Emission Factor
Non-South Coast	2.95%	26.26%	4.08%	14.45%	6.57%	45.26%	0.00%	0.13%	0.00%	
Nox Emission Factor	13.00	8.60	7.20	6.70	6.70	4.95	4.95	4.95	1.00	
Weighted Avg Nox Factor	0.38	2.26	0.29	0.97	0.44	2.24	0.00	0.01	0.00	6.59
HC Emission Factor	0.48	0.48	0.30	0.47	0.29	0.26	0.13	0.13	0.04	
Weighted Avg HC Factor	0.01	0.13	0.01	0.07	0.02	0.12	0.00	0.00	0.00	0.36
CO Emission Factor	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	
Weighted Avg HC Factor	0.04	0.34	0.05	0.18	0.08	0.58	0.00	0.00	0.00	1.28
PM10 Emission Factor	0.32	0.32	0.20	0.32	0.20	0.18	0.08	0.08	0.02	
Weighted Avg HC Factor	0.01	0.08	0.01	0.05	0.01	0.08	0.00	0.00	0.00	0.24

Table 4 7 U.S. EPA Line-haul emission factors (g/bhp-hr)

	PM10	HC	NOx	CO
Pre-Tier	0.32	0.48	13	1.28
Tier 0	0.32	0.48	8.6	1.28
Tier 0+	0.2	0.3	7.2	1.28
Tier 1	0.32	0.47	6.7	1.28
Tier 1+	0.2	0.29	6.7	1.28
Tier 2	0.18	0.26	4.95	1.28
Tier 2+	0.08	0.13	4.95	1.28
Tier 3	0.08	0.13	4.95	1.28
Tier 4	0.015	0.04	1	1.28

Power Needed in Throttle Notch	bhp	Nox g/bhp-hr	Hours/Year	g/year	lbs/year	Nox tons/year	Nox lbs/day
Idle	25	6.59	34.67	5,712.00	12.59	0.01	
DB 1	175	6.59	55.47	63,974.36	141.04	0.07	
DB 2	375	6.59	13.87	34,271.98	75.56	0.04	
			104			0.11	1.102

	Minutes	Hours	Fraction
Idling	5	0.08	0.333
N1	8	0.13	0.533
N2	2	0.03	0.133
Total	15	0.25	1.000

Convert g to lbs 0.00220462

Power Needed in Throttle Notch	bhp	HC g/bhp-hr	Hours/Year	g/year	lbs/year	HC tons/year	HC lbs/day
Idle	25	0.36	34.67	309.63	0.68	0.000	
N1	175	0.36	55.47	3,467.81	7.65	0.004	
N2	375	0.36	13.87	1,857.76	4.10	0.002	
			104			0.01	0.060

Power Needed in Throttle Notch	bhp	CO g/bhp-hr	Hours/Year	g/year	lbs/year	CO tons/year	CO lbs/day
Idle	25	0.36	34.67	309.63	0.68	0.000	
N1	175	0.36	55.47	3,467.81	7.65	0.004	
N2	375	0.36	13.87	1,857.76	4.10	0.002	
			104			0.006	0.060

Power Needed in Throttle Notch	bhp	PM10 g/bhp-hr	Hours/Year	g/year	lbs/year	PM10 tons/year	PM10 lbs/day
Idle	25	0.24	34.67	210.24	0.46	0.000	
N1	175	0.24	55.47	2,354.68	5.19	0.003	
N2	375	0.24	13.87	1,261.44	2.78	0.001	
			104			0.004	0.041

Train Op Days Per Year (4/week * 52) 208

Health Risk Prioritization

Health Risk Screening Analysis

Diesel Truck Trips

	KSF	Avg Daily Trips
Bronco Winery Expansion	510.529	50

Truck Assumptions

Trucks Onsite per Day	25
Trucks Onsite per Year	9125
Idling Events per Truck per day	1
Idling Time per Event (min.)	15
Idling Minutes/Year	136,875
Idling Hours/Year	2281.25

Average Travel Distance Onsite (ft) 2174
Measured with Google Earth Path Tool

	Miles/Trip
Offsite Miles Estimate	0.25

		Distance Onsite (ft) one way	Idling Min/Year	Idling Hours/year	Idling Emissions (lbs/year)	Running Emissions (lbs/yr)	Total Truck Emissions (lbs/year)	Grand Total (lbs/yr)	Average Lbs/Day	Max Lbs/Day*	Max Hrs/day
Onsite Truck Travel Emissions	A	2174	136.875	2281.25	0.171	2.99	3.16	3.16	**0.01**	0.03	0.00108

*Max daily assumed to be 3 times the daily average

	g/hour
EMFAC 2017 Idling Factor 2019	0.034

Running Emission Calculations

	T7 Trucks g/hour	grams/Year	Lbs/Year
Idling Emission Rate for Diesel g/hour	0.03400	77.6	0.17
g/lb conversion factor	0.00220		

HDT Onsite Running Emissions 5-15 mph g/mile	0.18021
HDT Running Emissions Onroad 5-25 mph	0.14145

EMFAC 2017 PM10 running emissions in 2020

	Miles/Day	Miles/Year	g/year	Lbs/Year
Onsite Travel	20.59	7,514	1354.185	2.985
Offsite Travel (.25 miles/trip)	12.5	4,563	645.382	1.423

Distance of Travel Onsite from Receptor 1	Feet	Fraction of Emissions at Each Distance	Emissions at Each Distance (lbs/year)	Cancer Risk	Chronic Risk
0-100 M					
100-250 M					
250-500 M	1627	0.748	**2.234**	0.206	0.0006
500-1000 M	547	0.252	**0.751**	0.019	0.0001
Total	2174		**2.985**	**0.225**	0.0007

Distance of Offsite Travel from Receptor 1	Feet	Fraction of Emissions at Each Distance	Emissions at Each Distance (lbs/year)	Cancer Risk	Chronic Risk
0-100 M					
100-250 M	223	0.167	**0.237**	0.137	0.0004
250-500 M	820	0.613	**0.873**	0.081	0.0002
500-1000 M	294	0.220	**0.313**	0.008	0.0000
Total	1337	1.000	**1.423**	**0.226**	0.0007

Distance of Onsite Idling from Receptor 1	Fraction of Emissions at Each Distance	Emissions at Each Distance (lbs/year)	Cancer Risk	Chronic Risk
0-100 M	0.000			
100-250 M	0.000			
250-500 M	1.000	**0.171**	**0.016**	0.0000468
500-1000 M	0.000			
Total	1.000	**0.171**	**0.016**	**0.000**

Cancer Risk Receptor 1 All Sources	Cancer Risk Score	Chronic Risk
Train Emissions	4.89	0.010
Truck Emissions Onsite Idling	0.02	0.000
Truck Emissions Onsite Travel	0.23	0.001
Truck Emissions Offsite Travel	0.23	0.001
	5.35	0.011

Running Emission Calculations

	Miles/year	Emission Factor (g/mi)	Emissions (grams/year)	Emission Lbs/year	Cancer Risk Score	Chronic Score	Max Lbs/Hr
Onsite Travel 0-100 M Worker Rec	0.0	0.18021	0.00	0.0000	1.69	0.00501	0
Onsite Travel 100-250 M Worker Rec	0.0	0.18021	0.00	0.0000	0.486	0.00144	0
Onsite Travel 250-500 M Worker Rec	14,477.6	0.18021	2609.07	5.7520	0.023	0.0000682	0.00196987
Onsite Emissions from HDT Travel	14,477.6	0.18021	2609.07	**5.7520**	**2.199**		
Offsite Emissions HDT within 1/4 mile Total	0	0.14145	0.00	**0.0000**			

Offsite Trucks Worker Receptor

	Trips	Distance (mi)	Miles/Day	Miles/Year	Emission Rate	Emissions g/year	Emission lbs/year
Incoming and Outgoing Northbound	50	0.25	12.5	4562.5	0.14145	645.38	1.42
Totals			**12.5**	**4562.5**			**1.42**

EMFAC 2017 Average Running Emissions

	PM10_RUNEX 5-25 mph (g/mile)	PM10 RUNEX 5-15 MPH (g/mile)
5 MPH	0.22309	0.22309
10 MPH	0.18728	0.18728
15 MPH	0.13027	0.13027
20 MPH	0.09120	
25 MPH	0.07543	
Average	**0.14145**	**0.18021**

Emissions based on Aggregated model year for Stanislaus County in 2020
Idling Emissions from EMFAC 2017

Bronco Winery Expansion — Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.		
Author or updater	Matthew Cegielski	*Last Update*	October 13, 2016
Facility:	Bronco Winery		
ID#:			
Project #:	Train		
Unit and Process#	Idling		

Operating Hours hr/yr	4,380.00			
Receptor Proximity and Proximity Factors	Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100 1.000	3.27E+00	9.69E-03	0.00E+00	3.27E+00
100≤R<250 0.250	8.17E-01	2.42E-03	0.00E+00	8.17E-01
250≤R<500 0.040	1.31E-01	3.88E-04	0.00E+00	1.31E-01
500≤R<1000 0.011	3.60E-02	1.07E-04	0.00E+00	3.60E-02
1000≤R<1500 0.003	9.81E-03	2.91E-05	0.00E+00	9.81E-03
1500≤R<2000 0.002	6.54E-03	1.94E-05	0.00E+00	6.54E-03
2000<R 0.001	3.27E-03	9.69E-06	0.00E+00	3.27E-03

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Idling

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	9901	1.42E+00	2.50E-04	3.23E-04	3.27E+00	9.69E-03	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	3.27E+00	9.69E-03	0.00E+00

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

Bronco Winery Expansion

Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Train Running
Unit and Process#	N1 <100 M

Operating Hours hr/yr	4,380.00			
Receptor Proximity and Proximity Factors	**Cancer Score**	**Chronic Score**	**Acute Score**	**Max Score**
0< R<100 1.000	9.75E-01	2.89E-03	0.00E+00	9.75E-01
100≤R<250 0.250	2.44E-01	7.23E-04	0.00E+00	2.44E-01
250≤R<500 0.040	3.90E-02	1.16E-04	0.00E+00	3.90E-02
500≤R<1000 0.011	1.07E-02	3.18E-05	0.00E+00	1.07E-02
1000≤R<1500 0.003	2.92E-03	8.67E-06	0.00E+00	2.92E-03
1500≤R<2000 0.002	1.95E-03	5.78E-06	0.00E+00	1.95E-03
2000<R 0.001	9.75E-04	2.89E-06	0.00E+00	9.75E-04

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

N1 <100 M

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	4.22E-01	2.50E-04	9.63E-05	9.75E-01	2.89E-03	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	**9.75E-01**	**2.89E-03**	**0.00E+00**

Bronco Winery Expansion — Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski — *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Train Running
Unit and Process#	N1 100-250 M

Operating Hours hr/yr	4,380.00			
Receptor Proximity and Proximity Factors	**Cancer Score**	**Chronic Score**	**Acute Score**	**Max Score**
0< R<100 1.000	6.60E+00	1.96E-02	0.00E+00	6.60E+00
100≤R<250 0.250	1.65E+00	4.89E-03	0.00E+00	1.65E+00
250≤R<500 0.040	2.64E-01	7.83E-04	0.00E+00	2.64E-01
500≤R<1000 0.011	7.26E-02	2.15E-04	0.00E+00	7.26E-02
1000≤R<1500 0.003	1.98E-02	5.87E-05	0.00E+00	1.98E-02
1500≤R<2000 0.002	1.32E-02	3.92E-05	0.00E+00	1.32E-02
2000<R 0.001	6.60E-03	1.96E-05	0.00E+00	6.60E-03

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

N1 100-250 M							
Substance	**CAS#**	**Annual Emissions (lbs/yr)**	**Maximum Hourly (lbs/hr)**	**Average Hourly (lbs/hr)**	**Cancer**	**Chronic**	**Acute**
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	2.86E+00	2.50E-04	6.53E-04	6.60E+00	1.96E-02	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	**6.60E+00**	**1.96E-02**	**0.00E+00**

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

Bronco Winery Expansion

Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Train Running
Unit and Process#	N1 250-500 M S

Operating Hours hr/yr	4,380.00			
Receptor Proximity and Proximity Factors	**Cancer Score**	**Chronic Score**	**Acute Score**	**Max Score**
0< R<100 1.000	9.10E-01	2.70E-03	0.00E+00	9.10E-01
100≤R<250 0.250	2.28E-01	6.75E-04	0.00E+00	2.28E-01
250≤R<500 0.040	3.64E-02	1.08E-04	0.00E+00	3.64E-02
500≤R<1000 0.011	1.00E-02	2.97E-05	0.00E+00	1.00E-02
1000≤R<1500 0.003	2.73E-03	8.10E-06	0.00E+00	2.73E-03
1500≤R<2000 0.002	1.82E-03	5.40E-06	0.00E+00	1.82E-03
2000<R 0.001	9.10E-04	2.70E-06	0.00E+00	9.10E-04

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

N1 250-500 M S

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	3.94E-01	2.50E-04	9.00E-05	9.10E-01	2.70E-03	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	**9.10E-01**	**2.70E-03**	**0.00E+00**

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

Bronco Winery Expansion — Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski — *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Train Running
Unit and Process#	N1 500-1000 M S

Operating Hours hr/yr	4,380.00			
Receptor Proximity and Proximity Factors	Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100 1.000	6.67E+00	1.98E-02	0.00E+00	6.67E+00
100≤R<250 0.250	1.67E+00	4.94E-03	0.00E+00	1.67E+00
250≤R<500 0.040	2.67E-01	7.91E-04	0.00E+00	2.67E-01
500≤R<1000 0.011	7.34E-02	2.18E-04	0.00E+00	7.34E-02
1000≤R<1500 0.003	2.00E-02	5.93E-05	0.00E+00	2.00E-02
1500≤R<2000 0.002	1.33E-02	3.95E-05	0.00E+00	1.33E-02
2000<R 0.001	6.67E-03	1.98E-05	0.00E+00	6.67E-03

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

N1 500-1000 M S

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	9901	2.89E+00	2.50E-04	6.59E-04	6.67E+00	1.98E-02	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	6.67E+00	1.98E-02	0.00E+00

Bronco Winery Expansion — Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski — *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Train Running
Unit and Process#	N1

Operating Hours hr/yr	4,380.00			
Receptor Proximity and Proximity Factors	**Cancer Score**	**Chronic Score**	**Acute Score**	**Max Score**
0< R<100 1.000	7.58E+00	2.25E-02	0.00E+00	7.58E+00
100≤R<250 0.250	1.89E+00	5.62E-03	0.00E+00	1.89E+00
250≤R<500 0.040	3.03E-01	8.99E-04	0.00E+00	3.03E-01
500≤R<1000 0.011	8.33E-02	2.47E-04	0.00E+00	8.33E-02
1000≤R<1500 0.003	2.27E-02	6.74E-05	0.00E+00	2.27E-02
1500≤R<2000 0.002	1.52E-02	4.49E-05	0.00E+00	1.52E-02
2000<R 0.001	7.58E-03	2.25E-05	0.00E+00	7.58E-03

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

N1

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	**CAS#**	**Annual Emissions (lbs/yr)**	**Maximum Hourly (lbs/hr)**	**Average Hourly (lbs/hr)**	**Cancer**	**Chronic**	**Acute**
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	3.28E+00	2.50E-04	7.49E-04	7.58E+00	2.25E-02	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	**7.58E+00**	**2.25E-02**	**0.00E+00**

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

Bronco Winery Expansion

Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Train Running
Unit and Process#	N2

Operating Hours hr/yr	4,380.00			
Receptor Proximity and Proximity Factors	Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100 1.000	3.87E+00	1.15E-02	0.00E+00	3.87E+00
100≤R<250 0.250	9.68E-01	2.87E-03	0.00E+00	9.68E-01
250≤R<500 0.040	1.55E-01	4.59E-04	0.00E+00	1.55E-01
500≤R<1000 0.011	4.26E-02	1.26E-04	0.00E+00	4.26E-02
1000≤R<1500 0.003	1.16E-02	3.45E-05	0.00E+00	1.16E-02
1500≤R<2000 0.002	7.75E-03	2.30E-05	0.00E+00	7.75E-03
2000<R 0.001	3.87E-03	1.15E-05	0.00E+00	3.87E-03

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

N2	Enter the unit's CAS# of the substances emitted and their amounts.				Prioritzation score for each substance generated below. Totals on last row.		
Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	9901	1.68E+00	2.50E-04	3.83E-04	3.87E+00	1.15E-02	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	3.87E+00	1.15E-02	0.00E+00

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

Bronco Winery Expansion

Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Truck Offsite
Unit and Process#	100-250 M

Operating Hours hr/yr		4,380.00			
Receptor Proximity and Proximity Factors		Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100	1.000	5.47E-01	1.62E-03	0.00E+00	5.47E-01
100≤R<250	0.250	1.37E-01	4.06E-04	0.00E+00	1.37E-01
250≤R<500	0.040	2.19E-02	6.49E-05	0.00E+00	2.19E-02
500≤R<1000	0.011	6.02E-03	1.79E-05	0.00E+00	6.02E-03
1000≤R<1500	0.003	1.64E-03	4.87E-06	0.00E+00	1.64E-03
1500≤R<2000	0.002	1.09E-03	3.25E-06	0.00E+00	1.09E-03
2000<R	0.001	5.47E-04	1.62E-06	0.00E+00	5.47E-04

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

100-250 M

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	9901	2.37E-01	2.50E-04	5.41E-05	5.47E-01	1.62E-03	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	5.47E-01	1.62E-03	0.00E+00

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

Bronco Winery Expansion — Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski — *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Truck Offsite
Unit and Process#	250-500 M

Operating Hours hr/yr	4,380.00			
Receptor Proximity and Proximity Factors	Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100 1.000	2.02E+00	5.98E-03	0.00E+00	2.02E+00
100≤R<250 0.250	5.04E-01	1.49E-03	0.00E+00	5.04E-01
250≤R<500 0.040	8.07E-02	2.39E-04	0.00E+00	8.07E-02
500≤R<1000 0.011	2.22E-02	6.58E-05	0.00E+00	2.22E-02
1000≤R<1500 0.003	6.05E-03	1.79E-05	0.00E+00	6.05E-03
1500≤R<2000 0.002	4.03E-03	1.20E-05	0.00E+00	4.03E-03
2000<R 0.001	2.02E-03	5.98E-06	0.00E+00	2.02E-03

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

250-500 M	Enter the unit's CAS# of the substances emitted and their amounts.				Prioritzation score for each substance generated below. Totals on last row.		
Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	9901	8.73E-01	2.50E-04	1.99E-04	2.02E+00	5.98E-03	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	2.02E+00	5.98E-03	0.00E+00

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

Bronco Winery Expansion

Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Truck Offsite
Unit and Process#	500-1000 M

Operating Hours hr/yr		4,380.00			
Receptor Proximity and Proximity Factors		**Cancer Score**	**Chronic Score**	**Acute Score**	**Max Score**
0< R<100	1.000	7.23E-01	2.14E-03	0.00E+00	7.23E-01
100≤R<250	0.250	1.81E-01	5.36E-04	0.00E+00	1.81E-01
250≤R<500	0.040	2.89E-02	8.58E-05	0.00E+00	2.89E-02
500≤R<1000	0.011	7.95E-03	2.36E-05	0.00E+00	7.95E-03
1000≤R<1500	0.003	2.17E-03	6.43E-06	0.00E+00	2.17E-03
1500≤R<2000	0.002	1.45E-03	4.29E-06	0.00E+00	1.45E-03
2000<R	0.001	7.23E-04	2.14E-06	0.00E+00	7.23E-04

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

500-1000 M

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	**CAS#**	**Annual Emissions (lbs/yr)**	**Maximum Hourly (lbs/hr)**	**Average Hourly (lbs/hr)**	**Cancer**	**Chronic**	**Acute**
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	3.13E-01	2.50E-04	7.15E-05	7.23E-01	2.14E-03	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	**7.23E-01**	**2.14E-03**	**0.00E+00**

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

Bronco Winery Expansion — Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski — *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Truck Onsite
Unit and Process#	250-500 M

Operating Hours hr/yr	4,380.00			
Receptor Proximity and Proximity Factors	Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100 1.000	5.15E+00	1.53E-02	0.00E+00	5.15E+00
100≤R<250 0.250	1.29E+00	3.82E-03	0.00E+00	1.29E+00
250≤R<500 0.040	2.06E-01	6.11E-04	0.00E+00	2.06E-01
500≤R<1000 0.011	5.67E-02	1.68E-04	0.00E+00	5.67E-02
1000≤R<1500 0.003	1.55E-02	4.58E-05	0.00E+00	1.55E-02
1500≤R<2000 0.002	1.03E-02	3.05E-05	0.00E+00	1.03E-02
2000<R 0.001	5.15E-03	1.53E-05	0.00E+00	5.15E-03

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

250-500 M							
Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	9901	2.23E+00	2.50E-04	5.09E-04	5.15E+00	1.53E-02	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	5.15E+00	1.53E-02	0.00E+00

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

Bronco Winery Expansion

Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Truck Onsite
Unit and Process#	500-1000 M

Operating Hours hr/yr	4,380.00			
Receptor Proximity and Proximity Factors	**Cancer Score**	**Chronic Score**	**Acute Score**	**Max Score**
0< R<100 1.000	1.73E+00	5.14E-03	0.00E+00	1.73E+00
100≤R<250 0.250	4.34E-01	1.29E-03	0.00E+00	4.34E-01
250≤R<500 0.040	6.94E-02	2.06E-04	0.00E+00	6.94E-02
500≤R<1000 0.011	1.91E-02	5.66E-05	0.00E+00	1.91E-02
1000≤R<1500 0.003	5.20E-03	1.54E-05	0.00E+00	5.20E-03
1500≤R<2000 0.002	3.47E-03	1.03E-05	0.00E+00	3.47E-03
2000<R 0.001	1.73E-03	5.14E-06	0.00E+00	1.73E-03

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

500-1000 M

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	7.51E-01	2.50E-04	1.71E-04	1.73E+00	5.14E-03	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	1.73E+00	5.14E-03	0.00E+00

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

Bronco Winery Expansion — Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author or updater	Matthew Cegielski — *Last Update* October 13, 2016
Facility:	Bronco Winery
ID#:	
Project #:	Truck Idling
Unit and Process#	250-500

Operating Hours hr/yr	4,380.00			
Receptor Proximity and Proximity Factors	Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100 1.000	3.95E-01	1.17E-03	0.00E+00	3.95E-01
100≤R<250 0.250	9.88E-02	2.93E-04	0.00E+00	9.88E-02
250≤R<500 0.040	1.58E-02	4.68E-05	0.00E+00	1.58E-02
500≤R<1000 0.011	4.35E-03	1.29E-05	0.00E+00	4.35E-03
1000≤R<1500 0.003	1.19E-03	3.51E-06	0.00E+00	1.19E-03
1500≤R<2000 0.002	7.90E-04	2.34E-06	0.00E+00	7.90E-04
2000<R 0.001	3.95E-04	1.17E-06	0.00E+00	3.95E-04

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

250-500

Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	9901	1.71E-01	2.50E-04	3.90E-05	3.95E-01	1.17E-03	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	**3.95E-01**	**1.17E-03**	**0.00E+00**

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

Emission Summary

Bronco Winery Expansion Emission Summary

			Tons/Year			
Construction Emissions (Annual)	**ROG**	**NOX**	**CO**	**SO2**	**PM10**	**PM2.5**
Phase 1 Construction 2017	0.66	5.09	4.35	0.01	0.73	0.36
Phase 1 Construction 2018	0.99	3.43	3.30	0.01	0.53	0.23
Phase 2 Construction 2019	0.20	1.98	1.36	0.00	0.26	0.15
Phase 2 Construction 2020	0.64	4.97	4.82	0.01	0.87	0.34
Phase 2 Construction 2021	4.60	1.65	1.71	0.01	0.30	0.12
	7.09	**17.12**	**15.54**	**0.04**	**2.69**	**1.20**
Highest Emiissions Any Year	**4.60**	**5.09**	**4.82**	**0.01**	**0.87**	**0.36**

Operational Emissions

			Tons/Year			
2020	**ROG**	**NOX**	**CO**	**SO2**	**PM10**	**PM2.5**
Phase 1 Area	0.62	0.00	0.00	0.00	0.00	0.00
Phase 1 Energy	0.01	0.11	0.07	0.00	0.01	0.01
Phase 2 Area	2.64	0.00	0.00	0.00	0.00	0.00
Phase 2 Energy	0.06	0.52	0.44	0.00	0.04	0.04
Mobile (employee and visitor)	0.02	0.35	0.00	0.00	0.09	0.02
Mobile (Truck)	0.16	5.00	0.78	0.02	0.42	0.13
Train Operations	0.01	0.11	0.01	0.00	0.00	0.00
Total	**3.51**	**6.09**	**1.29**	**0.02**	**0.56**	**0.20**

Phase 1

Construction Daily			Pounds/Day				
Maximum Daily Emission Summer	**ROG**	**NOX**	**CO**	**SO2**	**PM10**	**PM2.5**	
2017	7.27	68.06	**50.55**	**0.12**	**11.24**		**7.18**
2018	**52.36**	44.02	45.92	0.12	7.13		3.05
Total	**59.63**	**112.09**	**96.46**	**0.23**	**18.37**		**10.23**

Construction Daily			Pounds/Day				
Maximum Daily Emission Winter	**ROG**	**NOX**	**CO**	**SO2**	**PM10**	**PM2.5**	
2017	7.32	**68.09**	46.78	0.11	11.24		7.18
2018	52.36	44.66	42.44	0.11	7.13		3.05
Total	**59.67**	**112.75**	**89.22**	**0.22**	**18.37**		**10.23**

Highest Emissions During Phase	**52.36**	**68.09**	**50.55**	**0.12**	**11.24**		**7.18**

Phase 2

Construction Daily			Pounds/Day				
Maximum Daily Emission Summer	**ROG**	**NOX**	**CO**	**SO2**	**PM10**	**PM2.5**	
2019	5.73	**54.61**	**42.72**	**0.12**	**10.75**		**6.73**
2020	5.12	37.59	**39.59**	0.12	6.78		2.65
2021	**27.67**	34.22	37.19	0.11	6.57		2.46
Total	**38.52**	**126.42**	**119.50**	**0.35**	**24.10**		**11.84**

ROG adjusted to reflect painting of no more than 2 bldgs on a single day of the 14 buildings.

Construction Daily				Pounds/Day			
Maximum Daily Emission Winter		**ROG**	**NOX**	**CO**	**SO2**	**PM10**	**PM2.5**
	2019	5.74	**54.63**	**39.51**	**0.11**	**10.75**	**6.73**
	2020	5.13	38.05	36.61	0.11	6.78	2.65
	2021	**27.67**	34.58	34.45	0.11	6.58	2.46
Total		**38.54**	**127.26**	**110.58**	**0.32**	**24.11**	**11.85**

ROG adjusted to reflect painting of no more than 2 bldgs on a single day of the 14 buildings.

Highest Emissions During Phase	**27.67**	**54.63**	**42.72**	**0.12**	**10.75**	**6.73**

Phase 1 Operations			Pounds/Day			
Max Daily Emissions	**ROG**	**NOX**	**CO**	**SO2**	**PM10**	**PM2.5**
Area	0.66	5.09	4.35	0.01	0.85	0.42
Energy	0.99	3.43	3.30	0.01	0.53	0.23
Total	**1.64**	**8.52**	**7.65**	**0.02**	**1.38**	**0.65**

Operations			Pounds/Day			
Max Daily Emissions	**ROG**	**NOX**	**CO**	**SO2**	**PM10**	**PM2.5**
Area	14.47	0.00	0.06	0.00	0.00	0.00
Energy	0.32	2.87	2.41	0.02	0.22	0.22
Mobile (employee and visitor)	0.01	0.01	0.08	0.00	0.02	0.00
Mobile (Truck)	0.01	0.33	0.05	0.00	0.03	0.01
Train Operations	0.06	1.01	0.06		0.04	0.04
Total	**14.86**	**4.22**	**2.66**	**0.02**	**0.31**	**0.27**
Max Daily All Phases	**16.50**	**12.74**	**10.31**	**0.04**	**1.69**	**0.92**

Mobile emissions include only emissions within 1/2 mile of the site. Employee commute trip is 14.7 miles in CalEEMod

.5 local miles/ 14.7 mile trip length 0.03

.5 local miles/50 mile trip length 0.013 Truck trips are 50 miles

CalEEMod Modeling Results

CalEEMod Output

Phase 1 Construction and Operations No HDT (Annual)

Bronco Winery Phase 1 Construction and Area

Stanislaus County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	120.00	1000sqft	2.75	120,000.00	0
Other Non-Asphalt Surfaces	3.80	Acre	3.80	165,528.00	0
Other Non-Asphalt Surfaces	10.30	Acre	10.30	448,668.00	0
Parking Lot	2.75	Acre	2.75	119,790.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Architectural Coating - Rule 4601 Architectural Coatings

Vehicle Trips - Construction, area source, and energy only

Construction Off-road Equipment Mitigation -

Area Coating - Rule 4601 Architectural Coatings compliance

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

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					
2017	0.6574	5.0912	4.3504	9.9100e-003	0.6359	0.2165	0.8524	0.2155	0.2024	0.4179	0.0000	908.7181	908.7181	0.1211	0.0000	911.7455
2018	0.9871	3.4259	3.3012	8.4800e-003	0.3949	0.1335	0.5284	0.1064	0.1256	0.2319	0.0000	774.7855	774.7855	0.0864	0.0000	776.9445
Maximum	**0.9871**	**5.0912**	**4.3504**	**9.9100e-003**	**0.6359**	**0.2165**	**0.8524**	**0.2155**	**0.2024**	**0.4179**	**0.0000**	**908.7181**	**908.7181**	**0.1211**	**0.0000**	**911.7455**

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					
2017	0.6574	5.0912	4.3504	9.9100e-003	0.5146	0.2165	0.7312	0.1585	0.2024	0.3609	0.0000	908.7178	908.7178	0.1211	0.0000	911.7451
2018	0.9871	3.4259	3.3012	8.4800e-003	0.3949	0.1335	0.5284	0.1064	0.1256	0.2319	0.0000	774.7852	774.7852	0.0864	0.0000	776.9443
Maximum	**0.9871**	**5.0912**	**4.3504**	**9.9100e-003**	**0.5146**	**0.2165**	**0.7312**	**0.1585**	**0.2024**	**0.3609**	**0.0000**	**908.7178**	**908.7178**	**0.1211**	**0.0000**	**911.7451**

	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**	**11.76**	**0.00**	**8.78**	**17.70**	**0.00**	**8.77**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Bronco Winery Phase 1 Construction and Area - Stanislaus County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2017	6-30-2017	2.0959	2.0959
2	7-1-2017	9-30-2017	1.8358	1.8358
3	10-1-2017	12-31-2017	1.8618	1.8618
4	1-1-2018	3-31-2018	1.6405	1.6405
5	4-1-2018	6-30-2018	1.6373	1.6373
6	7-1-2018	9-30-2018	1.1046	1.1046
		Highest	2.0959	2.0959

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	0.5677	1.0000e-005	1.2700e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4500e-003	2.4500e-003	1.0000e-005	0.0000	2.6100e-003
Energy	0.0117	0.1064	0.0893	6.4000e-004		8.0800e-003	8.0800e-003		8.0800e-003	8.0800e-003	0.0000	455.7741	455.7741	0.0176	5.3000e-003	457.7943
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	22.8974	0.0000	22.8974	1.3532	0.0000	56.7273
Water						0.0000	0.0000		0.0000	0.0000	8.8038	43.6819	52.4857	0.9062	0.0218	81.6253
Total	**0.5794**	**0.1064**	**0.0906**	**6.4000e-004**	**0.0000**	**8.0800e-003**	**8.0800e-003**	**0.0000**	**8.0800e-003**	**8.0800e-003**	**31.7012**	**499.4584**	**531.1596**	**2.2770**	**0.0271**	**596.1495**

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	0.5677	1.0000e-005	1.2700e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4500e-003	2.4500e-003	1.0000e-005	0.0000	2.6100e-003
Energy	0.0117	0.1064	0.0893	6.4000e-004		8.0800e-003	8.0800e-003		8.0800e-003	8.0800e-003	0.0000	455.7741	455.7741	0.0176	5.3000e-003	457.7943
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	22.8974	0.0000	22.8974	1.3532	0.0000	56.7273
Water						0.0000	0.0000		0.0000	0.0000	8.8038	43.6819	52.4857	0.9062	0.0218	81.6253
Total	**0.5794**	**0.1064**	**0.0906**	**6.4000e-004**	**0.0000**	**8.0800e-003**	**8.0800e-003**	**0.0000**	**8.0800e-003**	**8.0800e-003**	**31.7012**	**499.4584**	**531.1596**	**2.2770**	**0.0271**	**596.1495**

	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Bronco Winery Phase 1 Construction and Area - Stanislaus County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2017	4/14/2017	5	10	
2	Grading	Grading	4/15/2017	5/26/2017	5	30	
3	Building Construction	Building Construction	5/27/2017	7/20/2018	5	300	
4	Paving	Paving	7/21/2018	8/17/2018	5	20	
5	Architectural Coating	Architectural Coating	8/18/2018	9/14/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 16.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 180,000; Non-Residential Outdoor: 60,000; Striped Parking Area: 44,039 (Architectural Coating – sqft)

OffRoad Equipment

Bronco Winery Phase 1 Construction and Area - Stanislaus County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	359.00	140.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	72.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2017

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2614	0.1173	1.9000e-004		0.0144	0.0144		0.0132	0.0132	0.0000	17.6672	17.6672	5.4100e-003	0.0000	17.8025
Total	**0.0248**	**0.2614**	**0.1173**	**1.9000e-004**	**0.0903**	**0.0144**	**0.1047**	**0.0497**	**0.0132**	**0.0629**	**0.0000**	**17.6672**	**17.6672**	**5.4100e-003**	**0.0000**	**17.8025**

3.2 Site Preparation - 2017

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	7.7000e-004	6.0000e-004	6.1000e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	1.0975	1.0975	4.0000e-005	0.0000	1.0986
Total	**7.7000e-004**	**6.0000e-004**	**6.1000e-003**	**1.0000e-005**	**1.1200e-003**	**1.0000e-005**	**1.1300e-003**	**3.0000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**1.0975**	**1.0975**	**4.0000e-005**	**0.0000**	**1.0986**

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					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2614	0.1173	1.9000e-004		0.0144	0.0144		0.0132	0.0132	0.0000	17.6672	17.6672	5.4100e-003	0.0000	17.8025
Total	**0.0248**	**0.2614**	**0.1173**	**1.9000e-004**	**0.0407**	**0.0144**	**0.0550**	**0.0223**	**0.0132**	**0.0356**	**0.0000**	**17.6672**	**17.6672**	**5.4100e-003**	**0.0000**	**17.8025**

3.2 Site Preparation - 2017

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	7.7000e-004	6.0000e-004	6.1000e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	1.0975	1.0975	4.0000e-005	0.0000	1.0986
Total	**7.7000e-004**	**6.0000e-004**	**6.1000e-003**	**1.0000e-005**	**1.1200e-003**	**1.0000e-005**	**1.1300e-003**	**3.0000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**1.0975**	**1.0975**	**4.0000e-005**	**0.0000**	**1.0986**

3.3 Grading - 2017

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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0862	1.0191	0.5817	9.3000e-004		0.0461	0.0461		0.0424	0.0424	0.0000	86.3398	86.3398	0.0265	0.0000	87.0011
Total	**0.0862**	**1.0191**	**0.5817**	**9.3000e-004**	**0.1301**	**0.0461**	**0.1762**	**0.0540**	**0.0424**	**0.0964**	**0.0000**	**86.3398**	**86.3398**	**0.0265**	**0.0000**	**87.0011**

3.3 Grading - 2017

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	2.5700e-003	2.0100e-003	0.0203	4.0000e-005	3.7300e-003	3.0000e-005	3.7600e-003	9.9000e-004	3.0000e-005	1.0200e-003	0.0000	3.6583	3.6583	1.5000e-004	0.0000	3.6620
Total	**2.5700e-003**	**2.0100e-003**	**0.0203**	**4.0000e-005**	**3.7300e-003**	**3.0000e-005**	**3.7600e-003**	**9.9000e-004**	**3.0000e-005**	**1.0200e-003**	**0.0000**	**3.6583**	**3.6583**	**1.5000e-004**	**0.0000**	**3.6620**

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					0.0586	0.0000	0.0586	0.0243	0.0000	0.0243	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0862	1.0191	0.5817	9.3000e-004		0.0461	0.0461		0.0424	0.0424	0.0000	86.3397	86.3397	0.0265	0.0000	87.0010
Total	**0.0862**	**1.0191**	**0.5817**	**9.3000e-004**	**0.0586**	**0.0461**	**0.1046**	**0.0243**	**0.0424**	**0.0667**	**0.0000**	**86.3397**	**86.3397**	**0.0265**	**0.0000**	**87.0010**

3.3 Grading - 2017

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	2.5700e-003	2.0100e-003	0.0203	4.0000e-005	3.7300e-003	3.0000e-005	3.7600e-003	9.9000e-004	3.0000e-005	1.0200e-003	0.0000	3.6583	3.6583	1.5000e-004	0.0000	3.6620
Total	**2.5700e-003**	**2.0100e-003**	**0.0203**	**4.0000e-005**	**3.7300e-003**	**3.0000e-005**	**3.7600e-003**	**9.9000e-004**	**3.0000e-005**	**1.0200e-003**	**0.0000**	**3.6583**	**3.6583**	**1.5000e-004**	**0.0000**	**3.6620**

3.4 Building Construction - 2017

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	0.2414	2.0580	1.4091	2.0900e-003		0.1386	0.1386		0.1301	0.1301	0.0000	186.3820	186.3820	0.0459	0.0000	187.5299
Total	**0.2414**	**2.0580**	**1.4091**	**2.0900e-003**		**0.1386**	**0.1386**		**0.1301**	**0.1301**	**0.0000**	**186.3820**	**186.3820**	**0.0459**	**0.0000**	**187.5299**

3.4 Building Construction - 2017

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	0.0633	1.5638	0.3296	2.8900e-003	0.0650	0.0147	0.0796	0.0188	0.0140	0.0328	0.0000	274.2978	274.2978	0.0293	0.0000	275.0302
Worker	0.2384	0.1864	1.8861	3.7600e-003	0.3456	2.8000e-003	0.3484	0.0919	2.5800e-003	0.0944	0.0000	339.2756	339.2756	0.0138	0.0000	339.6211
Total	**0.3017**	**1.7502**	**2.2158**	**6.6500e-003**	**0.4106**	**0.0175**	**0.4280**	**0.1106**	**0.0166**	**0.1272**	**0.0000**	**613.5734**	**613.5734**	**0.0431**	**0.0000**	**614.6513**

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	0.2414	2.0580	1.4091	2.0900e-003		0.1386	0.1386		0.1301	0.1301	0.0000	186.3817	186.3817	0.0459	0.0000	187.5297
Total	**0.2414**	**2.0580**	**1.4091**	**2.0900e-003**		**0.1386**	**0.1386**		**0.1301**	**0.1301**	**0.0000**	**186.3817**	**186.3817**	**0.0459**	**0.0000**	**187.5297**

3.4 Building Construction - 2017

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	0.0633	1.5638	0.3296	2.8900e-003	0.0650	0.0147	0.0796	0.0188	0.0140	0.0328	0.0000	274.2978	274.2978	0.0293	0.0000	275.0302
Worker	0.2384	0.1864	1.8861	3.7600e-003	0.3456	2.8000e-003	0.3484	0.0919	2.5800e-003	0.0944	0.0000	339.2756	339.2756	0.0138	0.0000	339.6211
Total	**0.3017**	**1.7502**	**2.2158**	**6.6500e-003**	**0.4106**	**0.0175**	**0.4280**	**0.1106**	**0.0166**	**0.1272**	**0.0000**	**613.5734**	**613.5734**	**0.0431**	**0.0000**	**614.6513**

3.4 Building Construction - 2018

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	0.1943	1.6958	1.2746	1.9500e-003		0.1087	0.1087		0.1022	0.1022	0.0000	172.3813	172.3813	0.0422	0.0000	173.4371
Total	**0.1943**	**1.6958**	**1.2746**	**1.9500e-003**		**0.1087**	**0.1087**		**0.1022**	**0.1022**	**0.0000**	**172.3813**	**172.3813**	**0.0422**	**0.0000**	**173.4371**

3.4 Building Construction - 2018

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	0.0510	1.3781	0.2679	2.6900e-003	0.0608	0.0111	0.0718	0.0176	0.0106	0.0282	0.0000	255.6282	255.6282	0.0254	0.0000	256.2643
Worker	0.1976	0.1518	1.5407	3.4700e-003	0.3233	2.5500e-003	0.3259	0.0859	2.3500e-003	0.0883	0.0000	312.9504	312.9504	0.0116	0.0000	313.2399
Total	**0.2486**	**1.5298**	**1.8086**	**6.1600e-003**	**0.3841**	**0.0136**	**0.3977**	**0.1035**	**0.0130**	**0.1164**	**0.0000**	**568.5786**	**568.5786**	**0.0370**	**0.0000**	**569.5041**

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	0.1943	1.6958	1.2746	1.9500e-003		0.1087	0.1087		0.1022	0.1022	0.0000	172.3810	172.3810	0.0422	0.0000	173.4369
Total	**0.1943**	**1.6958**	**1.2746**	**1.9500e-003**		**0.1087**	**0.1087**		**0.1022**	**0.1022**	**0.0000**	**172.3810**	**172.3810**	**0.0422**	**0.0000**	**173.4369**

3.4 Building Construction - 2018

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	0.0510	1.3781	0.2679	2.6900e-003	0.0608	0.0111	0.0718	0.0176	0.0106	0.0282	0.0000	255.6282	255.6282	0.0254	0.0000	256.2643
Worker	0.1976	0.1518	1.5407	3.4700e-003	0.3233	2.5500e-003	0.3259	0.0859	2.3500e-003	0.0883	0.0000	312.9504	312.9504	0.0116	0.0000	313.2399
Total	**0.2486**	**1.5298**	**1.8086**	**6.1600e-003**	**0.3841**	**0.0136**	**0.3977**	**0.1035**	**0.0130**	**0.1164**	**0.0000**	**568.5786**	**568.5786**	**0.0370**	**0.0000**	**569.5041**

3.5 Paving - 2018

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	0.0164	0.1752	0.1480	2.3000e-004		9.5600e-003	9.5600e-003		8.8000e-003	8.8000e-003	0.0000	20.8116	20.8116	6.4800e-003	0.0000	20.9736
Paving	3.6000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0200**	**0.1752**	**0.1480**	**2.3000e-004**		**9.5600e-003**	**9.5600e-003**		**8.8000e-003**	**8.8000e-003**	**0.0000**	**20.8116**	**20.8116**	**6.4800e-003**	**0.0000**	**20.9736**

3.5 Paving - 2018

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	1.1400e-003	8.7000e-004	8.8800e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.8036	1.8036	7.0000e-005	0.0000	1.8052
Total	**1.1400e-003**	**8.7000e-004**	**8.8800e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8800e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.8036**	**1.8036**	**7.0000e-005**	**0.0000**	**1.8052**

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	0.0164	0.1752	0.1480	2.3000e-004		9.5600e-003	9.5600e-003		8.8000e-003	8.8000e-003	0.0000	20.8116	20.8116	6.4800e-003	0.0000	20.9736
Paving	3.6000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0200**	**0.1752**	**0.1480**	**2.3000e-004**		**9.5600e-003**	**9.5600e-003**		**8.8000e-003**	**8.8000e-003**	**0.0000**	**20.8116**	**20.8116**	**6.4800e-003**	**0.0000**	**20.9736**

3.5 Paving - 2018

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	1.1400e-003	8.7000e-004	8.8800e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.8036	1.8036	7.0000e-005	0.0000	1.8052
Total	**1.1400e-003**	**8.7000e-004**	**8.8800e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8800e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.8036**	**1.8036**	**7.0000e-005**	**0.0000**	**1.8052**

3.6 Architectural Coating - 2018

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	0.5146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5593
Total	**0.5176**	**0.0201**	**0.0185**	**3.0000e-005**		**1.5100e-003**	**1.5100e-003**		**1.5100e-003**	**1.5100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.4000e-004**	**0.0000**	**2.5593**

3.6 Architectural Coating - 2018

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	5.4700e-003	4.2000e-003	0.0426	1.0000e-004	8.9400e-003	7.0000e-005	9.0200e-003	2.3800e-003	7.0000e-005	2.4400e-003	0.0000	8.6572	8.6572	3.2000e-004	0.0000	8.6652
Total	**5.4700e-003**	**4.2000e-003**	**0.0426**	**1.0000e-004**	**8.9400e-003**	**7.0000e-005**	**9.0200e-003**	**2.3800e-003**	**7.0000e-005**	**2.4400e-003**	**0.0000**	**8.6572**	**8.6572**	**3.2000e-004**	**0.0000**	**8.6652**

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	0.5146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5593
Total	**0.5176**	**0.0201**	**0.0185**	**3.0000e-005**		**1.5100e-003**	**1.5100e-003**		**1.5100e-003**	**1.5100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.4000e-004**	**0.0000**	**2.5593**

3.6 Architectural Coating - 2018

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	5.4700e-003	4.2000e-003	0.0426	1.0000e-004	8.9400e-003	7.0000e-005	9.0200e-003	2.3800e-003	7.0000e-005	2.4400e-003	0.0000	8.6572	8.6572	3.2000e-004	0.0000	8.6652
Total	**5.4700e-003**	**4.2000e-003**	**0.0426**	**1.0000e-004**	**8.9400e-003**	**7.0000e-005**	**9.0200e-003**	**2.3800e-003**	**7.0000e-005**	**2.4400e-003**	**0.0000**	**8.6572**	**8.6572**	**3.2000e-004**	**0.0000**	**8.6652**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.0000	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.483771	0.038135	0.171001	0.151080	0.031874	0.006863	0.026572	0.080370	0.001802	0.001269	0.005122	0.000896	0.001247
Parking Lot	0.483771	0.038135	0.171001	0.151080	0.031874	0.006863	0.026572	0.080370	0.001802	0.001269	0.005122	0.000896	0.001247
Unrefrigerated Warehouse-No Rail	0.483771	0.038135	0.171001	0.151080	0.031874	0.006863	0.026572	0.080370	0.001802	0.001269	0.005122	0.000896	0.001247

5.0 Energy Detail

Historical Energy Use: N

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	339.9959	339.9959	0.0154	3.1800e-003	341.3282
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	339.9959	339.9959	0.0154	3.1800e-003	341.3282
NaturalGas Mitigated	0.0117	0.1064	0.0893	6.4000e-004		8.0800e-003	8.0800e-003		8.0800e-003	8.0800e-003	0.0000	115.7781	115.7781	2.2200e-003	2.1200e-003	116.4661
NaturalGas Unmitigated	0.0117	0.1064	0.0893	6.4000e-004		8.0800e-003	8.0800e-003		8.0800e-003	8.0800e-003	0.0000	115.7781	115.7781	2.2200e-003	2.1200e-003	116.4661

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					
Other Non-Asphalt Surfaces	0	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
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	2.1696e+006	0.0117	0.1064	0.0893	6.4000e-004		8.0800e-003	8.0800e-003		8.0800e-003	8.0800e-003	0.0000	115.7781	115.7781	2.2200e-003	2.1200e-003	116.4661
Total		**0.0117**	**0.1064**	**0.0893**	**6.4000e-004**		**8.0800e-003**	**8.0800e-003**		**8.0800e-003**	**8.0800e-003**	**0.0000**	**115.7781**	**115.7781**	**2.2200e-003**	**2.1200e-003**	**116.4661**

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					
Other Non-Asphalt Surfaces	0	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
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	2.1696e+006	0.0117	0.1064	0.0893	6.4000e-004		8.0800e-003	8.0800e-003		8.0800e-003	8.0800e-003	0.0000	115.7781	115.7781	2.2200e-003	2.1200e-003	116.4661
Total		**0.0117**	**0.1064**	**0.0893**	**6.4000e-004**		**8.0800e-003**	**8.0800e-003**		**8.0800e-003**	**8.0800e-003**	**0.0000**	**115.7781**	**115.7781**	**2.2200e-003**	**2.1200e-003**	**116.4661**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	41926.5	12.1969	5.5000e-004	1.1000e-004	12.2447
Unrefrigerated Warehouse-No Rail	1.1268e+006	327.7990	0.0148	3.0700e-003	329.0835
Total		**339.9959**	**0.0154**	**3.1800e-003**	**341.3281**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	41926.5	12.1969	5.5000e-004	1.1000e-004	12.2447
Unrefrigerated Warehouse-No Rail	1.1268e+006	327.7990	0.0148	3.0700e-003	329.0835
Total		**339.9959**	**0.0154**	**3.1800e-003**	**341.3281**

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	0.5677	1.0000e-005	1.2700e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4500e-003	2.4500e-003	1.0000e-005	0.0000	2.6100e-003
Unmitigated	0.5677	1.0000e-005	1.2700e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4500e-003	2.4500e-003	1.0000e-005	0.0000	2.6100e-003

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	0.0515					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5161					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.2700e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4500e-003	2.4500e-003	1.0000e-005	0.0000	2.6100e-003
Total	**0.5677**	**1.0000e-005**	**1.2700e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.4500e-003**	**2.4500e-003**	**1.0000e-005**	**0.0000**	**2.6100e-003**

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	0.0515					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5161					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.2700e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4500e-003	2.4500e-003	1.0000e-005	0.0000	2.6100e-003
Total	**0.5677**	**1.0000e-005**	**1.2700e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.4500e-003**	**2.4500e-003**	**1.0000e-005**	**0.0000**	**2.6100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	52.4857	0.9062	0.0218	81.6253
Unmitigated	52.4857	0.9062	0.0218	81.6253

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	27.75 / 0	52.4857	0.9062	0.0218	81.6253
Total		**52.4857**	**0.9062**	**0.0218**	**81.6253**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	27.75 / 0	52.4857	0.9062	0.0218	81.6253
Total		**52.4857**	**0.9062**	**0.0218**	**81.6253**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	22.8974	1.3532	0.0000	56.7273
Unmitigated	22.8974	1.3532	0.0000	56.7273

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	112.8	22.8974	1.3532	0.0000	56.7273
Total		**22.8974**	**1.3532**	**0.0000**	**56.7273**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	112.8	22.8974	1.3532	0.0000	56.7273
Total		**22.8974**	**1.3532**	**0.0000**	**56.7273**

9.0 Operational Offroad

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

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

11.0 Vegetation

CalEEMod Output

Phase 2 Construction and Operations no HDT (Annual)

Bronco Winery Later Phases Construction Area and Employee

Stanislaus County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	111.30	1000sqft	2.56	111,300.00	0
Unrefrigerated Warehouse-No Rail	510.53	1000sqft	11.72	510,529.00	0
Parking Lot	6.22	Acre	6.22	270,943.20	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Annual

Project Characteristics -

Land Use - Parking lot based on area of site minus the area of the buildings.

Construction Phase -

Trips and VMT - Demolition is for one house.

Demolition - Remove 2727 sf house with 1,790 sf patio cover

Architectural Coating - Rule 4601 Architectural Coatings

Vehicle Trips - Operational run for employees only based on increase of 30 employees for 60 trips/day.

Area Coating - Rule 4601 Architectural Coatings - use compliant coatings

Construction Off-road Equipment Mitigation -

Area Mitigation -

Fleet Mix - Employee vehicles only LDA, LDT1 and 2, MCY, and MH. Adjusted fleet mix.

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblFleetMix	HHD	0.08	0.00
tblFleetMix	LDA	0.50	0.59
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.17	0.20
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	6.0470e-003	0.00
tblFleetMix	MDV	0.14	0.16
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.8200e-003	0.00
tblFleetMix	SBUS	8.6900e-004	0.00
tblFleetMix	UBUS	1.1830e-003	0.00
tblLandUse	LandUseSquareFeet	510,530.00	510,529.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	21.00	4.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.12
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.12
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.12

2.0 Emissions Summary

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					
2019	0.2016	1.9812	1.3622	2.9200e-003	0.3084	0.0870	0.3953	0.1302	0.0805	0.2107	0.0000	263.8296	263.8296	0.0574	0.0000	265.2638
2020	0.6429	4.9699	4.8164	0.0145	0.7069	0.1620	0.8688	0.1905	0.1524	0.3429	0.0000	1,316.8385	1,316.8385	0.1333	0.0000	1,320.1715
2021	2.1501	1.6488	1.7079	5.0900e-003	0.2457	0.0527	0.2983	0.0662	0.0494	0.1156	0.0000	462.3458	462.3458	0.0499	0.0000	463.5937
Maximum	**2.1501**	**4.9699**	**4.8164**	**0.0145**	**0.7069**	**0.1620**	**0.8688**	**0.1905**	**0.1524**	**0.3429**	**0.0000**	**1,316.8385**	**1,316.8385**	**0.1333**	**0.0000**	**1,320.1715**

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					
2019	0.2016	1.9812	1.3622	2.9200e-003	0.1740	0.0870	0.2609	0.0680	0.0805	0.1486	0.0000	263.8294	263.8294	0.0574	0.0000	265.2636
2020	0.6429	4.9699	4.8164	0.0145	0.7069	0.1620	0.8688	0.1905	0.1524	0.3429	0.0000	1,316.8381	1,316.8381	0.1333	0.0000	1,320.1711
2021	2.1501	1.6488	1.7079	5.0900e-003	0.2457	0.0527	0.2983	0.0662	0.0494	0.1156	0.0000	462.3456	462.3456	0.0499	0.0000	463.5935
Maximum	**2.1501**	**4.9699**	**4.8164**	**0.0145**	**0.7069**	**0.1620**	**0.8688**	**0.1905**	**0.1524**	**0.3429**	**0.0000**	**1,316.8381**	**1,316.8381**	**0.1333**	**0.0000**	**1,320.1711**

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Annual

	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	10.66	0.00	8.60	16.06	0.00	9.28	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	10-1-2019	12-31-2019	1.7850	1.7850
2	1-1-2020	3-31-2020	1.4031	1.4031
3	4-1-2020	6-30-2020	1.3880	1.3880
4	7-1-2020	9-30-2020	1.4032	1.4032
5	10-1-2020	12-31-2020	1.4185	1.4185
6	1-1-2021	3-31-2021	1.2601	1.2601
7	4-1-2021	6-30-2021	2.5637	2.5637
		Highest	2.5637	2.5637

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	2.6396	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120
Energy	0.0576	0.5237	0.4399	3.1400e-003		0.0398	0.0398		0.0398	0.0398	0.0000	2,287.5460	2,287.5460	0.0886	0.0265	2,297.6633
Mobile	0.0240	0.0348	0.3529	9.5000e-004	0.0874	5.9000e-004	0.0880	0.0232	5.5000e-004	0.0238	0.0000	85.4590	85.4590	2.8600e-003	0.0000	85.5305
Waste						0.0000	0.0000		0.0000	0.0000	118.4270	0.0000	118.4270	6.9988	0.0000	293.3978
Water						0.0000	0.0000		0.0000	0.0000	43.7309	229.3247	273.0556	4.5020	0.1082	417.8482
Total	**2.7212**	**0.5585**	**0.7986**	**4.0900e-003**	**0.0874**	**0.0404**	**0.1279**	**0.0232**	**0.0404**	**0.0636**	**162.1578**	**2,602.3410**	**2,764.4988**	**11.5923**	**0.1347**	**3,094.4518**

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	2.6396	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120
Energy	0.0576	0.5237	0.4399	3.1400e-003		0.0398	0.0398		0.0398	0.0398	0.0000	2,287.5460	2,287.5460	0.0886	0.0265	2,297.6633
Mobile	0.0240	0.0348	0.3529	9.5000e-004	0.0874	5.9000e-004	0.0880	0.0232	5.5000e-004	0.0238	0.0000	85.4590	85.4590	2.8600e-003	0.0000	85.5305
Waste						0.0000	0.0000		0.0000	0.0000	118.4270	0.0000	118.4270	6.9988	0.0000	293.3978
Water						0.0000	0.0000		0.0000	0.0000	43.7309	229.3247	273.0556	4.5020	0.1082	417.8482
Total	**2.7212**	**0.5585**	**0.7986**	**4.0900e-003**	**0.0874**	**0.0404**	**0.1279**	**0.0232**	**0.0404**	**0.0636**	**162.1578**	**2,602.3410**	**2,764.4988**	**11.5923**	**0.1347**	**3,094.4518**

	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2019	9/27/2019	5	20	
2	Site Preparation	Site Preparation	10/1/2019	10/14/2019	5	10	
3	Grading	Grading	10/15/2019	12/2/2019	5	35	
4	Building Construction	Building Construction	12/3/2019	5/3/2021	5	370	
5	Paving	Paving	5/4/2021	5/31/2021	5	20	
6	Architectural Coating	Architectural Coating	6/1/2021	6/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 6.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 932,744; Non-Residential Outdoor: 310,915; Striped Parking Area: 16,257 (Architectural Coating – sqft)

OffRoad Equipment

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Annual

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

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Annual

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	6	15.00	0.00	4.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	364.00	146.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	73.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019

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					2.2200e-003	0.0000	2.2200e-003	3.4000e-004	0.0000	3.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**	**2.2200e-003**	**0.0180**	**0.0202**	**3.4000e-004**	**0.0167**	**0.0170**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8672**

3.2 Demolition - 2019

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	2.0000e-005	5.9000e-004	8.0000e-005	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1534	0.1534	1.0000e-005	0.0000	0.1536
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	1.0300e-003	7.7000e-004	7.8500e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.7516	1.7516	6.0000e-005	0.0000	1.7531
Total	**1.0500e-003**	**1.3600e-003**	**7.9300e-003**	**2.0000e-005**	**1.8900e-003**	**1.0000e-005**	**1.9200e-003**	**5.1000e-004**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**1.9050**	**1.9050**	**7.0000e-005**	**0.0000**	**1.9067**

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					1.0000e-003	0.0000	1.0000e-003	1.5000e-004	0.0000	1.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**	**1.0000e-003**	**0.0180**	**0.0190**	**1.5000e-004**	**0.0167**	**0.0169**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8671**

3.2 Demolition - 2019

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	2.0000e-005	5.9000e-004	8.0000e-005	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1534	0.1534	1.0000e-005	0.0000	0.1536
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	1.0300e-003	7.7000e-004	7.8500e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.7516	1.7516	6.0000e-005	0.0000	1.7531
Total	**1.0500e-003**	**1.3600e-003**	**7.9300e-003**	**2.0000e-005**	**1.8900e-003**	**1.0000e-005**	**1.9200e-003**	**5.1000e-004**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**1.9050**	**1.9050**	**7.0000e-005**	**0.0000**	**1.9067**

3.3 Site Preparation - 2019

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

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	6.2000e-004	4.6000e-004	4.7100e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0510	1.0510	4.0000e-005	0.0000	1.0519
Total	**6.2000e-004**	**4.6000e-004**	**4.7100e-003**	**1.0000e-005**	**1.1200e-003**	**1.0000e-005**	**1.1300e-003**	**3.0000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0510**	**1.0510**	**4.0000e-005**	**0.0000**	**1.0519**

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					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0407**	**0.0120**	**0.0526**	**0.0223**	**0.0110**	**0.0333**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

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	6.2000e-004	4.6000e-004	4.7100e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0510	1.0510	4.0000e-005	0.0000	1.0519
Total	**6.2000e-004**	**4.6000e-004**	**4.7100e-003**	**1.0000e-005**	**1.1200e-003**	**1.0000e-005**	**1.1300e-003**	**3.0000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0510**	**1.0510**	**4.0000e-005**	**0.0000**	**1.0519**

3.4 Grading - 2019

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					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0829	0.9541	0.5841	1.0900e-003		0.0417	0.0417		0.0384	0.0384	0.0000	97.4773	97.4773	0.0308	0.0000	98.2483
Total	**0.0829**	**0.9541**	**0.5841**	**1.0900e-003**	**0.1518**	**0.0417**	**0.1935**	**0.0629**	**0.0384**	**0.1013**	**0.0000**	**97.4773**	**97.4773**	**0.0308**	**0.0000**	**98.2483**

3.4 Grading - 2019

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	2.4000e-003	1.7900e-003	0.0183	5.0000e-005	4.3500e-003	3.0000e-005	4.3800e-003	1.1600e-003	3.0000e-005	1.1900e-003	0.0000	4.0871	4.0871	1.4000e-004	0.0000	4.0905
Total	**2.4000e-003**	**1.7900e-003**	**0.0183**	**5.0000e-005**	**4.3500e-003**	**3.0000e-005**	**4.3800e-003**	**1.1600e-003**	**3.0000e-005**	**1.1900e-003**	**0.0000**	**4.0871**	**4.0871**	**1.4000e-004**	**0.0000**	**4.0905**

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					0.0683	0.0000	0.0683	0.0283	0.0000	0.0283	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0829	0.9541	0.5841	1.0900e-003		0.0417	0.0417		0.0384	0.0384	0.0000	97.4772	97.4772	0.0308	0.0000	98.2482
Total	**0.0829**	**0.9541**	**0.5841**	**1.0900e-003**	**0.0683**	**0.0417**	**0.1100**	**0.0283**	**0.0384**	**0.0667**	**0.0000**	**97.4772**	**97.4772**	**0.0308**	**0.0000**	**98.2482**

3.4 Grading - 2019

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	2.4000e-003	1.7900e-003	0.0183	5.0000e-005	4.3500e-003	3.0000e-005	4.3800e-003	1.1600e-003	3.0000e-005	1.1900e-003	0.0000	4.0871	4.0871	1.4000e-004	0.0000	4.0905
Total	**2.4000e-003**	**1.7900e-003**	**0.0183**	**5.0000e-005**	**4.3500e-003**	**3.0000e-005**	**4.3800e-003**	**1.1600e-003**	**3.0000e-005**	**1.1900e-003**	**0.0000**	**4.0871**	**4.0871**	**1.4000e-004**	**0.0000**	**4.0905**

3.5 Building Construction - 2019

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	0.0248	0.2213	0.1802	2.8000e-004		0.0135	0.0135		0.0127	0.0127	0.0000	24.6859	24.6859	6.0100e-003	0.0000	24.8363
Total	**0.0248**	**0.2213**	**0.1802**	**2.8000e-004**		**0.0135**	**0.0135**		**0.0127**	**0.0127**	**0.0000**	**24.6859**	**24.6859**	**6.0100e-003**	**0.0000**	**24.8363**

3.5 Building Construction - 2019

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	6.7900e-003	0.1969	0.0358	4.0000e-004	9.1800e-003	1.4100e-003	0.0106	2.6500e-003	1.3500e-003	4.0000e-003	0.0000	38.2816	38.2816	3.7300e-003	0.0000	38.3749
Worker	0.0262	0.0195	0.2001	4.9000e-004	0.0475	3.6000e-004	0.0478	0.0126	3.3000e-004	0.0130	0.0000	44.6311	44.6311	1.5000e-003	0.0000	44.6686
Total	**0.0330**	**0.2164**	**0.2360**	**8.9000e-004**	**0.0567**	**1.7700e-003**	**0.0584**	**0.0153**	**1.6800e-003**	**0.0170**	**0.0000**	**82.9127**	**82.9127**	**5.2300e-003**	**0.0000**	**83.0434**

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	0.0248	0.2213	0.1802	2.8000e-004		0.0135	0.0135		0.0127	0.0127	0.0000	24.6859	24.6859	6.0100e-003	0.0000	24.8363
Total	**0.0248**	**0.2213**	**0.1802**	**2.8000e-004**		**0.0135**	**0.0135**		**0.0127**	**0.0127**	**0.0000**	**24.6859**	**24.6859**	**6.0100e-003**	**0.0000**	**24.8363**

3.5 Building Construction - 2019

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	6.7900e-003	0.1969	0.0358	4.0000e-004	9.1800e-003	1.4100e-003	0.0106	2.6500e-003	1.3500e-003	4.0000e-003	0.0000	38.2816	38.2816	3.7300e-003	0.0000	38.3749
Worker	0.0262	0.0195	0.2001	4.9000e-004	0.0475	3.6000e-004	0.0478	0.0126	3.3000e-004	0.0130	0.0000	44.6311	44.6311	1.5000e-003	0.0000	44.6686
Total	**0.0330**	**0.2164**	**0.2360**	**8.9000e-004**	**0.0567**	**1.7700e-003**	**0.0584**	**0.0153**	**1.6800e-003**	**0.0170**	**0.0000**	**82.9127**	**82.9127**	**5.2300e-003**	**0.0000**	**83.0434**

3.5 Building Construction - 2020

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	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4091**	**303.4091**	**0.0740**	**0.0000**	**305.2596**

3.5 Building Construction - 2020

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	0.0677	2.2419	0.3836	4.9800e-003	0.1145	0.0113	0.1258	0.0331	0.0108	0.0439	0.0000	473.6485	473.6485	0.0430	0.0000	474.7233
Worker	0.2974	0.2147	2.2257	5.9800e-003	0.5924	4.3700e-003	0.5968	0.1574	4.0200e-003	0.1615	0.0000	539.7809	539.7809	0.0163	0.0000	540.1886
Total	**0.3652**	**2.4566**	**2.6093**	**0.0110**	**0.7068**	**0.0157**	**0.7225**	**0.1905**	**0.0148**	**0.2053**	**0.0000**	**1,013.4294**	**1,013.4294**	**0.0593**	**0.0000**	**1,014.9119**

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	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4087**	**303.4087**	**0.0740**	**0.0000**	**305.2592**

3.5 Building Construction - 2020

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	0.0677	2.2419	0.3836	4.9800e-003	0.1145	0.0113	0.1258	0.0331	0.0108	0.0439	0.0000	473.6485	473.6485	0.0430	0.0000	474.7233
Worker	0.2974	0.2147	2.2257	5.9800e-003	0.5924	4.3700e-003	0.5968	0.1574	4.0200e-003	0.1615	0.0000	539.7809	539.7809	0.0163	0.0000	540.1886
Total	**0.3652**	**2.4566**	**2.6093**	**0.0110**	**0.7068**	**0.0157**	**0.7225**	**0.1905**	**0.0148**	**0.2053**	**0.0000**	**1,013.4294**	**1,013.4294**	**0.0593**	**0.0000**	**1,014.9119**

3.5 Building Construction - 2021

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	0.0827	0.7583	0.7210	1.1700e-003		0.0417	0.0417		0.0392	0.0392	0.0000	100.7622	100.7622	0.0243	0.0000	101.3700
Total	**0.0827**	**0.7583**	**0.7210**	**1.1700e-003**		**0.0417**	**0.0417**		**0.0392**	**0.0392**	**0.0000**	**100.7622**	**100.7622**	**0.0243**	**0.0000**	**101.3700**

3.5 Building Construction - 2021

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	0.0183	0.6789	0.1107	1.6400e-003	0.0380	1.7400e-003	0.0398	0.0110	1.6700e-003	0.0126	0.0000	155.7902	155.7902	0.0138	0.0000	156.1356
Worker	0.0912	0.0636	0.6740	1.9200e-003	0.1967	1.4100e-003	0.1981	0.0523	1.3000e-003	0.0536	0.0000	173.5702	173.5702	4.8700e-003	0.0000	173.6919
Total	**0.1096**	**0.7425**	**0.7848**	**3.5600e-003**	**0.2347**	**3.1500e-003**	**0.2379**	**0.0633**	**2.9700e-003**	**0.0662**	**0.0000**	**329.3604**	**329.3604**	**0.0187**	**0.0000**	**329.8275**

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	0.0827	0.7583	0.7210	1.1700e-003		0.0417	0.0417		0.0392	0.0392	0.0000	100.7621	100.7621	0.0243	0.0000	101.3698
Total	**0.0827**	**0.7583**	**0.7210**	**1.1700e-003**		**0.0417**	**0.0417**		**0.0392**	**0.0392**	**0.0000**	**100.7621**	**100.7621**	**0.0243**	**0.0000**	**101.3698**

3.5 Building Construction - 2021

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	0.0183	0.6789	0.1107	1.6400e-003	0.0380	1.7400e-003	0.0398	0.0110	1.6700e-003	0.0126	0.0000	155.7902	155.7902	0.0138	0.0000	156.1356
Worker	0.0912	0.0636	0.6740	1.9200e-003	0.1967	1.4100e-003	0.1981	0.0523	1.3000e-003	0.0536	0.0000	173.5702	173.5702	4.8700e-003	0.0000	173.6919
Total	**0.1096**	**0.7425**	**0.7848**	**3.5600e-003**	**0.2347**	**3.1500e-003**	**0.2379**	**0.0633**	**2.9700e-003**	**0.0662**	**0.0000**	**329.3604**	**329.3604**	**0.0187**	**0.0000**	**329.8275**

3.6 Paving - 2021

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	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	8.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0207**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.6 Paving - 2021

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	8.6000e-004	6.0000e-004	6.3900e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.6443	1.6443	5.0000e-005	0.0000	1.6454
Total	**8.6000e-004**	**6.0000e-004**	**6.3900e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8800e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.6443**	**1.6443**	**5.0000e-005**	**0.0000**	**1.6454**

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	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	8.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0207**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.6 Paving - 2021

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	8.6000e-004	6.0000e-004	6.3900e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.6443	1.6443	5.0000e-005	0.0000	1.6454
Total	**8.6000e-004**	**6.0000e-004**	**6.3900e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8800e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.6443**	**1.6443**	**5.0000e-005**	**0.0000**	**1.6454**

3.7 Architectural Coating - 2021

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	1.9299					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**1.9321**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.7 Architectural Coating - 2021

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	4.2100e-003	2.9300e-003	0.0311	9.0000e-005	9.0700e-003	6.0000e-005	9.1300e-003	2.4100e-003	6.0000e-005	2.4700e-003	0.0000	8.0022	8.0022	2.2000e-004	0.0000	8.0078
Total	**4.2100e-003**	**2.9300e-003**	**0.0311**	**9.0000e-005**	**9.0700e-003**	**6.0000e-005**	**9.1300e-003**	**2.4100e-003**	**6.0000e-005**	**2.4700e-003**	**0.0000**	**8.0022**	**8.0022**	**2.2000e-004**	**0.0000**	**8.0078**

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	1.9299					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**1.9321**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.7 Architectural Coating - 2021

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	4.2100e-003	2.9300e-003	0.0311	9.0000e-005	9.0700e-003	6.0000e-005	9.1300e-003	2.4100e-003	6.0000e-005	2.4700e-003	0.0000	8.0022	8.0022	2.2000e-004	0.0000	8.0078
Total	**4.2100e-003**	**2.9300e-003**	**0.0311**	**9.0000e-005**	**9.0700e-003**	**6.0000e-005**	**9.1300e-003**	**2.4100e-003**	**6.0000e-005**	**2.4700e-003**	**0.0000**	**8.0022**	**8.0022**	**2.2000e-004**	**0.0000**	**8.0078**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.0240	0.0348	0.3529	9.5000e-004	0.0874	5.9000e-004	0.0880	0.0232	5.5000e-004	0.0238	0.0000	85.4590	85.4590	2.8600e-003	0.0000	85.5305
Unmitigated	0.0240	0.0348	0.3529	9.5000e-004	0.0874	5.9000e-004	0.0880	0.0232	5.5000e-004	0.0238	0.0000	85.4590	85.4590	2.8600e-003	0.0000	85.5305

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	61.26	61.26	61.26	236,690	236,690
Total	61.26	61.26	61.26	236,690	236,690

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
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067
Parking Lot	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067
Unrefrigerated Warehouse-No Rail	0.589760	0.041511	0.202690	0.160108	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004865	0.000000	0.001067

5.0 Energy Detail

Historical Energy Use: N

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	1,717.4696	1,717.4696	0.0777	0.0161	1,724.1991
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,717.4696	1,717.4696	0.0777	0.0161	1,724.1991
NaturalGas Mitigated	0.0576	0.5237	0.4399	3.1400e-003		0.0398	0.0398		0.0398	0.0398	0.0000	570.0765	570.0765	0.0109	0.0105	573.4641
NaturalGas Unmitigated	0.0576	0.5237	0.4399	3.1400e-003		0.0398	0.0398		0.0398	0.0398	0.0000	570.0765	570.0765	0.0109	0.0105	573.4641

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					
General Office Building	1.45246e+006	7.8300e-003	0.0712	0.0598	4.3000e-004		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	77.5091	77.5091	1.4900e-003	1.4200e-003	77.9697
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	9.23036e+006	0.0498	0.4525	0.3801	2.7100e-003		0.0344	0.0344		0.0344	0.0344	0.0000	492.5674	492.5674	9.4400e-003	9.0300e-003	495.4945
Total		**0.0576**	**0.5237**	**0.4399**	**3.1400e-003**		**0.0398**	**0.0398**		**0.0398**	**0.0398**	**0.0000**	**570.0765**	**570.0765**	**0.0109**	**0.0105**	**573.4641**

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					
General Office Building	1.45246e+006	7.8300e-003	0.0712	0.0598	4.3000e-004		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	77.5091	77.5091	1.4900e-003	1.4200e-003	77.9697
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	9.23036e+006	0.0498	0.4525	0.3801	2.7100e-003		0.0344	0.0344		0.0344	0.0344	0.0000	492.5674	492.5674	9.4400e-003	9.0300e-003	495.4945
Total		**0.0576**	**0.5237**	**0.4399**	**3.1400e-003**		**0.0398**	**0.0398**		**0.0398**	**0.0398**	**0.0000**	**570.0765**	**570.0765**	**0.0109**	**0.0105**	**573.4641**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.01506e+006	295.2914	0.0134	2.7600e-003	296.4485
Parking Lot	94830.1	27.5872	1.2500e-003	2.6000e-004	27.6953
Unrefrigerated Warehouse-No Rail	4.79387e+006	1,394.5910	0.0631	0.0131	1,400.0554
Total		**1,717.4696**	**0.0777**	**0.0161**	**1,724.1991**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.01506e+006	295.2914	0.0134	2.7600e-003	296.4485
Parking Lot	94830.1	27.5872	1.2500e-003	2.6000e-004	27.6953
Unrefrigerated Warehouse-No Rail	4.79387e+006	1,394.5910	0.0631	0.0131	1,400.0554
Total		**1,717.4696**	**0.0777**	**0.0161**	**1,724.1991**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	2.6396	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120
Unmitigated	2.6396	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120

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	0.1930					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4461					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.5000e-004	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120
Total	**2.6396**	**5.0000e-005**	**5.8100e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0112**	**0.0112**	**3.0000e-005**	**0.0000**	**0.0120**

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	0.1930					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4461					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.5000e-004	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120
Total	**2.6396**	**5.0000e-005**	**5.8100e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0112**	**0.0112**	**3.0000e-005**	**0.0000**	**0.0120**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	273.0556	4.5020	0.1082	417.8482
Unmitigated	273.0556	4.5020	0.1082	417.8482

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	19.7818 / 12.1243	49.7596	0.6466	0.0156	70.5803
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	118.06 / 0	223.2960	3.8554	0.0926	347.2679
Total		**273.0556**	**4.5020**	**0.1082**	**417.8482**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	19.7818 / 12.1243	49.7596	0.6466	0.0156	70.5803
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	118.06 / 0	223.2960	3.8554	0.0926	347.2679
Total		**273.0556**	**4.5020**	**0.1082**	**417.8482**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	118.4270	6.9988	0.0000	293.3978
Unmitigated	118.4270	6.9988	0.0000	293.3978

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	103.51	21.0116	1.2418	0.0000	52.0553
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	479.9	97.4154	5.7571	0.0000	241.3424
Total		**118.4270**	**6.9988**	**0.0000**	**293.3978**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	103.51	21.0116	1.2418	0.0000	52.0553
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	479.9	97.4154	5.7571	0.0000	241.3424
Total		**118.4270**	**6.9988**	**0.0000**	**293.3978**

9.0 Operational Offroad

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

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

11.0 Vegetation

CalEEMod Output

All Phases Operations HDT Only (Annual)

Bronco Winery Expansion Truck Only

Stanislaus County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	111.30	1000sqft	2.56	111,300.00	0
Unrefrigerated Warehouse-No Rail	510.53	1000sqft	11.72	510,529.00	0
Parking Lot	6.22	Acre	6.22	270,943.20	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Parking lot based on area of site minus the area of the buildings.

Construction Phase -

Demolition - Remove 2727 sf house with 1,790 sf patio cover

Architectural Coating - Rule 4601 Architectural Coatings

Fleet Mix - Truck Only Run

Vehicle Trips - 50 new truck trips per day with expansion Trip length 50 miles Air District default value

Bronco Winery Expansion Truck Only - Stanislaus County, Annual

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.08	0.00
tblFleetMix	HHD	0.08	1.00
tblFleetMix	LDA	0.50	0.00
tblFleetMix	LDA	0.50	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	6.0470e-003	0.00
tblFleetMix	LHD2	6.0470e-003	0.00
tblFleetMix	MCY	4.8650e-003	0.00
tblFleetMix	MCY	4.8650e-003	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	1.0670e-003	0.00
tblFleetMix	MH	1.0670e-003	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.8200e-003	0.00
tblFleetMix	OBUS	1.8200e-003	0.00
tblFleetMix	SBUS	8.6900e-004	0.00
tblFleetMix	SBUS	8.6900e-004	0.00
tblFleetMix	UBUS	1.1830e-003	0.00
tblFleetMix	UBUS	1.1830e-003	0.00

tblLandUse	LandUseSquareFeet	510,530.00	510,529.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	50.00
tblVehicleTrips	CNW_TL	6.60	50.00
tblVehicleTrips	CW_TL	14.70	50.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.10
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.10
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.10

2.0 Emissions Summary

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					
2019	0.2016	1.9837	1.3625	2.9300e-003	0.3085	0.0870	0.3955	0.1302	0.0805	0.2107	0.0000	264.4815	264.4815	0.0574	0.0000	265.9167
2020	0.6429	4.9699	4.8164	0.0145	0.7069	0.1620	0.8688	0.1905	0.1524	0.3429	0.0000	1,316.8385	1,316.8385	0.1333	0.0000	1,320.1715
2021	4.6000	1.6488	1.7079	5.0900e-003	0.2457	0.0527	0.2983	0.0662	0.0494	0.1156	0.0000	462.3458	462.3458	0.0499	0.0000	463.5937
Maximum	**4.6000**	**4.9699**	**4.8164**	**0.0145**	**0.7069**	**0.1620**	**0.8688**	**0.1905**	**0.1524**	**0.3429**	**0.0000**	**1,316.8385**	**1,316.8385**	**0.1333**	**0.0000**	**1,320.1715**

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					
2019	0.2016	1.9837	1.3625	2.9300e-003	0.3085	0.0870	0.3955	0.1302	0.0805	0.2107	0.0000	264.4813	264.4813	0.0574	0.0000	265.9165
2020	0.6429	4.9699	4.8164	0.0145	0.7069	0.1620	0.8688	0.1905	0.1524	0.3429	0.0000	1,316.8381	1,316.8381	0.1333	0.0000	',320.1711
2021	4.6000	1.6488	1.7079	5.0900e-003	0.2457	0.0527	0.2983	0.0662	0.0494	0.1156	0.0000	462.3456	462.3456	0.0499	0.0000	463.5935
Maximum	**4.6000**	**4.9699**	**4.8164**	**0.0145**	**0.7069**	**0.1620**	**0.8688**	**0.1905**	**0.1524**	**0.3429**	**0.0000**	**1,316.8381**	**1,316.8381**	**0.1333**	**0.0000**	**1,320.1711**

Bronco Winery Expansion Truck Only - Stanislaus County, Annual

	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	0.00	0.00	0.00	0.00	0.00	0.00	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	10-1-2019	12-31-2019	1.7850	1.7850
2	1-1-2020	3-31-2020	1.4031	1.4031
3	4-1-2020	6-30-2020	1.3880	1.3880
4	7-1-2020	9-30-2020	1.4032	1.4032
5	10-1-2020	12-31-2020	1.4185	1.4185
6	1-1-2021	3-31-2021	1.2601	1.2601
7	4-1-2021	6-30-2021	5.0136	5.0136
		Highest	5.0136	5.0136

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	2.8846	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120
Energy	0.0576	0.5237	0.4399	3.1400e-003		0.0398	0.0398		0.0398	0.0398	0.0000	2,287.5460	2,287.5460	0.0886	0.0265	2,297.6633
Mobile	0.1552	5.0017	0.7763	0.0168	0.3956	0.0208	0.4164	0.1086	0.0199	0.1285	0.0000	1,595.4042	1,595.4042	0.0510	0.0000	1,596.6784
Waste						0.0000	0.0000		0.0000	0.0000	118.4270	0.0000	118.4270	6.9988	0.0000	293.3978
Water						0.0000	0.0000		0.0000	0.0000	43.7309	229.3247	273.0556	4.5020	0.1082	417.8482
Total	**3.0974**	**5.5254**	**1.2220**	**0.0199**	**0.3956**	**0.0606**	**0.4562**	**0.1086**	**0.0597**	**0.1683**	**162.1578**	**4,112.2861**	**4,274.4439**	**11.6404**	**0.1347**	**4,605.5996**

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	2.8846	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120
Energy	0.0576	0.5237	0.4399	3.1400e-003		0.0398	0.0398		0.0398	0.0398	0.0000	2,287.5460	2,287.5460	0.0886	0.0265	2,297.6633
Mobile	0.1552	5.0017	0.7763	0.0168	0.3956	0.0208	0.4164	0.1086	0.0199	0.1285	0.0000	1,595.4042	1,595.4042	0.0510	0.0000	1,596.6784
Waste						0.0000	0.0000		0.0000	0.0000	118.4270	0.0000	118.4270	6.9988	0.0000	293.3978
Water						0.0000	0.0000		0.0000	0.0000	43.7309	229.3247	273.0556	4.5020	0.1082	417.8482
Total	**3.0974**	**5.5254**	**1.2220**	**0.0199**	**0.3956**	**0.0606**	**0.4562**	**0.1086**	**0.0597**	**0.1683**	**162.1578**	**4,112.2861**	**4,274.4439**	**11.6404**	**0.1347**	**4,605.5996**

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	9/1/2019	9/27/2019	5	20	
2	Site Preparation	Site Preparation	10/1/2019	10/14/2019	5	10	
3	Grading	Grading	10/15/2019	12/2/2019	5	35	
4	Building Construction	Building Construction	12/3/2019	5/3/2021	5	370	
5	Paving	Paving	5/4/2021	5/31/2021	5	20	
6	Architectural Coating	Architectural Coating	6/1/2021	6/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 6.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 932,744; Non-Residential Outdoor: 310,915; Striped Parking Area: 16,257 (Architectural Coating – sqft)

OffRoad Equipment

Bronco Winery Expansion Truck Only - Stanislaus County, Annual

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 Ccunt	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	6	15.00	0.00	21.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	364.00	146.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	73.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NCx	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					2.2200e-003	0.0000	2.2200e-003	3.4000e-004	0.0000	3.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**	**2.2200e-003**	**0.0180**	**0.0202**	**3.4000e-004**	**0.0167**	**0.0170**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8672**

3.2 Demolition - 2019

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	9.0000e-005	3.1200e-003	4.4000e-004	1.0000e-005	1.8000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.8053	0.8053	5.0000e-005	0.0000	0.8066
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	1.0300e-003	7.7000e-004	7.8500e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.7516	1.7516	6.0000e-005	0.0000	1.7531
Total	**1.1200e-003**	**3.8900e-003**	**8.2900e-003**	**3.0000e-005**	**2.0400e-003**	**2.0000e-005**	**2.0700e-003**	**5.5000e-004**	**2.0000e-005**	**5.7000e-004**	**0.0000**	**2.5569**	**2.5569**	**1.1000e-004**	**0.0000**	**2.5597**

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					2.2200e-003	0.0000	2.2200e-003	3.4000e-004	0.0000	3.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**	**2.2200e-003**	**0.0180**	**0.0202**	**3.4000e-004**	**0.0167**	**0.0170**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8671**

3.2 Demolition - 2019

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	9.0000e-005	3.1200e-003	4.4000e-004	1.0000e-005	1.8000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.8053	0.8053	5.0000e-005	0.0000	0.8066
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	1.0300e-003	7.7000e-004	7.8500e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.7516	1.7516	6.0000e-005	0.0000	1.7531
Total	**1.1200e-003**	**3.8900e-003**	**8.2900e-003**	**3.0000e-005**	**2.0400e-003**	**2.0000e-005**	**2.0700e-003**	**5.5000e-004**	**2.0000e-005**	**5.7000e-004**	**0.0000**	**2.5569**	**2.5569**	**1.1000e-004**	**0.0000**	**2.5597**

3.3 Site Preparation - 2019

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

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	6.2000e-004	4.6000e-004	4.7100e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0510	1.0510	4.0000e-005	0.0000	1.0519
Total	**6.2000e-004**	**4.6000e-004**	**4.7100e-003**	**1.0000e-005**	**1.1200e-003**	**1.0000e-005**	**1.1300e-003**	**3.0000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0510**	**1.0510**	**4.0000e-005**	**0.0000**	**1.0519**

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

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	6.2000e-004	4.6000e-004	4.7100e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0510	1.0510	4.0000e-005	0.0000	1.0519
Total	**6.2000e-004**	**4.6000e-004**	**4.7100e-003**	**1.0000e-005**	**1.1200e-003**	**1.0000e-005**	**1.1300e-003**	**3.0000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0510**	**1.0510**	**4.0000e-005**	**0.0000**	**1.0519**

3.4 Grading - 2019

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					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0829	0.9541	0.5841	1.0900e-003		0.0417	0.0417		0.0384	0.0384	0.0000	97.4773	97.4773	0.0308	0.0000	98.2433
Total	**0.0829**	**0.9541**	**0.5841**	**1.0900e-003**	**0.1518**	**0.0417**	**0.1935**	**0.0629**	**0.0384**	**0.1013**	**0.0000**	**97.4773**	**97.4773**	**0.0308**	**0.0000**	**98.2433**

3.4 Grading - 2019

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	2.4000e-003	1.7900e-003	0.0183	5.0000e-005	4.3500e-003	3.0000e-005	4.3800e-003	1.1600e-003	3.0000e-005	1.1900e-003	0.0000	4.0871	4.0871	1.4000e-004	0.0000	4.0905
Total	**2.4000e-003**	**1.7900e-003**	**0.0183**	**5.0000e-005**	**4.3500e-003**	**3.0000e-005**	**4.3800e-003**	**1.1600e-003**	**3.0000e-005**	**1.1900e-003**	**0.0000**	**4.0871**	**4.0871**	**1.4000e-004**	**0.0000**	**4.0905**

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					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0829	0.9541	0.5841	1.0900e-003		0.0417	0.0417		0.0384	0.0384	0.0000	97.4772	97.4772	0.0308	0.0000	98.2482
Total	**0.0829**	**0.9541**	**0.5841**	**1.0900e-003**	**0.1518**	**0.0417**	**0.1935**	**0.0629**	**0.0384**	**0.1013**	**0.0000**	**97.4772**	**97.4772**	**0.0308**	**0.0000**	**98.2482**

3.4 Grading - 2019

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	2.4000e-003	1.7900e-003	0.0183	5.0000e-005	4.3500e-003	3.0000e-005	4.3800e-003	1.1600e-003	3.0000e-005	1.1900e-003	0.0000	4.0871	4.0871	1.4000e-004	0.0000	4.0905
Total	**2.4000e-003**	**1.7900e-003**	**0.0183**	**5.0000e-005**	**4.3500e-003**	**3.0000e-005**	**4.3800e-003**	**1.1600e-003**	**3.0000e-005**	**1.1900e-003**	**0.0000**	**4.0871**	**4.0871**	**1.4000e-004**	**0.0000**	**4.0905**

3.5 Building Construction - 2019

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	0.0248	0.2213	0.1802	2.8000e-004		0.0135	0.0135		0.0127	0.0127	0.0000	24.6859	24.6859	6.0100e-003	0.0000	24.8363
Total	**0.0248**	**0.2213**	**0.1802**	**2.8000e-004**		**0.0135**	**0.0135**		**0.0127**	**0.0127**	**0.0000**	**24.6859**	**24.6859**	**6.0100e-003**	**0.0000**	**24.8363**

3.5 Building Construction - 2019

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	6.7900e-003	0.1969	0.0358	4.0000e-004	9.1800e-003	1.4100e-003	0.0106	2.6500e-003	1.3500e-003	4.0000e-003	0.0000	38.2816	38.2816	3.7300e-003	0.0000	38.3749
Worker	0.0262	0.0195	0.2001	4.9000e-004	0.0475	3.6000e-004	0.0478	0.0126	3.3000e-004	0.0130	0.0000	44.6311	44.6311	1.5000e-003	0.0000	44.6686
Total	**0.0330**	**0.2164**	**0.2360**	**8.9000e-004**	**0.0567**	**1.7700e-003**	**0.0584**	**0.0153**	**1.6800e-003**	**0.0170**	**0.0000**	**82.9127**	**82.9127**	**5.2300e-003**	**0.0000**	**83.0434**

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	0.0248	0.2213	0.1802	2.8000e-004		0.0135	0.0135		0.0127	0.0127	0.0000	24.6859	24.6859	6.0100e-003	0.0000	24.8363
Total	**0.0248**	**0.2213**	**0.1802**	**2.8000e-004**		**0.0135**	**0.0135**		**0.0127**	**0.0127**	**0.0000**	**24.6859**	**24.6859**	**6.0100e-003**	**0.0000**	**24.8363**

3.5 Building Construction - 2019

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	6.7900e-003	0.1969	0.0358	4.0000e-004	9.1800e-003	1.4100e-003	0.0106	2.6500e-003	1.3500e-003	4.0000e-003	0.0000	38.2816	38.2816	3.7300e-003	0.0000	38.3749
Worker	0.0262	0.0195	0.2001	4.9000e-004	0.0475	3.6000e-004	0.0478	0.0126	3.3000e-004	0.0130	0.0000	44.6311	44.6311	1.5000e-003	0.0000	44.6686
Total	**0.0330**	**0.2164**	**0.2360**	**8.9000e-004**	**0.0567**	**1.7700e-003**	**0.0584**	**0.0153**	**1.6800e-003**	**0.0170**	**0.0000**	**82.9127**	**82.9127**	**5.2300e-003**	**0.0000**	**83.0434**

3.5 Building Construction - 2020

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	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4091**	**303.4091**	**0.0740**	**0.0000**	**305.2596**

3.5 Building Construction - 2020

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	0.0677	2.2419	0.3836	4.9800e-003	0.1145	0.0113	0.1258	0.0331	0.0108	0.0439	0.0000	473.6485	473.6485	0.0430	0.0000	474.7233
Worker	0.2974	0.2147	2.2257	5.9800e-003	0.5924	4.3700e-003	0.5968	0.1574	4.0200e-003	0.1615	0.0000	539.7809	539.7809	0.0163	0.0000	540.1886
Total	**0.3652**	**2.4566**	**2.6093**	**0.0110**	**0.7068**	**0.0157**	**0.7225**	**0.1905**	**0.0148**	**0.2053**	**0.0000**	**1,013.4294**	**1,013.4294**	**0.0593**	**0.0000**	**1,014.9119**

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	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4087**	**303.4087**	**0.0740**	**0.0000**	**305.2592**

3.5 Building Construction - 2020

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	0.0677	2.2419	0.3836	4.9800e-003	0.1145	0.0113	0.1258	0.0331	0.0108	0.0439	0.0000	473.6485	473.6485	0.0430	0.0000	474.7233
Worker	0.2974	0.2147	2.2257	5.9800e-003	0.5924	4.3700e-003	0.5968	0.1574	4.0200e-003	0.1615	0.0000	539.7809	539.7809	0.0163	0.0000	540.1886
Total	**0.3652**	**2.4566**	**2.6093**	**0.0110**	**0.7068**	**0.0157**	**0.7225**	**0.1905**	**0.0148**	**0.2053**	**0.0000**	**1,013.4294**	**1,013.4294**	**0.0593**	**0.0000**	**1,014.9119**

3.5 Building Construction - 2021

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	0.0827	0.7583	0.7210	1.1700e-003		0.0417	0.0417		0.0392	0.0392	0.0000	100.7622	100.7622	0.0243	0.0000	101.3700
Total	**0.0827**	**0.7583**	**0.7210**	**1.1700e-003**		**0.0417**	**0.0417**		**0.0392**	**0.0392**	**0.0000**	**100.7622**	**100.7622**	**0.0243**	**0.0000**	**101.3700**

3.5 Building Construction - 2021

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	0.0183	0.6789	0.1107	1.6400e-003	0.0380	1.7400e-003	0.0398	0.0110	1.6700e-003	0.0126	0.0000	155.7902	155.7902	0.0138	0.0000	156.1356
Worker	0.0912	0.0636	0.6740	1.9200e-003	0.1967	1.4100e-003	0.1981	0.0523	1.3000e-003	0.0536	0.0000	173.5702	173.5702	4.8700e-003	0.0000	173.6919
Total	**0.1096**	**0.7425**	**0.7848**	**3.5600e-003**	**0.2347**	**3.1500e-003**	**0.2379**	**0.0633**	**2.9700e-003**	**0.0662**	**0.0000**	**329.3604**	**329.3604**	**0.0187**	**0.0000**	**329.8275**

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	0.0827	0.7583	0.7210	1.1700e-003		0.0417	0.0417		0.0392	0.0392	0.0000	100.7621	100.7621	0.0243	0.0000	101.3698
Total	**0.0827**	**0.7583**	**0.7210**	**1.1700e-003**		**0.0417**	**0.0417**		**0.0392**	**0.0392**	**0.0000**	**100.7621**	**100.7621**	**0.0243**	**0.0000**	**101.3698**

3.5 Building Construction - 2021

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	0.0183	0.6789	0.1107	1.6400e-003	0.0380	1.7400e-003	0.0398	0.0110	1.6700e-003	0.0126	0.0000	155.7902	155.7902	0.0138	0.0000	156.1356
Worker	0.0912	0.0636	0.6740	1.9200e-003	0.1967	1.4100e-003	0.1981	0.0523	1.3000e-003	0.0536	0.0000	173.5702	173.5702	4.8700e-003	0.0000	173.6919
Total	**0.1096**	**0.7425**	**0.7848**	**3.5600e-003**	**0.2347**	**3.1500e-003**	**0.2379**	**0.0633**	**2.9700e-003**	**0.0662**	**0.0000**	**329.3604**	**329.3604**	**0.0187**	**0.0000**	**329.8275**

3.6 Paving - 2021

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	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	8.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0207**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.6 Paving - 2021

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	8.6000e-004	6.0000e-004	6.3900e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.6443	1.6443	5.0000e-005	0.0000	1.6454
Total	**8.6000e-004**	**6.0000e-004**	**6.3900e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8800e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.6443**	**1.6443**	**5.0000e-005**	**0.0000**	**1.6454**

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	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	8.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0207**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.6 Paving - 2021

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	8.6000e-004	6.0000e-004	6.3900e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.6443	1.6443	5.0000e-005	0.0000	1.6454
Total	**8.6000e-004**	**6.0000e-004**	**6.3900e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8800e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.6443**	**1.6443**	**5.0000e-005**	**0.0000**	**1.6454**

3.7 Architectural Coating - 2021

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	4.3798					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**4.3820**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.7 Architectural Coating - 2021

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	4.2100e-003	2.9300e-003	0.0311	9.0000e-005	9.0700e-003	6.0000e-005	9.1300e-003	2.4100e-003	6.0000e-005	2.4700e-003	0.0000	8.0022	8.0022	2.2000e-004	0.0000	8.0078
Total	**4.2100e-003**	**2.9300e-003**	**0.0311**	**9.0000e-005**	**9.0700e-003**	**6.0000e-005**	**9.1300e-003**	**2.4100e-003**	**6.0000e-005**	**2.4700e-003**	**0.0000**	**8.0022**	**8.0022**	**2.2000e-004**	**0.0000**	**8.0078**

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	4.3798					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**4.3820**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.7 Architectural Coating - 2021

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	4.2100e-003	2.9300e-003	0.0311	9.0000e-005	9.0700e-003	6.0000e-005	9.1300e-003	2.4100e-003	6.0000e-005	2.4700e-003	0.0000	8.0022	8.0022	2.2000e-004	0.0000	8.0078
Total	**4.2100e-003**	**2.9300e-003**	**0.0311**	**9.0000e-005**	**9.0700e-003**	**6.0000e-005**	**9.1300e-003**	**2.4100e-003**	**6.0000e-005**	**2.4700e-003**	**0.0000**	**8.0022**	**8.0022**	**2.2000e-004**	**0.0000**	**8.0078**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.1552	5.0017	0.7763	0.0168	0.3956	0.0208	0.4164	0.1086	0.0199	0.1285	0.0000	1,595.4042	1,595.4042	0.0510	0.0000	1,596.6784
Unmitigated	0.1552	5.0017	0.7763	0.0168	0.3956	0.0208	0.4164	0.1086	0.0199	0.1285	0.0000	1,595.4042	1,595.4042	0.0510	0.0000	1,596.6784

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	51.05	51.05	51.05	929,165	929,165
Total	51.05	51.05	51.05	929,165	929,165

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
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	50.00	50.00	50.00	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

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	1,717.4696	1,717.4696	0.0777	0.0161	1,724.1991
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,717.4696	1,717.4696	0.0777	0.0161	1,724.1991
NaturalGas Mitigated	0.0576	0.5237	0.4399	3.1400e-003		0.0398	0.0398		0.0398	0.0398	0.0000	570.0765	570.0765	0.0109	0.0105	573.4641
NaturalGas Unmitigated	0.0576	0.5237	0.4399	3.1400e-003		0.0398	0.0398		0.0398	0.0398	0.0000	570.0765	570.0765	0.0109	0.0105	573.4641

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					
General Office Building	1.45246e+006	7.8300e-003	0.0712	0.0598	4.3000e-004		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	77.5091	77.5091	1.4900e-003	1.4200e-003	77.9697
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	9.23036e+006	0.0498	0.4525	0.3801	2.7100e-003		0.0344	0.0344		0.0344	0.0344	0.0000	492.5674	492.5674	9.4400e-003	9.0300e-003	495.4945
Total		**0.0576**	**0.5237**	**0.4399**	**3.1400e-003**		**0.0398**	**0.0398**		**0.0398**	**0.0398**	**0.0000**	**570.0765**	**570.0765**	**0.0109**	**0.0105**	**573.4641**

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					
General Office Building	1.45246e+006	7.8300e-003	0.0712	0.0598	4.3000e-004		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	77.5091	77.5091	1.4900e-003	1.4200e-003	77.9697
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	9.23036e+006	0.0498	0.4525	0.3801	2.7100e-003		0.0344	0.0344		0.0344	0.0344	0.0000	492.5674	492.5674	9.4400e-003	9.0300e-003	495.4945
Total		**0.0576**	**0.5237**	**0.4399**	**3.1400e-003**		**0.0398**	**0.0398**		**0.0398**	**0.0398**	**0.0000**	**570.0765**	**570.0765**	**0.0109**	**0.0105**	**573.4641**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.01506e+006	295.2914	0.0134	2.7600e-003	296.4485
Parking Lot	94830.1	27.5872	1.2500e-003	2.6000e-004	27.6953
Unrefrigerated Warehouse-No Rail	4.79387e+006	1,394.5910	0.0631	0.0131	1,400.0554
Total		**1,717.4696**	**0.0777**	**0.0161**	**1,724.1991**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.01506e+006	295.2914	0.0134	2.7600e-003	296.4485
Parking Lot	94830.1	27.5872	1.2500e-003	2.6000e-004	27.6953
Unrefrigerated Warehouse-No Rail	4.79387e+006	1,394.5910	0.0631	0.0131	1,400.0554
Total		**1,717.4696**	**0.0777**	**0.0161**	**1,724.1991**

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	2.8846	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120
Unmitigated	2.8846	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120

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	0.4380					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4461					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.5000e-004	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120
Total	**2.8846**	**5.0000e-005**	**5.8100e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0112**	**0.0112**	**3.0000e-005**	**0.0000**	**0.0120**

Mitigated

	ROG	NCx	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	0.4380					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4461					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.5000e-004	5.0000e-005	5.8100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0112	0.0112	3.0000e-005	0.0000	0.0120
Total	**2.8846**	**5.0000e-005**	**5.8100e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0112**	**0.0112**	**3.0000e-005**	**0.0000**	**0.0120**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	273.0556	4.5020	0.1082	417.8482
Unmitigated	273.0556	4.5020	0.1082	417.8482

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	19.7818 / 12.1243	49.7596	0.6466	0.0156	70.5803
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	118.06 / 0	223.2960	3.8554	0.0926	347.2679
Total		**273.0556**	**4.5020**	**0.1082**	**417.8482**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	19.7818 / 12.1243	49.7596	0.6466	0.0156	70.5803
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	118.06 / 0	223.2960	3.8554	0.0926	347.2679
Total		**273.0556**	**4.5020**	**0.1082**	**417.8482**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	118.4270	6.9988	0.0000	293.3978
Unmitigated	118.4270	6.9988	0.0000	293.3978

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	103.51	21.0116	1.2418	0.0000	52.0553
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	479.9	97.4154	5.7571	0.0000	241.3424
Total		**118.4270**	**6.9988**	**0.0000**	**293.3978**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	103.51	21.0116	1.2418	0.0000	52.0553
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	479.9	97.4154	5.7571	0.0000	241.3424
Total		**118.4270**	**6.9988**	**0.0000**	**293.3978**

9.0 Operational Offroad

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

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

11.0 Vegetation

CalEEMod Output

Phase 1 Construction and Operation no HDT (Summer Daily)

Bronco Winery Phase 1 Construction and Area

Stanislaus County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	120.00	1000sqft	2.75	120,000.00	0
Other Non-Asphalt Surfaces	3.80	Acre	3.80	165,528.00	0
Other Non-Asphalt Surfaces	10.30	Acre	10.30	448,668.00	0
Parking Lot	2.75	Acre	2.75	119,790.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Architectural Coating - Rule 4601 Architectural Coatings

Vehicle Trips - Construction, area source, and energy only

Construction Off-road Equipment Mitigation -

Area Coating - Rule 4601 Architectural Coatings compliance

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2017	7.2747	68.0624	50.5458	0.1179	18.2962	3.0747	21.1766	9.9917	2.8288	12.6416	0.0000	11,891.3806	11,891.3806	1.9562	0.0000	11,923.0803
2018	52.3590	44.0226	45.9163	0.1170	5.4428	1.6867	7.1295	1.4628	1.5875	3.0503	0.0000	11,774.9799	11,774.9799	1.2060	0.0000	11,805.1288
Maximum	**52.3590**	**68.0624**	**50.5458**	**0.1179**	**18.2962**	**3.0747**	**21.1766**	**9.9917**	**2.8288**	**12.6416**	**0.0000**	**11,891.3806**	**11,891.3806**	**1.9562**	**0.0000**	**11,923.0803**

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	lb/day										lb/day					
2017	7.2747	68.0624	50.5458	0.1179	8.3597	3.0747	11.2401	4.5298	2.8288	7.1797	0.0000	11,891.3806	11,891.3806	1.9562	0.0000	11,923.0803
2018	52.3590	44.0226	45.9163	0.1170	5.4428	1.6867	7.1295	1.4628	1.5875	3.0503	0.0000	11,774.9799	11,774.9799	1.2060	0.0000	11,805.1288
Maximum	**52.3590**	**68.0624**	**50.5458**	**0.1179**	**8.3597**	**3.0747**	**11.2401**	**4.5298**	**2.8288**	**7.1797**	**0.0000**	**11,891.3806**	**11,891.3806**	**1.9562**	**0.0000**	**11,923.0803**

	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	41.86	0.00	35.10	47.68	0.00	34.81	0.00	0.00	0.00	0.00	0.00	0.00

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	lb/day										lb/day					
Area	3.1113	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320
Energy	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626
Mobile	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	**3.1754**	**0.5829**	**0.5037**	**3.5000e-003**	**0.0000**	**0.0443**	**0.0443**	**0.0000**	**0.0443**	**0.0443**		**699.3370**	**699.3370**	**0.0135**	**0.0128**	**703.4946**

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	lb/day										lb/day					
Area	3.1113	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320
Energy	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626
Mobile	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	**3.1754**	**0.5829**	**0.5037**	**3.5000e-003**	**0.0000**	**0.0443**	**0.0443**	**0.0000**	**0.0443**	**0.0443**		**699.3370**	**699.3370**	**0.0135**	**0.0128**	**703.4946**

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2017	4/14/2017	5	10	
2	Grading	Grading	4/15/2017	5/26/2017	5	30	
3	Building Construction	Building Construction	5/27/2017	7/20/2018	5	300	
4	Paving	Paving	7/21/2018	8/17/2018	5	20	
5	Architectural Coating	Architectural Coating	8/18/2018	9/14/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 16.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 180,000; Non-Residential Outdoor: 60,000; Striped Parking Area: 44,039 (Architectural Coating – sqft)

OffRoad Equipment

Bronco Winery Phase 1 Construction and Area - Stanislaus County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	359.00	140.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	72.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2017

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.2 Site Preparation - 2017

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	lb/day										lb/day					
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
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
Worker	0.1682	0.1105	1.4224	2.6700e-003	0.2299	1.8100e-003	0.2317	0.0610	1.6700e-003	0.0626		265.0728	265.0728	0.0109		265.3464
Total	**0.1682**	**0.1105**	**1.4224**	**2.6700e-003**	**0.2299**	**1.8100e-003**	**0.2317**	**0.0610**	**1.6700e-003**	**0.0626**		**265.0728**	**265.0728**	**0.0109**		**265.3464**

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	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**8.1298**	**2.8786**	**11.0084**	**4.4688**	**2.6483**	**7.1171**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.2 Site Preparation - 2017

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	lb/day										lb/day					
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
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
Worker	0.1682	0.1105	1.4224	2.6700e-003	0.2299	1.8100e-003	0.2317	0.0610	1.6700e-003	0.0626		265.0728	265.0728	0.0109		265.3464
Total	**0.1682**	**0.1105**	**1.4224**	**2.6700e-003**	**0.2299**	**1.8100e-003**	**0.2317**	**0.0610**	**1.6700e-003**	**0.0626**		**265.0728**	**265.0728**	**0.0109**		**265.3464**

3.3 Grading - 2017

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	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	5.7483	67.9396	38.7826	0.0620		3.0727	3.0727		2.8269	2.8269		6,344.8863	6,344.8863	1.9441		6,393.4879
Total	**5.7483**	**67.9396**	**38.7826**	**0.0620**	**8.6733**	**3.0727**	**11.7460**	**3.5965**	**2.8269**	**6.4234**		**6,344.8863**	**6,344.8863**	**1.9441**		**6,393.4879**

3.3 Grading - 2017

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	lb/day										lb/day					
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
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
Worker	0.1868	0.1228	1.5804	2.9700e-003	0.2555	2.0100e-003	0.2575	0.0678	1.8600e-003	0.0696		294.5253	294.5253	0.0122		294.8293
Total	**0.1868**	**0.1228**	**1.5804**	**2.9700e-003**	**0.2555**	**2.0100e-003**	**0.2575**	**0.0678**	**1.8600e-003**	**0.0696**		**294.5253**	**294.5253**	**0.0122**		**294.8293**

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	lb/day										lb/day					
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	5.7483	67.9396	38.7826	0.0620		3.0727	3.0727		2.8269	2.8269	0.0000	6,344.8863	6,344.8863	1.9441		6,393.4878
Total	**5.7483**	**67.9396**	**38.7826**	**0.0620**	**3.9030**	**3.0727**	**6.9757**	**1.6184**	**2.8269**	**4.4453**	**0.0000**	**6,344.8863**	**6,344.8863**	**1.9441**		**6,393.4878**

3.3 Grading - 2017

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	lb/day										lb/day					
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
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
Worker	0.1868	0.1228	1.5804	2.9700e-003	0.2555	2.0100e-003	0.2575	0.0678	1.8600e-003	0.0696		294.5253	294.5253	0.0122		294.8293
Total	**0.1868**	**0.1228**	**1.5804**	**2.9700e-003**	**0.2555**	**2.0100e-003**	**0.2575**	**0.0678**	**1.8600e-003**	**0.0696**		**294.5253**	**294.5253**	**0.0122**		**294.8293**

3.4 Building Construction - 2017

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	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**		**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.4 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NCx	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	lb/day										lb/day					
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
Vendor	0.8062	19.8392	3.9951	0.0377	0.8573	0.1877	1.0450	0.2468	0.1796	0.4264		3,953.6710	3,953.6710	0.3966		3,963.5868
Worker	3.3536	2.2036	28.3682	0.0532	4.5855	0.0361	4.6217	1.2160	0.0334	1.2494		5,286.7298	5,286.7298	0.2182		5,292.1857
Total	**4.1598**	**22.0428**	**32.3633**	**0.0910**	**5.4428**	**0.2238**	**5.6667**	**1.4629**	**0.2129**	**1.6758**		**9,240.4009**	**9,240.4009**	**0.6149**		**9,255.7725**

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	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**	**0.0000**	**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.4 Building Construction - 2017

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	lb/day										lb/day					
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
Vendor	0.8062	19.8392	3.9951	0.0377	0.8573	0.1877	1.0450	0.2468	0.1796	0.4264		3,953.6710	3,953.6710	0.3966		3,963.5868
Worker	3.3536	2.2036	28.3682	0.0532	4.5855	0.0361	4.6217	1.2160	0.0334	1.2494		5,286.7298	5,286.7298	0.2182		5,292.1857
Total	**4.1598**	**22.0428**	**32.3633**	**0.0910**	**5.4428**	**0.2238**	**5.6667**	**1.4629**	**0.2129**	**1.6758**		**9,240.4009**	**9,240.4009**	**0.6149**		**9,255.7725**

3.4 Building Construction - 2018

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	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.4 Building Construction - 2018

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	lb/day										lb/day					
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
Vendor	0.6936	18.7123	3.4475	0.0376	0.8572	0.1517	1.0089	0.2468	0.1451	0.3919		3,939.8689	3,939.8689	0.3674		3,949.0542
Worker	2.9834	1.9203	24.8883	0.0525	4.5855	0.0352	4.6207	1.2160	0.0325	1.2485		5,214.1758	5,214.1758	0.1964		5,219.0863
Total	**3.6770**	**20.6326**	**28.3359**	**0.0901**	**5.4428**	**0.1869**	**5.6296**	**1.4628**	**0.1776**	**1.6404**		**9,154.0448**	**9,154.0448**	**0.5638**		**9,168.1406**

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	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.4 Building Construction - 2018

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	lb/day										lb/day					
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
Vendor	0.6936	18.7123	3.4475	0.0376	0.8572	0.1517	1.0089	0.2468	0.1451	0.3919		3,939.8689	3,939.8689	0.3674		3,949.0542
Worker	2.9834	1.9203	24.8883	0.0525	4.5855	0.0352	4.6207	1.2160	0.0325	1.2485		5,214.1758	5,214.1758	0.1964		5,219.0863
Total	**3.6770**	**20.6326**	**28.3359**	**0.0901**	**5.4428**	**0.1869**	**5.6296**	**1.4628**	**0.1776**	**1.6404**		**9,154.0448**	**9,154.0448**	**0.5638**		**9,168.1406**

3.5 Paving - 2018

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	lb/day										lb/day					
Off-Road	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	0.3603					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0040**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**		**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

3.5 Paving - 2018

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	lb/day										lb/day					
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
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
Worker	0.1247	0.0802	1.0399	2.1900e-003	0.1916	1.4700e-003	0.1931	0.0508	1.3600e-003	0.0522		217.8625	217.8625	8.2100e-003		218.0677
Total	**0.1247**	**0.0802**	**1.0399**	**2.1900e-003**	**0.1916**	**1.4700e-003**	**0.1931**	**0.0508**	**1.3600e-003**	**0.0522**		**217.8625**	**217.8625**	**8.2100e-003**		**218.0677**

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	lb/day										lb/day					
Off-Road	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	0.3603					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0040**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**	**0.0000**	**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

3.5 Paving - 2018

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	lb/day										lb/day					
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
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
Worker	0.1247	0.0802	1.0399	2.1900e-003	0.1916	1.4700e-003	0.1931	0.0508	1.3600e-003	0.0522		217.8625	217.8625	8.2100e-003		218.0677
Total	**0.1247**	**0.0802**	**1.0399**	**2.1900e-003**	**0.1916**	**1.4700e-003**	**0.1931**	**0.0508**	**1.3600e-003**	**0.0522**		**217.8625**	**217.8625**	**8.2100e-003**		**218.0677**

3.6 Architectural Coating - 2018

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	lb/day										lb/day					
Archit. Coating	51.4621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**51.7607**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 2018

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	lb/day										lb/day					
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
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
Worker	0.5983	0.3851	4.9915	0.0105	0.9197	7.0600e-003	0.9267	0.2439	6.5100e-003	0.2504		1,045.7400	1,045.7400	0.0394		1,046.7248
Total	**0.5983**	**0.3851**	**4.9915**	**0.0105**	**0.9197**	**7.0600e-003**	**0.9267**	**0.2439**	**6.5100e-003**	**0.2504**		**1,045.7400**	**1,045.7400**	**0.0394**		**1,046.7248**

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	lb/day										lb/day					
Archit. Coating	51.4621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**51.7607**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 2018

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	lb/day										lb/day					
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
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
Worker	0.5983	0.3851	4.9915	0.0105	0.9197	7.0600e-003	0.9267	0.2439	6.5100e-003	0.2504		1,045.7400	1,045.7400	0.0394		1,046.7248
Total	**0.5983**	**0.3851**	**4.9915**	**0.0105**	**0.9197**	**7.0600e-003**	**0.9267**	**0.2439**	**6.5100e-003**	**0.2504**		**1,045.7400**	**1,045.7400**	**0.0394**		**1,046.7248**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	lb/day										lb/day					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.483771	0.038135	0.171001	0.151080	0.031874	0.006863	0.026572	0.080370	0.001802	0.001269	0.005122	0.000896	0.001247
Parking Lot	0.483771	0.038135	0.171001	0.151080	0.031874	0.006863	0.026572	0.080370	0.001802	0.001269	0.005122	0.000896	0.001247
Unrefrigerated Warehouse-No Rail	0.483771	0.038135	0.171001	0.151080	0.031874	0.006863	0.026572	0.080370	0.001802	0.001269	0.005122	0.000896	0.001247

5.0 Energy Detail

Historical Energy Use: N

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	lb/day										lb/day					
NaturalGas Mitigated	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626
NaturalGas Unmitigated	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626

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	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	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
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	5944.11	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626
Total		**0.0641**	**0.5828**	**0.4895**	**3.5000e-003**		**0.0443**	**0.0443**		**0.0443**	**0.0443**		**699.3070**	**699.3070**	**0.0134**	**0.0128**	**703.4626**

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	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	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
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	5.94411	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626
Total		**0.0641**	**0.5828**	**0.4895**	**3.5000e-003**		**0.0443**	**0.0443**		**0.0443**	**0.0443**		**699.3070**	**699.3070**	**0.0134**	**0.0128**	**703.4626**

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	lb/day										lb/day					
Mitigated	3.1113	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320
Unmitigated	3.1113	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320

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	lb/day										lb/day					
Architectural Coating	0.2820					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8280					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3500e-003	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320
Total	**3.1113**	**1.3000e-004**	**0.0142**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0300**	**0.0300**	**8.0000e-005**		**0.0320**

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	lb/day										lb/day					
Architectural Coating	0.2820					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8280					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3500e-003	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320
Total	**3.1113**	**1.3000e-004**	**0.0142**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0300**	**0.0300**	**8.0000e-005**		**0.0320**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

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

11.0 Vegetation

CalEEMod Output

Phase 1 Construction and Operation no HDT (Winter Daily)

Bronco Winery Phase 1 Construction and Area

Stanislaus County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	120.00	1000sqft	2.75	120,000.00	0
Other Non-Asphalt Surfaces	3.80	Acre	3.80	165,528.00	0
Other Non-Asphalt Surfaces	10.30	Acre	10.30	448,668.00	0
Parking Lot	2.75	Acre	2.75	119,790.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Bronco Winery Phase 1 Construction and Area - Stanislaus County, Winter

Project Characteristics -

Land Use -

Construction Phase -

Architectural Coating - Rule 4601 Architectural Coatings

Vehicle Trips - Construction, area source, and energy only

Construction Off-road Equipment Mitigation -

Area Coating - Rule 4601 Architectural Coatings compliance

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2017	7.3170	68.0864	46.7844	0.1105	18.2962	3.0747	21.1766	9.9917	2.8288	12.6416	0.0000	11,145.7447	11,145.7447	1.9548	0.0000	11,177.9891
2018	52.3571	44.6597	42.4367	0.1096	5.4428	1.6896	7.1324	1.4628	1.5902	3.0531	0.0000	11,033.8667	11,033.8667	1.2270	0.0000	11,064.5422
Maximum	**52.3571**	**68.0864**	**46.7844**	**0.1105**	**18.2962**	**3.0747**	**21.1766**	**9.9917**	**2.8288**	**12.6416**	**0.0000**	**11,145.7447**	**11,145.7447**	**1.9548**	**0.0000**	**11,177.9891**

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	lb/day										lb/day					
2017	7.3170	68.0864	46.7844	0.1105	8.3597	3.0747	11.2401	4.5298	2.8288	7.1797	0.0000	11,145.7447	11,145.7447	1.9548	0.0000	11,177.9891
2018	52.3571	44.6597	42.4367	0.1096	5.4428	1.6896	7.1324	1.4628	1.5902	3.0531	0.0000	11,033.8667	11,033.8667	1.2270	0.0000	11,064.5422
Maximum	**52.3571**	**68.0864**	**46.7844**	**0.1105**	**8.3597**	**3.0747**	**11.2401**	**4.5298**	**2.8288**	**7.1797**	**0.0000**	**11,145.7447**	**11,145.7447**	**1.9548**	**0.0000**	**11,177.9891**

	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**	**41.86**	**0.00**	**35.10**	**47.68**	**0.00**	**34.80**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	lb/day										lb/day					
Area	3.1113	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320
Energy	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626
Mobile	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	**3.1754**	**0.5829**	**0.5037**	**3.5000e-003**	**0.0000**	**0.0443**	**0.0443**	**0.0000**	**0.0443**	**0.0443**		**699.3370**	**699.3370**	**0.0135**	**0.0128**	**703.4946**

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	lb/day										lb/day					
Area	3.1113	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320
Energy	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626
Mobile	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	**3.1754**	**0.5829**	**0.5037**	**3.5000e-003**	**0.0000**	**0.0443**	**0.0443**	**0.0000**	**0.0443**	**0.0443**		**699.3370**	**699.3370**	**0.0135**	**0.0128**	**703.4946**

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2017	4/14/2017	5	10	
2	Grading	Grading	4/15/2017	5/26/2017	5	30	
3	Building Construction	Building Construction	5/27/2017	7/20/2018	5	300	
4	Paving	Paving	7/21/2018	8/17/2018	5	20	
5	Architectural Coating	Architectural Coating	8/18/2018	9/14/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 16.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 180,000; Non-Residential Outdoor: 60,000; Striped Parking Area: 44,039 (Architectural Coating – sqft)

OffRoad Equipment

Bronco Winery Phase 1 Construction and Area - Stanislaus County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	359.00	140.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	72.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2017

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.2 Site Preparation - 2017

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	lb/day										lb/day					
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
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
Worker	0.1685	0.1321	1.2013	2.3500e-003	0.2299	1.8100e-003	0.2317	0.0610	1.6700e-003	0.0626		233.9208	233.9208	9.6400e-003		234.1617
Total	**0.1685**	**0.1321**	**1.2013**	**2.3500e-003**	**0.2299**	**1.8100e-003**	**0.2317**	**0.0610**	**1.6700e-003**	**0.0626**		**233.9208**	**233.9208**	**9.6400e-003**		**234.1617**

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	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**8.1298**	**2.8786**	**11.0084**	**4.4688**	**2.6483**	**7.1171**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.2 Site Preparation - 2017

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	lb/day										lb/day					
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
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
Worker	0.1685	0.1321	1.2013	2.3500e-003	0.2299	1.8100e-003	0.2317	0.0610	1.6700e-003	0.0626		233.9208	233.9208	9.6400e-003		234.1617
Total	**0.1685**	**0.1321**	**1.2013**	**2.3500e-003**	**0.2299**	**1.8100e-003**	**0.2317**	**0.0610**	**1.6700e-003**	**0.0626**		**233.9208**	**233.9208**	**9.6400e-003**		**234.1617**

3.3 Grading - 2017

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	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	5.7483	67.9396	38.7826	0.0620		3.0727	3.0727		2.8269	2.8269		6,344.8863	6,344.8863	1.9441		6,393.4879
Total	**5.7483**	**67.9396**	**38.7826**	**0.0620**	**8.6733**	**3.0727**	**11.7460**	**3.5965**	**2.8269**	**6.4234**		**6,344.8863**	**6,344.8863**	**1.9441**		**6,393.4879**

3.3 Grading - 2017

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	lb/day										lb/day					
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
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
Worker	0.1873	0.1468	1.3348	2.6200e-003	0.2555	2.0100e-003	0.2575	0.0678	1.8600e-003	0.0696		259.9119	259.9119	0.0107		260.1797
Total	**0.1873**	**0.1468**	**1.3348**	**2.6200e-003**	**0.2555**	**2.0100e-003**	**0.2575**	**0.0678**	**1.8600e-003**	**0.0696**		**259.9119**	**259.9119**	**0.0107**		**260.1797**

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	lb/day										lb/day					
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	5.7483	67.9396	38.7826	0.0620		3.0727	3.0727		2.8269	2.8269	0.0000	6,344.8863	6,344.8863	1.9441		6,393.4878
Total	**5.7483**	**67.9396**	**38.7826**	**0.0620**	**3.9030**	**3.0727**	**6.9757**	**1.6184**	**2.8269**	**4.4453**	**0.0000**	**6,344.8863**	**6,344.8863**	**1.9441**		**6,393.4878**

3.3 Grading - 2017

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	lb/day										lb/day					
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
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
Worker	0.1873	0.1468	1.3348	2.6200e-003	0.2555	2.0100e-003	0.2575	0.0678	1.8600e-003	0.0696		259.9119	259.9119	0.0107		260.1797
Total	**0.1873**	**0.1468**	**1.3348**	**2.6200e-003**	**0.2555**	**2.0100e-003**	**0.2575**	**0.0678**	**1.8600e-003**	**0.0696**		**259.9119**	**259.9119**	**0.0107**		**260.1797**

3.4 Building Construction - 2017

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	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**		**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.4 Building Construction - 2017

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	lb/day										lb/day					
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
Vendor	0.8406	20.1561	4.6427	0.0366	0.8573	0.1910	1.0483	0.2468	0.1825	0.4296		3,829.3456	3,829.3456	0.4444		3,840.4556
Worker	3.3615	2.6353	23.9593	0.0470	4.5855	0.0361	4.6217	1.2160	0.0334	1.2494		4,665.4194	4,665.4194	0.1923		4,670.2256
Total	**4.2021**	**22.7915**	**28.6019**	**0.0835**	**5.4428**	**0.2272**	**5.5700**	**1.4629**	**0.2161**	**1.6790**		**8,494.7649**	**8,494.7649**	**0.6367**		**8,510.6813**

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	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**	**0.0000**	**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.4 Building Construction - 2017

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	lb/day										lb/day					
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
Vendor	0.8406	20.1561	4.6427	0.0366	0.8573	0.1910	1.0483	0.2468	0.1828	0.4296		3,829.3456	3,829.3456	0.4444		3,840.4556
Worker	3.3615	2.6353	23.9593	0.0470	4.5855	0.0361	4.6217	1.2160	0.0334	1.2494		4,665.4194	4,665.4194	0.1923		4,670.2256
Total	**4.2021**	**22.7915**	**28.6019**	**0.0835**	**5.4428**	**0.2272**	**5.6700**	**1.4629**	**0.2161**	**1.6790**		**8,494.7649**	**8,494.7649**	**0.6367**		**8,510.6813**

3.4 Building Construction - 2018

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	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.4 Building Construction - 2018

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	lb/day										lb/day					
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
Vendor	0.7235	18.9753	4.0445	0.0364	0.8572	0.1545	1.0118	0.2468	0.1478	0.3946		3,813.1812	3,813.1812	0.4134		3,823.5165
Worker	2.9739	2.2944	20.8118	0.0463	4.5855	0.0352	4.6207	1.2160	0.0325	1.2485		4,599.7504	4,599.7504	0.1715		4,604.0374
Total	**3.6975**	**21.2696**	**24.8563**	**0.0827**	**5.4428**	**0.1897**	**5.6325**	**1.4628**	**0.1803**	**1.6431**		**8,412.9316**	**8,412.9316**	**0.5849**		**8,427.5540**

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	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.4 Building Construction - 2018

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	lb/day										lb/day					
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
Vendor	0.7235	18.9753	4.0445	0.0364	0.8572	0.1545	1.0118	0.2468	0.1478	0.3946		3,813.1812	3,813.1812	0.4134		3,823.5165
Worker	2.9739	2.2944	20.8118	0.0463	4.5855	0.0352	4.6207	1.2160	0.0325	1.2485		4,599.7504	4,599.7504	0.1715		4,604.0374
Total	**3.6975**	**21.2696**	**24.8563**	**0.0827**	**5.4428**	**0.1897**	**5.6325**	**1.4628**	**0.1803**	**1.6431**		**8,412.9316**	**8,412.9316**	**0.5849**		**8,427.5540**

3.5 Paving - 2018

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	lb/day										lb/day					
Off-Road	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	0.3603					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0040**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**		**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

3.5 Paving - 2018

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	lb/day										lb/day					
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
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
Worker	0.1243	0.0959	0.8696	1.9300e-003	0.1916	1.4700e-003	0.1931	0.0508	1.3600e-003	0.0522		192.1901	192.1901	7.1700e-003		192.3693
Total	**0.1243**	**0.0959**	**0.8696**	**1.9300e-003**	**0.1916**	**1.4700e-003**	**0.1931**	**0.0508**	**1.3600e-003**	**0.0522**		**192.1901**	**192.1901**	**7.1700e-003**		**192.3693**

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	lb/day										lb/day					
Off-Road	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	0.3603					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0040**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**	**0.0000**	**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

3.5 Paving - 2018

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	lb/day										lb/day					
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
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
Worker	0.1243	0.0959	0.8696	1.9300e-003	0.1916	1.4700e-003	0.1931	0.0508	1.3600e-003	0.0522		192.1901	192.1901	7.1700e-003		192.3693
Total	**0.1243**	**0.0959**	**0.8696**	**1.9300e-003**	**0.1916**	**1.4700e-003**	**0.1931**	**0.0508**	**1.3600e-003**	**0.0522**		**192.1901**	**192.1901**	**7.1700e-003**		**192.3693**

3.6 Architectural Coating - 2018

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	lb/day										lb/day					
Archit. Coating	51.4621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**51.7607**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 2018

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	lb/day										lb/day					
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
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
Worker	0.5964	0.4602	4.1740	9.2800e-003	0.9197	7.0600e-003	0.9267	0.2439	6.5100e-003	0.2504		922.5126	922.5126	0.0344		923.3724
Total	**0.5964**	**0.4602**	**4.1740**	**9.2800e-003**	**0.9197**	**7.0600e-003**	**0.9267**	**0.2439**	**6.5100e-003**	**0.2504**		**922.5126**	**922.5126**	**0.0344**		**923.3724**

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	lb/day										lb/day					
Archit. Coating	51.4621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**51.7607**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 2018

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	lb/day										lb/day					
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
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
Worker	0.5964	0.4602	4.1740	9.2800e-003	0.9197	7.0600e-003	0.9267	0.2439	6.5100e-003	0.2504		922.5126	922.5126	0.0344		923.3724
Total	**0.5964**	**0.4602**	**4.1740**	**9.2800e-003**	**0.9197**	**7.0600e-003**	**0.9267**	**0.2439**	**6.5100e-003**	**0.2504**		**922.5126**	**922.5126**	**0.0344**		**923.3724**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	lb/day										lb/day					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.483771	0.038135	0.171001	0.151080	0.031874	0.006863	0.026572	0.080370	0.001802	0.001269	0.005122	0.000896	0.001247
Parking Lot	0.483771	0.038135	0.171001	0.151080	0.031874	0.006863	0.026572	0.080370	0.001802	0.001269	0.005122	0.000896	0.001247
Unrefrigerated Warehouse-No Rail	0.483771	0.038135	0.171001	0.151080	0.031874	0.006863	0.026572	0.080370	0.001802	0.001269	0.005122	0.000896	0.001247

5.0 Energy Detail

Historical Energy Use: N

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	lb/day										lb/day					
NaturalGas Mitigated	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626
NaturalGas Unmitigated	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626

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	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	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
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	5944.11	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626
Total		**0.0641**	**0.5828**	**0.4895**	**3.5000e-003**		**0.0443**	**0.0443**		**0.0443**	**0.0443**		**699.3070**	**699.3070**	**0.0134**	**0.0128**	**703.4626**

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	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	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
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	5.94411	0.0641	0.5828	0.4895	3.5000e-003		0.0443	0.0443		0.0443	0.0443		699.3070	699.3070	0.0134	0.0128	703.4626
Total		**0.0641**	**0.5828**	**0.4895**	**3.5000e-003**		**0.0443**	**0.0443**		**0.0443**	**0.0443**		**699.3070**	**699.3070**	**0.0134**	**0.0128**	**703.4626**

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	lb/day										lb/day					
Mitigated	3.1113	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320
Unmitigated	3.1113	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320

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	lb/day										lb/day					
Architectural Coating	0.2820					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8280					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3500e-003	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320
Total	**3.1113**	**1.3000e-004**	**0.0142**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0300**	**0.0300**	**8.0000e-005**		**0.0320**

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	lb/day										lb/day					
Architectural Coating	0.2820					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8280					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3500e-003	1.3000e-004	0.0142	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0300	0.0300	8.0000e-005		0.0320
Total	**3.1113**	**1.3000e-004**	**0.0142**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0300**	**0.0300**	**8.0000e-005**		**0.0320**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

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

11.0 Vegetation

CalEEMod Output

Phase 2 Construction and Operation no HDT (Summer Daily)

Bronco Winery Later Phases Construction Area and Employee

Stanislaus County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	111.30	1000sqft	2.56	111,300.00	0
Unrefrigerated Warehouse-No Rail	510.53	1000sqft	11.72	510,529.00	0
Parking Lot	6.22	Acre	6.22	270,943.20	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Summer

Project Characteristics -

Land Use - Parking lot based on area of site minus the area of the buildings.

Construction Phase -

Trips and VMT - Demolition is for one house.

Demolition - Remove 2727 sf house with 1,790 sf patio cover

Architectural Coating - Rule 4601 Architectural Coatings

Vehicle Trips - Operational run for employees only based on increase of 30 employees for 60 trips/day.

Area Coating - Rule 4601 Architectural Coatings - use compliant coatings

Construction Off-road Equipment Mitigation -

Area Mitigation -

Fleet Mix - Employee vehicles only LDA, LDT1 and 2, MCY, and MH. Adjusted fleet mix.

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblFleetMix	HHD	0.08	0.00
tblFleetMix	LDA	0.50	0.59
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.17	0.20
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	6.0470e-003	0.00
tblFleetMix	MDV	0.14	0.16
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.8200e-003	0.00
tblFleetMix	SBUS	8.6900e-004	0.00
tblFleetMix	UBUS	1.1830e-003	0.00
tblLandUse	LandUseSquareFeet	510,530.00	510,529.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	21.00	4.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.12
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.12
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.12

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2019	5.7304	54.6140	42.7219	0.1174	18.2962	2.3921	20.6882	9.9917	2.2007	12.1924	0.0000	11,800.9115	11,800.9115	1.9523	0.0000	11,830.3935
2020	5.1173	37.5891	39.5591	0.1155	5.5432	1.2357	6.7790	1.4903	1.1627	2.6530	0.0000	11,572.0965	11,572.0965	1.1196	0.0000	11,600.0866
2021	193.6730	34.2177	37.1910	0.1135	5.5432	1.0304	6.5735	1.4903	0.9687	2.4590	0.0000	11,376.5466	11,376.5466	1.0858	0.0000	11,403.6920
Maximum	**193.6730**	**54.6140**	**42.7219**	**0.1174**	**18.2962**	**2.3921**	**20.6882**	**9.9917**	**2.2007**	**12.1924**	**0.0000**	**11,800.9115**	**11,800.9115**	**1.9523**	**0.0000**	**11,830.3935**

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	lb/day										lb/day					
2019	5.7304	54.6140	42.7219	0.1174	8.3597	2.3921	10.7518	4.5298	2.2007	6.7305	0.0000	11,800.9115	11,800.9115	1.9523	0.0000	11,830.3935
2020	5.1173	37.5891	39.5591	0.1155	5.5432	1.2357	6.7790	1.4903	1.1627	2.6530	0.0000	11,572.0965	11,572.0965	1.1196	0.0000	11,600.0866
2021	193.6730	34.2177	37.1910	0.1135	5.5432	1.0304	6.5735	1.4903	0.9687	2.4590	0.0000	11,376.5466	11,376.5466	1.0858	0.0000	11,403.6920
Maximum	**193.6730**	**54.6140**	**42.7219**	**0.1174**	**8.3597**	**2.3921**	**10.7518**	**4.5298**	**2.2007**	**6.7305**	**0.0000**	**11,800.9115**	**11,800.9115**	**1.9523**	**0.0000**	**11,830.3935**

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Summer

	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	33.82	0.00	29.19	42.10	0.00	31.56	0.00	0.00	0.00	0.00	0.00	0.00

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	lb/day										lb/day					
Area	14.4667	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Energy	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589
Mobile	0.1643	0.1758	2.2193	5.7000e-003	0.4940	3.2600e-003	0.4972	0.1309	3.0000e-003	0.1339		567.3854	567.3854	0.0188		567.8543
Total	**14.9466**	**3.0458**	**4.6941**	**0.0229**	**0.4940**	**0.2216**	**0.7155**	**0.1309**	**0.2213**	**0.3523**		**4,010.8200**	**4,010.8200**	**0.0851**	**0.0631**	**4,031.7599**

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	lb/day										lb/day					
Area	14.4667	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Energy	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589
Mobile	0.1643	0.1758	2.2193	5.7000e-003	0.4940	3.2600e-003	0.4972	0.1309	3.0000e-003	0.1339		567.3854	567.3854	0.0188		567.8543
Total	**14.9466**	**3.0458**	**4.6941**	**0.0229**	**0.4940**	**0.2216**	**0.7155**	**0.1309**	**0.2213**	**0.3523**		**4,010.8200**	**4,010.8200**	**0.0851**	**0.0631**	**4,031.7599**

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	9/1/2019	9/27/2019	5	20	
2	Site Preparation	Site Preparation	10/1/2019	10/14/2019	5	10	
3	Grading	Grading	10/15/2019	12/2/2019	5	35	
4	Building Construction	Building Construction	12/3/2019	5/3/2021	5	370	
5	Paving	Paving	5/4/2021	5/31/2021	5	20	
6	Architectural Coating	Architectural Coating	6/1/2021	6/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 6.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 932,744; Non-Residential Outdoor: 310,915; Striped Parking Area: 16,257 (Architectural Coating – sqft)

OffRoad Equipment

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Summer

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

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Summer

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	6	15.00	0.00	4.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	364.00	146.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	73.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019

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	lb/day										lb/day					
Fugitive Dust					0.2223	0.0000	0.2223	0.0337	0.0000	0.0337			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**	**0.2223**	**1.7949**	**2.0172**	**0.0337**	**1.6697**	**1.7033**		**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

3.2 Demolition - 2019

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	lb/day										lb/day					
Hauling	1.6900e-003	0.0580	7.8900e-003	1.6000e-004	3.4900e-003	2.3000e-004	3.7300e-003	9.6000e-004	2.2000e-004	1.1800e-003		17.0542	17.0542	1.0300e-003		17.0799
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
Worker	0.1126	0.0704	0.9227	2.1300e-003	0.1916	1.4200e-003	0.1930	0.0508	1.3100e-003	0.0521		211.6170	211.6170	7.2600e-003		211.7986
Total	**0.1143**	**0.1283**	**0.9306**	**2.2900e-003**	**0.1951**	**1.6500e-003**	**0.1968**	**0.0518**	**1.5300e-003**	**0.0533**		**228.6712**	**228.6712**	**8.2900e-003**		**228.8785**

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	lb/day										lb/day					
Fugitive Dust					0.1000	0.0000	0.1000	0.0152	0.0000	0.0152			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**	**0.1000**	**1.7949**	**1.8949**	**0.0152**	**1.6697**	**1.6848**	**0.0000**	**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

3.2 Demolition - 2019

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	lb/day										lb/day					
Hauling	1.6900e-003	0.0580	7.8900e-003	1.6000e-004	3.4900e-003	2.3000e-004	3.7300e-003	9.6000e-004	2.2000e-004	1.1800e-003		17.0542	17.0542	1.0300e-003		17.0799
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
Worker	0.1126	0.0704	0.9227	2.1300e-003	0.1916	1.4200e-003	0.1930	0.0508	1.3100e-003	0.0521		211.6170	211.6170	7.2600e-003		211.7986
Total	**0.1143**	**0.1283**	**0.9306**	**2.2900e-003**	**0.1951**	**1.6500e-003**	**0.1968**	**0.0518**	**1.5300e-003**	**0.0533**		**228.6712**	**228.6712**	**8.2900e-003**		**228.8785**

3.3 Site Preparation - 2019

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

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	lb/day										lb/day					
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
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
Worker	0.1351	0.0844	1.1073	2.5500e-003	0.2299	1.7100e-003	0.2316	0.0610	1.5700e-003	0.0625		253.9405	253.9405	8.7100e-003		254.1583
Total	**0.1351**	**0.0844**	**1.1073**	**2.5500e-003**	**0.2299**	**1.7100e-003**	**0.2316**	**0.0610**	**1.5700e-003**	**0.0625**		**253.9405**	**253.9405**	**8.7100e-003**		**254.1583**

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	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**8.1298**	**2.3904**	**10.5202**	**4.4688**	**2.1991**	**6.6679**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

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	lb/day										lb/day					
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
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
Worker	0.1351	0.0844	1.1073	2.5500e-003	0.2299	1.7100e-003	0.2316	0.0610	1.5700e-003	0.0625		253.9405	253.9405	8.7100e-003		254.1583
Total	**0.1351**	**0.0844**	**1.1073**	**2.5500e-003**	**0.2299**	**1.7100e-003**	**0.2316**	**0.0610**	**1.5700e-003**	**0.0625**		**253.9405**	**253.9405**	**8.7100e-003**		**254.1583**

3.4 Grading - 2019

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	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**8.6733**	**2.3827**	**11.0560**	**3.5965**	**2.1920**	**5.7885**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

3.4 Grading - 2019

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	lb/day										lb/day					
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
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
Worker	0.1501	0.0938	1.2303	2.8400e-003	0.2555	1.9000e-003	0.2574	0.0678	1.7500e-003	0.0695		282.1561	282.1561	9.6800e-003		282.3981
Total	**0.1501**	**0.0938**	**1.2303**	**2.8400e-003**	**0.2555**	**1.9000e-003**	**0.2574**	**0.0678**	**1.7500e-003**	**0.0695**		**282.1561**	**282.1561**	**9.6800e-003**		**282.3981**

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	lb/day										lb/day					
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**3.9030**	**2.3827**	**6.2857**	**1.6184**	**2.1920**	**3.8105**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

3.4 Grading - 2019

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	lb/day										lb/day					
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
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
Worker	0.1501	0.0938	1.2303	2.8400e-003	0.2555	1.9000e-003	0.2574	0.0678	1.7500e-003	0.0695		282.1561	282.1561	9.6800e-003		282.3981
Total	**0.1501**	**0.0938**	**1.2303**	**2.8400e-003**	**0.2555**	**1.9000e-003**	**0.2574**	**0.0678**	**1.7500e-003**	**0.0695**		**282.1561**	**282.1561**	**9.6800e-003**		**282.3981**

3.5 Building Construction - 2019

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	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

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	lb/day										lb/day					
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
Vendor	0.6376	18.4783	3.1672	0.0389	0.8939	0.1331	1.0270	0.2574	0.1273	0.3847		4,074.0911	4,074.0911	0.3718		4,083.3851
Worker	2.7317	1.7073	22.3910	0.0516	4.6494	0.0345	4.6839	1.2330	0.0318	1.2648		5,135.2402	5,135.2402	0.1762		5,139.6449
Total	**3.3692**	**20.1856**	**25.5581**	**0.0905**	**5.5433**	**0.1676**	**5.7109**	**1.4903**	**0.1591**	**1.6494**		**9,209.3313**	**9,209.3313**	**0.5480**		**9,223.0300**

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	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

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	lb/day										lb/day					
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
Vendor	0.6376	18.4783	3.1672	0.0389	0.8939	0.1331	1.0270	0.2574	0.1273	0.3847		4,074.0911	4,074.0911	0.3718		4,083.3851
Worker	2.7317	1.7073	22.3910	0.0516	4.6494	0.0345	4.6839	1.2330	0.0318	1.2648		5,135.2402	5,135.2402	0.1762		5,139.6449
Total	**3.3692**	**20.1856**	**25.5581**	**0.0905**	**5.5433**	**0.1676**	**5.7109**	**1.4903**	**0.1591**	**1.6494**		**9,209.3313**	**9,209.3313**	**0.5480**		**9,223.0300**

3.5 Building Construction - 2020

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	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

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	lb/day										lb/day					
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
Vendor	0.5083	16.8971	2.7054	0.0386	0.8939	0.0854	0.9792	0.2573	0.0817	0.3390		4,040.5920	4,040.5920	0.3429		4,049.1650
Worker	2.4892	1.5059	20.0052	0.0500	4.6494	0.0333	4.6827	1.2330	0.0307	1.2637		4,978.4414	4,978.4414	0.1538		4,982.2871
Total	**2.9975**	**18.4030**	**22.7106**	**0.0886**	**5.5432**	**0.1187**	**5.6619**	**1.4903**	**0.1124**	**1.6027**		**9,019.0335**	**9,019.0335**	**0.4968**		**9,031.4521**

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	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

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	lb/day										lb/day					
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
Vendor	0.5083	16.8971	2.7054	0.0386	0.8939	0.0854	0.9792	0.2573	0.0817	0.3390		4,040.5920	4,040.5920	0.3429		4,049.1650
Worker	2.4892	1.5059	20.0052	0.0500	4.6494	0.0333	4.6827	1.2330	0.0307	1.2637		4,978.4414	4,978.4414	0.1538		4,982.2871
Total	**2.9975**	**18.4030**	**22.7106**	**0.0886**	**5.5432**	**0.1187**	**5.6619**	**1.4903**	**0.1124**	**1.6027**		**9,019.0335**	**9,019.0335**	**0.4968**		**9,031.4521**

3.5 Building Construction - 2021

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	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

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	lb/day										lb/day					
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
Vendor	0.4126	15.4422	2.3401	0.0382	0.8938	0.0393	0.9331	0.2573	0.0375	0.2949		4,002.3577	4,002.3577	0.3316		4,010.6467
Worker	2.2990	1.3434	18.2757	0.0484	4.6494	0.0324	4.6818	1.2330	0.0298	1.2628		4,820.8251	4,820.8251	0.1382		4,824.2811
Total	**2.7116**	**16.7856**	**20.6158**	**0.0866**	**5.5432**	**0.0717**	**5.6149**	**1.4903**	**0.0675**	**1.5577**		**8,823.1827**	**8,823.1827**	**0.4698**		**8,834.9278**

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	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

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	lb/day										lb/day					
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
Vendor	0.4126	15.4422	2.3401	0.0382	0.8938	0.0393	0.9331	0.2573	0.0376	0.2949		4,002.3577	4,002.3577	0.3316		4,010.6467
Worker	2.2990	1.3434	18.2757	0.0484	4.6494	0.0324	4.6818	1.2330	0.0298	1.2628		4,820.8251	4,820.8251	0.1382		4,824.2811
Total	**2.7116**	**16.7856**	**20.6158**	**0.0866**	**5.5432**	**0.0717**	**5.6149**	**1.4903**	**0.0675**	**1.5577**		**8,823.1827**	**8,823.1827**	**0.4698**		**8,834.9278**

3.6 Paving - 2021

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	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.8148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0704**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.6 Paving - 2021

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	lb/day										lb/day					
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
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
Worker	0.0947	0.0554	0.7531	2.0000e-003	0.1916	1.3400e-003	0.1929	0.0508	1.2300e-003	0.0520		198.6604	198.6604	5.7000e-003		198.8028
Total	**0.0947**	**0.0554**	**0.7531**	**2.0000e-003**	**0.1916**	**1.3400e-003**	**0.1929**	**0.0508**	**1.2300e-003**	**0.0520**		**198.6604**	**198.6604**	**5.7000e-003**		**198.8028**

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	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.8148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0704**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.6 Paving - 2021

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	lb/day										lb/day					
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
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
Worker	0.0947	0.0554	0.7531	2.0000e-003	0.1916	1.3400e-003	0.1929	0.0508	1.2300e-003	0.0520		198.6604	198.6604	5.7000e-003		198.8028
Total	**0.0947**	**0.0554**	**0.7531**	**2.0000e-003**	**0.1916**	**1.3400e-003**	**0.1929**	**0.0508**	**1.2300e-003**	**0.0520**		**198.6604**	**198.6604**	**5.7000e-003**		**198.8028**

3.7 Architectural Coating - 2021

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	lb/day										lb/day					
Archit. Coating	192.9930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**193.2119**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

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	lb/day										lb/day					
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
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
Worker	0.4611	0.2694	3.6652	9.7100e-003	0.9324	6.5000e-003	0.9389	0.2473	5.9900e-003	0.2533		966.8138	966.8138	0.0277		967.5069
Total	**0.4611**	**0.2694**	**3.6652**	**9.7100e-003**	**0.9324**	**6.5000e-003**	**0.9389**	**0.2473**	**5.9900e-003**	**0.2533**		**966.8138**	**966.8138**	**0.0277**		**967.5069**

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	lb/day										lb/day					
Archit. Coating	192.9930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**193.2119**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

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	lb/day										lb/day					
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
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
Worker	0.4611	0.2694	3.6652	9.7100e-003	0.9324	6.5000e-003	0.9389	0.2473	5.9900e-003	0.2533		966.8138	966.8138	0.0277		967.5069
Total	**0.4611**	**0.2694**	**3.6652**	**9.7100e-003**	**0.9324**	**6.5000e-003**	**0.9389**	**0.2473**	**5.9900e-003**	**0.2533**		**966.8138**	**966.8138**	**0.0277**		**967.5069**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	lb/day										lb/day					
Mitigated	0.1643	0.1758	2.2193	5.7000e-003	0.4940	3.2600e-003	0.4972	0.1309	3.0000e-003	0.1339		567.3854	567.3854	0.0188		567.8543
Unmitigated	0.1643	0.1758	2.2193	5.7000e-003	0.4940	3.2600e-003	0.4972	0.1309	3.0000e-003	0.1339		567.3854	567.3854	0.0188		567.8543

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	61.26	61.26	61.26	236,690	236,690
Total	61.26	61.26	61.26	236,690	236,690

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
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067
Parking Lot	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067
Unrefrigerated Warehouse-No Rail	0.589760	0.041511	0.202690	0.160108	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004865	0.000000	0.001067

5.0 Energy Detail

Historical Energy Use: N

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	lb/day										lb/day					
NaturalGas Mitigated	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589
NaturalGas Unmitigated	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589

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	lb/day										lb/day					
General Office Building	3979.36	0.0429	0.3901	0.3277	2.3400e-003		0.0297	0.0297		0.0297	0.0297		468.1596	468.1596	8.9700e-003	8.5800e-003	470.9416
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	25288.7	0.2727	2.4793	2.0826	0.0149		0.1884	0.1884		0.1884	0.1884		2,975.1376	2,975.1376	0.0570	0.0545	2,992.8173
Total		**0.3156**	**2.8694**	**2.4103**	**0.0172**		**0.2181**	**0.2181**		**0.2181**	**0.2181**		**3,443.2971**	**3,443.2971**	**0.0660**	**0.0631**	**3,463.7589**

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	lb/day										lb/day					
General Office Building	3.97936	0.0429	0.3901	0.3277	2.3400e-003		0.0297	0.0297		0.0297	0.0297		468.1596	468.1596	8.9700e-003	8.5800e-003	470.9416
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	25.2887	0.2727	2.4793	2.0826	0.0149		0.1884	0.1884		0.1884	0.1884		2,975.1376	2,975.1376	0.0570	0.0545	2,992.8173
Total		**0.3156**	**2.8694**	**2.4103**	**0.0172**		**0.2181**	**0.2181**		**0.2181**	**0.2181**		**3,443.2971**	**3,443.2971**	**0.0660**	**0.0631**	**3,463.7589**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	lb/day										lb/day					
Mitigated	14.4667	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Unmitigated	14.4667	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467

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	lb/day										lb/day					
Architectural Coating	1.0575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4031					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0700e-003	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Total	**14.4667**	**6.0000e-004**	**0.0645**	**0.0000**		**2.3000e-004**	**2.3000e-004**		**2.3000e-004**	**2.3000e-004**		**0.1375**	**0.1375**	**3.7000e-004**		**0.1467**

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	lb/day										lb/day					
Architectural Coating	1.0575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4031					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0700e-003	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Total	**14.4667**	**6.0000e-004**	**0.0645**	**0.0000**		**2.3000e-004**	**2.3000e-004**		**2.3000e-004**	**2.3000e-004**		**0.1375**	**0.1375**	**3.7000e-004**		**0.1467**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

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

11.0 Vegetation

CalEEMod Output

Phase 2 Construction and Operation no HDT (Winter Daily)

Bronco Winery Later Phases Construction Area and Employee

Stanislaus County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	111.30	1000sqft	2.56	111,300.00	0
Unrefrigerated Warehouse-No Rail	510.53	1000sqft	11.72	510,529.00	0
Parking Lot	6.22	Acre	6.22	270,943.20	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Winter

Project Characteristics -

Land Use - Parking lot based on area of site minus the area of the buildings.

Construction Phase -

Trips and VMT - Demolition is for one house.

Demolition - Remove 2727 sf house with 1,790 sf patio cover

Architectural Coating - Rule 4601 Architectural Coatings

Vehicle Trips - Operational run for employees only based on increase of 30 employees for 60 trips/day.

Area Coating - Rule 4601 Architectural Coatings - use compliant coatings

Construction Off-road Equipment Mitigation -

Area Mitigation -

Fleet Mix - Employee vehicles only LDA, LDT1 and 2, MCY, and MH. Adjusted fleet mix.

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblFleetMix	HHD	0.08	0.00
tblFleetMix	LDA	0.50	0.59
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.17	0.20
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	6.0470e-003	0.00
tblFleetMix	MDV	0.14	0.16
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.8200e-003	0.00
tblFleetMix	SBUS	8.6900e-004	0.00
tblFleetMix	UBUS	1.1830e-003	0.00
tblLandUse	LandUseSquareFeet	510,530.00	510,529.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	21.00	4.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.12
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.12
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.12

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2019	5.7436	54.6322	39.5127	0.1100	18.2962	2.3921	20.6882	9.9917	2.2007	12.1924	0.0000	11,063.4222	11,063.4222	1.9511	0.0000	11,093.5052
2020	5.1281	38.0452	36.6145	0.1083	5.5432	1.2377	6.7810	1.4903	1.1646	2.6549	0.0000	10,853.0517	10,853.0517	1.1431	0.0000	10,881.6287
2021	193.6705	34.5815	34.4545	0.1066	5.5432	1.0321	6.5752	1.4903	0.9704	2.4607	0.0000	10,677.4672	10,677.4672	1.1106	0.0000	10,705.2331
Maximum	**193.6705**	**54.6322**	**39.5127**	**0.1100**	**18.2962**	**2.3921**	**20.6882**	**9.9917**	**2.2007**	**12.1924**	**0.0000**	**11,063.4222**	**11,063.4222**	**1.9511**	**0.0000**	**11,093.5052**

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	lb/day										lb/day					
2019	5.7436	54.6322	39.5127	0.1100	8.3597	2.3921	10.7518	4.5298	2.2007	6.7305	0.0000	11,063.4222	11,063.4222	1.9511	0.0000	11,093.5052
2020	5.1281	38.0452	36.6145	0.1083	5.5432	1.2377	6.7810	1.4903	1.1646	2.6549	0.0000	10,853.0517	10,853.0517	1.1431	0.0000	10,881.6287
2021	193.6705	34.5815	34.4545	0.1066	5.5432	1.0321	6.5752	1.4903	0.9704	2.4607	0.0000	10,677.4672	10,677.4672	1.1106	0.0000	10,705.2331
Maximum	**193.6705**	**54.6322**	**39.5127**	**0.1100**	**8.3597**	**2.3921**	**10.7518**	**4.5298**	**2.2007**	**6.7305**	**0.0000**	**11,063.4222**	**11,063.4222**	**1.9511**	**0.0000**	**11,093.5052**

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Winter

	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	33.82	0.00	29.19	42.10	0.00	31.56	0.00	0.00	0.00	0.00	0.00	0.00

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	lb/day										lb/day					
Area	14.4667	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Energy	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589
Mobile	0.1243	0.2092	1.9369	5.0300e-003	0.4940	3.2600e-003	0.4972	0.1309	3.0000e-003	0.1339		501.1265	501.1265	0.0172		501.5557
Total	**14.9066**	**3.0792**	**4.4118**	**0.0223**	**0.4940**	**0.2216**	**0.7155**	**0.1309**	**0.2213**	**0.3523**		**3,944.5611**	**3,944.5611**	**0.0835**	**0.0631**	**3,965.4613**

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	lb/day										lb/day					
Area	14.4667	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Energy	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589
Mobile	0.1243	0.2092	1.9369	5.0300e-003	0.4940	3.2600e-003	0.4972	0.1309	3.0000e-003	0.1339		501.1265	501.1265	0.0172		501.5557
Total	**14.9066**	**3.0792**	**4.4118**	**0.0223**	**0.4940**	**0.2216**	**0.7155**	**0.1309**	**0.2213**	**0.3523**		**3,944.5611**	**3,944.5611**	**0.0835**	**0.0631**	**3,965.4613**

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	9/1/2019	9/27/2019	5	20	
2	Site Preparation	Site Preparation	10/1/2019	10/14/2019	5	10	
3	Grading	Grading	10/15/2019	12/2/2019	5	35	
4	Building Construction	Building Construction	12/3/2019	5/3/2021	5	370	
5	Paving	Paving	5/4/2021	5/31/2021	5	20	
6	Architectural Coating	Architectural Coating	6/1/2021	6/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 6.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 932,744; Non-Residential Outdoor: 310,915; Striped Parking Area: 16,257 (Architectural Coating – sqft)

OffRoad Equipment

Bronco Winery Later Phases Construction Area and Employee - Stanislaus County, Winter

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	6	15.00	0.00	4.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	364.00	146.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	73.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019

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	lb/day										lb/day					
Fugitive Dust					0.2223	0.0000	0.2223	0.0337	0.0000	0.0337			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**	**0.2223**	**1.7949**	**2.0172**	**0.0337**	**1.6697**	**1.7033**		**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

3.2 Demolition - 2019

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	lb/day										lb/day					
Hauling	1.7500e-003	0.0596	8.9200e-003	1.6000e-004	3.4900e-003	2.4000e-004	3.7300e-003	9.6000e-004	2.3000e-004	1.1800e-003		16.7070	16.7070	1.1500e-003		16.7358
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
Worker	0.1120	0.0840	0.7668	1.8800e-003	0.1916	1.4200e-003	0.1930	0.0508	1.3100e-003	0.0521		186.6418	186.6418	6.3100e-003		186.7995
Total	**0.1137**	**0.1436**	**0.7757**	**2.0400e-003**	**0.1951**	**1.6600e-003**	**0.1968**	**0.0518**	**1.5400e-003**	**0.0533**		**203.3488**	**203.3488**	**7.4600e-003**		**203.5353**

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	lb/day										lb/day					
Fugitive Dust					0.1000	0.0000	0.1000	0.0152	0.0000	0.0152			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**	**0.1000**	**1.7949**	**1.8949**	**0.0152**	**1.6697**	**1.6848**	**0.0000**	**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

3.2 Demolition - 2019

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	lb/day										lb/day					
Hauling	1.7500e-003	0.0596	8.9200e-003	1.6000e-004	3.4900e-003	2.4000e-004	3.7300e-003	9.6000e-004	2.3000e-004	1.1800e-003		16.7070	16.7070	1.1500e-003		16.7358
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
Worker	0.1120	0.0840	0.7668	1.8800e-003	0.1916	1.4200e-003	0.1930	0.0508	1.3100e-003	0.0521		186.6418	186.6418	6.3100e-003		186.7995
Total	**0.1137**	**0.1436**	**0.7757**	**2.0400e-003**	**0.1951**	**1.6600e-003**	**0.1968**	**0.0518**	**1.5400e-003**	**0.0533**		**203.3488**	**203.3488**	**7.4600e-003**		**203.5353**

3.3 Site Preparation - 2019

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

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	lb/day										lb/day					
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
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
Worker	0.1344	0.1008	0.9201	2.2500e-003	0.2299	1.7100e-003	0.2316	0.0610	1.5700e-003	0.0625		223.9702	223.9702	7.5700e-003		224.1594
Total	**0.1344**	**0.1008**	**0.9201**	**2.2500e-003**	**0.2299**	**1.7100e-003**	**0.2316**	**0.0610**	**1.5700e-003**	**0.0625**		**223.9702**	**223.9702**	**7.5700e-003**		**224.1594**

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	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**8.1298**	**2.3904**	**10.5202**	**4.4688**	**2.1991**	**6.6679**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

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	lb/day										lb/day					
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
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
Worker	0.1344	0.1008	0.9201	2.2500e-003	0.2299	1.7100e-003	0.2316	0.0610	1.5700e-003	0.0625		223.9702	223.9702	7.5700e-003		224.1594
Total	**0.1344**	**0.1008**	**0.9201**	**2.2500e-003**	**0.2299**	**1.7100e-003**	**0.2316**	**0.0610**	**1.5700e-003**	**0.0625**		**223.9702**	**223.9702**	**7.5700e-003**		**224.1594**

3.4 Grading - 2019

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	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**8.6733**	**2.3827**	**11.0560**	**3.5965**	**2.1920**	**5.7885**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

3.4 Grading - 2019

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	lb/day										lb/day					
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
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
Worker	0.1493	0.1120	1.0224	2.5000e-003	0.2555	1.9000e-003	0.2574	0.0678	1.7500e-003	0.0695		248.8558	248.8558	8.4100e-003		249.0660
Total	**0.1493**	**0.1120**	**1.0224**	**2.5000e-003**	**0.2555**	**1.9000e-003**	**0.2574**	**0.0678**	**1.7500e-003**	**0.0695**		**248.8558**	**248.8558**	**8.4100e-003**		**249.0660**

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	lb/day										lb/day					
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**3.9030**	**2.3827**	**6.2857**	**1.6184**	**2.1920**	**3.8105**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

3.4 Grading - 2019

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	lb/day										lb/day					
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
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
Worker	0.1493	0.1120	1.0224	2.5000e-003	0.2555	1.9000e-003	0.2574	0.0678	1.7500e-003	0.0695		248.8558	248.8558	8.4100e-003		249.0660
Total	**0.1493**	**0.1120**	**1.0224**	**2.5000e-003**	**0.2555**	**1.9000e-003**	**0.2574**	**0.0678**	**1.7500e-003**	**0.0695**		**248.8558**	**248.8558**	**8.4100e-003**		**249.0660**

3.5 Building Construction - 2019

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	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

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	lb/day										lb/day					
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
Vendor	0.6652	18.7115	3.7417	0.0376	0.8939	0.1358	1.0297	0.2574	0.1299	0.3873		3,942.6673	3,942.6673	0.4189		3,953.1399
Worker	2.7172	2.0388	18.6072	0.0455	4.6494	0.0345	4.6839	1.2330	0.0318	1.2648		4,529.1748	4,529.1748	0.1531		4,533.0019
Total	**3.3825**	**20.7503**	**22.3489**	**0.0831**	**5.5433**	**0.1703**	**5.7136**	**1.4903**	**0.1617**	**1.6520**		**8,471.8421**	**8,471.8421**	**0.5720**		**8,486.1418**

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	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

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	lb/day										lb/day					
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
Vendor	0.6652	18.7115	3.7417	0.0376	0.8939	0.1358	1.0297	0.2574	0.1299	0.3873		3,942.6673	3,942.6673	0.4189		3,953.1399
Worker	2.7172	2.0388	18.6072	0.0455	4.6494	0.0345	4.6839	1.2330	0.0318	1.2648		4,529.1748	4,529.1748	0.1531		4,533.0019
Total	**3.3825**	**20.7503**	**22.3489**	**0.0831**	**5.5433**	**0.1703**	**5.7136**	**1.4903**	**0.1617**	**1.6520**		**8,471.8421**	**8,471.8421**	**0.5720**		**8,486.1418**

3.5 Building Construction - 2020

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	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

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	lb/day										lb/day					
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
Vendor	0.5328	17.0626	3.2216	0.0373	0.8939	0.0874	0.9812	0.2573	0.0836	0.3409		3,909.5908	3,909.5908	0.3873		3,919.2728
Worker	2.4754	1.7966	16.5444	0.0441	4.6494	0.0333	4.6827	1.2330	0.0307	1.2637		4,390.3978	4,390.3978	0.1329		4,393.7214
Total	**3.0082**	**18.8591**	**19.7660**	**0.0814**	**5.5432**	**0.1207**	**5.6639**	**1.4903**	**0.1143**	**1.6046**		**8,299.9886**	**8,299.9886**	**0.5202**		**8,312.9942**

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	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

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	lb/day										lb/day					
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
Vendor	0.5328	17.0626	3.2216	0.0373	0.8939	0.0874	0.9812	0.2573	0.0836	0.3409		3,909.5908	3,909.5908	0.3873		3,919.2728
Worker	2.4754	1.7966	16.5444	0.0441	4.6494	0.0333	4.6827	1.2330	0.0307	1.2637		4,390.3978	4,390.3978	0.1329		4,393.7214
Total	**3.0082**	**18.8591**	**19.7660**	**0.0814**	**5.5432**	**0.1207**	**5.6639**	**1.4903**	**0.1143**	**1.6046**		**8,299.9886**	**8,299.9886**	**0.5202**		**8,312.9942**

3.5 Building Construction - 2021

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	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

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	lb/day										lb/day					
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
Vendor	0.4355	15.5475	2.8137	0.0370	0.8938	0.0411	0.9348	0.2573	0.0393	0.2966		3,872.4884	3,872.4884	0.3753		3,881.8716
Worker	2.2865	1.6020	15.0656	0.0427	4.6494	0.0324	4.6818	1.2330	0.0298	1.2628		4,251.6149	4,251.6149	0.1193		4,254.5972
Total	**2.7220**	**17.1494**	**17.8793**	**0.0796**	**5.5432**	**0.0735**	**5.6166**	**1.4903**	**0.0691**	**1.5594**		**8,124.1033**	**8,124.1033**	**0.4946**		**8,136.4688**

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	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

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	lb/day										lb/day					
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
Vendor	0.4355	15.5475	2.8137	0.0370	0.8938	0.0411	0.9348	0.2573	0.0393	0.2966		3,872.4884	3,872.4884	0.3753		3,881.8716
Worker	2.2865	1.6020	15.0656	0.0427	4.6494	0.0324	4.6818	1.2330	0.0298	1.2628		4,251.6149	4,251.6149	0.1193		4,254.5972
Total	**2.7220**	**17.1494**	**17.8793**	**0.0796**	**5.5432**	**0.0735**	**5.6166**	**1.4903**	**0.0691**	**1.5594**		**8,124.1033**	**8,124.1033**	**0.4946**		**8,136.4688**

3.6 Paving - 2021

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	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.8148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0704**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.6 Paving - 2021

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	lb/day										lb/day					
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
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
Worker	0.0942	0.0660	0.6208	1.7600e-003	0.1916	1.3400e-003	0.1929	0.0508	1.2300e-003	0.0520		175.2039	175.2039	4.9200e-003		175.3268
Total	**0.0942**	**0.0660**	**0.6208**	**1.7600e-003**	**0.1916**	**1.3400e-003**	**0.1929**	**0.0508**	**1.2300e-003**	**0.0520**		**175.2039**	**175.2039**	**4.9200e-003**		**175.3268**

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	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.8148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0704**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.6 Paving - 2021

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	lb/day										lb/day					
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
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
Worker	0.0942	0.0660	0.6208	1.7600e-003	0.1916	1.3400e-003	0.1929	0.0508	1.2300e-003	0.0520		175.2039	175.2039	4.9200e-003		175.3268
Total	**0.0942**	**0.0660**	**0.6208**	**1.7600e-003**	**0.1916**	**1.3400e-003**	**0.1929**	**0.0508**	**1.2300e-003**	**0.0520**		**175.2039**	**175.2039**	**4.9200e-003**		**175.3268**

3.7 Architectural Coating - 2021

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	lb/day										lb/day					
Archit. Coating	192.9930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**193.2119**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

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	lb/day										lb/day					
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
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
Worker	0.4586	0.3213	3.0214	8.5600e-003	0.9324	6.5000e-003	0.9389	0.2473	5.9900e-003	0.2533		852.6590	852.6590	0.0239		853.2571
Total	**0.4586**	**0.3213**	**3.0214**	**8.5600e-003**	**0.9324**	**6.5000e-003**	**0.9389**	**0.2473**	**5.9900e-003**	**0.2533**		**852.6590**	**852.6590**	**0.0239**		**853.2571**

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	lb/day										lb/day					
Archit. Coating	192.9930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**193.2119**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

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	lb/day										lb/day					
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
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
Worker	0.4586	0.3213	3.0214	8.5600e-003	0.9324	6.5000e-003	0.9389	0.2473	5.9900e-003	0.2533		852.6590	852.6590	0.0239		853.2571
Total	**0.4586**	**0.3213**	**3.0214**	**8.5600e-003**	**0.9324**	**6.5000e-003**	**0.9389**	**0.2473**	**5.9900e-003**	**0.2533**		**852.6590**	**852.6590**	**0.0239**		**853.2571**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	lb/day										lb/day					
Mitigated	0.1243	0.2092	1.9369	5.0300e-003	0.4940	3.2600e-003	0.4972	0.1309	3.0000e-003	0.1339		501.1265	501.1265	0.0172		501.5557
Unmitigated	0.1243	0.2092	1.9369	5.0300e-003	0.4940	3.2600e-003	0.4972	0.1309	3.0000e-003	0.1339		501.1265	501.1265	0.0172		501.5557

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	61.26	61.26	61.26	236,690	236,690
Total	61.26	61.26	61.26	236,690	236,690

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
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067
Parking Lot	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067
Unrefrigerated Warehouse-No Rail	0.589760	0.041511	0.202690	0.160108	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004865	0.000000	0.001067

5.0 Energy Detail

Historical Energy Use: N

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	lb/day										lb/day					
NaturalGas Mitigated	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589
NaturalGas Unmitigated	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589

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	lb/day										lb/day					
General Office Building	3979.36	0.0429	0.3901	0.3277	2.3400e-003		0.0297	0.0297		0.0297	0.0297		468.1596	468.1596	8.9700e-003	8.5800e-003	470.9416
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	25288.7	0.2727	2.4793	2.0826	0.0149		0.1884	0.1884		0.1884	0.1884		2,975.1376	2,975.1376	0.0570	0.0545	2,992.8173
Total		**0.3156**	**2.8694**	**2.4103**	**0.0172**		**0.2181**	**0.2181**		**0.2181**	**0.2181**		**3,443.2971**	**3,443.2971**	**0.0660**	**0.0631**	**3,463.7589**

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	lb/day										lb/day					
General Office Building	3.97936	0.0429	0.3901	0.3277	2.3400e-003		0.0297	0.0297		0.0297	0.0297		468.1596	468.1596	8.9700e-003	8.5800e-003	470.9416
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	25.2887	0.2727	2.4793	2.0826	0.0149		0.1884	0.1884		0.1884	0.1884		2,975.1376	2,975.1376	0.0570	0.0545	2,992.8173
Total		**0.3156**	**2.8694**	**2.4103**	**0.0172**		**0.2181**	**0.2181**		**0.2181**	**0.2181**		**3,443.2971**	**3,443.2971**	**0.0660**	**0.0631**	**3,463.7589**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	lb/day										lb/day					
Mitigated	14.4667	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Unmitigated	14.4667	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467

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	lb/day										lb/day					
Architectural Coating	1.0575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4031					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0700e-003	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Total	**14.4667**	**6.0000e-004**	**0.0645**	**0.0000**		**2.3000e-004**	**2.3000e-004**		**2.3000e-004**	**2.3000e-004**		**0.1375**	**0.1375**	**3.7000e-004**		**0.1467**

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	lb/day										lb/day					
Architectural Coating	1.0575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4031					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0700e-003	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Total	**14.4667**	**6.0000e-004**	**0.0645**	**0.0000**		**2.3000e-004**	**2.3000e-004**		**2.3000e-004**	**2.3000e-004**		**0.1375**	**0.1375**	**3.7000e-004**		**0.1467**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

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

11.0 Vegetation

CalEEMod Output

All Phases Operation HDT Only (Summer Daily)

Bronco Winery Expansion Truck Only

Stanislaus County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	111.30	1000sqft	2.56	111,300.00	0
Unrefrigerated Warehouse-No Rail	510.53	1000sqft	11.72	510,529.00	0
Parking Lot	6.22	Acre	6.22	270,943.20	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Parking lot based on area of site minus the area of the buildings.

Construction Phase -

Demolition - Remove 2727 sf house with 1,790 sf patio cover

Architectural Coating - Rule 4601 Architectural Coatings

Fleet Mix - Truck Only Run

Vehicle Trips - 50 new truck trips per day with expansion Trip length 50 miles Air District default value

Bronco Winery Expansion Truck Only - Stanislaus County, Summer

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.08	0.00
tblFleetMix	HHD	0.08	1.00
tblFleetMix	LDA	0.50	0.00
tblFleetMix	LDA	0.50	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	6.0470e-003	0.00
tblFleetMix	LHD2	6.0470e-003	0.00
tblFleetMix	MCY	4.8650e-003	0.00
tblFleetMix	MCY	4.8650e-003	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	1.0670e-003	0.00
tblFleetMix	MH	1.0670e-003	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.8200e-003	0.00
tblFleetMix	OBUS	1.8200e-003	0.00
tblFleetMix	SBUS	8.6900e-004	0.00
tblFleetMix	SBUS	8.6900e-004	0.00
tblFleetMix	UBUS	1.1830e-003	0.00
tblFleetMix	UBUS	1.1830e-003	0.00

tblLandUse	LandUseSquareFeet	510,530.00	510,529.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	50.00
tblVehicleTrips	CNW_TL	6.60	50.00
tblVehicleTrips	CW_TL	14.70	50.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.10
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.10
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.10

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2019	5.7304	54.6140	42.7219	0.1174	18.2962	2.3921	20.6882	9.9917	2.2007	12.1924	0.0000	11,800.9115	11,800.9115	1.9523	0.0000	11,830.3935
2020	5.1173	37.5891	39.5591	0.1155	5.5432	1.2357	6.7790	1.4903	1.1627	2.6530	0.0000	11,572.0965	11,572.0965	1.1196	0.0000	11,600.0866
2021	438.6583	34.2177	37.1910	0.1135	5.5432	1.0304	6.5735	1.4903	0.9687	2.4590	0.0000	11,376.5466	11,376.5466	1.0858	0.0000	11,403.6920
Maximum	**438.6583**	**54.6140**	**42.7219**	**0.1174**	**18.2962**	**2.3921**	**20.6882**	**9.9917**	**2.2007**	**12.1924**	**0.0000**	**11,800.9115**	**11,800.9115**	**1.9523**	**0.0000**	**11,830.3935**

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	lb/day										lb/day					
2019	5.7304	54.6140	42.7219	0.1174	18.2962	2.3921	20.6882	9.9917	2.2007	12.1924	0.0000	11,800.9115	11,800.9115	1.9523	0.0000	11,830.3935
2020	5.1173	37.5891	39.5591	0.1155	5.5432	1.2357	6.7790	1.4903	1.1627	2.6530	0.0000	11,572.0965	11,572.0965	1.1196	0.0000	11,600.0866
2021	438.6583	34.2177	37.1910	0.1135	5.5432	1.0304	6.5735	1.4903	0.9687	2.4590	0.0000	11,376.5466	11,376.5466	1.0858	0.0000	11,403.6920
Maximum	**438.6583**	**54.6140**	**42.7219**	**0.1174**	**18.2962**	**2.3921**	**20.6882**	**9.9917**	**2.2007**	**12.1924**	**0.0000**	**11,800.9115**	**11,800.9115**	**1.9523**	**0.0000**	**11,830.3935**

Bronco Winery Expansion Truck Only - Stanislaus County, Summer

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	lb/day										lb/day					
Area	15.8091	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Energy	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589
Mobile	0.8465	26.5447	4.1784	0.0925	2.2270	0.1137	2.3407	0.6100	0.1083	0.7187		9,711.4165	9,711.4165	0.2966		9,718.8307
Total	**16.9712**	**29.4147**	**6.6533**	**0.1097**	**2.2270**	**0.3320**	**2.5590**	**0.6100**	**0.3271**	**0.9371**		**13,154.8511**	**13,154.8511**	**0.3629**	**0.0631**	**13,182.7363**

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	lb/day										lb/day					
Area	15.8091	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Energy	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589
Mobile	0.8465	26.5447	4.1784	0.0925	2.2270	0.1137	2.3407	0.6100	0.1083	0.7187		9,711.4165	9,711.4165	0.2966		9,718.8307
Total	**16.9712**	**29.4147**	**6.6533**	**0.1097**	**2.2270**	**0.3320**	**2.5590**	**0.6100**	**0.3271**	**0.9371**		**13,154.8511**	**13,154.8511**	**0.3629**	**0.0631**	**13,182.7363**

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	9/1/2019	9/27/2019	5	20	
2	Site Preparation	Site Preparation	10/1/2019	10/14/2019	5	10	
3	Grading	Grading	10/15/2019	12/2/2019	5	35	
4	Building Construction	Building Construction	12/3/2019	5/3/2021	5	370	
5	Paving	Paving	5/4/2021	5/31/2021	5	20	
6	Architectural Coating	Architectural Coating	6/1/2021	6/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 6.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 932,744; Non-Residential Outdoor: 310,915; Striped Parking Area: 16,257 (Architectural Coating – sqft)

OffRoad Equipment

Bronco Winery Expansion Truck Only - Stanislaus County, Summer

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	6	15.00	0.00	21.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	364.00	146.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	73.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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	lb/day										lb/day					
Fugitive Dust					0.2223	0.0000	0.2223	0.0337	0.0000	0.0337			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**	**0.2223**	**1.7949**	**2.0172**	**0.0337**	**1.6697**	**1.7033**		**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

3.2 Demolition - 2019

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	lb/day										lb/day					
Hauling	8.8900e-003	0.3043	0.0414	8.5000e-004	0.0184	1.2100e-003	0.0196	5.0300e-003	1.1600e-003	6.1900e-003		89.5344	89.5344	5.4000e-003		89.6695
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
Worker	0.1126	0.0704	0.9227	2.1300e-003	0.1916	1.4200e-003	0.1930	0.0508	1.3100e-003	0.0521		211.6170	211.6170	7.2600e-003		211.7986
Total	**0.1215**	**0.3746**	**0.9641**	**2.9800e-003**	**0.2100**	**2.6300e-003**	**0.2126**	**0.0558**	**2.4700e-003**	**0.0583**		**301.1514**	**301.1514**	**0.0127**		**301.4680**

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	lb/day										lb/day					
Fugitive Dust					0.2223	0.0000	0.2223	0.0337	0.0000	0.0337			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**	**0.2223**	**1.7949**	**2.0172**	**0.0337**	**1.6697**	**1.7033**	**0.0000**	**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

3.2 Demolition - 2019

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	lb/day										lb/day					
Hauling	8.8900e-003	0.3043	0.0414	8.5000e-004	0.0184	1.2100e-003	0.0196	5.0300e-003	1.1600e-003	6.1900e-003		89.5344	89.5344	5.4000e-003		89.6695
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
Worker	0.1126	0.0704	0.9227	2.1300e-003	0.1916	1.4200e-003	0.1930	0.0508	1.3100e-003	0.0521		211.6170	211.6170	7.2600e-003		211.7986
Total	**0.1215**	**0.3746**	**0.9641**	**2.9800e-003**	**0.2100**	**2.6300e-003**	**0.2126**	**0.0558**	**2.4700e-003**	**0.0583**		**301.1514**	**301.1514**	**0.0127**		**301.4680**

3.3 Site Preparation - 2019

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

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	lb/day										lb/day					
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
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
Worker	0.1351	0.0844	1.1073	2.5500e-003	0.2299	1.7100e-003	0.2316	0.0610	1.5700e-003	0.0625		253.9405	253.9405	8.7100e-003		254.1583
Total	**0.1351**	**0.0844**	**1.1073**	**2.5500e-003**	**0.2299**	**1.7100e-003**	**0.2316**	**0.0610**	**1.5700e-003**	**0.0625**		**253.9405**	**253.9405**	**8.7100e-003**		**254.1583**

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

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	lb/day										lb/day					
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
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
Worker	0.1351	0.0844	1.1073	2.5500e-003	0.2299	1.7100e-003	0.2316	0.0610	1.5700e-003	0.0625		253.9405	253.9405	8.7100e-003		254.1583
Total	**0.1351**	**0.0844**	**1.1073**	**2.5500e-003**	**0.2299**	**1.7100e-003**	**0.2316**	**0.0610**	**1.5700e-003**	**0.0625**		**253.9405**	**253.9405**	**8.7100e-003**		**254.1583**

3.4 Grading - 2019

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	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**8.6733**	**2.3827**	**11.0560**	**3.5965**	**2.1920**	**5.7885**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

3.4 Grading - 2019

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	lb/day										lb/day					
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
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
Worker	0.1501	0.0938	1.2303	2.8400e-003	0.2555	1.9000e-003	0.2574	0.0678	1.7500e-003	0.0695		282.1561	282.1561	9.6800e-003		282.3981
Total	**0.1501**	**0.0938**	**1.2303**	**2.8400e-003**	**0.2555**	**1.9000e-003**	**0.2574**	**0.0678**	**1.7500e-003**	**0.0695**		**282.1561**	**282.1561**	**9.6800e-003**		**282.3981**

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	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**8.6733**	**2.3827**	**11.0560**	**3.5965**	**2.1920**	**5.7885**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

3.4 Grading - 2019

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	lb/day										lb/day					
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
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
Worker	0.1501	0.0938	1.2303	2.8400e-003	0.2555	1.9000e-003	0.2574	0.0678	1.7500e-003	0.0695		282.1561	282.1561	9.6800e-003		282.3981
Total	**0.1501**	**0.0938**	**1.2303**	**2.8400e-003**	**0.2555**	**1.9000e-003**	**0.2574**	**0.0678**	**1.7500e-003**	**0.0695**		**282.1561**	**282.1561**	**9.6800e-003**		**282.3981**

3.5 Building Construction - 2019

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	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

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	lb/day										lb/day					
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
Vendor	0.6376	18.4783	3.1672	0.0389	0.8939	0.1331	1.0270	0.2574	0.1273	0.3847		4,074.0911	4,074.0911	0.3718		4,083.3851
Worker	2.7317	1.7073	22.3910	0.0516	4.6494	0.0345	4.6839	1.2330	0.0318	1.2648		5,135.2402	5,135.2402	0.1762		5,139.6449
Total	**3.3692**	**20.1856**	**25.5581**	**0.0905**	**5.5433**	**0.1676**	**5.7109**	**1.4903**	**0.1591**	**1.6494**		**9,209.3313**	**9,209.3313**	**0.5480**		**9,223.0300**

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	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

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	lb/day										lb/day					
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
Vendor	0.6376	18.4783	3.1672	0.0389	0.8939	0.1331	1.0270	0.2574	0.1273	0.3847		4,074.0911	4,074.0911	0.3718		4,083.3851
Worker	2.7317	1.7073	22.3910	0.0516	4.6494	0.0345	4.6839	1.2330	0.0318	1.2648		5,135.2402	5,135.2402	0.1762		5,139.6449
Total	**3.3692**	**20.1856**	**25.5581**	**0.0905**	**5.5433**	**0.1676**	**5.7109**	**1.4903**	**0.1591**	**1.6494**		**9,209.3313**	**9,209.3313**	**0.5480**		**9,223.0300**

3.5 Building Construction - 2020

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	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

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	lb/day										lb/day					
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
Vendor	0.5083	16.8971	2.7054	0.0386	0.8939	0.0854	0.9792	0.2573	0.0817	0.3390		4,040.5920	4,040.5920	0.3429		4,049.1650
Worker	2.4892	1.5059	20.0052	0.0500	4.6494	0.0333	4.6827	1.2330	0.0307	1.2637		4,978.4414	4,978.4414	0.1538		4,982.2871
Total	**2.9975**	**18.4030**	**22.7106**	**0.0886**	**5.5432**	**0.1187**	**5.6619**	**1.4903**	**0.1124**	**1.6027**		**9,019.0335**	**9,019.0335**	**0.4968**		**9,031.4521**

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	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

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	lb/day										lb/day					
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
Vendor	0.5083	16.8971	2.7054	0.0386	0.8939	0.0854	0.9792	0.2573	0.0817	0.3390		4,040.5920	4,040.5920	0.3429		4,049.1650
Worker	2.4892	1.5059	20.0052	0.0500	4.6494	0.0333	4.6827	1.2330	0.0307	1.2637		4,978.4414	4,978.4414	0.1538		4,982.2871
Total	**2.9975**	**18.4030**	**22.7106**	**0.0886**	**5.5432**	**0.1187**	**5.6619**	**1.4903**	**0.1124**	**1.6027**		**9,019.0335**	**9,019.0335**	**0.4968**		**9,031.4521**

3.5 Building Construction - 2021

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	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

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	lb/day										lb/day					
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
Vendor	0.4126	15.4422	2.3401	0.0382	0.8938	0.0393	0.9331	0.2573	0.0376	0.2949		4,002.3577	4,002.3577	0.3316		4,010.6467
Worker	2.2990	1.3434	18.2757	0.0484	4.6494	0.0324	4.6818	1.2330	0.0298	1.2628		4,820.8251	4,820.8251	0.1382		4,824.2811
Total	**2.7116**	**16.7856**	**20.6158**	**0.0866**	**5.5432**	**0.0717**	**5.6149**	**1.4903**	**0.0675**	**1.5577**		**8,823.1827**	**8,823.1827**	**0.4698**		**8,834.9278**

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	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

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	lb/day										lb/day					
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
Vendor	0.4126	15.4422	2.3401	0.0382	0.8938	0.0393	0.9331	0.2573	0.0376	0.2949		4,002.3577	4,002.3577	0.3316		4,010.6467
Worker	2.2990	1.3434	18.2757	0.0484	4.6494	0.0324	4.6818	1.2330	0.0298	1.2628		4,820.8251	4,820.8251	0.1382		4,824.2811
Total	**2.7116**	**16.7856**	**20.6158**	**0.0866**	**5.5432**	**0.0717**	**5.6149**	**1.4903**	**0.0675**	**1.5577**		**8,823.1827**	**8,823.1827**	**0.4698**		**8,834.9278**

3.6 Paving - 2021

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	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.8148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0704**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.6 Paving - 2021

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	lb/day										lb/day					
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
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
Worker	0.0947	0.0554	0.7531	2.0000e-003	0.1916	1.3400e-003	0.1929	0.0508	1.2300e-003	0.0520		198.6604	198.6604	5.7000e-003		198.8028
Total	**0.0947**	**0.0554**	**0.7531**	**2.0000e-003**	**0.1916**	**1.3400e-003**	**0.1929**	**0.0508**	**1.2300e-003**	**0.0520**		**198.6604**	**198.6604**	**5.7000e-003**		**198.8028**

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	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.8148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0704**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.6 Paving - 2021

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	lb/day										lb/day					
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
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
Worker	0.0947	0.0554	0.7531	2.0000e-003	0.1916	1.3400e-003	0.1929	0.0508	1.2300e-003	0.0520		198.6604	198.6604	5.7000e-003		198.8028
Total	**0.0947**	**0.0554**	**0.7531**	**2.0000e-003**	**0.1916**	**1.3400e-003**	**0.1929**	**0.0508**	**1.2300e-003**	**0.0520**		**198.6604**	**198.6604**	**5.7000e-003**		**198.8028**

3.7 Architectural Coating - 2021

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	lb/day										lb/day					
Archit. Coating	437.9783					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**438.1972**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

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	lb/day										lb/day					
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
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
Worker	0.4611	0.2694	3.6652	9.7100e-003	0.9324	6.5000e-003	0.9389	0.2473	5.9900e-003	0.2533		966.8138	966.8138	0.0277		967.5069
Total	**0.4611**	**0.2694**	**3.6652**	**9.7100e-003**	**0.9324**	**6.5000e-003**	**0.9389**	**0.2473**	**5.9900e-003**	**0.2533**		**966.8138**	**966.8138**	**0.0277**		**967.5069**

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	lb/day										lb/day					
Archit. Coating	437.9783					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**438.1972**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

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	lb/day										lb/day					
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
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
Worker	0.4611	0.2694	3.6652	9.7100e-003	0.9324	6.5000e-003	0.9389	0.2473	5.9900e-003	0.2533		966.8138	966.8138	0.0277		967.5069
Total	**0.4611**	**0.2694**	**3.6652**	**9.7100e-003**	**0.9324**	**6.5000e-003**	**0.9389**	**0.2473**	**5.9900e-003**	**0.2533**		**966.8138**	**966.8138**	**0.0277**		**967.5069**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	lb/day										lb/day					
Mitigated	0.8465	26.5447	4.1784	0.0925	2.2270	0.1137	2.3407	0.6100	0.1088	0.7187		9,711.4165	9,711.4165	0.2966		9,718.8307
Unmitigated	0.8465	26.5447	4.1784	0.0925	2.2270	0.1137	2.3407	0.6100	0.1088	0.7187		9,711.4165	9,711.4165	0.2966		9,718.8307

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	51.05	51.05	51.05	929,165	929,165
Total	51.05	51.05	51.05	929,165	929,165

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
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	50.00	50.00	50.00	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

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	lb/day										lb/day					
NaturalGas Mitigated	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589
NaturalGas Unmitigated	0.3156	2.8694	2.4103	0.0172		0.2181	0.2181		0.2181	0.2181		3,443.2971	3,443.2971	0.0660	0.0631	3,463.7589

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	lb/day										lb/day					
General Office Building	3979.36	0.0429	0.3901	0.3277	2.3400e-003		0.0297	0.0297		0.0297	0.0297		468.1596	468.1596	8.9700e-003	8.5800e-003	470.9416
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	25288.7	0.2727	2.4793	2.0826	0.0149		0.1884	0.1884		0.1884	0.1884		2,975.1376	2,975.1376	0.0570	0.0545	2,992.8173
Total		**0.3156**	**2.8694**	**2.4103**	**0.0172**		**0.2181**	**0.2181**		**0.2181**	**0.2181**		**3,443.2971**	**3,443.2971**	**0.0660**	**0.0631**	**3,463.7589**

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	lb/day										lb/day					
General Office Building	3.97936	0.0429	0.3901	0.3277	2.3400e-003		0.0297	0.0297		0.0297	0.0297		468.1596	468.1596	8.9700e-003	8.5800e-003	470.9416
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	25.2887	0.2727	2.4793	2.0826	0.0149		0.1884	0.1884		0.1884	0.1884		2,975.1376	2,975.1376	0.0570	0.0545	2,992.8173
Total		**0.3156**	**2.8694**	**2.4103**	**0.0172**		**0.2181**	**0.2181**		**0.2181**	**0.2181**		**3,443.2971**	**3,443.2971**	**0.0660**	**0.0631**	**3,463.7589**

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	lb/day										lb/day					
Mitigated	15.8091	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Unmitigated	15.8091	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467

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	lb/day										lb/day					
Architectural Coating	2.3999					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4031					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0700e-003	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Total	**15.8091**	**6.0000e-004**	**0.0645**	**0.0000**		**2.3000e-004**	**2.3000e-004**		**2.3000e-004**	**2.3000e-004**		**0.1375**	**0.1375**	**3.7000e-004**		**0.1467**

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	lb/day										lb/day					
Architectural Coating	2.3999					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4031					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0700e-003	6.0000e-004	0.0645	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1375	0.1375	3.7000e-004		0.1467
Total	**15.8091**	**6.0000e-004**	**0.0645**	**0.0000**		**2.3000e-004**	**2.3000e-004**		**2.3000e-004**	**2.3000e-004**		**0.1375**	**0.1375**	**3.7000e-004**		**0.1467**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

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

11.0 Vegetation

EMFAC 2017 Emission Factors

EMFAC2017 (v1.0.2) Emission Rates
Region Type: County
Region: STANISLAUS
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW

Region	Calendar Y	Vehicle Ca	Model Yea	Speed	Fuel	VMT	ROG_RUNI	TOG_RUNI	CO_RUNEX	NOx_RUNI	SOx_RUNE	CO2_RUNE	CH4_RUNE	PM10_RUI	PM2_5_RU	N2O_RUNEX
STANISLAUS	2020	T7 tractor	Aggregatec	5	DSL	1047.441	1.908673	2.172879	4.539717	16.94731	0.034218	3621.949	0.088653	0.223094	0.213443	0.56932
STANISLAUS	2020	T7 tractor	Aggregatec	10	DSL	2236.967	1.439833	1.639141	3.373609	13.59758	0.028866	3055.446	0.066877	0.187277	0.179175	0.480274
STANISLAUS	2020	T7 tractor	Aggregatec	15	DSL	2852.21	0.785087	0.893761	2.153757	9.910779	0.023061	2440.922	0.036465	0.130272	0.124637	0.383679
STANISLAUS	2020	T7 tractor	Aggregatec	20	DSL	3258.973	0.415681	0.473222	1.479208	7.954494	0.019692	2084.341	0.019307	0.091196	0.087251	0.327629
STANISLAUS	2020	T7 tractor	Aggregatec	25	DSL	3964.205	0.304265	0.346382	1.156368	6.715251	0.017342	1835.585	0.014132	0.075429	0.072166	0.288528
	g/mile													**0.707268**		
Average Running Emissions 5-25 MPH	**0.141454**															
Average Running Emissions 5-15 MPH	**0.180214**															

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Appendix B: San Joaquin Valley Air Pollution Control District Amicus Brief on Friant Ranch Supreme Court Decision

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SUPREME COURT COPY

CASE NO. S219783

IN THE SUPREME COURT OF CALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,
Plaintiffs and Appellants

v.

COUNTY OF FRESNO,
Defendant and Respondent

FRIANT RANCH, L.P.,
Real Party in Interest and Respondent

SUPREME COURT
FILED
APR 13 2015
Frank A. McGuire Clerk
Deputy

After a Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726

APPLICATION FOR LEAVE TO FILE AMICUS CURIAE BRIEF OF SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT IN SUPPORT OF DEFENDANT AND RESPONDENT, COUNTY OF FRESNO AND REAL PARTY IN INTEREST AND RESPONDENT, FRIANT RANCH, L.P.

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CASE NO. S219783

IN THE SUPREME COURT OF CALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,
Plaintiffs and Appellants

v.

COUNTY OF FRESNO,
Defendant and Respondent

FRIANT RANCH, L.P.,
Real Party in Interest and Respondent

After a Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726

APPLICATION FOR LEAVE TO FILE AMICUS CURIAE BRIEF OF SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT IN SUPPORT OF DEFENDANT AND RESPONDENT, COUNTY OF FRESNO AND REAL PARTY IN INTEREST AND RESPONDENT, FRIANT RANCH, L.P.

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APPLICATION

Pursuant to California Rules of Court 8.520(f)(1), proposed Amicus Curiae San Joaquin Valley Unified Air Pollution Control District hereby requests permission from the Chief Justice to file an amicus brief in support of Defendant and Respondent, County of Fresno, and Defendant and Real Parties in Interest Friant Ranch, L.P. Pursuant to Rule 8.520(f)(5) of the California Rules of Court, the proposed amicus curiae brief is combined with this Application. The brief addresses the following issue certified by this Court for review:

> Is an EIR adequate when it identifies the health impacts of air pollution and quantifies a project's expected emissions, or does CEQA further require the EIR to *correlate* a project's air quality emissions to specific health impacts?

As of the date of this filing, the deadline for the final reply brief on the merits was March 5, 2015. Accordingly, under Rule 8.520(f)(2), this application and brief are timely.

1. Background and Interest of San Joaquin Valley Unified Air Pollution Control District

The San Joaquin Valley Unified Air Pollution Control District ("Air District") regulates air quality in the eight counties comprising the San Joaquin Valley ("Central Valley"): Kern, Tulare, Madera, Fresno, Merced, San Joaquin, Stanislaus, and Kings, and is primarily responsible for attaining air quality standards within its jurisdiction. After billions of dollars of investment by Central Valley businesses, pioneering air quality regulations, and consistent efforts by residents, the Central Valley air basin has made historic improvements in air quality.

The Central Valley's geographical, topographical and meteorological features create exceptionally challenging air quality

conditions. For example, it receives air pollution transported from the San Francisco Bay Area and northern Central Valley communities, and the southern portion of the Central Valley includes three mountain ranges (Sierra, Tehachapi, and Coastal) that, under some meteorological conditions, effectively trap air pollution. Central Valley air pollution is only a fraction of what the Bay Area and Los Angeles produce, but these natural conditions result in air quality conditions that are only marginally better than Los Angeles, even though about ten times more pollution is emitted in the Los Angeles region. Bay Area air quality is much better than the Central Valley's, even though the Bay Area produces about six times more pollution. The Central Valley also receives air pollution transported from the Bay Area and northern counties in the Central Valley, including Sacramento, and transboundary anthropogenic ozone from as far away as China.

Notwithstanding these challenges, the Central Valley has reduced emissions at the same or better rate than other areas in California and has achieved unparalleled milestones in protecting public health and the environment:

- In the last decade, the Central Valley became the first air basin classified by the federal government under the Clean Air Act as a "serious nonattainment" area to come into attainment of health-based National Ambient Air Quality Standard ("NAAQS") for coarse particulate matter (PM10), an achievement made even more notable given the Valley's extensive agricultural sector. Unhealthy levels of particulate matter can cause and exacerbate a range of chronic and acute illnesses.
- In 2013, the Central Valley became the first air basin in the country to improve from a federal designation of "extreme" nonattainment to

actually attain (and quality for an attainment designation) of the 1-hour ozone NAAQS; ozone creates "smog" and, like PM10, causes adverse health impacts.

- The Central Valley also is in full attainment of federal standards for lead, nitrogen dioxide, sulfur dioxide, and carbon monoxide.
- The Central Valley continues to make progress toward compliance with its last two attainment standards, with the number of exceedences for the 8-hour ozone NAAQS reduced by 74% (for the 1997 standard) and 38% (for the 2008 standard) since 1991, and for the small particulate matter (PM2.5) NAAQS reduced by 85% (for the 1997 standard) and 61% (for the 2006 standard).

Sustained improvement in Central Valley air quality requires a rigorous and comprehensive regulatory framework that includes prohibitions (e.g., on wood-burning fireplaces in new residences), mandates (e.g., requiring the installation of best available pollution reduction technologies on new and modified equipment and industrial operations), innovations (e.g., fees assessed against residential development to fund pollution reduction actions to "offset" vehicular emissions associated with new residences), incentive programs (e.g., funding replacements of older, more polluting heavy duty trucks and school buses)[1], ongoing planning for continued air quality improvements, and enforcement of Air District permits and regulations.

The Air District is also an expert air quality agency for the eight counties and cities in the San Joaquin Valley. In that capacity, the Air District has developed air quality emission guidelines for use by the Central

[1] San Joaquin's incentive program has been so successful that through 2012, it has awarded over $ 432 million in incentive funds and has achieved 93,349 tons of lifetime emissions reductions. *See* SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 2012 PM2.5 PLAN, 6-6 (2012) *available at* http://www.valleyair.org/Workshops/postings/2012/12-20-12PM25/FinalVersion/06%20Chapter%206%20Incentives.pdf.

Valley counties and cities that implement the California Environment Quality Act (CEQA).[2] In its guidance, the Air District has distinguished between toxic air contaminants and criteria air pollutants.[3] Recognizing this distinction, the Air District's CEQA Guidance has adopted distinct thresholds of significance for *criteria* pollutants (i.e., ozone, PM2.5 and their respective precursor pollutants) based upon scientific and factual data which demonstrates the level that can be accommodated on a cumulative basis in the San Joaquin Valley without affecting the attainment of the applicable NAAQS.[4] For *toxic air* pollutants, the District has adopted different thresholds of significance which scientific and factual data demonstrates has the potential to expose sensitive receptors (i.e., children, the elderly) to levels which may result in localized health impacts.[5]

The Air District's CEQA Guidance was followed by the County of Fresno in its environment review of the Friant Ranch project, for which the Air District also served as a commenting agency. The Court of Appeal's holding, however, requiring correlation between the project's criteria

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[2] *See, e.g.*, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, PLANNING DIVISION, GUIDE FOR ASSESSING AND MITIGATING AIR QUALITY IMPACTS (2015), *available at* http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf ("CEQA Guidance").

[3] Toxic air contaminants, also known as hazardous air pollutants, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as birth defects. There are currently 189 toxic air contaminants regulated by the United States Environmental Protection Agency ("EPA") and the states pursuant to the Clean Air Act. 42 U.S.C. § 7412. Common TACs include benzene, perchloroethylene and asbestos. *Id.* at 7412(b).

In contrast, there are only six (6) criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and lead. Although criteria air pollutants can also be harmful to human health, they are distinguishable from toxic air contaminants and are regulated separately. For instance, while criteria pollutants are regulated by numerous sections throughout Title I of the Clean Air Act, the regulation of toxic air contaminants occurs solely under section 112 of the Act. Compare 42 U.S.C. §§ 7407 – 7411 & 7501 – 7515 with 42 U.S.C. § 7411.

[4] See, e.g., CEQA Guidance at http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf, pp. 64-66, 80.

[5] See, e.g., CEQA Guidance at http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf, pp. 66, 99-101.

pollutants and local health impacts, departs from the Air District's Guidance and approved methodology for assessing criteria pollutants. A close reading of the administrative record that gave rise to this issue demonstrates that the Court's holding is based on a misunderstanding of the distinction between toxic air contaminants (for which a local health risk assessment is feasible and routinely performed) and criteria air pollutants (for which a local health risk assessment is not feasible and would result in speculative results).[6] The Air District has a direct interest in ensuring the lawfulness and consistent application of its CEQA Guidance, and will explain how the Court of Appeal departed from the Air District's long-standing CEQA Guidance in addressing criteria pollutants and toxic air contaminants in this amicus brief.

2. How the Proposed Amicus Curiae Brief Will Assist the Court

As counsel for the proposed amicus curiae, we have reviewed the briefs filed in this action. In addition to serving as a "commentary agency" for CEQA purposes over the Friant Ranch project, the Air District has a strong interest in assuring that CEQA is used for its intended purpose, and believes that this Court would benefit from additional briefing explaining the distinction between criteria pollutants and toxic air contaminants and the different methodologies employed by local air pollution control agencies such as the Air District to analyze these two categories of air pollutants under CEQA. The Air District will also explain how the Court of Appeal's opinion is based upon a fundamental misunderstanding of these two different approaches by requiring the County of Fresno to correlate the project's *criteria* pollution emissions with *local* health impacts. In doing

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[6] CEQA does not require speculation. *See, e.g., Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.*, 6 Cal. 4th 1112, 1137 (1993) (upholding EIR that failed to evaluate cumulative toxic air emission increases given absence of any acceptable means for doing so).

so, the Air District will provide helpful analysis to support its position that at least insofar as criteria pollutants are concerned, CEQA does not require an EIR to correlate a project's air quality emissions to specific health impacts, because such an analysis is not reasonably feasible.

Rule 8.520 Disclosure

Pursuant to Cal. R. 8.520(f)(4), neither the Plaintiffs nor the Defendant or Real Party In Interest or their respective counsel authored this brief in whole or in part. Neither the Plaintiffs nor the Defendant or Real Party in Interest or their respective counsel made any monetary contribution towards or in support of the preparation of this brief.

CONCLUSION

On behalf of the San Joaquin Valley Unified Air Pollution Control District, we respectfully request that this Court accept the filing of the attached brief.

Dated: April 2, 2015

Annette A. Ballatore-Williamson
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Attorney for Proposed Amicus Curiae

SAN JOAQUIN VALLEY UNIFIED
AIR POLLUTION CONTROL
DISTRICT

CASE NO. S219783

IN THE SUPREME COURT OF CALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,
Plaintiffs and Appellants

v.

COUNTY OF FRESNO,
Defendant and Respondent

FRIANT RANCH, L.P.,
Real Party in Interest and Respondent

After a Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726

AMICUS CURIAE BRIEF OF SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT IN SUPPORT OF DEFENDANT AND RESPONDENT, COUNTY OF FRESNO AND REAL PARTY IN INTEREST AND RESPONDENT, FRIANT RANCH, L.P.

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I. INTRODUCTION.

The San Joaquin Valley Unified Air Pollution Control District ("Air District") respectfully submits that the Court of Appeal erred when it held that the air quality analysis contained in the Environmental Impact Report ("EIR") for the Friant Ranch development project was inadequate under the California Environmental Quality Act ("CEQA") because it did not include an analysis of the correlation between the project's criteria air pollutants and the potential adverse human health impacts. A close reading of the portion of the administrative record that gave rise to this issue demonstrates that the Court's holding is based on a misunderstanding of the distinction between toxic air contaminants and criteria air pollutants.

Toxic air contaminants, also known as hazardous air pollutants, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as birth defects. There are currently 189 toxic air contaminants (hereinafter referred to as "TACs") regulated by the United States Environmental Protection Agency ("EPA") and the states pursuant to the Clean Air Act. 42 U.S.C. § 7412. Common TACs include benzene, perchloroethylene and asbestos. *Id.* at 7412(b).

In contrast, there are only six (6) criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and lead. Although criteria air pollutants can also be harmful to human health,

they are distinguishable from TACs and are regulated separately. For instance, while criteria pollutants are regulated by numerous sections throughout Title I of the Clean Air Act, the regulation of TACs occurs solely under section 112 of the Act. *Compare* 42 U.S.C. §§ 7407 – 7411 & 7501 – 7515 *with* 42 U.S.C. § 7411.

The most relevant difference between criteria pollutants and TACs for purposes of this case is the manner in which human health impacts are accounted for. While it is common practice to analyze the correlation between an individual facility's TAC emissions and the expected localized human health impacts, such is not the case for criteria pollutants. Instead, the human health impacts associated with criteria air pollutants are analyzed and taken into consideration when EPA sets the national ambient air quality standard ("NAAQS") for each criteria pollutant. 42 U.S.C. § 7409(b)(1). The health impact of a particular criteria pollutant is analyzed on a regional and not a facility level based on how close the area is to complying with (attaining) the NAAQS. Accordingly, while the type of individual facility / health impact analysis that the Court of Appeal has required is a customary practice for TACs, it is not feasible to conduct a similar analysis for criteria air pollutants because currently available computer modeling tools are not equipped for this task.

It is clear from a reading of both the administrative record and the Court of Appeal's decision that the Court did not have the expertise to fully

appreciate the difference between TACs and criteria air pollutants. As a result, the Court has ordered the County of Fresno to conduct an analysis that is not practicable and not likely yield valid information. The Air District respectfully requests that this portion of the Court of Appeal's decision be reversed.

II. THE COURT OF APPEAL ERRED IN FINDING THE FRIANT RANCH EIR INADEQUATE FOR FAILING TO ANALYZE THE SPECIFIC HUMAN HEALTH IMPACTS ASSOCIATED CRITERIA AIR POLLUTANTS.

Although the Air District does not take lightly the amount of air emissions at issue in this case, it submits that the Court of Appeal got it wrong when it required Fresno County to revise the Friant Ranch EIR to include an analysis correlating the criteria air pollutant emissions associated with the project with specific, localized health-impacts. The type of analysis the Court of Appeal has required will not yield reliable information because currently available modeling tools are not well suited for this task. Further, in reviewing this issue de novo, the Court of Appeal failed to appreciate that it lacked the scientific expertise to appreciate the significant differences between a health risk assessment commonly performed for toxic air contaminants and a similar type of analysis it felt should have been conducted for criteria air pollutants.

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A. Currently Available Modeling Tools are not Equipped to Provide a Meaningful Analysis of the Correlation between an Individual Development Project's Air Emissions and Specific Human Health Impacts.

In order to appreciate the problematic nature of the Court of Appeals' decision requiring a health risk type analysis for criteria air pollutants, it is important to understand how the relevant criteria pollutants (ozone and particulate matter) are formed, dispersed and regulated.

Ground level ozone (smog) is not directly emitted into the air, but is formed when precursor pollutants such as oxides of nitrogen (NOx) and volatile organic compounds (VOCs) are emitted into the atmosphere and undergo complex chemical reactions in the process of sunlight.[1] Once formed, ozone can be transported long distances by wind.[2] Because of the complexity of ozone formation, a specific tonnage amount of NOx or VOCs emitted in a particular area does not equate to a particular concentration of ozone in that area. In fact, even rural areas that have relatively low tonnages of emissions of NOx or VOCs can have high levels of ozone concentration simply due to wind transport.[3] Conversely, the San Francisco Bay Area has six times more NOx and VOC emissions per square mile than the San Joaquin Valley, but experiences lower

[1] *See* United States Environmental Protection Agency, *Ground-level Ozone: Basic Information*, available at: http://www.epa.gov/airquality/ozonepollution/basic.html (visited March 10, 2015).
[2] *Id.*
[3] *Id.*

concentrations of ozone (and better air quality) simply because sea breezes disperse the emissions.[4]

Particulate matter ("PM") can be divided into two categories: directly emitted PM and secondary PM.[5] While directly emitted PM can have a localized impact, the tonnage emitted does not always equate to the local PM concentration because it can be transported long distances by wind.[6] Secondary PM, like ozone, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as sulfur dioxides (SOx) and NOx.[7] Because of the complexity of secondary PM formation, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area.

The disconnect between the *tonnage* of precursor pollutants (NOx, SOx and VOCs) and the *concentration* of ozone or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting ozone or PM. Indeed, the national ambient air quality standards ("NAAQS"), which are statutorily required to be set by the United States Environmental Protection

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[4] *San Joaquin Valley Air Pollution Control District 2007 Ozone Plan*, Executive Summary p. ES-6, available at: http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Ozone_2007_Adopted/03%20Executive%20Summary.pdf (visited March 10, 2015).

[5] United States Environmental Protection Agency, *Particulate Matter: Basic Information*, available at: http://www.epa.gov/airquality/particlepollution/basic.html (visited March 10, 2015).

[6] *Id.*

[7] *Id.*

Agency ("EPA") at levels that are "requisite to protect the public health," 42 U.S.C. § 7409(b)(1), are established as concentrations of ozone or particulate matter and not as tonnages of their precursor pollutants.[8]

Attainment of a particular NAAQS occurs when the concentration of the relevant pollutant remains below a set threshold on a consistent basis throughout a particular region. For example, the San Joaquin Valley attained the 1-hour ozone NAAQS when ozone concentrations remained at or below 0.124 parts per million Valley-wide on 3 or fewer days over a 3-year period.[9] Because the NAAQS are focused on achieving a particular concentration of pollution region-wide, the Air District's tools and plans for attaining the NAAQS are regional in nature.

For instance, the computer models used to simulate and predict an attainment date for the ozone or particulate matter NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NOx, SOx and VOCs) and the atmospheric chemistry and meteorology of the Valley.[10] At a very basic level, the models simulate future ozone or PM levels based on predicted changes in precursor

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[8] See, e.g., United States Environmental Protection Agency, *Table of National Ambient Air Quality Standards*, available at: http://www.epa.gov/air/criteria.html#3 (visited March 10, 2015).
[9] *San Joaquin Valley Unified Air Pollution Control District 2013 Plan for the Revoked 1-Hour Ozone Standard*, Ch. 2 p. 2-16, available at: http://www.valleyair.org/Air_Quality_Plans/OzoneOneHourPlan2013/02Chapter2ScienceTrendsModeling.pdf (visited March 10, 2015).
[10] *Id.* at Ch. 2 p. 2-19 (visited March 12, 2015); *San Joaquin Valley Unified Air Pollution Control District 2008 PM2.5 Plan*, Appendix F, pp. F-2 – F-5, available at: http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Final_Adopted_PM2.5/20%20Appendix%20F.pdf (visited March 19, 2015).

emissions Valley wide.[11] Because the NAAQS are set levels necessary to protect human health, the closer a region is to attaining a particular NAAQS, the lower the human health impact is from that pollutant.

The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the Valley attains the NAAQS. Rather, the Air District's modeling and planning strategy is regional in nature and based on the extent to which *all* of the emission-generating sources in the Valley (current and future) must be controlled in order to reach attainment.[12]

Accordingly, the Air District has based its thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the Valley can accommodate without affecting the attainment date for the NAAQS.[13] The Air District has tied its CEQA significance thresholds to the level at which stationary pollution sources permitted by the Air District must "offset" their emissions.[14] This "offset"

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[11] *Id.*

[12] Although the Air District does have a dispersion modeling tool used during its air permitting process that is used to predict whether a particular project's directly emitted PM will either cause an exceedance of the PM NAAQS or contribute to an existing exceedance, this model bases the prediction on a worst case scenario of emissions and meteorology and has no provision for predicting any associated human health impacts. Further, this analysis is only performed for stationary sources (factories, oil refineries, etc.) that are required to obtain a New Source Review permit from the Air District and not for development projects such as Friant Ranch over which the Air District has no preconstruction permitting authority. *See* San Joaquin Valley Unified Air Pollution Control District Rule 2201 §§ 2.0; 3.3.9; 4.14.1, available at: http://www.valleyair.org/rules/currntrules/Rule2201041l.pdf (visited March 19, 2015).

[13] *San Joaquin Valley Unified Air Pollution Control District Guide to Assessing and Mitigating Air Quality Impacts*, (March 19, 2015) p. 22, available at: http://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI%20Jan%202002%20Rev.pdf (visited March 30, 2015).

[14] *Id.* at pp. 22, 25.

level allows for growth while keeping the cumulative effects of all new sources at a level that will not impede attainment of the NAAQS.[15] In the Valley, these thresholds are 15 tons per year of PM, and 10 tons of NOx or VOC per year. *Sierra Club, supra*, 172 Cal.Rptr.3d at 303; AR 4554. Thus, the CEQA air quality analysis for criteria pollutants is not really a localized, project-level impact analysis but one of regional, "cumulative impacts."

Accordingly, the significance thresholds applied in the Friant Ranch EIR (15 tons per year of PM and 10 tons of NOx or VOCs) are not intended to be indicative of any localized human health impact that the project may have. While the health effects of air pollution are of primary concern to the Air District (indeed, the NAAQS are established to protect human health), the Air District is simply not equipped to analyze whether and to what extent the criteria pollutant emissions of an individual CEQA project directly impact human health in a particular area. This is true even for projects with relatively high levels of emissions of criteria pollutant precursor emissions.

For instance, according to the EIR, the Friant Ranch project is estimated to emit 109.52 tons per year of ROG (VOC), 102.19 tons per year of NOx, and 117.38 tons per year of PM. Although these levels well

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[15] [15] *San Joaquin Valley Unified Air Pollution Control District Environmental Review Guidelines* (Aug. 2000) p. 4-11, available at: http://www.valleyair.org/transportation/CEQA%20Rules/ERG%20Adopted%20_August%202000_.pdf (visited March 12, 2015).

exceed the Air District's CEQA significance thresholds, this does not mean that one can easily determine the concentration of ozone or PM that will be created at or near the Friant Ranch site on a particular day or month of the year, or what specific health impacts will occur. Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone or PM. This is especially true for a project like Friant Ranch where most of the criteria pollutant emissions derive not from a single "point source," but from area wide sources (consumer products, paint, etc.) or mobile sources (cars and trucks) driving to, from and around the site.

In addition, it would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have. As discussed above, the currently available modeling tools are equipped to model the impact of *all* emission sources in the Valley on attainment. According to the most recent EPA-approved emission inventory, the NOx inventory for the Valley is for the year 2014 is 458.2 tons per day, or 167,243 tons per year and the VOC (or ROG) inventory is 361.7 tons per day, or 132,020.5 tons per year.[16] Running the photochemical grid model used for predicting ozone attainment with the

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[16] *San Joaquin Valley Unified Air Pollution Control District 2007 Ozone Plan*, Appendix B pp. B-6, B-9,
available at:
http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Ozone_2007_Adopted/19%20Appendix%20B%20April%202007.pdf (visited March 12, 2015).

emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NOx and VOC in the Valley) is not likely to yield valid information given the relative scale involved.

Finally, even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like ozone and some particulates, it remains impossible, using today's models, to correlate that increase in concentration to a specific health impact. The reason is the same: such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level.

For these reasons, it is not the norm for CEQA practitioners, including the Air District, to conduct an analysis of the localized health impacts associated with a project's criteria air pollutant emissions as part of the EIR process. When the accepted scientific method precludes a certain type of analysis, "the court cannot impose a legal standard to the contrary." *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 717 n. 8. However, that is exactly what the Court of Appeal has done in this case. Its decision upends the way CEQA air quality analysis of criteria pollutants occurs and should be reversed.

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B. The Court of Appeal Improperly Extrapolated a Request for a Health Risk Assessment for Toxic Air Contaminants into a Requirement that the EIR contain an Analysis of Localized Health Impacts Associated with Criteria Air Pollutants.

The Court of Appeal's error in requiring the new health impact analysis for criteria air pollutants clearly stems from a misunderstanding of terms of art commonly used in the air pollution field. More specifically, the Court of Appeal (and Appellants Sierra Club et al.) appear to have confused the health risk analysis ("HRA") performed to determine the health impacts associated with a project's toxic air contaminants ("TACs"), with an analysis correlating a project's criteria air pollutants (ozone, PM and the like) with specific localized health impacts.

The first type of analysis, the HRA, is commonly performed during the Air District's stationary source permitting process for projects that emit TACs and is, thus, incorporated into the CEQA review process. An HRA is a comprehensive analysis to evaluate and predict the dispersion of TACs emitted by a project and the potential for exposure of human populations. It also assesses and quantifies both the individual and population-wide health risks associated with those levels of exposure. There is no similar analysis conducted for criteria air pollutants. Thus, the second type of analysis (required by the Court of Appeal), is not currently part of the Air District's process because, as outlined above, the health risks associated

with exposure to criteria pollutants are evaluated on a regional level based on the region's attainment of the NAAQS.

The root of this confusion between the types of analyses conducted for TACs versus criteria air pollutants appears to stem from a comment that was presented to Fresno County by the City of Fresno during the administrative process.

In its comments on the draft EIR, the City of Fresno (the only party to raise this issue) stated:

> [t]he EIR must disclose the human health related effects of the Project's air pollution impacts. (CEQA Guidelines section 15126.2(a).) The EIR fails completely in this area. The EIR should be revised to disclose and determine the significance of TAC impacts, and of human health risks due to exposure to Project-related air emissions.

(AR 4602.)

In determining that the issue regarding the correlation between the Friant Ranch project's criteria air pollutants and adverse health impacts was adequately exhausted at the administrative level, the Court of Appeal improperly read the first two sentences of the City of Fresno's comment in isolation rather than in the context of the entire comment. *See Sierra Club v. County of Fresno* (2014) 172 Cal.Rptr.3d 271, 306. Although the comment first speaks generally in terms of "human health related effects" and "air pollution," it requests only that the EIR be revised to disclose "the significance of TACs" and the "human health risks due to exposure."

The language of this request in the third sentence of the comment is significant because, to an air pollution practitioner, the language would only have indicated only that a HRA for TACs was requested, and not a separate analysis of the health impacts associated with the project's criteria air pollutants. Fresno County clearly read the comment as a request to perform an HRA for TACs and limited its response accordingly. (AR 4602.)[17] The Air District submits that it would have read the City's comment in the same manner as the County because the City's use of the terms "human health risks" and "TACs" signal that an HRA for TACs is being requested. Indeed, the Air District was also concerned that an HRA be conducted, but understood that it was not possible to conduct such an analysis until the project entered the phase where detailed site specific information, such as the types of emission sources and the proximity of the sources to sensitive receptors became available. (AR 4553.)[18] The City of Fresno was apparently satisfied with the County's discussion of human health risks, as it did not raise the issue again when it commented on the final EIR. (AR 8944 – 8960.)

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[17] Appellants do not challenge the manner in which the County addressed TACs in the EIR. (Appellants' Answer Brief p. 28 fn. 7.)

[18] Appellants rely on the testimony of Air District employee, Dan Barber, as support for their position that the County should have conducted an analysis correlating the project's criteria air pollutant emissions with localized health impacts. (Appellants Answer Brief pp. 10-11; 28.) However, Mr. Barber's testimony simply reinforces the Air District's concern that a risk assessment (HRA) be conducted once the actual details of the project become available. (AR 8863.) As to criteria air pollutants, Mr. Barber's comments are aimed at the Air District's concern about the amount of emissions and the fact that the emissions will make it "more difficult for Fresno County and the Valley to reach attainment which means that the health of Valley residents maybe [sic] adversely impacted." Mr. Barber says nothing about conducting a separate analysis of the localized health impacts the project's emissions may have.

The Court of Appeal's holding, which incorrectly extrapolates a request for an HRA for TACs into a new analysis of the localized health impacts of the project's criteria air pollutants, highlights two additional errors in the Court's decision.

First, the Court of Appeal's holding illustrates why the Court should have applied the deferential substantial evidence standard of review to the issue of whether the EIR's air quality analysis was sufficient. The regulation of air pollution is a technical and complex field and the Court of Appeal lacked the expertise to fully appreciate the difference between TACs and criteria air pollutants and tools available for analyzing each type of pollutant.

Second, it illustrates that the Court likely got it wrong when it held that the issue regarding the criteria pollutant / localized health impact analysis was properly exhausted during the administrative process. In order to preserve an issue for the court, '[t]he "exact issue" must have been presented to the administrative agency....' [Citation.] *Citizens for Responsible Equitable Environmental Development v. City of San Diego*, (2011) 196 Cal.App.4th 515, 527 129 Cal.Rptr.3d 512, 521; *Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523, 535, 78 Cal.Rptr.3d 1, 13. "'[T]he objections must be sufficiently specific so that the agency has the

opportunity to evaluate and respond to them.' [Citation.]" *Sierra Club v. City of Orange*,163 Cal.App.4th at 536.[19]

As discussed above, the City's comment, while specific enough to request a commonly performed HRA for TACs, provided the County with no notice that it should perform a new type of analysis correlating criteria pollutant tonnages to specific human health effects. Although the parties have not directly addressed the issue of failure to exhaust administrative remedies in their briefs, the Air District submits that the Court should consider how it affects the issues briefed by the parties since "[e]xhaustion of administrative remedies is a jurisdictional prerequisite to maintenance of a CEQA action." *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1199, 22 Cal.Rptr.3d 203.

III. CONCLUSION

For all of the foregoing reasons, the Air District respectfully requests that the portion of the Court of Appeal's decision requiring an analysis correlating the localized human health impacts associated with an individual project's criteria air pollutant emissions be reversed.

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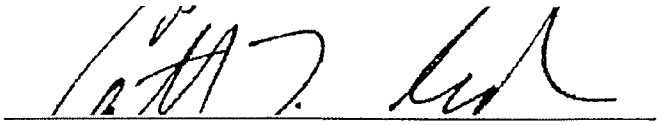
[19] *Sierra Club v. City of Orange*, is illustrative here. In that case, the plaintiffs challenged an EIR approved for a large planned community on the basis that the EIR improperly broke up the various environmental impacts by separate project components or "piecemealed" the analysis in violation of CEQA. In evaluating the defense that the plaintiffs had failed to adequately raise the issue at the administrative level, the Court held that comments such as *"the use of a single document for both a project-level and a program-level EIR [is] 'confusing',"* and *"[t]he lead agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project,"* were too vague to fairly raise the argument of piecemealing before the agency. *Sierra Club v. City of Orange*, 163 Cal.App.4th at 537.

correlating the localized human health impacts associated with an individual project's criteria air pollutant emissions be reversed.

Respectfully submitted,

Dated: April 2, 2015



Catherine T. Redmond
Attorney for Proposed Amicus Curiae

SAN JOAQUIN VALLEY
UNIFIED
AIR POLLUTION CONTROL
DISTRICT

CERTIFICATE OF WORD COUNT

Pursuant to Rule 8.204 of the California Rules of Court, I hereby certify that this document, based on the Word County feature of the Microsoft Word software program used to compose and print this document, contains, exclusive of caption, tables, certificate of word count, signature block and certificate of service, 3806 words.

Dated: April 2, 2015

Annette A. Ballatore-Williamson
District Counsel (SBN 192176)

Sierra Club et al, v. County of Fresno, et al
Supreme Court of California Case No.: S219783
Fifth District Court of Appeal Case No.: F066798
Fresno County Superior Court Case No.: 11CECG00726

PROOF OF SERVICE

I am over the age of 18 years and not a p[arty to the above-captioned action; that my business address is San Joaquin Valley Unified Air Pollution Control District located at 1990 E. Gettysburg Avenue, Fresno, California 93726.

On April 2, 2015, I served the document described below:

APPLICATION FOR LEAVE TO FILE AMICUS CURIAE BRIEF OF SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT IN SUPPORT OF DEFENDANT AND RESPONDENT, COUNTY OF FRESNO

On all parties to this action at the following addresses and in the following manner:

PLEASE SEE ATTACHED SERVICE LIST

(XX) **(BY MAIL)** I caused a true copy of each document(s) to be laced in a sealed envelope with first-class postage affixed and placed the envelope for collection. Mail is collected daily at my office and placed in a United State Postal Service collection box for pick-up and delivery that same day.

( ) **(BY ELECTRONIC MAIL)** I caused a true and correct scanned image (.PDF file) copy to be transmitted via electronic mail transfer system in place at the San Joaquin Valley Unified Air Pollution Control District ("District"), originating from the undersigned at 1990 E. Gettysburg Avenue, Fresno, CA, to the address(es) indicated below.

( ) **(BY OVERNIGHT MAIL)** I caused a true and correct copy to be delivered via Federal Express to the following person(s) or their representative at the address(es) listed below.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that I executed this document on April 2, 2015, at Fresno, California.

Esthela Soto

SERVICE LIST

Sierra Club et al, v. County of Fresno, et al
Supreme Court of California Case No.: S219783
Fifth District Court of Appeal Case No.: F066798
Fresno County Superior Court Case No.: 11CECG00726

Sara Hedgpeth-Harris, Esq. LAW OFFICE OF SARA HEDGPETH-HARRIS 2125 Kern Street, Suite 301 Fresno, California 93721 Telephone: (559) 233-0907 Facsimile: (559) 272-6046 Email: sara.hedgpethharris@shh-law.com	Attorney for Plaintiffs and Appellants, Sierra Club, et al
Daniel C. Cederborg, Esq. Bruce B. Johnson, Jr., Esq. OFFICE OF THE FRESNO COUNTY COUNSEL 2220 Tulare Street, Suite 500 Fresno, California 93721 Telephone: (559) 600-3479 Facsimile: (559) 600-3480 Email: bjohnson@co.fresno.ca.us	Attorneys for Defendant and Respondent, County of Fresno
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Clerk of the Court Superior Court of California County of Fresno 1130 'O' Street Fresno, California 93721 Telephone: (559) 457-1900	
Clerk of the Court Fifth District Court of Appeal 2424 Ventura Street Fresno, California 93721 Telephone: (559) 445-5491	

R. Tyson Sohagim, Esq. THE SOHAGI LAW GROUP 11999 San Vicente Blvd., Suite 150 Los Angeles, California 90049 Telephone: (310) 475-5700 Facsimile: (310) 475-5707 Email: tsohagi@sohagi.com	Attorney for Amici Curiae; League of California Cities, and the California State Association of Counties
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Gene Talmadge, President CALIFORNIA ASSOCIATION OF ENVIRONMENTAL PROFESSIONALS 40747 Baranda Court Palm Desert, California 92260 Telephone: (760) 340-4499 Facsimile: (760) 674-2479	Attorney for Amicus Curiae, California Association of Environmental Professionals
Jennifer L. Hernandez, Esq. HOLLAND & KNIGHT LLP 50 California Street, Suite 2800 San Francisco, California 94111	On behalf of Amicus Curiae, CEQA Research Council

Telephone: (415) 743-6927 Facsimile: (415) 743-6910 Email: Jennifer.hernandez@hklaw.com	

Attachment "2A"

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 - FAX (209) 667-3324

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

RECEIVED
MAY 29 2009
R.B. WELTY & ASSOCIATES, INC.

Date: May 27, 2009

CCIC File #: 7410 N
Project: Rezone map and application for APN 041-046-19, 6342 Bystrum Road, Ceres, CA (rezoning for planned development)

Kaiser Shahbaz
Survey Department Manager
R.B. Welty & Associates, Inc.
P.O. Box 1724
Modesto, CA 95353-1724

Dear Mr. Shahbaz,

We have conducted a records search as per your request for the above-referenced project area located on the Ceres 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 National Register of Historic Places, the California Register of Historical Resources, the *California Inventory of Historic Resources* (1976), the *California Historical Landmarks* (1990), and the California Points of Historical Interest listing (May 1992 and updates), the Directory of Properties in the Historic Property Data File (HPDF) and the Archaeological Determinations of Eligibility (ADOE) (Office of Historic Preservation current computer lists dated 02-05-2009 and 02-04-2009), the CALTRANS State and Local Bridge Survey (1989 and updates), the *Survey of Surveys* (1989), GLO Plats, and other pertinent historic data available at the CCIC for each specific county.

The following details the results of the records search:

Prehistoric or historic resources within the project area:

No prehistoric or historic archaeological resources or historic properties have been reported to the Information Center.

Other historic information:

- Moore Drain: shown within the NW corner of the property on the 1953 Ceres USGS 7.5' map. But other maps we have been able to access appear to indicate that the drain has either been abandoned and filled in, or it has been routed underground. These maps do show the old culvert where the drain formerly passed under the adjacent railroad track, but the culvert is now filled in with dirt. The culvert does not appear to be within the property line as shown on the rezoning map sheet C2.

- The 1953 USGS also shows two buildings (near where the existing building is), but these buildings are not shown on the 1969 USGS.

- The 1969 USGS shows one building on the property; we do not know if it is the existing building, or when it was constructed.

Prehistoric or historic resources within the immediate vicinity of the project area:

No prehistoric or historic archaeological resources or historic properties have been reported.

Other historic information:

- The Tidewater-Southern Railroad line from Modesto to Turlock was built from 1910 to 1916. It has not been formally recorded and evaluated where it lies adjacent to the project area. CCIC files for this railroad line are under P-50-000083.

Resources that are known to have value to local cultural groups:

None have been formally reported to the Information Center.

Previous investigations within the project area:

One has been reported along Keyes Road, just within the northern boundary of the property:

CCIC report #	**Author/Date**
ST-	
859	Chavez (1976)

An Archaeological Reconnaissance of the Robert's Ferry Reservoir and Water Extraction and Conveyance Systems, Stanislaus County, California: Phase II

Previous investigations within the immediate vicinity of the project area:

No others have been reported to the Information Center.

Recommendations/Comments:

Based on existing data in our files the project area has a low sensitivity for the possible discovery of prehistoric resources, due to the distance from a natural water source; and a low sensitivity for historic archaeological resources. However, if the existing building will be demolished or moved as the result of this project, *and* it is over 45 years old, we recommend that it be recorded and evaluated prior to implementation of the project or issuance of any discretionary permit. If the adjacent railroad line will be impacted by this development, we also recommend recordation and evaluation of the adjacent railroad line.

The Statewide Referral List for Historical Resources Consultants is posted for your use on the internet at http://chrisinfo.org

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. 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.

We advise you that in accordance with State law, if any historical resources are discovered during project-related activities, all work is to stop and the lead agency and a qualified professional are to be consulted to determine the importance and appropriate treatment of the find. If Native American remains are found the County Coroner and the Native American Heritage Commission, Sacramento (916-653-4082) are to be notified immediately for recommended procedures.

We thank you for contacting this office regarding historical resource preservation. Please let us know when we can be of further service. Billing is attached, payable within 60 days of receipt of the invoice.

Sincerely,

R. Hards

Robin Hards, Assistant Research Technician
Central California Information Center
California Historical Resources Information System

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
BOARD ACTION SUMMARY

DEPT: Planning and Community Development BOARD AGENDA #: 9:15 a.m.

AGENDA DATE: May 23, 2017

SUBJECT:

Public Hearing to Consider the Planning Commission's Recommendation for Approval of Rezone Application No. PLN2016-0066, Bronco Wine Company, Located at 800 E. Keyes Road and 6342 Bystrum Road, at the Southeast Corner of Bystrum and E. Keyes Roads, and Adoption of a Mitigated Negative Declaration

---

BOARD ACTION AS FOLLOWS:

No. 2017-283

On motion of Supervisor Withrow , **Seconded by Supervisor** Olsen
and approved by the following vote,
Ayes: Supervisors: Olsen, Withrow, Monteith, DeMartini, and Chairman Chiesa
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

1) X **Approved as recommended**
2) _____ **Denied**
3) _____ **Approved as amended**
4) _____ **Other:**

MOTION: INTRODUCED, WAIVED THE READING, AND ADOPTED ORDINANCE C.S. 1193

ATTEST: Elizabeth A. King
ELIZABETH A. KING, Clerk of the Board of Supervisors

File No. **ORD-56-2**

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
AGENDA ITEM

DEPT: Planning and Community Development
Urgent ○ Routine ◉

BOARD AGENDA #: 9:15 a.m.

AGENDA DATE: May 23, 2017

CEO CONCURRENCE:

4/5 Vote Required: Yes ○ No ◉

SUBJECT:

Public Hearing to Consider the Planning Commission's Recommendation for Approval of Rezone Application No. PLN2016-0066, Bronco Wine Company, Located at 800 E. Keyes Road and 6342 Bystrum Road, at the Southeast Corner of Bystrum and E. Keyes Roads, and Adoption of a Mitigated Negative Declaration

---

PLANNING COMMISSION AND STAFF RECOMMENDATIONS:

1. Conduct a public hearing to consider Planning Commission's recommendation for approval of Rezone Application No. PLN2016-0066, Bronco Wine Company, located at 800 E. Keyes Road and 6342 Bystrum Road, at the southeast corner of Bystrum and E. Keyes Roads.

2. Adopt the Mitigated Negative Declaration and Mitigation Monitoring Plan pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15074(b), by finding that on the basis of the whole record, including the Initial Study and any comments received, that there is no substantial evidence the project will have a significant effect on the environment and that the Mitigated Negative Declaration reflects Stanislaus County's independent judgment and analysis.

3. Order the filing of a Notice of Determination with the Stanislaus County Clerk-Recorder pursuant to Public Resources Code Section 21152 and CEQA Guidelines Section 15075.

4. Find that:

   A. The project is consistent with the overall goals and policies of the County General Plan.

   B. The proposed Planned Development zoning is consistent with the Agriculture General Plan designation.

   C. The alternative to the Agricultural Buffer Standards applied to this project provides equal or greater protection than the existing buffer standards.

   D. The project will increase activities in and around the project area, and increase demands for roads and services, thereby requiring dedication and improvements.

5. Approve Rezone Application No. PLN2016-0066 – Bronco Wine Company, subject to the attached Development Standards/Mitigation Measures and Development Schedule.

6. Introduce, waive the reading, and adopt an ordinance for the approved Rezone Application No. PLN2016-0066, Bronco Wine Company.

DISCUSSION:

This is a request to rezone a 117.93 acre parcel from existing Planned Development P-D (6) and P-D (321) zones to a new Planned Development (P-D) zone to allow for the expansion of an existing winery and bottling facility developed on 82.15 acres of the project site. The expansion includes 14 proposed buildings, totaling 743,013 square feet, the construction of two rail spurs, and the addition of a fleet of 53 foot long trucks and tanker trucks. (Additional details can be found in Attachment 1 - *Planning Commission Staff Report, May 4, 2017.*)

The project is proposed to be constructed in phases. Phase 1 includes construction of a 120,000 square foot warehouse to be utilized for the storage of bottled wine stock, construction of two rail spurs to be utilized for deliveries, a fleet of 53 foot long trucks and tanker trucks, and fencing around the perimeter of the new warehouse. Development will occur within five years of project approval.

This project request includes preliminarily approval of additional future phases, which includes three admin/office buildings, two employee centers, a pavilion, six warehouses, and a storage building, to be constructed according to market demand. However, additional phases may not be constructed until additional CEQA analysis is conducted through the use permit process.

The project site is located at 800 E. Keyes Road and 6342 Bystrum Road, east of Crows Landing Road, west of State Highway 99, and south of Ceres. The northern portion is improved with a single-family dwelling, drainage basin, and a vineyard. The southern portion includes the existing Bronco Wine Company facility. The Union Pacific Railroad abuts the western property line of the project site. The parcel includes a 20-foot-wide panhandle which extends from the eastern most portion of the project site, north to E. Keyes Road.

The surrounding area consists of agricultural uses, primarily orchards and vineyards, with scattered single-family dwellings.

In 1974, the Board of Supervisors approved a rezone from A-2-10 (General Agriculture) to P-D (6) (Planned Development) to allow the operation of a winery and bottling facility on the southern 82.15 acres of the project site. A Use Permit was completed for the existing facility in 1981 which allowed for additional tanks and a doubling in size of the crushing facilities. Since then, the operation has expanded through several Staff Approval permits which have allowed for numerous expansions to their bottling, cooling, tank facilities, warehousing, and offices. The northern 35 acres was rezoned to P-D (321) in 2010, permitting conversion of the dwelling into an office, construction of two truck scales, a guard shack, employee and truck parking lots, and construction of two 14,400 square-foot office buildings. A Time Extension processed for P-D (321) extended the Development Schedule to October 20, 2016. However, the development schedule was not met; and, as such is expired. The northern parcel and the existing winery facility to the south were merged into one parcel in October of 2015.

If approved, the Development Standards included with the sites new Planned Development zoning designation will replace the existing Development Standards and approved uses of its current P-D (6) zoning and its expired P-D (321) zoning.

Pursuant to the California Environmental Quality Act (CEQA), the proposed project was circulated to all interested parties and responsible agencies for review and comment and mitigation was incorporated into the project to address aesthetics, and transportation/traffic. The adoption of a Mitigated Negative Declaration is proposed.

The Planning Commission considered this item at a public hearing on May 4, 2017. The staff report presentation provided clarification that the original 1,462,186 total square feet proposed with the project was incorrectly referenced in the project description section of the staff report. The total square footage requested for the project was modified to 743,013 square feet. Staff also recommended removal of Development Standard 23, as request by the applicant, to address duplication in development standards/mitigation measures. No one spoke in opposition of the project and project representatives from CB Engineering and from Bronco Wine Company spoke in favor of the project. On a vote of 7-0, the Planning Commission recommended the Board of Supervisors approve the request as proposed, including removal of Development Standard number 23, and adoption of a Mitigated Negative Declaration.

POLICY ISSUE:

In order to consider a rezone request, the Board of Supervisors must hold a public hearing. Additionally, in order to approve a rezone, it must be found to be consistent with the General Plan. In this case, the General Plan designation is Agriculture, which is consistent with a Planned Development zoning designation when it is used for agriculturally-related uses or for uses of a demonstrably unique character.

FISCAL IMPACT:

Costs associated with processing the application, setting the public hearing, publishing of required notices, and conducting the hearing has been covered by the application fee deposit plus revenue from additional invoicing at project end.

BOARD OF SUPERVISORS' PRIORITY:

Approval of this action supports the Board of Supervisor's priority of A Well Planned Infrastructure and A Strong Local Economy by providing a land use determination consistent with the overall goals and policies of the Stanislaus County General Plan.

STAFFING IMPACT:

Planning and Community Development Department staff is responsible for reviewing all applications, preparing all reports, and attending meetings associated with the proposed Rezone application.

Public Hearing to Consider the Planning Commission's Recommendation for Approval of Rezone Application No. PLN2016-0066, Bronco Wine Company, Located at 800 E. Keyes Road and 6342 Bystrum Road, at the Southeast Corner of Bystrum and E. Keyes Roads, and Adoption of a Mitigated Negative Declaration

---

CONTACT PERSON:

Angela Freitas, Planning and Community Development Director Telephone: (209) 525-6330

ATTACHMENT(S):

1. Planning Commission Staff Report, May 4, 2017
2. Planning Commission Minutes, May 4, 2017 (Excerpt)

Attachment 1

STANISLAUS COUNTY PLANNING COMMISSION

May 4, 2017

STAFF REPORT

REZONE APPLICATION NO. PLN2016-0066
BRONCO WINE COMPANY

REQUEST: REQUEST TO REZONE A 117.93 ACRE PARCEL FROM EXISTING PLANNED DEVELOPMENT P-D (6) AND P-D (321) ZONES TO A NEW PLANNED DEVELOPMENT (P-D) ZONE TO ALLOW FOR THE EXPANSION OF AN EXISTING WINERY AND BOTTLING FACILITY DEVELOPED ON 82.15 ACRES OF THE PROJECT SITE. THE EXPANSION INCLUDES 14 PROPOSED BUILDINGS, TOTALING 1,462,186 SQUARE FEET, THE CONSTRUCTION OF TWO RAIL SPURS, AND THE ADDITION OF A FLEET OF 53 FOOT LONG TRUCKS AND TANKER TRUCKS.

APPLICATION INFORMATION

Applicant/Property owner:	Bronco Wine Company - John Franzia
Agent:	CB Engineering
Location:	800 E. Keyes Road and 6342 Bystrum Road, at the southeast corner of Bystrum and E. Keyes Roads, east of Crows Landing Road, west of State Highway 99, and south of Ceres.
Section, Township, Range:	33-4-9
Supervisorial District:	Two (Supervisor Chiesa)
Assessor's Parcel:	041-046-021
Referrals:	See Exhibit M Environmental Review Referrals
Area of Parcel(s):	117.93 acres
Water Supply:	Private well
Sewage Disposal:	Private septic system
General Plan Designation:	AG (Agriculture)
Existing Zoning:	Planned Development (6) & Planned Development (321)
Sphere of Influence:	N/A
Community Plan Designation:	N/A
Williamson Act Contract No.:	N/A
Environmental Review:	Mitigated Negative Declaration
Present Land Use:	Bronco Wine Company, single-family dwelling, drainage basin, and a vineyard.
Surrounding Land Use:	Scattered single-family dwellings in all directions. To the north, orchards and row crops. To the east, a vineyard, orchards, and row crops. To the west orchards, row crops, and a dairy farm. To the south a chicken farm, orchard, row crops, and a dairy farm.

RECOMMENDATION

Staff recommends the Planning Commission recommend that the Board of Supervisors approve this request based on the discussion below and on the whole of the record provided to the County. If the Planning Commission decides to recommend approval of this project, Exhibit A provides an overview of all of the findings required for project approval, which includes rezone findings and adoption of a Mitigated Negative Declaration.

SITE DESCRIPTION

The project site is located at 800 E. Keyes Road and 6342 Bystrum Road, east of Crows Landing Road, west of State Highway 99, and south of Ceres. The northern portion is improved with a single-family dwelling, drainage basin, and a vineyard. The southern portion includes the existing Bronco Wine Company facility. The Union Pacific Railroad abuts the western property line of the project site. The parcel includes a 20-foot-wide panhandle which extends from the eastern most portion of the project site, north to E. Keyes Road.

The surrounding area consists of agricultural uses, primarily orchards and vineyards, with scattered single-family dwellings.

BACKGROUND

According to County records, the southern 82.15 acres of the project site, which currently includes the Bronco Wine Company facility, located at 6342 Bystrum Road, was rezoned to allow operation of a winery and bottling facility in 1974. The Board of Supervisors approved the rezone from A-2-10 (General Agriculture) to P-D (6) (Planned Development) based on the following factors:

1. The proposed project should not be detrimental to the existing agricultural usage of the surrounding neighborhood if developed in compliance with the recommended performance standards.
2. The use is in compliance with the General Plan as a facility that is associated with agricultural production and complies with the provisions of the Planned Development zone.
3. The project is to be located near major or collector streets and a railroad facility that would provide the necessary transportation needs of the facility.
4. Many such winery facilities are located throughout the valley region in rural areas without apparent conflict with surrounding agricultural uses.

Since its approval in 1974, Bronco Wine Company has produced wine and sparkling wine and has a license to produce malt beverages. Grapes are trucked to the site and crushing operations take place during the grape harvest season, generally from July to November. After crushing, the grapes are fermented in large stainless steel tanks and grape skins and seeds are pressed and discarded with the pressed grape pomace to be sold for feed. After fermenting, the wine is transferred to storage tanks where it is cooled, filtered, blended, and bottled.

A Use Permit was completed in 1981 which allowed for additional tanks and a doubling in size of the crushing facilities. Since then, they have expanded through several Staff Approval permits which have allowed for numerous expansions to the operations' bottling, cooling, tank facilities, warehousing, and offices.

The northern 35.78 project site, which includes an existing single-family dwelling, drainage basin, and vineyard, was rezoned to P-D (321) in 2010, permitting conversion of the dwelling into an office for their shipping and receiving services. The rezone also allowed for the construction of two truck scales, a guard shack, the construction of employee and truck parking lots, and two 14,400 square-foot office buildings, new septic tanks, and landscaping.

A Time Extension processed for P-D (321) extended the Development Schedule to October 20, 2016. Although some grading occurred on the northern portion of the site prior to the date allowed by the Time Extension, the development schedule has not been met; and, as such, a new Rezone is required to develop the site.

The northern parcel (previously APN: 041-046-019) and the existing winery facility to the south (previously APN: 041-046-020) were merged into one parcel, and a new and expanded project description is now being proposed, requiring a new Rezone for the entire 117+ acre merged property (now APN: 041-046-021).

PROJECT DESCRIPTION

This is a request to rezone a 117.93 acre parcel from existing Planned Development P-D (6) and P-D (321) zones to a new Planned Development (P-D) zone to allow for expansion of an existing winery and bottling facility developed on 82.15 acres of the project site.

The expansion includes construction of the following 14 proposed buildings, totaling 1,462,186 square feet to be developed in phases. (See Buildings labeled N-BB on the site plan included in Exhibit B-5 through B-9):

- Four 120,000 square-foot warehouses (Buildings N, O, P, and Q), two with 10 additional truck docks each
- Three 44,483 square-foot warehouses (Buildings V, W, and X)
- A 13,000 square-foot office (Building T)
- A 38,000 square-foot office (Building U)
- A 10,300 square-foot employee center (commercial kitchen, cafeteria, and conference area, Building R)
- A 2,264 square-foot pavilion (roof only shade structure, Building S)
- A 20,000 square-foot employee center (lockers and restrooms, Building Y)
- A 30,000 square-foot administration building (Building Z)
- A 16,000 square-foot filter storage building (Building AA).
- Construction of two rail spurs to be utilized for deliveries
- A fleet of 53-foot-long trucks and tanker trucks

Phase 1 – Includes construction of a 120,000 square foot warehouse (Building Q) to be utilized for the storage of bottled wine stock, construction of two rail spurs to be utilized for deliveries, a fleet of 53 foot long trucks and tanker trucks, and fencing around the perimeter of the new warehouse. Development will occur within five years of project approval.

Future Phases – All other proposed uses will be included in future phases to be constructed according to market demand and will require a Use Permit be obtained. The parking lot expansion will occur as required for each building constructed. Fencing and landscaping around the entire project site to be completed with the first building permit to be issued for the next Phase.

(See Exhibit D – *Development Schedule* and Exhibit E – *Applicant's Project Description.*)

The hours of operation for the winery are Monday-Friday, 24 hours a day year-round and additionally, Sunday-Saturday 24 hours per day during seasonal months, which is from mid-July to mid-November. There are currently 396 employees year-round with an additional 90 employees during seasonal months, for a total of 486 employees maximum. At full build-out, there will be approximately 30 additional year-round employees, for a total of 426 employees year-round and 516 with employees seasonally. The addition of the employee center and pavilion will be utilized for educational seminars and meetings, to be held up to two times per year for up to 68 people, for Bronco's National sales force, and for Bronco's Wholesale Division's monthly meetings (Northern California sales force), which proposes to utilize the Ceres site up to four times per year for up to 50 managers.

All access associated with this project will occur along Bystrum Road. All entrances to the operation are fenced and include security gates. The expansion also includes railroad access to Union Pacific Railroad by constructing two rail spurs, which will minimize traffic impacts in surrounding areas.

As part of the rezone, a fleet of 53-foot-long trucks and tanker trucks will be added to the operation and stored on-site to allow both bulk and bottled wines to be picked up and delivered to partner wineries. On-site truck maintenance will be limited to minor maintenance activities. Any required major maintenance will be performed at off-site truck repair shops.

The project site currently includes six-foot high security chain-link fencing, and cypress trees along the eastern and western property borders and proposes to extend the fencing and cypress trees along the northern property line.

The project proposes to maintain their current operational ratio of approximately 88% of product produced and owned by Bronco, 8% produced by other California wineries, and 4% imported from other countries.

ISSUES

The following is a summary of those issues which have been identified as part of the review of the project:

Traffic

A Traffic Impact Analysis for the proposed project was prepared by KD Anderson & Associates, Inc., dated November 23, 2016. The analysis evaluated traffic impacts from the project based on the proposed new structures and based on the addition of a fleet of trucks and the utilization of rail, which will allow the current truck trip to inventory ratio to be decreased. Trucks currently arrive to the site empty or leave the site empty. The addition of their own truck fleet will allow truck trips to be full both on the way to the site and on the way to a delivery/pick-up destination. The use of rail will also offset truck trips as the equivalent of four fully stocked trucks can fit into one rail car. At full build-out there will be approximately 30 additional year-round employees and the proposed employee centers will host staff for trainings up to six times a year.

Stanislaus County Public Works and the Stanislaus County Environmental Review Committee both provided referral responses requesting that the Traffic Impact Analysis be amended to address safety concerns. The Traffic Impact Analysis was revised on March 15, 2017, to include improvements to the intersection of Keyes Road and Bystrum Road, including dedicated turn lanes

per the California Highway Design Manual, to address traffic safety concerns. This has been incorporated into the project as a Mitigation Measure. With mitigation applied, impacts to transportation and traffic are considered to be less than significant. (See Exhibit H - *Traffic Impact Analysis, prepared by KD Anderson & Associates, Inc. dated November 23, 2016, Revised March 15, 2017.*)

Air Quality

No referral response was received from the San Joaquin Valley Air Pollution Control District during the Early Consultation referral period. However, a referral response was received from the Air District during the 30-day Initial Study review period indicating that further review of the project's potential impacts to air quality should be conducted. Specifically, the response letter stated that the project's emissions of criteria pollutants, at full build-out, may exceed the District's thresholds of 10 tons/year NOX, 10 tons/year ROG, and 15 tons/year PM10. Further, the response letter stated that project related pollutant emissions should be identified and quantified, for both existing and post-project construction and operational emissions. The letter also indicated that a Health Impact Assessment may also be needed to evaluate the project's health related impacts.

The comments provided by the Air District are based on the project at full build-out. However, Phase 1 of the project, which includes one 120,000 square-foot warehouse, is under the threshold of significance for industrial projects, which ranges from 370,000 square feet for an industrial park, to 920,000 square feet for heavy industrial uses. Accordingly, Staff recommends that consideration of approval for Phase 1 of this project move forward without additional environmental analysis. However, Phase 1 is still required to obtain any applicable Air District permits, as reflected in the Development Standards. Staff also recommends that future phases of this project request be considered through the use permit process, which will allow additional CEQA analysis to be conducted, specifically in terms of potential impacts to air quality. This is reflected in the Development Standards applied to this project. (See Exhibit-I – *Project Referral Response received on April 24, 2017, from the San Joaquin Valley Air Pollution Control District.*)

GENERAL PLAN CONSISTENCY

Consistency with the goals, objectives, and policies of the various elements of the General Plan must be evaluated when processing all discretionary project requests. Additionally, in order to approve a rezone, it must be found to be consistent with the General Plan. In this case, the General Plan designation is Agriculture. The Agriculture General Plan designation is consistent with a Planned Development zoning designation when, *"it is used for agriculturally-related uses or for uses of a demonstrably unique character, which due to specific agricultural needs or to their transportation needs or to needs that can only be satisfied in the agriculture designation, may be properly located within areas designated as "agricultural" on the General Plan. Such uses can include facilities for packing fresh fruit, facilities for the processing of agricultural commodities utilized in the County's agriculture community, etc."* Goal One, Policy One, Implementation Measure One of the Land Use Element requires that when reviewing proposals for amendments to land use designations, the County shall evaluate how the proposal would advance the long-term goals of the County. Goal Two and Three of the Land Use Element of the Stanislaus County General Plan aim to ensure compatibility between land uses; and, to promote diversification and growth of the local economy by accommodating the siting of industries with unique requirements, as described in the Land Use Designations section of the Land Use Element.

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. 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 does currently include six-foot high security chain-link fencing, and cypress trees along the eastern and western property borders and proposes to extend the fencing and cypress trees to act as an agricultural buffer along the northern property line. The proposed buildings meet the required 150-foot setback on the eastern and southern boundaries of the project site. The warehouse proposed on the northern portion of the property, along the western property border, does not meet the required 150-foot buffer setback standard; however, the warehouses are intended for storage and will not be occupied by employees at all times which allows it to be considered as a permitted use within the buffer area if determined to be a low people intensive use similar to a roadway or parking lot. The project site is considered to meet the required 150-foot buffer on the northern boundary, as the proposed office building closest to the northern property line exceeds the 150-foot setback requirement. The proposed administrative building closest to the western property line is setback 108 feet from the nearest agricultural property, which does not meet the required 150-foot setback. Accordingly, the applicant is proposing to utilize the existing fencing and landscaping as an agricultural buffer alternative allowing for a reduced setback on the west property line. Staff believes that because the administration building is proposed to be located in the area already developed by the winery that the alternative can be found to provide equal protection to the existing buffer standards.

Staff believes that the proposed Planned Development is consistent with the General Plan. This project is a request to expand an existing use. The existing P-D (6) and expired P-D (321) rezones were both found to meet the standards of the General Plan, including consistency with the Agricultural Land Use Designation. With mitigation and development standards in place, staff believes the project is consistent with the County's General Plan.

ZONING ORDINANCE CONSISTENCY

The site is currently zoned Planned Development P-D (6) and P-D (317) which includes development plans that outline specific development regulations and design standards applicable to the project's approved uses. The proposed rezone to a new P-D allowing for the expansion of the existing winery and bottling facility must be found consistent with the General Plan's Agricultural designation. The proposed new P-D will replace the Development Standards associated with the existing P-D (6) and expired P-D (321) Planned Development zoning designations with revised uses and Development Standards. All applicable Development Standards from P-D (6) have been incorporated into the Development Standards for this Rezone. This project will maintain zoning consistency by adhering to the uses and development Standards incorporated into this project.

ENVIRONMENTAL REVIEW

Pursuant to the California Environmental Quality Act (CEQA), the proposed project was circulated to all interested parties and responsible agencies for review and comment. As discussed in Section XVI – Transportation/Traffic of the Initial Study prepared for this project, and in the *Issues* Section of this Staff Report, a Traffic Impact Analysis was prepared and mitigation was applied as recommended by the studies to reduce potential impacts from transportation/traffic to a less than significant level. (See Exhibit H - *Traffic Impact Analysis, prepared by KD Anderson & Associates, Inc. dated November 23, 2016, Revised March 15, 2017.*) Additionally, mitigation to prevent impacts from the addition of on-site lighting has also been incorporated into this project, as discussed in Section I – Aesthetics of the Initial Study, reducing potential impacts to a less than significant level. (See Exhibit J – *Initial Study.*)

As discussed in the Issues Section of this Staff Report, a referral response was received from the Air District during the 30-day Initial Study review period indicating that further review of the project's potential impacts to air quality should be conducted. Phase 1 includes one 120,000 square-foot warehouse, which is under the threshold of significance for industrial projects. Therefore, staff is recommending that a use permit be obtained prior to development of any future phases, beyond Phase 1, which will allow additional CEQA analysis to be completed. This is reflected in the Development Standards applied to this project.

A Mitigated Negative Declaration has been prepared for approval prior to action on this Rezone as the project will not have a significant effect on the environment. (See Exhibit L - *Mitigated Negative Declaration.*) Development standards reflecting referral responses have also been placed on the project. (See Exhibit C – *Development Standards and Mitigation Measures.*)

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Note: Pursuant to California Fish and Game Code Section 711.4, all project applicants subject to the California Environmental Quality Act (CEQA) shall pay a filing fee for each project; therefore, the applicant will further be required to pay **$2,273.25** for the California Department of Fish and Wildlife (formerly the Department of Fish and Game) and the Clerk Recorder filing fees. The attached Conditions of Approval ensure that this will occur.

Contact Person: Kristin Doud, Senior Planner, (209) 525-6330

Attachments:

Exhibit A - Findings and Actions Required for Project Approval
Exhibit B - Maps
Exhibit C - Development Standards and Mitigation Measures
Exhibit D - Development Schedule
Exhibit E - Applicant Project Description
Exhibit F - Board of Supervisor's Report for Rezone Application No. REZ74-02 – Bronco Winery, dated April 9, 1974
  Attachment 1 - Planning Commission Staff Report, March 21, 1974
  Attachment 2 - Final Environmental Impact Report
  Attachment 3 - Exhibit C – Development Plan (Performance Standards)
Exhibit G - Board of Supervisor's Report for Rezone Application No. REZ2009-04 – Bronco Wine Company, dated April 20, 2010 *(with partial attachments)*
  Attachment 1 - Planning Commission Staff Report, March 18, 2010
    Exhibit A – Maps
    Exhibit B – Development Standards
    Exhibit C – Development Schedule
    Exhibit H – Surrounding Landowner's Responses
  Attachment 2 - Planning Commission Minutes, March 18, 2010
Exhibit H - Traffic Impact Analysis, prepared by KD Anderson & Associates, Inc. dated November 23, 2016, Revised March 15, 2017
Exhibit I - Project Referral Response received on April 24, 2017, from the San Joaquin Valley Air Pollution Control District
Exhibit J - Initial Study
Exhibit K - Mitigation Monitoring Plan
Exhibit L - Mitigated Negative Declaration
Exhibit M - Environmental Review Referrals

Exhibit A
Findings and Actions Required for Project Approval

NOTE: The proposed project must obtain approval from the Stanislaus County Board of Supervisors to be permitted. The Planning Commission may make a recommendation to the Board. Should the Commission support the project, the Commission may recommend the following:

1. Adopt the Mitigated Negative Declaration and Mitigation Monitoring Plan pursuant to CEQA Guidelines Section 15074(b), by finding that on the basis of the whole record, including the Initial Study and any comments received, that there is no substantial evidence the project will have a significant effect on the environment and that the Mitigated Negative Declaration reflects Stanislaus County's independent judgment and analysis.

2. Order the filing of a Notice of Determination with the Stanislaus County Clerk-Recorder pursuant to Public Resources Code Section 21152 and CEQA Guidelines Section 15075.

3. Find that:

   A. The project is consistent with the overall goals and policies of the County General Plan.

   B. The proposed Planned Development zoning is consistent with the Agriculture General Plan designation.

   C. The alternative to the Agricultural Buffer Standards applied to this project provides equal or greater protection than the existing buffer standards.

   D. The project will increase activities in and around the project area, and increase demands for roads and services, thereby requiring dedication and improvements.

4. Approve Rezone No. PLN2016-0066 – Bronco Wine Company, subject to the attached Development Standards/Mitigation Measures and Development Schedule.

REZ PLN 2016-0066
BRONCO WINE COMPANY
AREA MAP
CERES
SITE
99
E. KEYES RD.
S. CARPENTER RD.
CROWS LANDING RD.
UNION PACIFIC RAILROAD
FULKERTH RD.
N
0 0.5 1 2 Miles
Legend
SPHERE OF INFLUENCE
CERES
COUNTY
MODESTO
TURLOCK
RAILROAD

EXHIBIT B

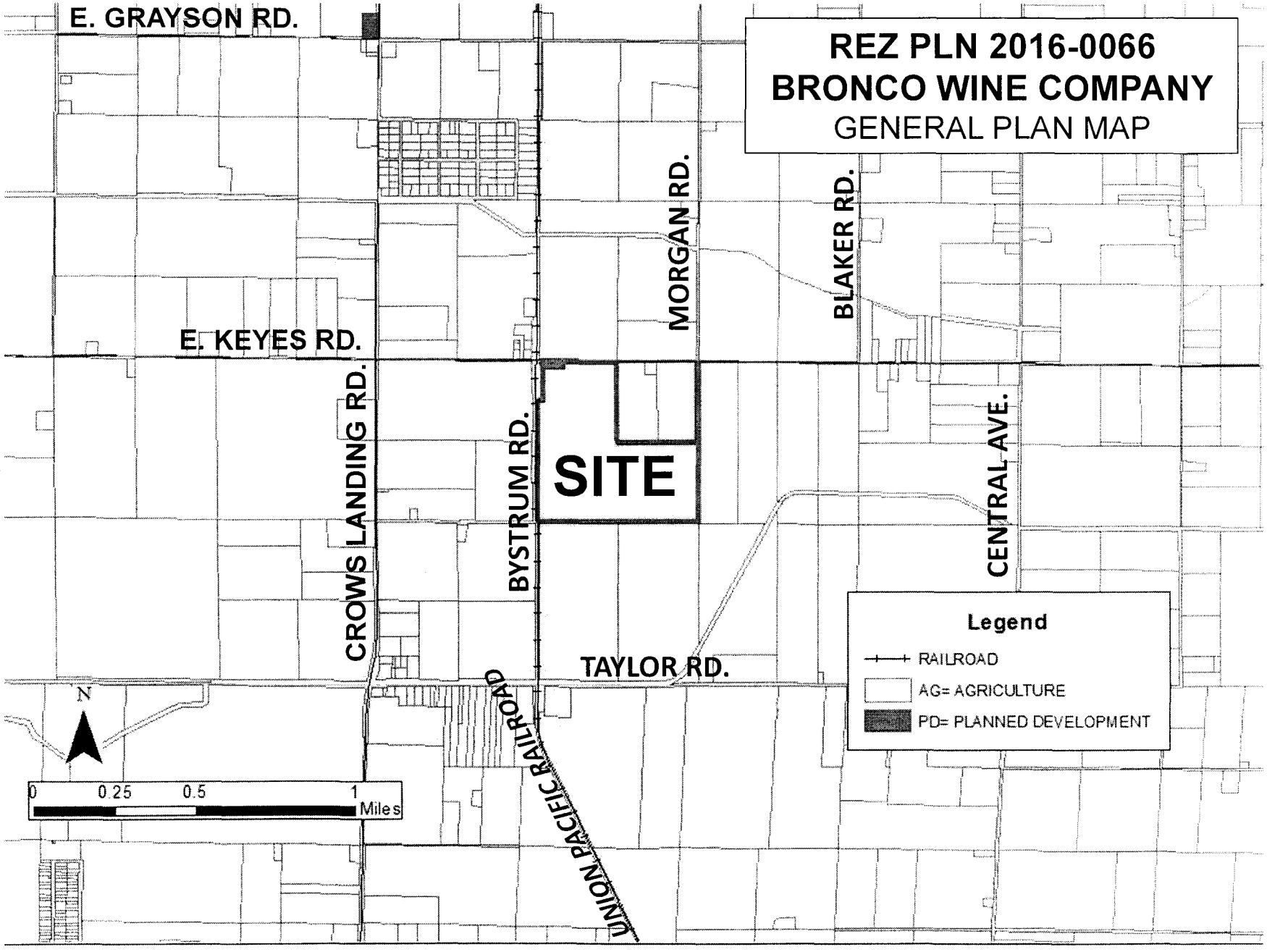

REZ PLN 2016-0066
BRONCO WINE COMPANY
GENERAL PLAN MAP
E. GRAYSON RD.
E. KEYES RD.
MORGAN RD.
BLAKER RD.
CROWS LANDING RD.
BYSTRUM RD.
CENTRAL AVE.
SITE
TAYLOR RD.
UNION PACIFIC RAILROAD
Legend
RAILROAD
AG= AGRICULTURE
PD= PLANNED DEVELOPMENT
N
0 0.25 0.5 1 Miles

EXHIBIT B-1

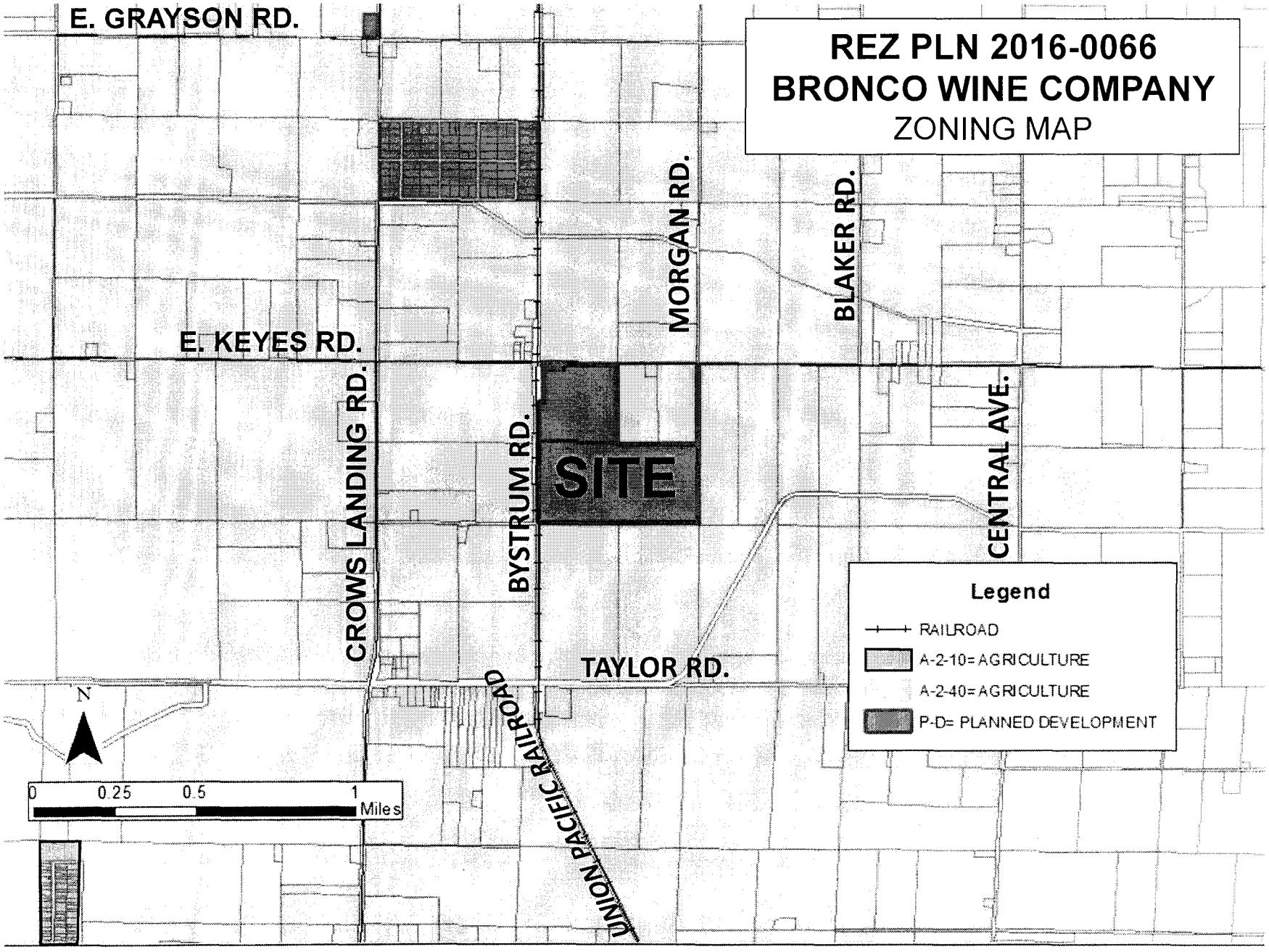

REZ PLN 2016-0066
BRONCO WINE COMPANY
ZONING MAP
E. GRAYSON RD.
E. KEYES RD.
TAYLOR RD.
MORGAN RD.
BLAKER RD.
CENTRAL AVE.
CROWS LANDING RD.
BYSTRUM RD.
UNION PACIFIC RAILROAD
SITE
Legend
RAILROAD
A-2-10= AGRICULTURE
A-2-40= AGRICULTURE
P-D= PLANNED DEVELOPMENT
N
0 0.25 0.5 1
Miles

EXHIBIT B-2

REZ PLN 2016-0066
BRONCO WINE COMPANY
2015 COUNTY AERIAL
E. KEYES RD.
CROWS LANDING RD.
BYSTRUM RD.
N
0
0.125
0.25
0.5
Miles

EXHIBIT B-3

REZ PLN 2016-0066
BRONCO WINE COMPANY
2015 COUNTY AERIAL
BYSTRUM RD.
N
0 250 500 1,000
Feet

EXHIBIT B-4

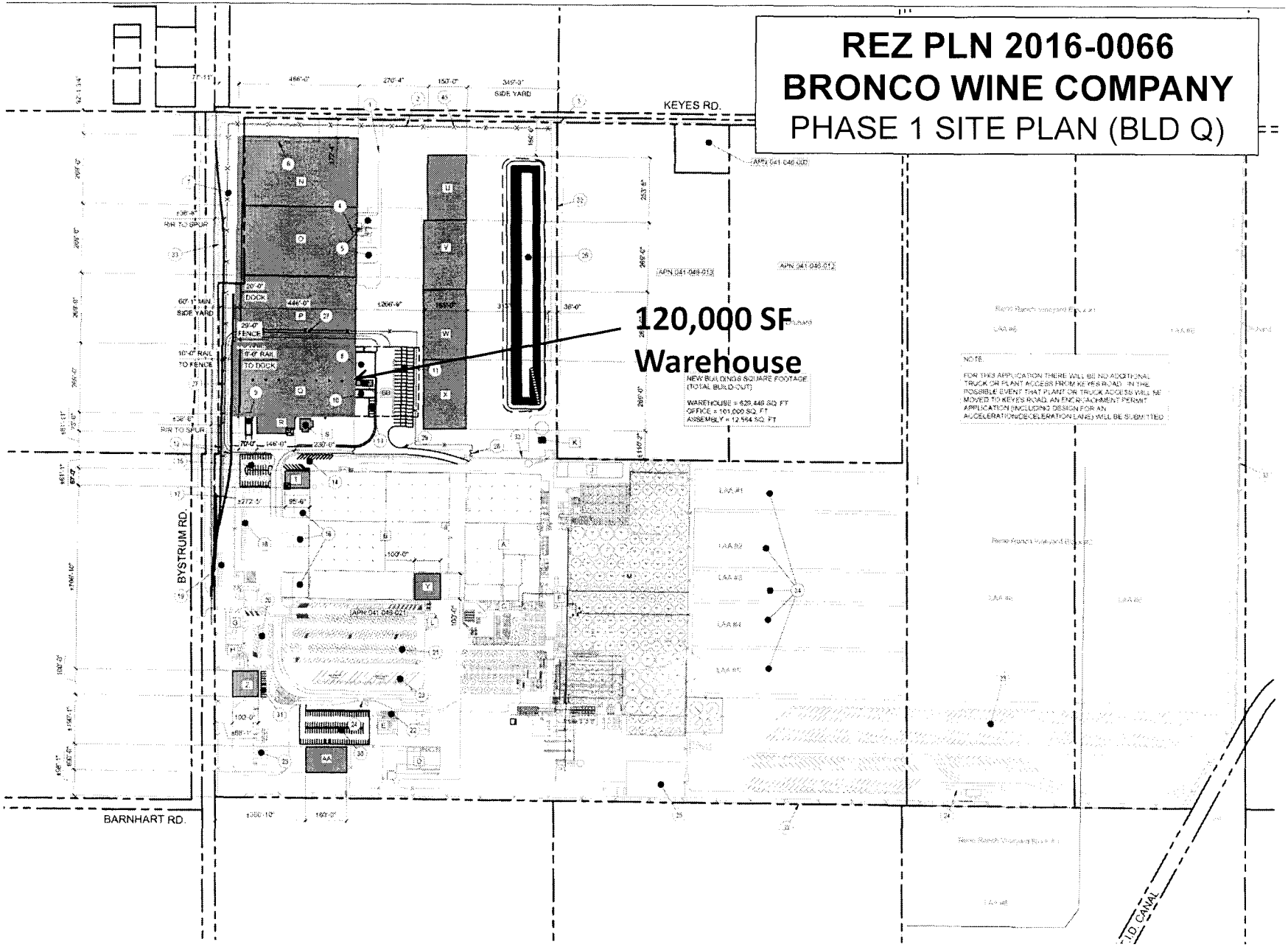
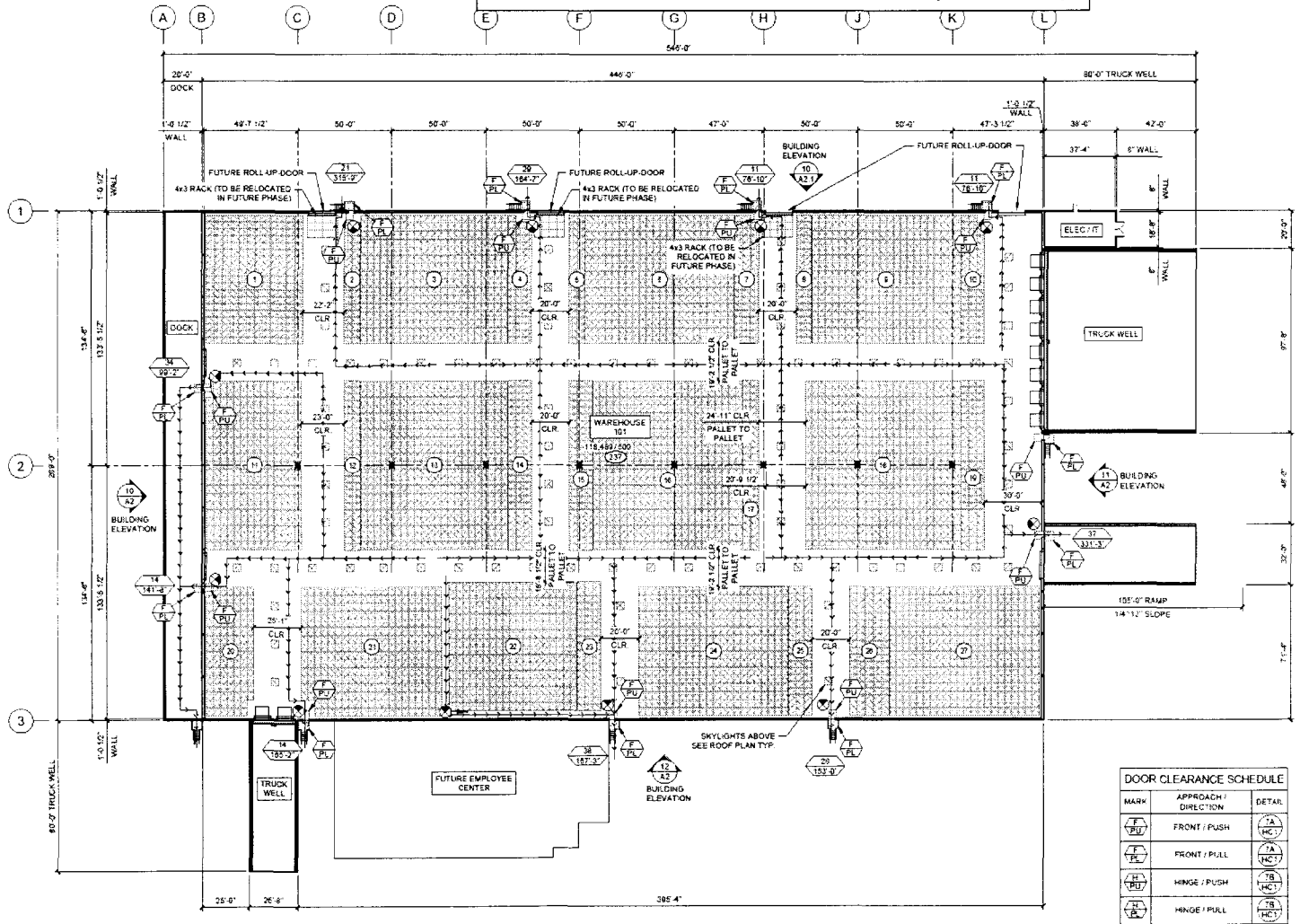

REZ PLN 2016-0066
BRONCO WINE COMPANY
PHASE 1 SITE PLAN (BLD Q)
120,000 SF
Warehouse
KEYES RD.
BYSTRUM RD.
BARNHART RD.
NEW BUILDING SQUARE FOOTAGE (TOTAL BUILD-OUT)
WAREHOUSE = 626,449 SQ. FT
OFFICE = 101,000 SQ. FT
ASSEMBLY = 12,564 SQ. FT
NOTE:
FOR THIS APPLICATION THERE WILL BE NO ADDITIONAL TRUCK OR PLANT ACCESS FROM KEYES ROAD. IN THE POSSIBLE EVENT THAT PLANT OR TRUCK ACCESS WILL BE MOVED TO KEYES ROAD, AN ENCROACHMENT PERMIT APPLICATION (INCLUDING DESIGN FOR AN ACCELERATION/DECELERATION LANE) WILL BE SUBMITTED
APN: 041-046-021
APN: 041-046-013
APN: 041-046-012
APN: 041-046-020
LAA #1
LAA #2
LAA #3
LAA #4
LAA #5
LAA #6
LAA #7
LAA #8
20'-0" DOCK
29'-0" FENCE
6'-0" RAIL TO DOCK
60'-1" MIN SIDE YARD
10'-0" RAIL TO FENCE
RR TO SPUR
SIDE YARD

EXHIBIT B-5

REZ PLN 2016-0066
BRONCO WINE COMPANY
PHASE 1 FLOOR PLAN (BLD Q)



PALLET SPACE COUNT					
AREA	COLUMNS x ROWS		PALLETS LOST TO COL OR DOOR	AREA TOTAL	FORKLIFT APPROACH DIRECTION
1	12	19	0	228	EAST-WEST
2	2	18	0	36	EAST-WEST
3	16	22	0	352	NORTH-SOUTH
4	3	18	2	56	EAST-WEST
5	2	19	0	38	EAST-WEST
6	16	22	3	352	NORTH-SOUTH
7	3	19	1	56	EAST-WEST
8	14	16	3	224	EAST-WEST
9	22	16	3	352	NORTH-SOUTH
10	3	19	1	56	EAST-WEST
11	14	21	3	291	NORTH-SOUTH
12	2	28	3	56	EAST-WEST
13	22	24	4	524	NORTH-SOUTH
14	3	26	0	78	EAST-WEST
15	3	26	2	76	EAST-WEST
16	22	21	2	460	NORTH-SOUTH
17	2	26	2	48	EAST-WEST
18	23	21	4	479	NORTH-SOUTH
19	3	26	0	78	EAST-WEST
20	7	16	3	109	NORTH-SOUTH
21	21	16	4	332	NORTH-SOUTH
22	19	16	0	304	NORTH-SOUTH
23	3	19	0	57	EAST-WEST
24	22	16	0	352	NORTH-SOUTH
25	3	19	0	57	EAST-WEST
26	5	19	0	95	EAST-WEST
27	22	16	3	352	NORTH-SOUTH
TOTAL PALLET SPACES =				5462	

DOOR CLEARANCE SCHEDULE		
MARK	APPROACH / DIRECTION	DETAIL
F PU	FRONT / PUSH	7A HC1
F PL	FRONT / PULL	7A HC1
H PU	HINGE / PUSH	7B HC1
H PL	HINGE / PULL	7B HC1
L PU	LATCH / PUSH	7C HC1
L PL	LATCH / PULL	7C HC1

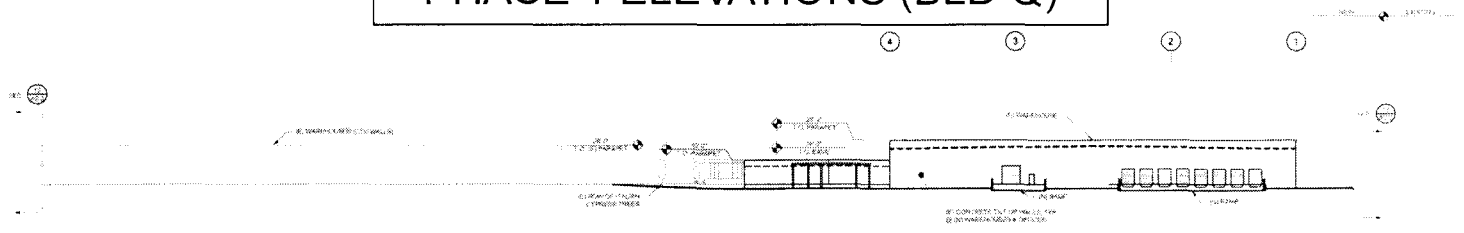
OCCUPANCY AND EGRESS CALCULATIONS

EGRESS WIDTH:

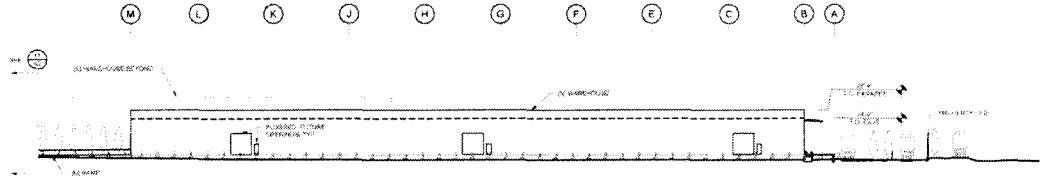
NOTE:

EXHIBIT B-6

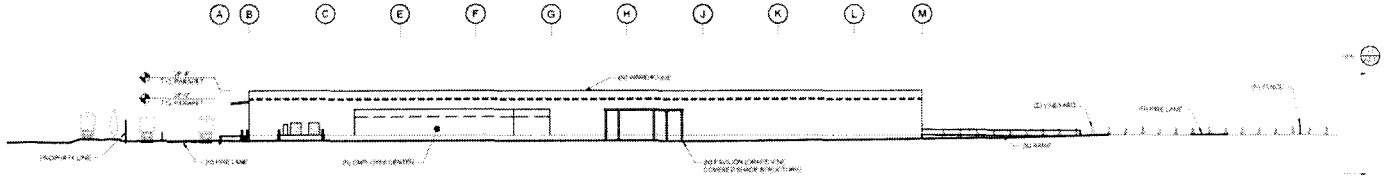
REZ PLN 2016-0066
BRONCO WINE COMPANY
PHASE 1 ELEVATIONS (BLD Q)



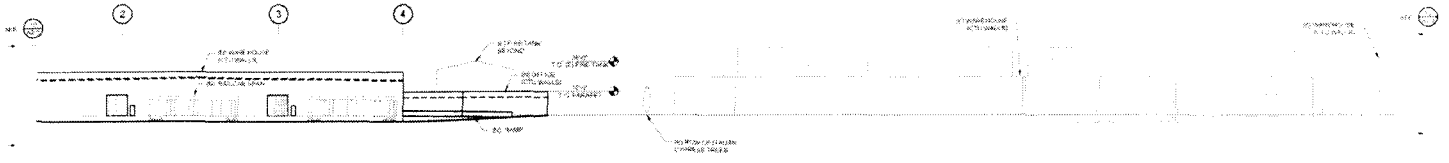
EAST EXTERIOR ELEVATION (FACING WEST - CENTER) WESTERN PORTION OF PARCEL ONLY



NORTH EXTERIOR ELEVATION (FACING SOUTH - WEST SIDE)



SOUTH EXTERIOR ELEVATION (FACING NORTH - WEST SIDE) NORTHERN PORTION OF PARCEL ONLY



WEST EXTERIOR ELEVATION (FACING EAST - CENTER)

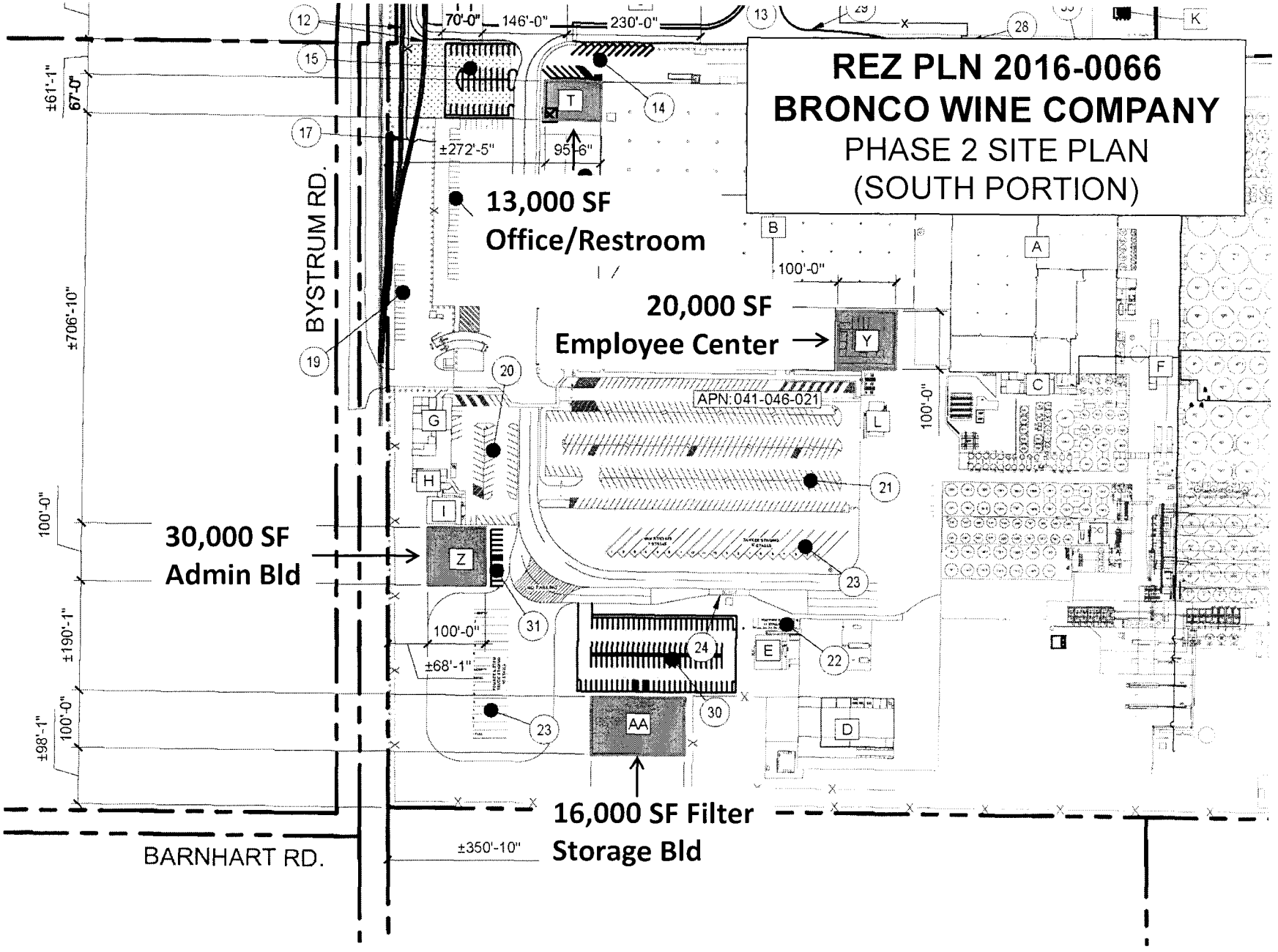

REZ PLN 2016-0066
BRONCO WINE COMPANY
PHASE 2 SITE PLAN
(SOUTH PORTION)
13,000 SF
Office/Restroom
20,000 SF
Employee Center
30,000 SF
Admin Bld
16,000 SF Filter
Storage Bld
BYSTRUM RD.
BARNHART RD.
APN:041-046-021
70'-0"
146'-0"
230'-0"
±272'-5"
95'-6"
100'-0"
±706'-10"
±61'-1"
67'-0"
±190'-1"
±98'-1"
±68'-1"
±350'-10"

EXHIBIT B-8

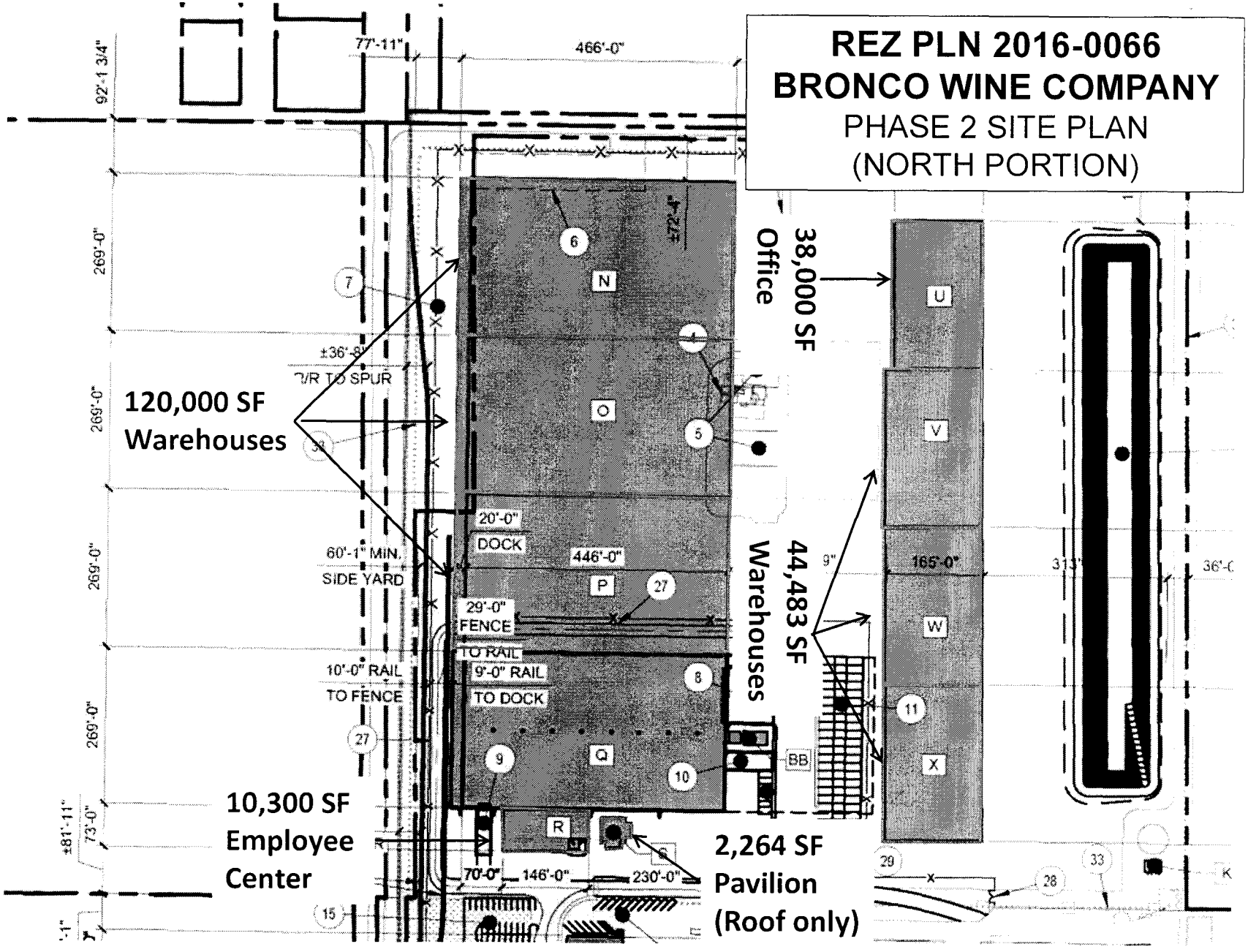
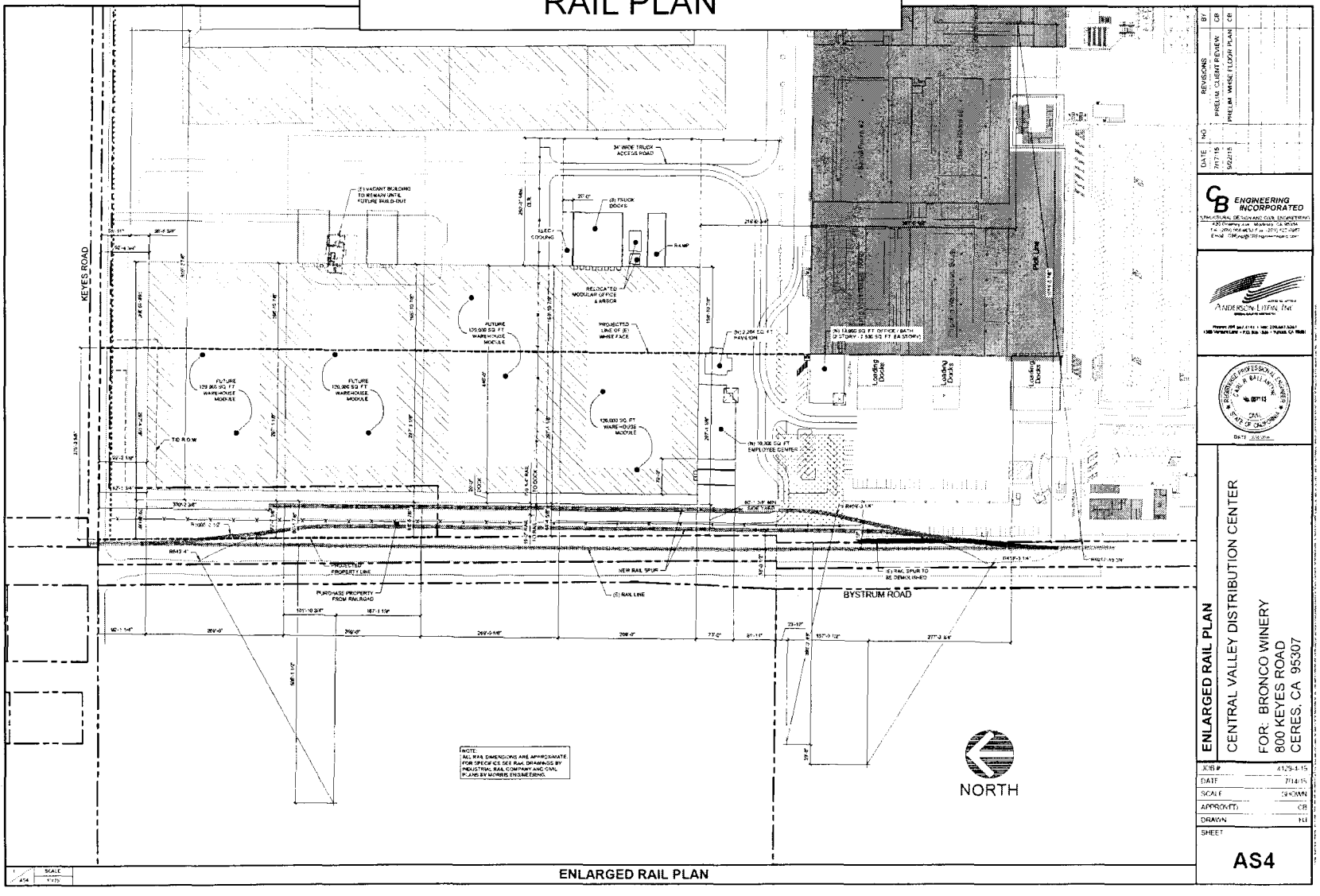

REZ PLN 2016-0066
BRONCO WINE COMPANY
PHASE 2 SITE PLAN
(NORTH PORTION)
120,000 SF
Warehouses
38,000 SF
Office
44,483 SF
Warehouses
10,300 SF
Employee
Center
2,264 SF
Pavilion
(Roof only)
466'-0"
77'-11"
92'-1 3/4"
269'-0"
±36'-8"
T/R TO SPUR
60'-1" MIN.
SIDE YARD
20'-0"
DOCK
446'-0"
29'-0"
FENCE
TO RAIL
10'-0" RAIL
TO FENCE
9'-0" RAIL
TO DOCK
165'-0"
70'-0"
146'-0"
230'-0"
N
O
P
Q
R
U
V
W
X
BB

EXHIBIT B-9

REZ PLN 2016-0066
BRONCO WINE COMPANY
RAIL PLAN



ENLARGED RAIL PLAN

REVISIONS

NO	DATE	BY
	7/7/15	CB
	9/22/15	CB

PRELIM. CLIENT REVIEW
PRELIM. WINERY FLOOR PLAN

CB ENGINEERING INCORPORATED

ANDERSON-LIEPA, INC.

ENLARGED RAIL PLAN

CENTRAL VALLEY DISTRIBUTION CENTER

FOR: BRONCO WINERY
800 KEYES ROAD
CERES, CA 95307

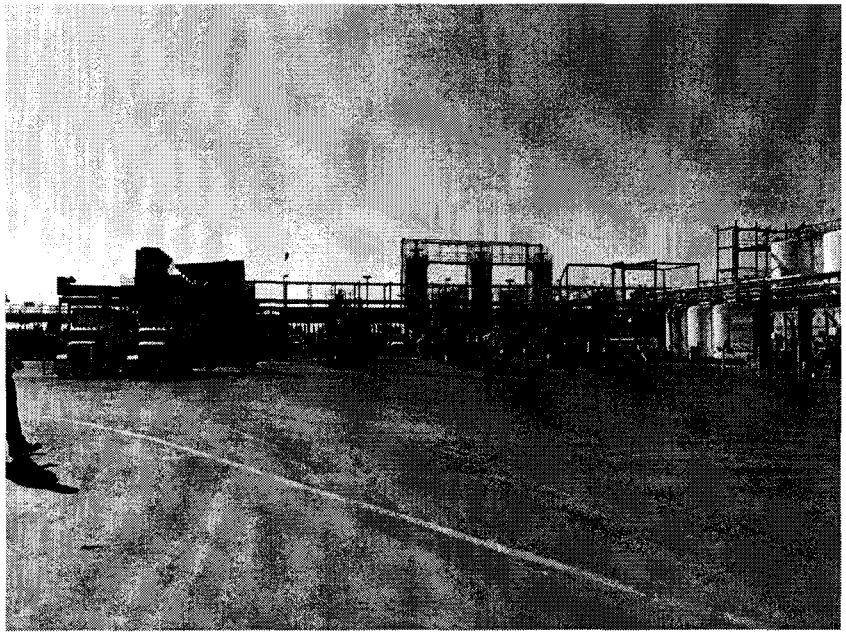
JOB #	4129-1-15
DATE	7/14/15
SCALE	SHOWN
APPROVED	CB
DRAWN	HH
SHEET	AS4

EXHIBIT B-10

REZ PLN 2016-0066
BRONCO WINE COMPANY
TRAFFIC & FIRE LANES PLAN

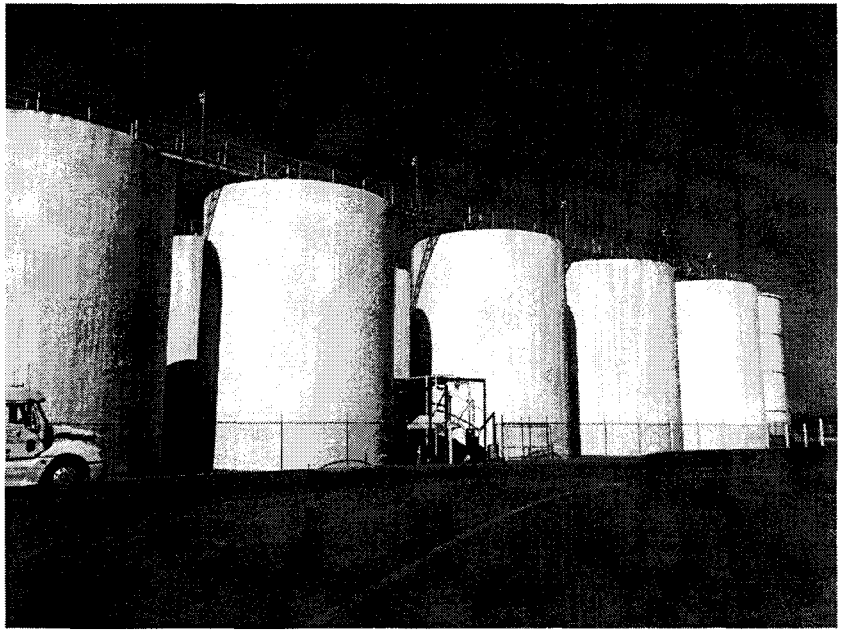
EXHIBIT B-11

REZ PLN 2016-0066
BRONCO WINE COMPANY
2015 SITE PHOTOS



SOUTHEAST PORTION OF SITE
EXISTING WINE TANKS & TRUCK DOCKS

SOUTHEAST PORTION OF SITE
EXISTING WINE TANKS



REZ PLN 2016-0066
BRONCO WINE COMPANY
2015 SITE PHOTOS



WEST ENTRANCE
BYSTRUM RD. AND UNION PACIFIC RR

SOUTHWEST CORNER OF SITE
BYSTRUM RD. AND UNION PACIFIC RR



AS AMENDED BY THE PLANNING COMMISSION
MAY 4, 2017
AS APPROVED BY THE BOARD OF SUPERVISORS
MAY 23, 2017

NOTE: Approval of this application is valid only if the following conditions are met. This permit shall expire unless activated within 18 months of the date of approval. In order to activate the permit, it must be signed by the applicant and one of the following actions must occur: (a) a valid building permit must be obtained to construct the necessary structures and appurtenances; or, (b) the property must be used for the purpose for which the permit is granted. (Stanislaus County Ordinance 21.104.030)

DEVELOPMENT STANDARDS

REZONE APPLICATION NO. PLN2016-0066
BRONCO WINE COMPANY

Department of Planning and Community Development

1. Use(s) shall be conducted as described in the application and supporting information (including the plot plan) as approved by the Planning Commission and/or Board of Supervisors and in accordance with other laws and ordinances. All development standards of P-D (6) shall be superseded and governed by these development standards.

2. Pursuant to Section 711.4 of the California Fish and Game Code (effective January 1, 2017), the applicant is required to pay a California Department of Fish and Wildlife (formerly the Department of Fish and Game) fee at the time of filing a "Notice of Determination." Within five (5) days of approval of this project by the Planning Commission or Board of Supervisors, the applicant shall submit to the Department of Planning and Community Development a check for **$2,273.25**, made payable to **Stanislaus County**, for the payment of California Department of Fish and Wildlife and Clerk Recorder filing fees.

   Pursuant to Section 711.4 (e) (3) of the California Fish and Game Code, no project shall be operative, vested, or final, nor shall local government permits for the project be valid, until the filing fees required pursuant to this section are paid.

3. Developer shall pay all Public Facilities Impact Fees and Fire Facilities Fees as adopted by Resolution of the Board of Supervisors. The fees shall be payable at the time of issuance of a building permit for any construction in the development project and shall be based on the rates in effect at the time of building permit issuance.

4. The applicant/owner is required to defend, indemnify, or hold harmless the County, its officers, and employees from any claim, action, or proceedings against the County to set aside the approval of the project which is brought within the applicable statute of limitations. The County shall promptly notify the applicant of any claim, action, or proceeding to set aside the approval and shall cooperate fully in the defense.

5. During any future construction, if any human remains, significant or potentially unique, are found, all construction activities in the area shall cease until a qualified archeologist can be consulted. Construction activities shall not resume in the area until an on-site archeological mitigation program has been approved by a qualified archeologist. The Central California Information Center shall be notified if the find is deemed historically or culturally significant.

6. Pursuant to Section 404 of the Clean Water Act, prior to construction, the developer shall be responsible for contacting the US Army Corps of Engineers to determine if any "wetlands," "waters of the United States," or other areas under the jurisdiction of the Corps of Engineers are present on the project site, and shall be responsible for obtaining all appropriate permits or authorizations from the Corps, including all necessary water quality certifications, if necessary.

7. Any construction resulting from this project shall comply with standardized dust controls adopted by the San Joaquin Valley Air Pollution Control District (SJVAPCD) and may be subject to additional regulations/permits, as determined by the SJVAPCD.

8. A sign plan for all proposed on-site signs indicating the location, height, area of the sign(s), and message must be approved by the Planning Director or appointed designee(s) prior to installation.

9. Pursuant to Sections 1600 and 1603 of the California Fish and Game Code, prior to construction, the developer shall be responsible for contacting the California Department of Fish and Game and shall be responsible for obtaining all appropriate stream-bed alteration agreements, permits, or authorizations, if necessary.

10. The Department of Planning and Community Development shall record a Notice of Administrative Conditions and Restrictions with the County Recorder's Office within 30 days of project approval. The Notice includes: Conditions of Approval/Development Standards and Schedule; any adopted Mitigation Measures; and a project area map.

11. Pursuant to the federal and state Endangered Species Acts, prior to construction, the developer shall be responsible for contacting the US Fish and Wildlife Service and California Department of Fish and Game to determine if any special status plant or animal species are present on the project site, and shall be responsible for obtaining all appropriate permits or authorizations from these agencies, if necessary.

12. Pursuant to State Water Resources Control Board Order 99-08-DWQ and National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, prior to construction, the developer shall be responsible for contacting the California Regional Water Quality Control Board to determine if a "Notice of Intent" is necessary, and shall prepare all appropriate documentation, including a Storm Water Pollution Prevention Plan (SWPPP). Once complete, and prior to construction, a copy of the SWPPP shall be submitted to the Stanislaus County Department of Public Works.

13. A use permit shall be obtained prior to development of any future phases, beyond the uses included in Phase 1 of this project request. As part of the use permit process, additional CEQA analysis shall be completed to evaluate potential environmental impacts, specifically to air quality.

Prior Development Standards

14. No structures or ponding areas to be located closer than 50 feet to property lines and tree screening to be provided along the property lines adjacent to any structure or ponding area located within 75 feet of such property line.

15. Parking shall be developed as buildings are constructed as required by Chapter 21.76 Off-site Parking. Driveways and parking areas to be blacktopped and on-site drainage provided as approved by the Department of Public Works.

16. Should additional ponding areas be added to the project site, the ponding areas shall be a maximum of six inches in depth and 10 foot wide roadways shall be provided around all ponds to provide access for Turlock Mosquito Abatement District staff. Lighting of new pond areas shall be approved by the Turlock Mosquito Abatement District. All pond wastewater shall be rotated daily and ponding areas shall be kept free of weeds and maintained for mosquito control as required by the Turlock Mosquito Abatement District.

17. All trucks servicing this development must restrict ingress and egress from Keyes Road to the existing entrance on Bystrum Road. In no case shall truck traffic use Barnhart Road or the 20-foot panhandle extending from east side of the subject property to Keyes Road.

18. All future railroad improvements, including but not limited to any crossings at entrances to the site, shall be constructed as approved by the Union Pacific Railroad and all applicable government agencies.

19. Grape pomace shall be removed from the project site on a daily basis.

20. On-site truck parking and circulation shall be constructed as required by the Department of Public Works.

21. Bystrum Road shall not be used for parking or storage by trucks servicing the winery.

22. The ponding operation shall not create a public nuisance as defined by the Code of Civil Procedures.

Department of Public Works

~~23. Prior to the issuance of any building or grading permit, not including building or grading permits issued for Building Q, street improvement plans, per the California Highway Design Manual, for dedicated turn lanes at the intersection of Keyes Road and Bystrum Road shall be submitted to and approved by the Department of Public Works. These plans shall be approved prior to the issuance of any building or grading permit submitted after Building Q.~~

24. Prior to acceptance of the road improvements, a set of Record Drawings, as specified in the County's Standards and Specifications, and scanned files for each sheet in a PDF format shall be provided to the Department of Public Works for review and approval.

25. Prior to the issuance of any grading, building, or encroachment permit, not including building or grading permits issued for Building Q, an acceptable financial guarantee for the Keyes Road and Bystrum Road intersection road improvements shall be provided to the

Department of Public Works. A financial guarantee is not required if the work in the right-of-way is completed prior to the issuance of any grading or building permit, not including building or grading permits for Building Q.

26. An Engineer's Estimate shall be provided for the road improvements so that the amount of the financial guarantee can be determined for the improvements in the County road right-of-way.
27. An Encroachment Permit shall be obtained for any work completed in the Stanislaus County road right-of-way.

28. No parking, loading or unloading of vehicles will be permitted within the Keyes Road and Bystrum Road rights-of-way. The applicant will be required to install or pay for the installation of any signs and/or markings, coordinating the installation of the signs with Public Works Traffic Section.

29. Public Works shall approve the location and width of any new driveway approaches on any County maintained roadway.

30. Prior to issuance of a grading or building permit, a grading, drainage, and erosion/sediment control plan for the project site shall be submitted before any grading or building occurs. Public Works will review and approve the drainage calculations. The grading and drainage plan shall include the following information:

    A. Drainage calculations shall be prepared as per the Stanislaus County Standards and Specifications that are current at the time the permit is issued.

    B. The plan shall contain enough information to verify that all runoff will be kept from going onto adjacent properties and Stanislaus County road right-of-way.

    C. The grading, drainage, erosion/sediment control plan shall comply with the current State of California National Pollutant Discharge Elimination System (NPDES) General Construction Permit and Stanislaus County storm water treatment and quality standards.

    D. The grading, drainage, and associated work shall be accepted by Stanislaus County Public Works prior to a final inspection or occupancy, as required by the grading or building permit.

    E. The permit applicant shall pay the current Stanislaus County Public Works weighted labor rate for the plan review and all on-site inspections required for the grading, drainage, erosion/sediment control, or building permit plan. The Public Works inspector shall be contacted 48 hours prior to the commencement of any grading or drainage work on-site. The plans shall not be released until such time that all plan check and inspection fees have been paid.

31. As reflected on Exhibit B-11 - Traffic and Fire Lanes, dated July 14, 2015, provided as part of the project application, no additional trucks will be allowed to utilize the Keyes Entrance labeled as Keyes Road Entrance "B", also known as Pike Road. Truck trips are limited to the number of trips included on the "Traffic and Fire Lanes" exhibit as follows:

Existing

- In Season:
  - Grape Trucks 105 /day and 735/week
  - Pomace Trucks 23/day and 163/week
- Out of Season:
  - Tanker Trucks 34/day and 230/week

Phase 1 Expansion

- In Season:
  - Grape Trucks 105 /day and 735/week
  - Pomace Trucks 23/day and 163/week
- Out of Season:
  - Tanker Trucks 34/day and 230/week

Department of Environmental Resources

32. The applicant shall contact the Department of Environmental Resources (DER) regarding appropriate permitting requirements for hazardous materials and/or wastes. Applicant and/or occupants handling hazardous materials or generating hazardous wastes must notify DER relative to the following:

    A. Permits for the underground storage of hazardous substances at new or modified tank facilities.

    B. Requirements for registering as a handler of hazardous materials in the County.

    C. Submittal of Hazardous Materials Business information into the California Electronic Reporting System (CERS) by handlers of materials in excess of 55 gallons or 500 pounds of hazardous material, or of 200 cubic feet of compressed gas.

    D. The handling of acutely hazardous materials may require the preparation of a Risk Management Prevention Program, which must be implemented prior to operation of the facility. The list of acutely hazardous materials can be found in SARA, Title III, Section 302.

    E. Generators of hazardous waste must notify the Department relative to the: (1) quantities of waste generated; (2) plans for reducing wastes generated; and (3) proposed waste disposal practices. Generators of hazardous waste must also use the CERS database to submit chemical and facility information to DER.

    F. Permits for the treatment of hazardous waste on-site will be required form the Hazardous Materials Division of DER.

33. The California Health and Safety Code Sections 25534 and 25535.1, require that stationary source facilities that handle or store acutely hazardous materials in reportable quantities develop a Risk Management Plan (RMP) and submit it to the local administering agency for review and approval. Stanislaus County Department of Environmental Resources is the administering agency for facilities subject to an RMP. For changes involving chemical engineering, hazardous materials systems and equipment, and in the storage of acutely

hazardous materials, that require modification of a facilities RMP shall be documented appropriately and submitted to DER as per requirements of California Health and Safety Code Section 25534.

34. Prior to the issuance of a grading permit, applicants shall determine, to the satisfaction of the Department of Environmental Resources (DER), that a site containing (or formerly containing) residences or farm buildings, or structures, has been fully investigated (via Phase I Study, and if necessary, Phase II Study). DER recommends a thorough records search be conducted to determine the historical types of farming operations performed at the project site; and that based on the results of that information, any suspect areas of the proposed development site be tested for organic pesticides and metals. Any discovery of underground storage tanks, former underground storage tank locations, buried chemicals, buried refuse, or contaminated soil shall be brought to the immediate attention of DER.

35. Property owner/developer shall obtain the appropriate permit from the Stanislaus County Department of Environmental Resources (DER) prior to installation (or destruction) of monitoring wells, and performance of exploratory soil borings for purposes of geotechnical and/or environmental assessment. All drilling for these purposes shall be performed by a C-57 Licensed California Well Driller, and according to applicable standards set forth in California Well Standards Bulletin 74-90.

36. Prior the installation of any water infrastructure for the site, the property owner shall provide to the Department of Environmental Resources an application for amended water supply permit along with a full technical report demonstrating that the water system will meet all requirements of a Nontransient Noncommunity water system: capacity, source water, treatment plant modifications, water works standards, and the California Environmental Quality Act (CEQA).

37. This site has multiple wastewater treatment systems (WTS) some are conventional septic and others are aerobic treatment units (ATU). Most of these system dispersal systems are under paved area. The groundwater or the water system has shown high levels of nitrates and di-Bromo-Chloro-Propane (DBCP) as of these products in the groundwater the water well on-site has couple of treatments one for the removal of inorganic (Nitrate) and the second is the removal of organic (DBCP).

38. The expansion of this project will have an increase of water treatment which will impact on the wastewater treatment by the side products from the treatments. Therefore, any proposed on-site wastewater treatment system or expansion of existing on-site waste water system (OWTS) need to be referred to Central Valley Regional Water Quality Control Board CVRWQCB), for review and approval. A centralized OWTS may be required by CVRWQCB with proper treatment of the discharged effluent. The quality of the discharged effluent shall meet EPA Secondary Treatment Guidelines. The focus will be on the ability to reduce nitrate, salt, and organic chemical levels, which have a minimum impact upon the area's groundwater

Building Permits Division

39. Building permits are required and the project must conform to the California Code of Regulations, Title 24.

Keyes Fire District

40. All proposed structures shall obtain building permits, shall meet all applicable Building and Fire codes, and shall be reviewed and approved by the Keyes Fire District.

Turlock Irrigation District

41. There is an existing privately owned 36 inch irrigation pipeline which enters the subject property from the east at approximately 670 feet south of Keyes Road. The portion of this pipeline remaining on the subject parcel shall be removed as the area(s) develop and the opening in the control structure along the east property line sealed.

42. A second 36 inch diameter cast-in-place concrete irrigation pipeline and easement belonging to Improvement District 1121, the Moore, is located in the northwest corner of the project. The pipeline crosses Keyes Road approximately 400 feet east of Blaker Road and then turns westerly parallel to Keyes Road. The portion crossing the road appears to be within the existing irrigation easement. However, the east-west portion is located about 18 feet south of the Keyes Road right-of-way and outside of the easement. It is likely that the existing easement could be quitclaimed in lieu of dedication of a new easement to cover the actual location of the pipeline.

43. The developer shall submit plans detailing the existing irrigation facilities, relative to the proposed site improvements, in order for the District to determine specific impacts and requirements.

44. The District shall review and approve all maps and plans for the project. Any improvements to this property which impact irrigation facilities shall be subject to the District's approval and shall meet all District standards and specifications. If it is determined that irrigation facilities will be impacted, the applicant will need to provide irrigation improvement plans and enter into an Irrigation Improvements Agreement for the required irrigation facility modifications. There is a District Board approved time and material fee associated with this review.

45. Work on irrigation facilities can only be performed during the non-irrigation season which typically runs from November 1, through March 1, but can vary.

46. Upon request, the District will review and quitclaim irrigation easements that are no longer required. There is a $100.00 application fee for this review.

47. Developed property adjoining irrigated ground must be graded so that finished grading elevations are at least 6 inches higher than irrigated ground. A protective berm must be installed to prevent irrigation water from reaching non-irrigated properties.

48. Developer shall determine how the new electrical load will be connected to their primary metered electrical system and ensure that the total plant load can receive satisfactory service from developer's primary metered service. The new total electrical demand shall be reviewed and approved by the District to ensure total load is within the limits of the District's electrical feeders that serve the development.

49. The District has a transmission and distribution line on the south side of Keyes Road along the northern boundary of the subject property. Applicant proposes to plant Italian Cypress trees parallel to the line. These trees shall be planted 20 feet from the line to ensure safe and reliable operation of the electric system.

Central Valley Regional Water Quality Control Board

50. Project shall obtain all applicable permits in accordance with the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs). All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan.

51. Prior to ground disturbance or issuance of a building permit, the Central Valley Regional Quality Control Board shall be consulted to obtain any necessary permits and to implement any necessary measures, including but not limited to Construction Storm Water General Permit, Phase I and II Municipal Separate Storm Sewer System (MS4) Permits, Industrial Storm Water General Permit, Clean Water Act Section 404 Permit, Clean Water Act Section 401 Permit (Water Quality Certification), Waste Discharge Requirements, Dewatering Permit, Low or Limited Threat General NPDES Permit, NPDES Permit or any other applicable Regional Water Quality Control Board permit.

San Joaquin Valley Air Pollution Control District

52. The proposed project shall obtain all applicable Air District permits. Prior to the start of construction, the property owner/operator shall contact the District's Small Business Assistance Office at (559) 230-5888 to determine if an Authority to Construct (ATC) is required, or if any other District rules or permits are required.

MITIGATION MEASURES

(Pursuant to California Public Resources Code 15074.1: Prior to deleting and substituting for a mitigation measure, the lead agency shall do both of the following:
1) Hold a public hearing to consider the project; and
2) Adopt a written finding that the new measure is equivalent or more effective in mitigating or avoiding potential significant effects and that it in itself will not cause any potentially significant effect on the environment.)

53. All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include but not be limited to: the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and to prevent light trespass (glare and spill light that shines onto neighboring properties).

54. Prior to issuance of a building permit, not including the building permit for Phase 1, which includes construction of the 120,000 square-foot warehouse (Building Q), improvements to alleviate traffic congestion at the intersection of Keyes Road and Bystrum Road and to

improve safety conditions along Keyes Road, to include dedicated turn lanes per the California Highway Design Manual, shall be completed. Improvement plans shall be reviewed and approved by the Stanislaus County Department of Public Works.

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*Please note: If Conditions of Approval/Development Standards are amended by the Planning Commission or Board of Supervisors, such amendments will be noted in the upper right-hand corner of the Conditions of Approval/Development Standards; new wording is in **bold**, and deleted wording will have a ~~line through it.~~*

Business Model of Bronco Wine Company

In support of its new Land Use Permit

Application before Stanislaus County

March 16, 2017

I. FAMILY HISTORY

Coca Cola Bottling Company of New York purchased the Franzia Brothers Winery, Ripon, California in 1973. Bronco's Founders and owners resigned their position from Coca Cola to start Bronco Wine Company in 1974. Bronco's Founders selected Stanislaus County, rather than San Joaquin County, as the preferred winery site to grow our Bronco Wine Company. During the past 44 years, Bronco Wine Company has grown our winery by selling wine to American consumers at prices they can afford to enjoy wine every day. In order to supplement a low cost supply source for grapes, various Bronco partnerships have acquired and planted over 40,000 acres of wine grape vineyards in eleven (11) counties primarily in the San Joaquin Valley. Bronco purchases grapes from growers and produces wine at Ceres for bottling both still and sparkling wine and also warehouses and distributes these wines at Ceres. Bronco also sells bulk wine from our Ceres winery to dozens of other California wineries. Bronco maintains a wholesale business in California, selling directly to retailers and restaurants (on sale (i. e. wine consumed on the premise where purchased, like a restaurant) and off sale (i. e. wine consumed at a location other than where purchased, like in the purchaser's home) from our Ceres warehouse. Bronco also markets and sells numerous branded wines to distributors (wholesalers) in the other 49 states and exports both bulk and bottled wines to over 70 countries including 10 provinces in Canada. The National and California case sales divisions of Bronco sell both Bronco produced brands and brands produced by other California wineries, as well as wines imported from around the world directly from our warehouse at Ceres. In addition, Bronco and other affiliated companies built or acquired additional bonded wineries and bonded bottling facilities, warehouses and logistics services in five counties other than Stanislaus. All these wines and brands need a consolidation point for shipping to our distributors. This full complement of wines is necessary for Bronco to compete with major national wineries like E&J Gallo (Stanislaus County); The Wine Group - FKA Franzia Brothers Winery (San Joaquin County), and Delicato Family Winery (San Joaquin County). Most recently, Bronco is launching a new distribution logistics business to be more vertically integrated and again, as our first choice, we want to build a consolidation point to ship wine on a more economical basis from a central location from our Ceres warehouse/distribution point. Trucks returning from case good delivery can backhaul wines for consolidation at Ceres. Bronco has been appointed a Freight Consolidator for our largest national retail customer from our supply base to eventually accommodate rail shipments to our major markets.

II. INVENTORY POSITION

The Planning Department inquired about the mix of inventory in the Ceres warehouse. During Bronco's recent physical inventory, audited by our Independent Public Accountants, the mix of case goods was

1,874,413 cases (88%) produced and owned by Bronco; 179,458 cases (8%) produced by other California wineries and 91,001 cases (4%) imported from other countries.

III. BUSINESS MODEL IN SUPPORT OF REDUCED TRUCK TRAFFIC

The following discusses how Bronco and its affiliated logistics and trucking company will reduce truck loads into and out of the Ceres facility and also addresses proposed new office buildings and related parking.

1) Bronco is investing millions of dollars to build a new warehouse which will store finished cases of wine produced by Bronco at the Ceres winery, at affiliated wineries in Napa and Sonoma, other portfolio wineries throughout California and overseas wineries. Bronco is also investing additional millions of dollars for railroad access into the area adjacent to the new warehouse. Each railroad car has a capacity equal to 4 - 53' truck vans. Bronco sells to over 370 distributors throughout the United States whose terms are FOB, Ceres. The wines are picked up by these distributors in 53' vans. One trip in (empty) and one trip out (full). We are initially working with large distributors in 10 states which have already requested wine to be delivered on railroad cars. During the past 3 months, these distributors picked up 142,800 cases of wine in 119 trucks. This required 238 truck trips (in and out). In the future, these distributors will have this same wine delivered in railroad cars and thus will eliminate 238 truck trips (119 empty trips in and 119 full trips out of the winery) during this 3 month period. This equates to an elimination of 952 truck trips annually. The elimination of truck trips will only increase as more and more distributors realize the cost savings of consolidation 4 truckloads of wine into one rail car.

2) Bronco bottles wine at the Ceres facility for many non-related wineries throughout California. Currently these non-related wineries send their empty 53' trucks to Ceres, get loaded with cases of wine and depart the winery fully loaded. (2 trips). Separately, Bronco owned wines are bottled at affiliated wineries in Napa and Sonoma. A non-affiliated trucking company picks up the bottled wines in their 53' trucks in Napa or Sonoma and delivers the wine to Ceres and leaves empty. (2 loads).

   Bronco, through an affiliate, will purchase four (4) 53' dry goods vans. Over the next five (5) years, the number of vans could grow to 12-15. Through negotiations with the non-related wineries, Bronco will include the cost of delivery in the bottling price and deliver the bottled wine to the non-related winery. The same van will then pick up Bronco's bottled wines at the Napa or Sonoma affiliated wineries and deliver the wine to Ceres. This model has the effect of reducing 50% of the truck traffic for each such event. During the 3 month period of November through January, a total of 878 truck trips arrived in Ceres and 199 truck trips departed Ceres for a 3 month total of 1,077. The average annual truck trips would therefore be 4,308. These trips will be cut in half and result in a truck trip elimination of 2,154 truck trips per year.

3) a) Bronco produces bulk wine for dozens of California non-related wineries. These non-related wineries send their empty tanker trucks to pick up the bulk wine (1 trip in). After the tanker is loaded with bulk wine, the truck returns to the non-related winery (1 trip out). Bronco, through an affiliate, will purchase ten (10) bulk wine tankers. Over the next five (5) years, the number of

bulk wine tankers could grow to 20 tankers. Through negotiations with the non-related wineries, Bronco will include the cost of delivering the bulk wine in the selling price of the bulk wine. The result is one tanker trip going out of Ceres loaded and the incoming empty tanker trip is eliminated. The Bronco tanker truck then returns to Ceres full. See discussion in the next paragraph.

b) Separately, other non-related wineries send their produced bulk wine to Ceres to be blended with Bronco's wines and further processed (1 trip in full and 1 trip out empty).The blending and processing takes weeks to finish. The non-related winery then sends an empty tank truck to Ceres for loading of bulk wine and the tank truck returns (another 2 tanker truck trips). This entire task requires 4 bulk wine tanker truck trips by the non-related winery.
Because a Bronco affiliate is purchasing bulk wine tankers, the other non-related winery's wine can be picked up for return to Ceres for the blending and processing, after the wine in 3. a) above is delivered. This will eliminate the other non-related winery's 2 bulk wine tanker truck trips. After the wine is blended, a Bronco affiliate's bulk wine tanker will take the full load to the other non-related winery, and pick up another load of bulk wine from the same non-relater winery or a different non-related winery for return to Ceres. Thus, 4 bulk wine truck trips by the other non-related winery will be replaced by 2 truck trips made by Bronco's affiliate, thereby eliminating 50% of this truck traffic. This will greatly reduce the number of tank trips and eliminate the other non-related wineries' empty tankers from entering or leaving the Ceres winery. During the three period of November through January, 224 truckloads of bulk wine entered the Ceres winery and 387 truckloads of bulk wine left the Ceres winery for a total of 611 trips. The average annual truckloads would therefore be 2,444 and based on this business model, 1,222 truck trips will be eliminated.

4) Bronco operates as its own wholesale company within the state of California. This entity is known as Classic Wines of California (CWOC). The entity serves 6,100 retail accounts in California. Deliveries of case goods, produced by both Bronco and other non-affiliated wineries are made to retailers four days each week. The delivery trucks leave Ceres, deliver the cases at retail locations and return empty. By better logistics planning, these same trucks will now pick up other winery's wines, (which are for sale through the Bronco wholesale organization), and return to Ceres, thus eliminating a separate incoming truck trip from the other non-affiliated winery. Our logistics manager estimates that we can eliminate 552 truckloads each year which are currently hauled by outside 3rd party trucking companies.

5) Items III. (2), (3), and (4) above all discuss business models which include the use of trucks and delivery vans and bulk wine tankers. The pending Land Use Application does not include building a vehicle maintenance shop. Rather, minor maintenance will be provided on-site by either winery maintenance personnel, if qualified, or independent mobile maintenance firms. Major repairs will be performed off-site at truck repair shops which are located within a 5-10 mile radius of our Stanislaus County winery. The number of power units which will haul the vans and bulk wine tankers is 12 and could grow to 30 in the next five (5) years.

6) The Public Works and/or Planning Department expressed concerns about dramatic increases in auto trips and parking resulting from the proposed new office buildings identified as Building "U" and Building "T". There will be NO increase in employee auto trips or parking. Bronco currently has 97 employees working in 11 departments on the Ceres campus. If these new office buildings are built, the existing 97 employees will be repositioned into these buildings. Administrative personnel growth during the next 5 years could range 2-4% total.

7) The General Project Summary in the traffic study makes reference to "1 future employee center (commercial kitchen/cafeteria/conference area) at 10,300 square feet (Building "R")". The use of this building will be as follows.

   a) Once or twice each year, Bronco's National sales force of approximately 68 people travel to California for meetings and educational seminars. They typically meet in Napa for 3-5 days and in Ceres for 1-2 days during the week-long meetings. Management requires the sales force to car pool in vans so that vehicle count will be approximately 11-13 vehicles for 4 days per year maximum. The meeting room currently used in Ceres is too small for this size group and also conflicts with other meeting held by winery personnel.

   b) Bronco's wholesale division (CWOC) holds monthly meetings for its Northern California sales force of approximately 50 managers and sales personnel. Currently all meetings are held in our Napa facility. The management of CWOC would like to conduct these meetings in Ceres once each quarter (4 times per year). Again, management requires the sales personnel to car pool, when possible. Since the personnel are disbursed throughout Northern California, the volume of vehicles is expected to be 25-30 vehicles for each quarterly meeting, or an average of 0.38-0.48 vehicles per day during each calendar quarter.

   c) Neither this facility, nor any portion of Bronco's Stanislaus County winery, will be open to the public. This facility will not include any on-site amplified outdoor sound systems. Food preparation will be provided by off-site catering firms.

Based on the above information and the creation of additional jobs in Stanislaus County and the increased property tax dollars to Stanislaus County, there is no reason the land use permit should not be issued.

April 9, 1974

TO: BOARD OF SUPERVISORS

FROM: PLANNING DIRECTOR

SUBJECT: BRONCO WINERY - PLANNED DEVELOPMENT

The attached packet includes the Planning Staff Report and Environmental Impact Report with respect to the Bronco Wine Company's Planned Development for construction of a winery on 81.25 acres of property located on the east side of Bystrum Road one-quarter mile south of Keyes Road.

The Planning Commission, following a public hearing, unanimously voted to forward the application to the Board of Supervisors with the following recommendations:

A. Approval of the Environmental Impact Report

B. Approval of the proposed development plan for the construction of a winery.

C. Reclassification of the property from A-2-10 (Exclusive Agricultural) to P-D (Planned Development).

Encluded with the Staff report is Exhibit "C" (Performance standards for the completion of the Planned Development). Exhibits "A" and "B" as described in the attached Staff report will be on display at your meeting.

Attachments:

1. Staff Report
2. E.I.R.
3. Exhibit "C"

RMA:dl

EXHIBIT F

RESOLUTION NO. 74-2

RESOLUTION OF THE STANISLAUS COUNTY PLANNING COMMISSION TO THE BOARD OF SUPERVISORS RECOMMENDING THE REZONING OF PROPERTY ON THE EAST SIDE OF BYSTRUM ROAD, SOUTH OF KEYES ROAD. (PLANNED DEVELOPMENT - BRONCO WINE CO.)

WHEREAS, the Stanislaus County Planning Commission had on file a verified petition asking that the zoning of the area as shown on the attached map be changed from A-2-10 (Exclusive Agricultural) zoning to P-D (Planned Development) zoning for a winery, and

WHEREAS, a public hearing was held on March 21, 1974, after giving proper notice and publication, and

WHEREAS, the Land Use Element of the General Plan provides for applications of non-agricultural uses within areas designated for agricultural purposes on a planned development basis provided that it is demonstrated that the proposed uses are validly responsive to the needs of the agricultural area and that approval will not result in detriment to adjacent properties or other continued agricultural usage, and

WHEREAS, the Commission finds that the proposal is consistent with the intent of the Land Use Element of the General Plan and is a valid use of the Planned Development process as a facility that is associated with agricultural production, and

WHEREAS, many such winery facilities are located throughout the valley region in rural areas without apparent conflict with surrounding agricultural uses.

NOW, THEREFORE, BE IT RESOLVED that the Stanislaus County Planning Commission recommends that the proposed zone change to P-D (Planned Development) zoning and the winery project be approved after the one necessary public hearing.

I hereby certify that the above is a full, true, and correct copy of a resolution adopted by the Stanislaus County Planning Commission at a public hearing held on the 21st day of March, 1974.

Robert L. Davis, Jr.
Secretary

March 21 1974

TO: PLANNING COMMISSION

FROM: PLANNING DEPARTMENT

SUBJECT: R 74-2 P-D (PLANNED DEVELOPMENT) BRONCO WINERY

I. APPLICATION

A.	Applicant:	Bronco Wine Company by Joseph S. Franzia
B.	Owners:	Gregory Specialty Co. and V.W. Washam
C.	Location of property:	On the east side of Bystrum Road, one-quarter mile south of Keyes Road.
D.	Area of property:	81.25 acres
E.	Existing zoning:	A-2-10 (Exclusive Agricultural)
F.	Request:	Reclassification of property to P-D (Planned Development) and approval of a Development Plan for a winery.
G.	Applicant's statement:	See E.I.R.

II. ENVIRONMENTAL REVIEW

The Environmental Review Committee determined that this project may have a significant effect on the environment. A draft E.I.R. prepared by the Planning Department is attached with the final E.I.R. to be available for your review prior to the meeting of March 21, 1974.

III. ANALYSIS

The proposed Planned Development project involves the construction of a winery and bottling facility on an 81.25 acre parcel of land located on the east side of Bystrum Road, approximately one-quarter mile south of Keyes Road in an A-2-10 (Exclusive Agricultural) zone. The Tidewater Southern Railroad is located along the west side of the subject property adjacent to Bystrum Road. Crows Landing Road, located one-half mile to the west of the project site is indicated on the Highway Transportation Element of the General Plan as a major street connecting Interstate Highway 5 to the west of Crows Landing with State Highway 99 near the City of Modesto. Keyes Road is designated as a collector street connecting with State Highway 99 near the town of Keyes located approximately four miles to the east of the site.

Bystrum Road, providing access to the project site from Keyes Road is a county maintained road of indefinite right of way width but established by usage to a traveled width of approximately 40 feet with a native soil surface. Barnhart Road is deeded to a 40 foot right of way width with a blacktop surface in poor condition structurally and extends east from Crows Landing Road to the southwest corner of the site. Additional access to the property is available by means of a private 20 foot wide access road extending south from Keyes Road to the northeast corner of the property.

The vehicular traffic to be generated in the area from the project as indicated by the applicant, includes a total of twenty-six trucks and thirty-three automobiles on a daily basis during the crushing season and six trucks and twenty-three automobiles daily during the off season. A major portion of this traffic generated would be along Keyes Road between the winery facility and State Highway 99 near the town of Keyes.

The surrounding uses in the vicinity of the project are primarily agricultural including grape vineyards, orchards, pasture land and a large dairy operation immediately to the south of the site. To the southwest along Barnhart Road, are three mobile homes and two residences.

The soil types of the subject property are a mixture of grades one and two prime soils classified as Hanford Sandy Loam, Tujunda Sandy Loam and Dinuba Sandy Loam with a water table depth of approximately six feet as indicated by T.I.D. data obtained in 1970.

The applicant indicates that the project is to include the making of wine and champagne with no distillery to be constructed on the site at any time. The crushing operations will take place during the grape harvest season, generally from late August to early November. During this approximate ten week period, grapes will be crushed five days a week during the daylight hours. After crushing, the grapes are fermented in large stainless steel tanks and grape skins and seeds are pressed and discarded with the pressed grape pumace to be sold for poultry feed. After fermenting, the wine is transferred to storage tanks where it is cooled, filtered, blended and bottled.

Waste water created by the project is proposed to be ponded in shallow ponds, located on the premises as shown on the attached plot plan, consisting of five one-acre ponds approximately six inches deep and graded in a level condition. These ponds will be maintained in a weed free condition with maintenance roads separating the ponds for access. Water is to be pumped into the ponds from a collection sump and the ponds are to be rotated daily with the maximum water depth of a pond at any one time approximately four inches. The percolation rate at the site falls within a range of one inch per hour to six inches per day. This shallow waste water ponding method is presently being used by Tri-Valley Growers on Kiernan Avenue north of Modesto and has proved successful in the elimination of odors.

Septic tank facilities are to be used for sewage disposal on the site and domestic water provided by a well also serving as a source of water for fire protection and sprinkler system.

The Agricultural Extension Service has been requested by the Planning Staff to submit comments in respect to this project as it would effect the groundwater at this location and how the winery would be affeced by spraying and dusting operations in the surrounding agricultural areas. Also, the County Assessor has been contacted to comment on any effect this project would have on surrounding agricultural land assessments. The applicant is working with Regional Water Quality Control and the County Health Department for compliance with their requirements and a report from these agencies on the project will be forthcoming. These comments will be delivered to your Commission prior to the meeting of March 21, 1974, when the application is to be considered.

The development plan submitted by the applicant for approval in connection with the zoning change to P-D (Planned Development) consists of the following:

Exhibit A March 6, 1974
Vicinity map, plot plan, building and storage tank elevations, and off-street parking plan.

Exhibit B
Development Schedule

Exhibits are available for review in the Planning Office and will be on display at your meeting.

IV. RECOMMENDATION

The following factors influence our recommendation with respect to this project:

1. The proposed project should not be detrimental to the existing agricultural usage of the surrounding neighborhood if developed in compliance with recommended performance standards. (See Exhibit C).

2. The use is in compliance with the General Plan as a facility that is associated with agricultural production and complies with the provisions of Section 118.5 of the Zoning Ordinance (Planned Development zone).

3. The project is to be located near major or collector streets and a railroad facility that would provide the necessary transportation needs of the facility.

4. Many such winery facilities are located throughout the valley region in rural areas without apparent conflict with surrounding agricultural uses.

We therefore recommend that your Commission take the following actions pertaining to this project:

1. Approve the Final EIR prepared by the Planning Department prior to action on this application.

2. Forward a recommendation to the Board of Supervisors for reclassification of the subject property from A-2-10 (Exclusive Agricultural) to P-D (Planned Development) and approval of a Development Plan consisting of the following:

   Exhibit A
   Vicinity map, plot plan, elevation and off-street parking plan.

   Exhibit B
   Development Schedule

   Exhibit C
   Performance standards for completion of the Planned Development as follows:

1. No structures or ponding areas to be located closer than 50 feet to property lines and tree screening to be provided along the property lines adjacent to any structure or ponding area located within 75 feet of such property lines.

2. Driveways and parking areas to be blacktopped and on-site drainage provided as approved by the Department of Public Works.

3. The ponding areas to be a maximum of 6 inches in depth with daily rotation of waste water and 10 foot wide roadways around all ponds provided for access to ponds for mosquito personnel. The ponding areas to be kept free of weeds and maintained for mosquito control as required by the Turlock Mosquito Abatement District. Also, night lighting for the project to be installed as approved by the T.M.A.D.

4. Water table levels and ground water quality must be monitored regularly to make certain that no adverse changes occur. If changes do occur, winery operation must be adjusted or additional measures approved by Turlock Irrigation District undertaken to off-set such changes.

5. Crops to be grown during effluent usage when practical and at least each season after effluent applications to make use of the nutrients in the effluent with soil sample to be obtained and analyzed before and after each growing season to determine any chemical or physical change in the soil. The applicant to work with the Agricultural Extension Service for compliance with this condition.

6. The project to be conducted in compliance with State Water Quality Control Board and County Health Department regulations and necessary clearances obtained from these agencies prior to the issuance of building permits.

7. All trucks servicing this development must restrict ingress and egress from Keyes Road along Bystrum Road to the entrance designated on Exhibit A as alternate entrance. In no case shall truck traffic use Barnhart Road or the 20 foot "panhandle" ownership extending from subject property northerly to Keyes Road.

8. The railroad crossing at the entrance to be constructed as approved by the Tidewater Southern Railroad and all applicable government agencies.

9. Pumace to be removed from the project site on a daily basis.

10. That section of Bystrum Road lying between the alternate entrance as shown on Exhibit A and Keyes Road shall be improved by the applicant to provide a 28 foot wide paved section to a design section minimum of 2 inches of asphalt concrete over a 6 inch aggregate base.

11. On-site truck parking and circulation facilities to be provided to the satisfaction of the Public Works Department.

12. Bystrum Road shall not be used for parking or storage by trucks servicing the winery.

13. Plans for the alternate entrance access road intersection to Bystrum Road shall be submitted to and approved by the Public Works Department.

14. A financial guarantee shall be posted by the applicant to pay the County's share of cost of providing additional railroad crossing protection at the Keyes Road Tidewater Southern tracks if such protection is necessary within two years after the winery begins operation.

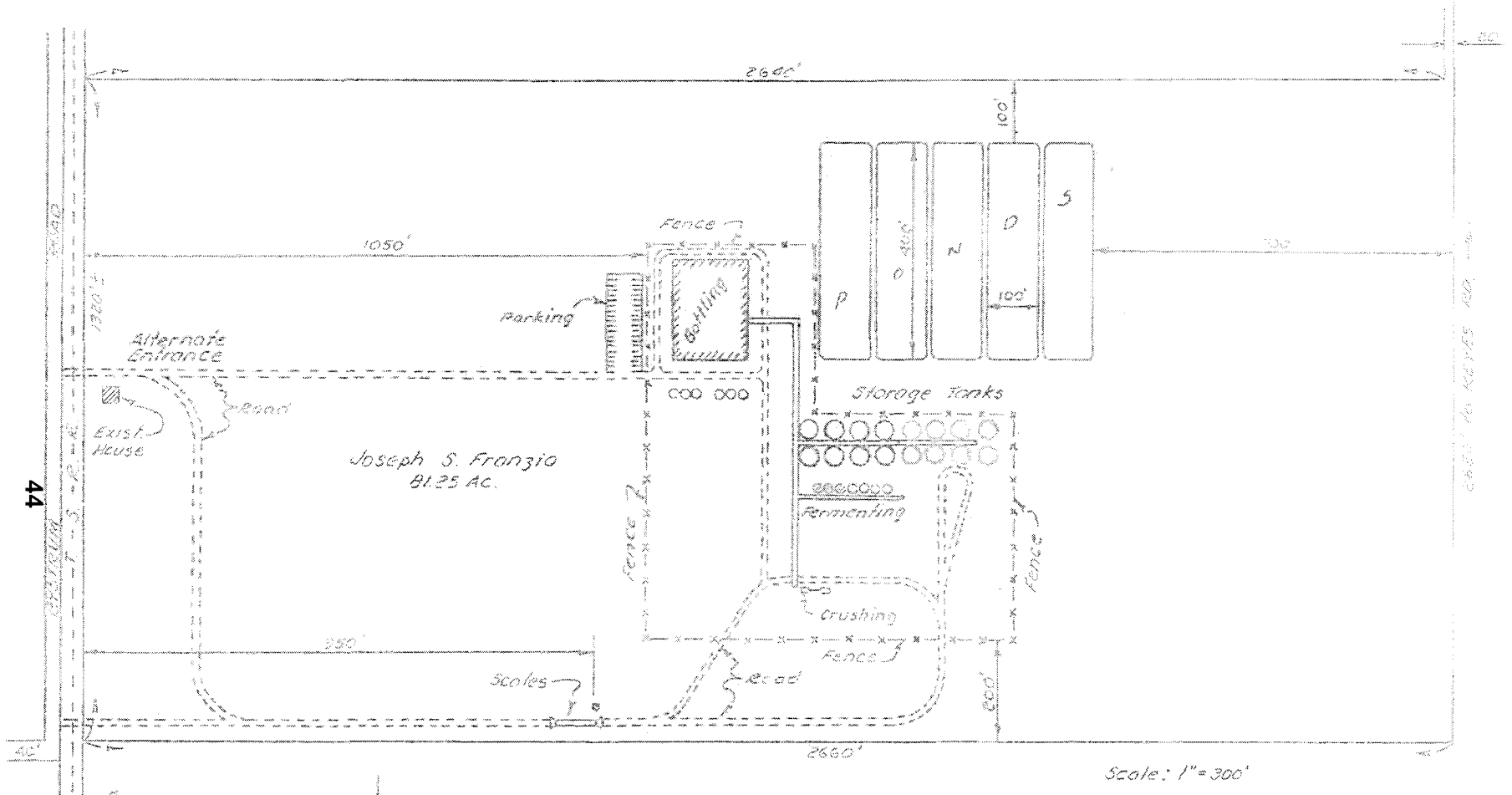
Attachments:

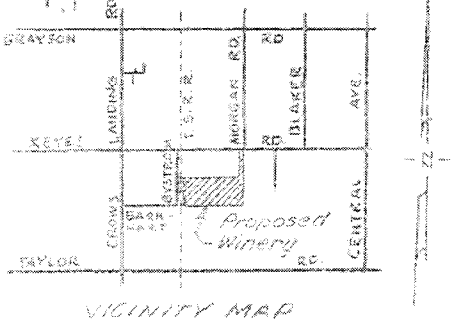
1. Letters from Ag. Extension
2. Letter from Mosquito Abatement
3. Letter from T.I.D.

RMA:dl



TYPICAL ELEVATION





VICINITY MAP

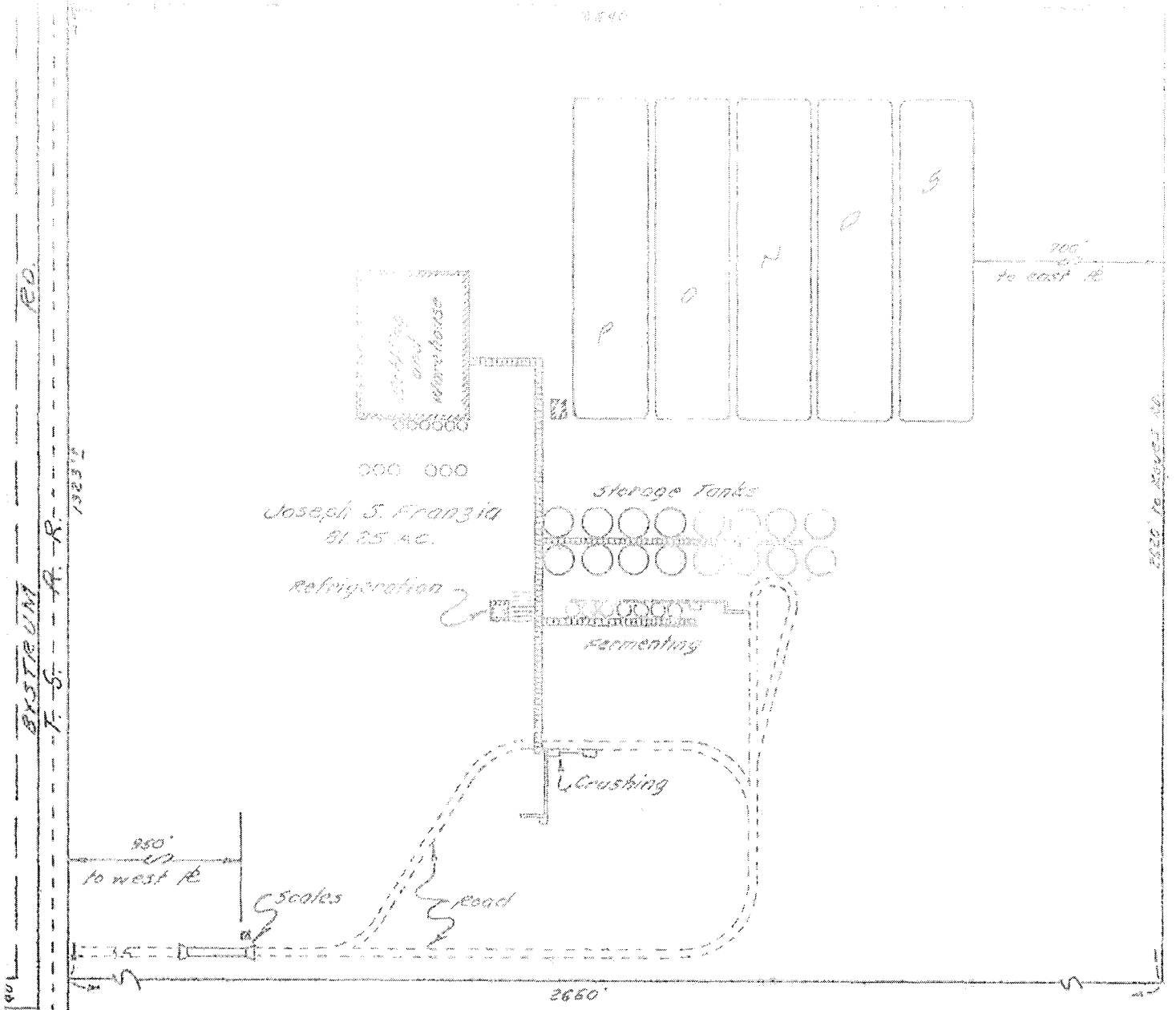
MAP SHOWING AREA PROPOSED TO BE REZONED FROM A-2-10 EXCLUSIVE AGRICULTURE TO P-D-2 PLANNED DEVELOPMENT.

By Joseph S. Franzia to construct a winery and bottling facility Winery to be known as BRONCO WINE COMPANY

LEGEND

Red = 1st year development

Green = 2nd year development



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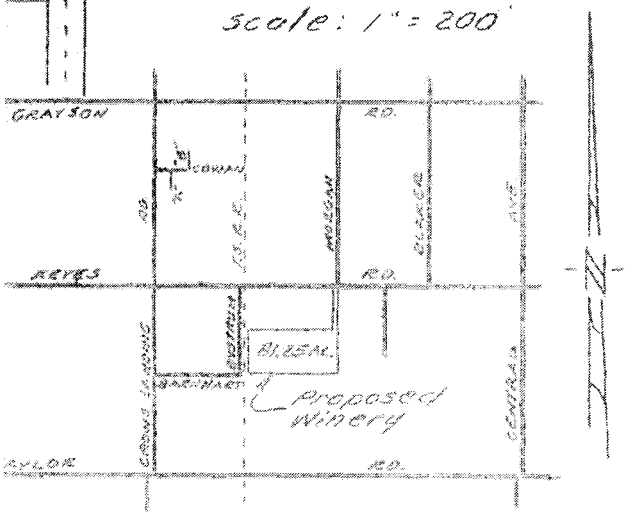


VICINITY MAP
scale: 3" = 1 Mile

FINAL ENVIRONMENTAL IMPACT REPORT

PLANNED DEVELOPMENT

ZONING RECLASSIFICATION

BRONCO WINE COMPANY

Stanislaus County Planning Commission

March 21,1974

EIR 74-2

ATTACHMENT 2

BACKGROUND

On January 21, 1974, the Bronco Wine Company applied for a P-D zone to develop a winery to be located at the northwest corner of Barnhart and Bystrum Roads, four miles west of Keyes.

Pursuant to Stanislaus County regulations, the Environmental Review Committee determined in February, 1974, that an Environmental Impact Report was required. A Draft Environmental Impact Statement was prepared by the Stanislaus County Planning Department in February, 1974. The Draft EIR was sent to concerned public agencies, newspapers, and was made available to any individual who expressed an interest in the project. The review period, during which comments could be made, ended on March 15, 1974.

The Final EIR has been prepared as the last step in the environmental review process. Pursuant to Section 15146 of the State Administrative Code, the Final EIR contains:

1. The Draft EIR
2. The Comments received during the review
3. The response of the County to the significant environmental issues raised by the comments.

The Final EIR must be adopted by the decision-making body before a determination is made on the proposed project itself. The EIR becomes, upon adoption, part of the project report. Its contents must be considered when evaluating the project.

DRAFT ENVIRONMENTAL IMPACT REPORT

REZONING APPLICATION

PLANNED DEVELOPMENT

BRONCO WINERY
814 14th Street
Modesto, California

Prepared by

Stanislaus County Planning Commission

February 15, 1973

BRONCO WINERY PLANNED DEVELOPMENT REZONING

BYSTRUM ROAD-BARNHART ROAD AREA

I. PROJECT DESCRIPTION

A. The project is an 81-acre site located approximately four to five miles south of Modesto and four miles west of the Town of Keyes. The site, consisting of two parcels of about equal size is south of Keyes Road, at the northwest corner of the intersection of Bystrum and Barnhart Roads. The Tidewater Southern Railroad is located on the west boundary of the property.

B. The objective of the Planned Development is to construct a winery. The winery will begin operation on a contract basis, ultimately hoping to market its own brand of wine. The applicant desires to find a location which will allow room for future expansion, as economics permit.

On this site, Bronco plans to make wine and champagne, bottle and ship via truck and rail car. A distillery will not be built on the proposed site at any time in the future. The winery will be constructed near the center of the 81-acre site.

C. 1. Description of Operation

Crushing. Crushing operations take place during the grape harvest which is normally from late August to early November. Bronco Winery will be set up so that it can process all its grape requirements during this 10-week period. Grapes will be crushed five days a week during the daylight hours, all crushing operations should be complete by 9:00 p.m.

Fermenting and Pressing. After crushing the grapes are fermented in large stainless steel tanks. Grape skins and seeds are pressed and discarded. The pressed grape pomace has commercial value as poultry feed, and Bronco plans to sell its pomace for this use. Fermenting and pressing operations take place 16 - 24 hours a day during the crushing season.

Processing. After fermenting, the wine is transferred to storage tanks where it is cooled, filtered, blended and bottled. Flow sheets depicting these operations are attached.

4. Disposal

Stems

Trucked away daily to sanitary landfill.

Pomace

Trucked away daily for commercial use.

Wine Lees

Filtered on dry cake discharge filters and trucked to a sanitary landfill daily.

Still Slops

No distillery at this location, therefore, no still slops.

Wash Water

Collected and pumped to shallow ponds on the site.

Sanitary Sewer

Via septic tank on the site.

5. Water

Water will be pumped from a deep well on the premises. This well will serve as a source of domestic water and also for fire protection and sprinklers.

6. Ponds

Waste water will be ponded in shallow ponds on the premises. Initial plans call for five 1-acre ponds approximately six inches deep and graded level. Water will be pumped into the ponds from a collection sump. Ponds will be rotated daily. Ten foot roadways will be provided around all ponds and vegetation will be controlled.

Estimated daily flows are:

Source	Crushing Season	Off Season
Crushing	15,000	0
Pressing	25,000	0
Cooling	10,000	10,000
Filtering	24,000	24,000
Bottling	10,000	10,000
Misc.	25,000	25,000
Total	109,000	69,000
Depth on 1 acre	4"	2 1/2"

III. ENVIRONMENTAL IMPACTS--LONG & SHORT TERM

A. 1. Impacts on Natural Systems

The project as proposed would have several impacts on the physical environment. The ultimate scale of many of the impacts will ultimately depend upon the growth of the winery. Although the present proposal is limited to growth in the next three years, continued growth is very possible and could serve to compound the impacts of the present proposal.

Perhaps the most obvious impact will be the conversion of this agriculturally used property to what is basically a manufacturing operation. However, this conversion of uses will be limited to only about one-quarter to one-third of the property in question, although future expansion could increase this ratio. The remaining acreage will continue in its present state for at least the near future.

A second area of major concern is the ponding operation, which carries with it a number of potential hazards. One of the most obvious of these is odor. In the past, other ponding operations have been criticized because of odors. However, these complaints have resulted largely in areas where deep ponds (up to 14 feet) are used. These ponds, with their great depths of standing water became particularly offensive at certain times of the year. The Bronco Winery proposes to use the newer ponding technique of shallow (6 inches) ponds and daily rotation. As indicated in the project description, the waste water will be at a depth of only about four inches. The percolation rate at the site falls within a range of one inch per hour to six inches per day. Because the waste water will contain some solids which will settle out, the percolation rates will be slowed to some extent. Nevertheless, there are no problems anticipated with standing water, as the maximum depth of a pond at any one time will be four inches. The ponds will be periodically disced to prevent any hardpan formation.

An example of deep ponds versus shallow ponds can be found in the case of the Tri-Valley Growers plant on Kiernan Avenue. This plant used deep ponds for many years, and from time to time received complaints about odors. Two years ago the plant converted to a shallow ponding system with rapid rotation similar to the type of system proposed by Bronco. In two canning seasons since the use of the ponds, no complaints about odor have arisen. Although the wastes at a cannery differ somewhat from those of a winery, the ponding operations are similar enough that comparisons can be made. It should be pointed out that if, for some unknown reason, the ponds do not operate properly, odor could become a problem.

Associated with the increase in traffic in this agricultural area are the conditions of the roads that provide access to the site. Crows Landing Road is presently a heavily used major road, ultimately planned as an expressway. Keyes Road is designated as a collector. It is presently a 2-lane road, seemingly adequate to handle anticipated traffic. The two small county roads leading directly to the site, Barnhart and Bystrum, are poorly maintained and inadequate to handle any significant increase in traffic. Both roads will need improvement, including paving, in order to properly serve the winery, as well as the present users of the roads. There will have to be a crossing constructed over the Tidewater Southern tracks. This will produce a hazard, but one which is no greater than that at any other railroad crossing.

The initial stages of the project do not call for the construction of a railroad spur track, but ultimately a spur will be constructed to serve the property. The major impact of this will be the noise resulting from the loading and switching activities associated with the spur. The magnitude of this impact will depend upon the amount of rail traffic that is actually demonstrated.

The winery will certainly have a visual impact on the surrounding area. Introducing a winery, with its structures and large holding tanks, will produce a substantial impact on the visual character of the site. The effects of this change can be either beneficial or adverse, depending upon the exact style of the structures and upon the taste of the viewers. The Planned Development zoning allows the County to require landscaping and other controls on the visual character of the site.

The winery may have some effect upon land values of the surrounding land, although this should be rather minor. The agricultural potential of the land should not be diminished by this Planned Development. The operation could decrease the value of the adjacent land for residential use, but the agricultural zoning prohibits residential uses except on large parcels or in existing residences. Expansion of the operation could lead to adjacent landowners selling their property to Bronco. Others may wish to leave the area due to the changes in its character which the winery will introduce.

The conflict in land use between the wine processing and the surrounding agricultural activities could be a problem. Orchard spraying could be a hazard to both the production of the wine and to the persons working at the

to prevent nighttime insects can be required. Lighting can also be placed in such a way that it does not disturb neighboring residences.

The plant itself will be completely fenced to provide safety to both the plant and the surrounding area. Proper signals at the railroad crossing can decrease the hazard that will exist there.

Hazards to the area groundwater can be minimized by placing septic tanks at locations to which they are best suited. The County Health Department can aide in this respect. The fact that the winery will be pumping large amounts of groundwater will help lower the water table in the area, which will aid in preventing any problems in this respect

D. Alternatives to the Proposed Action

Alternative No. 1 "No Project." The "No Project" alternative would leave the site and surrounding area in their present condition. The land would very likely continue in agricultural use for the foreseeable future. The applicants would have to find and purchase an existing winery where there would be no new impacts.

Alternative No. 2 "Different Location." This is a realistic alternative to the proposed site. The applicants could search for a site, either in this County or another, at which there would be fewer impacts. Since the operation requires both street and rail traffic, the number of such sites would be limited. If such a site were located in an agricultural area, the impacts would be basically the same as at the present site. It may be desirable to find a site to which better road access is available, as the present site is somewhat distant from easy access to major routes.

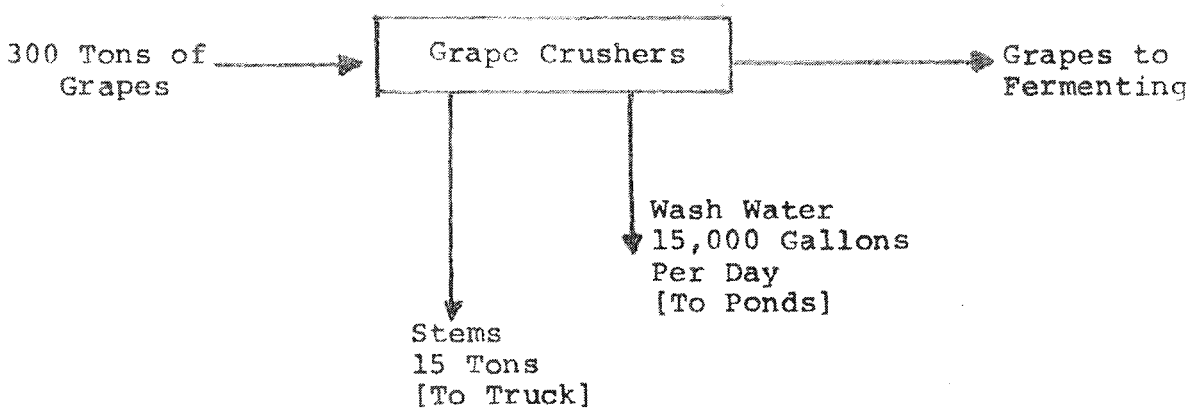
Location in an area presently zoned for industrial use is possible. This could eliminate many of the impacts at this location that are associated with the change in land use. Impacts such as increased noise levels in the agricultural area could be minimized. Sewer service is also available in some areas, such as the Beard Industrial Tract of Modesto, and could eliminate any septic tank problems. The costs of locating in an industrial area may make this alternative undesirable to the applicants.

E. Short-Term Vs. Long-Term Impacts and Irreversible Commitments

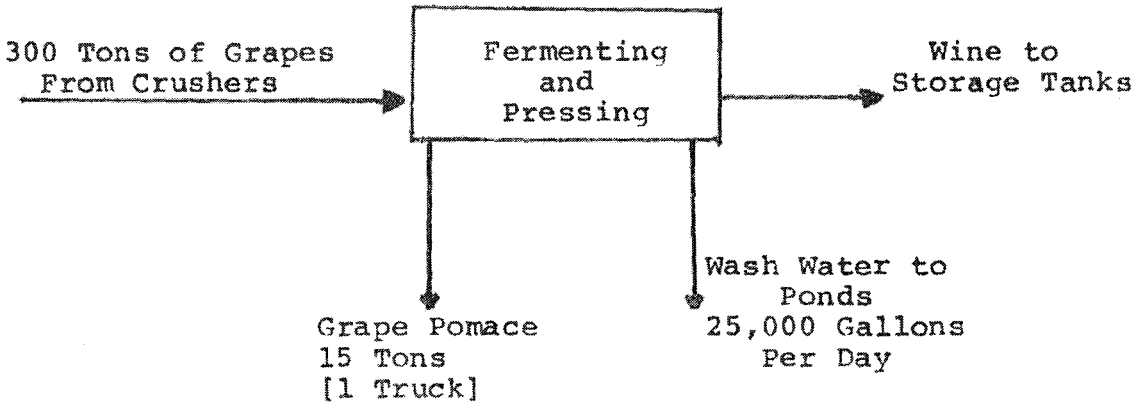
Basically, the present proposal would commit the prime agricultural soil found at the site to an industrial use. Long-term risks to health and safety would be related to proper functioning of the ponding operation. The ponding

BRONCO WINE COMPANY

FLOW CHART
CRUSHING
DAILY OPERATION



FLOW CHART
FERMENTING
AND
PRESSING
DAILY AVERAGE



The Draft EIR was circulated to the following agencies and organizations with regard to its comments:

- State Department of Fish and Game (Local and Regional Offices)
- Turlock Irrigation District
- Keyes Fire Protection District
- County Agricultural Extension Service
- Modesto Bee
- State Reclamation Board
- County Health Department
- State Regional Water Quality Control Board
- County Public Works Department
- Yokut Wilderness Group
- Turlock Mosquito Abatement District
- State Alcoholic Beverage Control
- Federal Bureau of Alcohol, Tobacco, Firearms and Taxes
- Tidewater Southern Railroad
- Turlock Daily Journal

Comments were received during the 30-day review period from the following:

- Turlock Irrigation District
- County Agricultural Extension Service
- County Health Department
- State Regional Water Quality Control Board
- County Public Works Department
- Turlock Mosquito Abatement District
- State Department of Fish and Game
- State Reclamation Board
- Price, Martin and Crabtree (Attorneys)
- Sierra Club (Yokut Wilderness Group)

BRONCO WINE CO. PLANNED DEVELOPMENT
P-D (6)
"DEVELOPMENT PLAN"
EXHIBIT C (PERFORMANCE STANDARDS)

Performance standards for completion of Planned Development P-D (6) are as follows:

1. No structures or ponding areas to be located closer than 50 feet to property lines and tree screening to be provided along the property lines adjacent to any structure or ponding area located within 75 feet of such property lines.

2. Driveways and parking areas to be blacktopped and onsite drainage provided as approved by the Department of Public Works.

3. The ponding areas to be a maximum of 6 inches in depth with daily rotation of waste water and 10 foot wide roadways around all ponds provided for access to ponds for mosquito personnel. The ponding areas to be kept free of weeds and maintained for mosquito control as required by the Turlock Mosquito Abatement District. Also, night lighting for the project to be installed as approved by the T.M.A.D.

4. Water table levels and ground water quality must be monitored regularly to make certain that no adverse changes occur. If changes do occur, winery operation must be adjusted or additional measures undertaken to off-set such changes.

5. Crops to be grown during effluent usage when practical and and at least each season after effluent applications to make use of the nutrients in the effluent with soil sample to be obtained and analysed before and after each growing season to determine any chemical or physical change in the soil. The applicant to work with the Agricultural Extension Service for compliance with this condition.

6. The project to be conducted in compliance with the State Water Quality Control Board and County Health Department regulations.

7. All trucks necessary for the farming operation and servicing of the home will use the "Panhandle Road to Keyes Road. All other trucks must restrict ingress and egress off Bystrum Road via Keyes Road to the entrance designated on Exhibit A as "Alternate Access".

8. The railroad crossing at the entrance to be constructed as approved by the Tidewater Southern Railroad and all applicable government agencies.

9. Pumace and stems to be removed from the project site on a daily basis.

10. That section of Bystrum Road lying between Barnhart Road and Keyes Road shall be improved in conjunction with the County. Bronco Wine will bring the road to grade with required fill, if necessary, and apply road base to a thickness of six inches. The County will do the necessary grading and applying of two inches of asphalt concrete which would be normal under standards for a country road. The fill and base would be built to specifications approved by the Public Works Department.

11. On-site truck parking and circulation facilities to be provided to the satisfaction of the Public Works Department.

12. Bystrum Road shall not be used for parking or storage by trucks servicing the winery.

13. Plans for the alternate entrance access road intersection to Bystrum Road shall be submitted to and approved by the Public Works Department.

14. The ponding operation shall not create a public nuisance as defined by the Code of Civil Procedures.

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: Planning and Community Development BOARD AGENDA # 6:45 p.m.

Urgent ☐ Routine ■ AGENDA DATE April 20, 2010

CEO Concurs with Recommendation YES ☐ NO ☐ (Information Attached) 4/5 Vote Required YES ☐ NO ■

SUBJECT:

Public Hearing to Consider Planning Commission's Recommendation for Approval of Rezone Application No. 2009-04, Bronco Wine Co., a Request to Rezone a Parcel from A-2-40 (General Agriculture) to PD (Planned Development) on Property Located at 800 E. Keyes Road, at the Southeast Corner of E. Keyes and Bystrum Roads, in the Ceres Area

PLANNING COMMISSION RECOMMENDATIONS:

After conducting a duly advertised public hearing at its regular meeting of March 18, 2010, the Planning Commission, on a 5-0 vote, recommended the Board approve the project as follows:

1. Adopt the Mitigated Negative Declaration pursuant to CEQA Guidelines Section 15074(b), by finding that on the basis of the whole record, including the Initial Study and any comments received, that there is no substantial evidence the project will have a significant effect on the environment and that the Negative Declaration reflects Stanislaus County's independent judgement and analysis.

(Continued on page 2)

FISCAL IMPACT:

There are no fiscal impacts associated with this project. In accordance with the adopted Department of Planning and Community Development Fee Schedule, this project is subject to payment of the 'actual cost' for process. All costs associated with this project have been paid and approval of this project will have no impact on the County's General Fund.

BOARD ACTION AS FOLLOWS:

No. 2010-218

On motion of Supervisor Chiesa **, Seconded by Supervisor** O'Brien
and approved by the following vote,
Ayes: Supervisors: O'Brien, Chiesa, Monteith, DeMartini, and Chairman Grover
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

1) X **Approved as recommended**
2) _____ **Denied**
3) _____ **Approved as amended**
4) _____ **Other:**

MOTION: INTRODUCED, ADOPTED, AND WAIVED THE READING OF ORDINANCE C.S. 1084 FOR REZONE APPLICATION #2009-04.

Christine Ferraro

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

File No. ORD-55-L17

EXHIBIT G

PLANNING COMMISSION RECOMMENDATION: (Continued)

2. Order the filing of a Notice of Determination with the Stanislaus County Clerk-Recorder's Office pursuant to Public Resources Code Section 21152 and CEQA Guidelines Section 15075.

3. Find that the project is consistent with the overall goals and policies of the County General Plan.

4. Find that the proposed PD zoning is consistent with the Planned Development General Plan designation.

5. The alternative to the Agricultural Buffer Standards applied to this project provides equal or greater protection than the existing buffer standards.

6. The project will increase activities in and around the project area, and increase demands for roads and services, thereby requiring dedication and improvements.

7. Approve Rezone Application No. 2009-04 - Bronco Wine Co., subject to the attached Development Standards and Development Schedule.

DISCUSSION:

This is a request to rezone a 35.78-acre parcel from A-2-40 (General Agriculture) to P-D (Planned Development) for expansion of the adjoining Bronco Wine facility by conversion of an existing house into an office, construction of two (2) new 14,400 square foot office buildings, an associated parking lot and two (2) driveways on E. Keyes Road.

The project site is located at 800 E. Keyes Road, south of Ceres, and is improved with a single-family dwelling and a vineyard. The surrounding area consists of agricultural uses, primarily orchards and vineyards. Bronco Wine Co. is south of and adjacent to the project site. There are scattered single-family dwellings in the area, with the closest off-site dwelling being approximately 60 feet from the project site's eastern property line.

The applicants are proposing to begin construction on the driveways and parking lots by fall of 2010. No development schedule was provided for the 14,000 square foot offices as the applicants are not proposing to construct those buildings at this time. They are requesting to "reserve" the footprints of the office buildings to allow the administrative portion of the business to be relocated as necessary to accommodate the expansion of the adjacent wine processing facility located at 6342 Bystrum Road.

Days and hours of operation from December to June are Monday thru Friday, 24 hours a day, and from July to November, seven (7) days a week, 24 hours a day. Currently, there are 180 employees on a maximum shift, 10 customers/visitors on site at peak times, 60 truck deliveries/loadings per day off-season, and 300 truck deliveries/loadings per day during peak season. Peak seasonal operation hours are from mid-July to mid-November. The project will be served by a private well for water and on-site septic facilities will provide for sewage disposal.

On March 18, 2010, the Planning Commission considered this application at a properly advertised public hearing. No one spoke in support of the project. Alice Roche spoke in opposition to the project citing conflict between tractors crossing E. Keyes Road and additional truck and employee traffic resulting from the proposed project. The tractors are used on properties, in the immediate vicinity, which are farmed as a part of the Bronco operation.

Following the closing of the hearing, the Commission unanimously voted 5-0 (Ramos/Assali) to forward the project to the Board of Supervisors for approval. A detailed discussion of the request and staff's recommendation of approval can be found in the attached Planning Commission Staff Report.

POLICY ISSUES:

The Board should determine if approval of the proposed rezone furthers the goals of efficient delivery of government services and a well-planned infrastructure system.

STAFFING IMPACT:

There are no staffing impacts associated with this item.

CONTACT PERSON:

Kirk Ford, Planning and Community Development Director. Telephone: (209) 525-6330

ATTACHMENTS:

1. Planning Commission Staff Report, March 18, 2010
2. Planning Commission Minutes, March 18, 2010

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STANISLAUS COUNTY PLANNING COMMISSION

March 18, 2010

STAFF REPORT

REZONE APPLICATION NO. 2009-04
BRONCO WINE CO.

REQUEST: TO REZONE A 35.78-ACRE PARCEL FROM A-2-40 (GENERAL AGRICULTURE) TO PLANNED DEVELOPMENT FOR EXPANSION OF THE ADJOINING BRONCO WINE FACILITY BY CONVERSION OF AN EXISTING HOUSE INTO AN OFFICE, CONSTRUCTION OF TWO NEW 14,400 SQUARE FOOT OFFICE BUILDINGS, AN ASSOCIATED PARKING LOT AND TWO DRIVEWAYS ON E. KEYES ROAD. THE PROJECT SITE IS LOCATED AT 800 E. KEYES ROAD, SOUTH OF CERES.

APPLICATION INFORMATION

Applicant:	Bronco Wine Co.
Engineer:	R.B. Welty & Associates
Location:	800 E. Keyes Road, at the southeast corner of E. Keyes and Bystrum Roads, in the Ceres area.
Section, Township, Range:	33-4-9
Supervisorial District:	Two (Supervisor Chiesa)
Assessor's Parcel:	041-046-019
Referrals:	See Exhibit "I" Environmental Review Referrals
Area of Parcels:	36.62 acres
Water Supply:	Private well
Sewage Disposal:	Septic
Existing Zoning:	A-2-40 (General Agriculture)
General Plan Designation:	Agriculture
Community Plan Designation:	Not applicable
Williamson Act:	Not applicable
Environmental Review:	Mitigated Negative Declaration
Present Land Use:	Single-family dwelling and a vineyard
Surrounding Land Use:	Scattered single-family dwellings, vineyards, and orchards to the north, east, and west, Bronco Wine Co., dairies, and scattered single-family dwellings to the south

PROJECT DESCRIPTION

This is a request to rezone a 35.78-acre parcel from A-2-40 (General Agriculture) to P-D (Planned Development). The project site is north of and adjacent to the existing Bronco Wine Co. site, located at 6342 Bystrum Road. The request includes adding two (2) driveways onto E. Keyes Road, the conversion of an existing house to a shipping and receiving office, and the construction

of two (2) truck scales, a guard shack, employee and truck parking lots, a 14,400 square foot administration building, and a 14,400 square foot sales building. The proposed driveways and employee and truck parking lots will serve both the proposed and existing Bronco Wine facility. The parking lot, access roads, and driveways will be paved.

On the existing site, days and hours of operation from December to June are Monday thru Friday, 24 hours a day, and from July to November, seven (7) days a week, 24 hours a day. Currently there are 180 employees on a maximum shift, 10 customers/visitors on site at peak times, 60 truck deliveries/loadings per day off-season, and 300 truck deliveries/loadings per day during peak season. Peak seasonal operation hours are from mid-July to mid-November. The project will be served by a private well for water and on-site septic facilities will provide for sewage disposal.

SITE DESCRIPTION

The project site is located at 800 E. Keyes Road and is improved with a single-family dwelling and a vineyard. The surrounding area consists of agricultural uses, primarily orchards and vineyards. Bronco Wine Co. is south of and adjacent to the project site. There are scattered single-family dwellings in the area, with the closest off-site dwelling being approximately 60 feet from the project site's eastern property line.

DISCUSSION

According to County records, the current Bronco Wine Co. facility, located at 6342 Bystrum Road, was approved to operate as a winery and bottling facility since the 82-acre property was rezoned in 1974. The Board of Supervisors approved the rezone from A-2-10 (General Agriculture) to P-D (6) (Planned Development) based on the following factors:

1. The proposed project should not be detrimental to the existing agricultural usage of the surrounding neighborhood if developed in compliance with the recommended performance standards; and
2. The use is in compliance with the General Plan as a facility that is associated with agricultural production and complies with the provisions of Section 118.5 of the Zoning Ordinance (Planned Development zone); and
3. The project is to be located near major or collector streets and a railroad facility that would provide the necessary transportation needs of the facility; and
4. Many such winery facilities are located throughout the valley region in rural areas without apparent conflict with surrounding agricultural uses.

Since its approval in 1974, Bronco Wine Co. has produced wine and sparkling wine and has a license to produce malt beverages. Grapes are trucked to the site and crushing operations take place during the grape harvest season, generally from July to November. After crushing, the grapes are fermented in large stainless steel tanks and grape skins and seeds are pressed and discarded with the pressed grape pomace to be sold for feed. After fermenting, the wine is transferred to storage tanks where it is cooled, filtered, blended and bottled.

The project site includes an existing single-family dwelling which will be converted to a shipping and receiving office. The proposed improvements to the site will include two (2) truck scales, a guard shack, the construction of employee and truck parking lots and two (2) 14,400 square foot office buildings, new septic tanks, and landscaping. The proposed office buildings and parking lots will be located in the southern half of the property. Construction of the driveways and parking lots off

of E. Keyes Road will move vehicular traffic away from the railroad crossing currently utilized off of Bystrum Road. The applicants are proposing to begin construction on the driveways and parking lots by fall of 2010. No development schedule was provided for the offices as the applicants are not proposing to construct those buildings at this time. They are requesting to "reserve" the footprints of the office buildings to allow the administrative portion of the business to be relocated as necessary to accommodate the expansion of the wine processing facility.

In order to approve a rezone, it must be found to be consistent with the General Plan. In this case, the General Plan designation is "Agriculture." The "Agriculture" General Plan designation is consistent with a Planned Development zoning designation when, *"it is used for agriculturally-related uses or for uses of a demonstrably unique character, which due to specific agricultural needs or to their transportation needs or to needs that can only be satisfied in the agriculture designation, may be properly located within areas designated as "agricultural" on the General Plan. Such uses can include, facilities for packing fresh fruit, facilities for the processing of agricultural commodities utilized in the County's agriculture community, etc."* Staff believes that the proposed Planned Development is logical considering the unique characteristics of this site, such as the close proximity to the existing Bronco Wine Co. site. The proposed use should not be detrimental to agricultural uses and other property in the area which consists mainly of orchards, vineyards, dairies, and the existing Bronco Wine Co. Staff finds the proposal to rezone this parcel to Planned Development to be consistent with the General Plan.

The existing County parking standards require manufacturing or assembly plants and wholesale warehouses provide one (1) parking space for each employee on a maximum shift plus three (3) additional spaces. Office buildings are required to provide one (1) space for every 300 square feet of office space. The site plan identifies 345 employee parking spaces and 32 truck parking spaces. The proposed office buildings, at build out, would require a total of 94 parking spaces (see Exhibit "A" - *Maps*). If needed, additional parking spaces could be provided since the project site does have area that will remain in grape production.

The site plan for the proposed expansion indicates that a two foot by three foot directional sign will be located at the entrance to the truck and employee driveways (see Exhibit "A" - *Maps*). All final sign approvals rest with the Director of Planning and Community Development and will require the Planning Director's (or designee's) approval prior to the placement of such signs (see Exhibit "B" - *Development Standards*).

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. The purpose of these guidelines is to protect the long-term health of agriculture by minimizing conflicts resulting from the interaction of agricultural and non-agricultural uses. Current buffer guidelines require a project that is expanding a non-agricultural use to provide a minimum building setback of 150-feet, fencing, and vegetative screening; the same is required for new non-agricultural uses.

Appendix "A" - Buffer and Setback Guidelines of the Agricultural Element allows for alternative buffers to be proposed, provided the Stanislaus County Planning Commission makes a finding that the buffer alternative is found to provide equal or greater protection to surrounding agricultural uses. Alternatives proposed by a project applicant shall be reviewed and supported by the Stanislaus County Agricultural Advisory Board prior to consideration by the Planning Commission.

On September 8, 2008 and November 2, 2009, planning staff asked the Agricultural Advisory Board to support a series of 'generic', non-project specific buffer alternatives applicable to uses such as nut hulling, shelling, dehydrating, grain warehousing, and agricultural processing facilities (without incidental tasting rooms or sales). The Agricultural Advisory Board supported these alternatives.

The supported alternatives applicable to this project include:

- Providing an overall distance of 150 feet or greater exists between the proposed use and the property line, no vegetative screening shall be required.

- When trespassing onto neighboring property is determined not to be an issue, the fencing requirement may be waived.

Based on Appendix "A" - Buffer and Setback Guidelines of the Agricultural Element, "property line" refers to the property line of any adjoining parcels for this supported alternative. The project will exceed the required 150-foot distance between the use and adjoining agricultural uses in each direction; therefore, a vegetative screen will not be required. Because the proposed use and the product produced is agricultural in nature, the applicants intend to keep as much of the property as possible planted in vineyards. An agricultural buffer two (2) feet wide and planted in evergreen trees, six (6) feet high, and five (5) feet apart will be planted along the east and north property lines. The western property line is planted in cypress trees; trespassing will not be an issue and the fencing requirement may be waived. Additional landscaping will be installed around the perimeter of the employee parking lot (see Exhibit "A" - *Maps*). Landscaping and buffer installation will be reviewed as a part of the building and/or grading permit.

Staff has received two (2) phone calls, an email, and a letter from neighboring property owners who were concerned about dust, negative impacts to air quality, the increase in traffic, traffic safety, and the impact to existing driveways (see Exhibit "H" - *Surrounding Landowner's Responses*). According to the Stanislaus County 2008 aerials, the driveways of the parcels directly north and east of the project site are located across and adjacent to the proposed Bronco driveways. The applicants are proposing to pave the proposed access roads and parking lots which will reduce dust. A referral response was received from the San Joaquin Valley Air Pollution Control District which stated that project specific emissions were not expected to exceed District significance thresholds. Therefore, the District concluded that project specific pollutant emissions would have no significant adverse impact on air quality. The project will be subject to the Indirect Source Review as reflected in the Development Standards. Finally, the Department of Public Works reviewed the proposed project and responded with conditions of approval and mitigation measures to address and mitigate impacts on traffic, driveways, and safety (see Exhibit "B" - *Development Standards*). Existing and proposed driveways and the feasibility of their locations will be reviewed as a part of the encroachment permit process.

ENVIRONMENTAL REVIEW

Pursuant to the California Environmental Quality Act (CEQA), the proposed project was circulated to all interested parties and responsible agencies for review and comment (see Exhibit "I" - *Environmental Review Referrals*). Based on the Initial Study prepared for this project, adoption of a Mitigated Negative Declaration is being recommended (see Exhibits "E" - *Initial Study* and "F" -

Mitigated Negative Declaration). The mitigation measures included in the project address light and traffic related standards; these measures include light shielding and traffic operations and improvements. Responses received from agencies and mitigation measures have been incorporated into this project as Development Standards (see Exhibit "B" - *Development Standards*).

RECOMMENDATION

Based on all evidence on the record, and on the ongoing discussion, staff recommends that the Planning Commission recommend that the Board of Supervisors take the following actions regarding this project:

1. Adopt the Mitigated Negative Declaration pursuant to CEQA Guidelines Section 15074(b), by finding that on the basis of the whole record, including the Initial Study and any comments received, that there is no substantial evidence the project will have a significant effect on the environment and that the Mitigated Negative Declaration reflects Stanislaus County's independent judgement and analysis.

2. Order the filing of a Notice of Determination with the Stanislaus County Clerk-Recorder's Office pursuant to Public Resources Code Section 21152 and CEQA Guidelines Section 15075.

3. Find that:

    A. The project is consistent with the overall goals and policies of the County General Plan;

    B. The proposed Planned Development zoning is consistent with the Agriculture General Plan designation;

    C. The alternative to the Agricultural Buffer Standards applied to this project provides equal or greater protection than the existing buffer standards; and

    D. The project will increase activities in and around the project area, and increase demands for roads and services, thereby requiring dedication and improvements.

4. Approve Rezone Application No. 2009-04 - Bronco Wine Co., subject to the attached Development Standards and Development Schedule.

Note: Pursuant to California Fish and Game Code Section 711.4, all project applicants subject to the California Environmental Quality Act (CEQA) shall pay a filing fee for each project. Therefore, the applicant will further be required to pay $2,067.25 for the Department of Fish and Game, and the Clerk Recorder filing fees. The attached Development Standards ensure that this will occur.

******

Report written by: Rachel Wyse, Assistant Planner, March 1, 2010
Report reviewed by: Bill Carlson, Senior Planner

Attachments:

Exhibit A -	Maps
Exhibit B -	Development Standards
Exhibit C -	Development Schedule
Exhibit D -	Application Information
Exhibit E -	Initial Study
Exhibit F -	Mitigated Negative Declaration
Exhibit G -	Mitigation Monitoring Plan
Exhibit H -	Surrounding Landowner's Responses
Exhibit I -	Environmental Review Referrals

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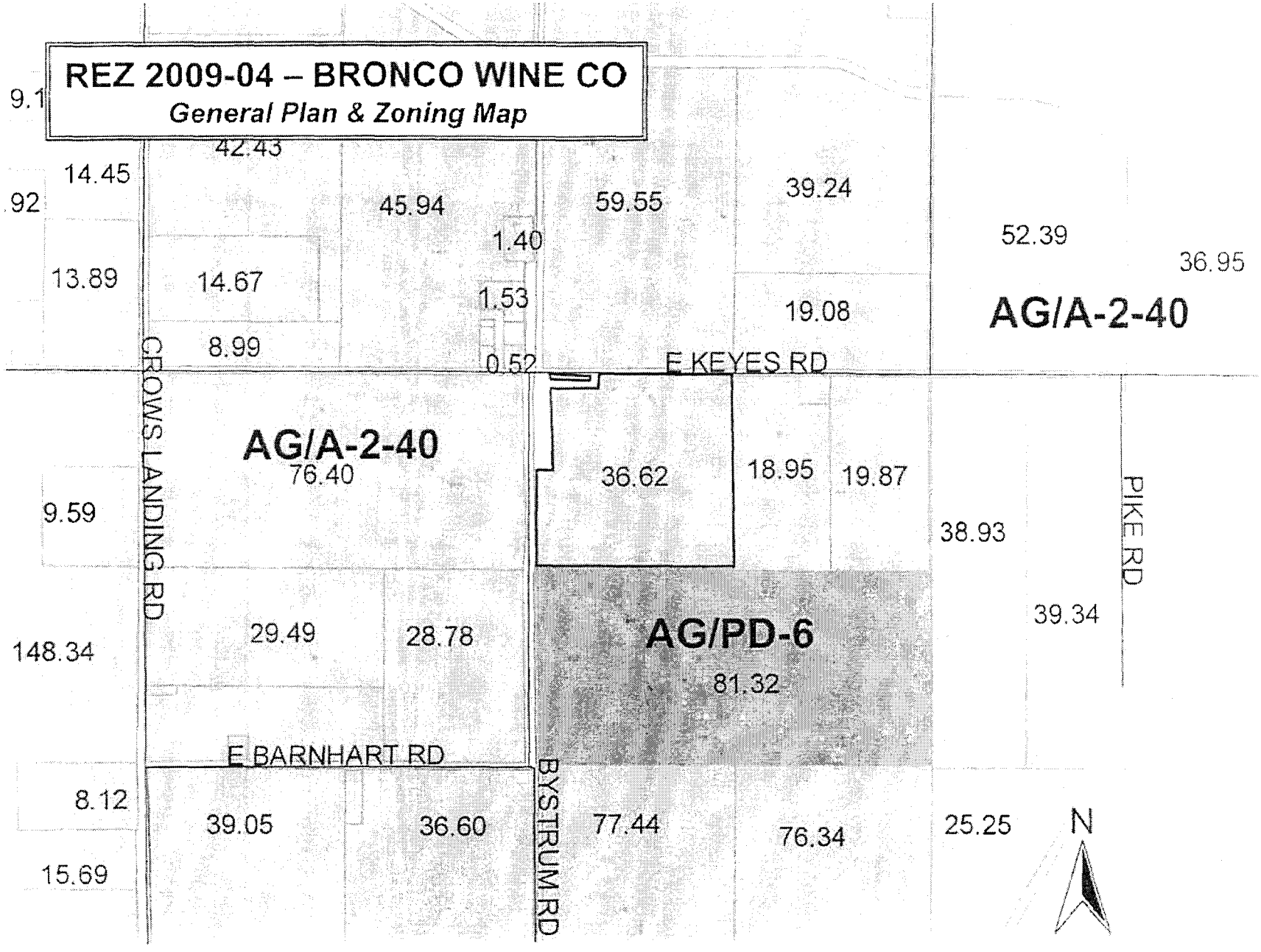
REZ 2009-04 – BRONCO WINE CO
AREA MAP
CERES
W GRAYSON RD
Union Pacific
MORGAN RD
BLAKER RD
CENTRAL AVE
CERES MAIN
TID LATERAL NO 2 1/2
W KEYES RD
BYSTRUM RD
CROWS LANDING RD
WESTPORT DRAIN
E TAYLOR RD
HATCH DRAIN
N

EXHIBIT A



68

EXHIBIT A-1

REZ 2009-04 – BRONCO WINE CO
2008 STANISLAUS COUNTY AERIAL
E KEYES RD
BYSTRUM RD
N

EXHIBIT A-2

R. B.

REZ 2009-04 – BRONCO WINE CO

Existing & Proposed Sites

EERS

REZONING
BRONCO WINE CO

C1

EXHIBIT A-3

REZ 2009-04 – BRONCO WINE CO

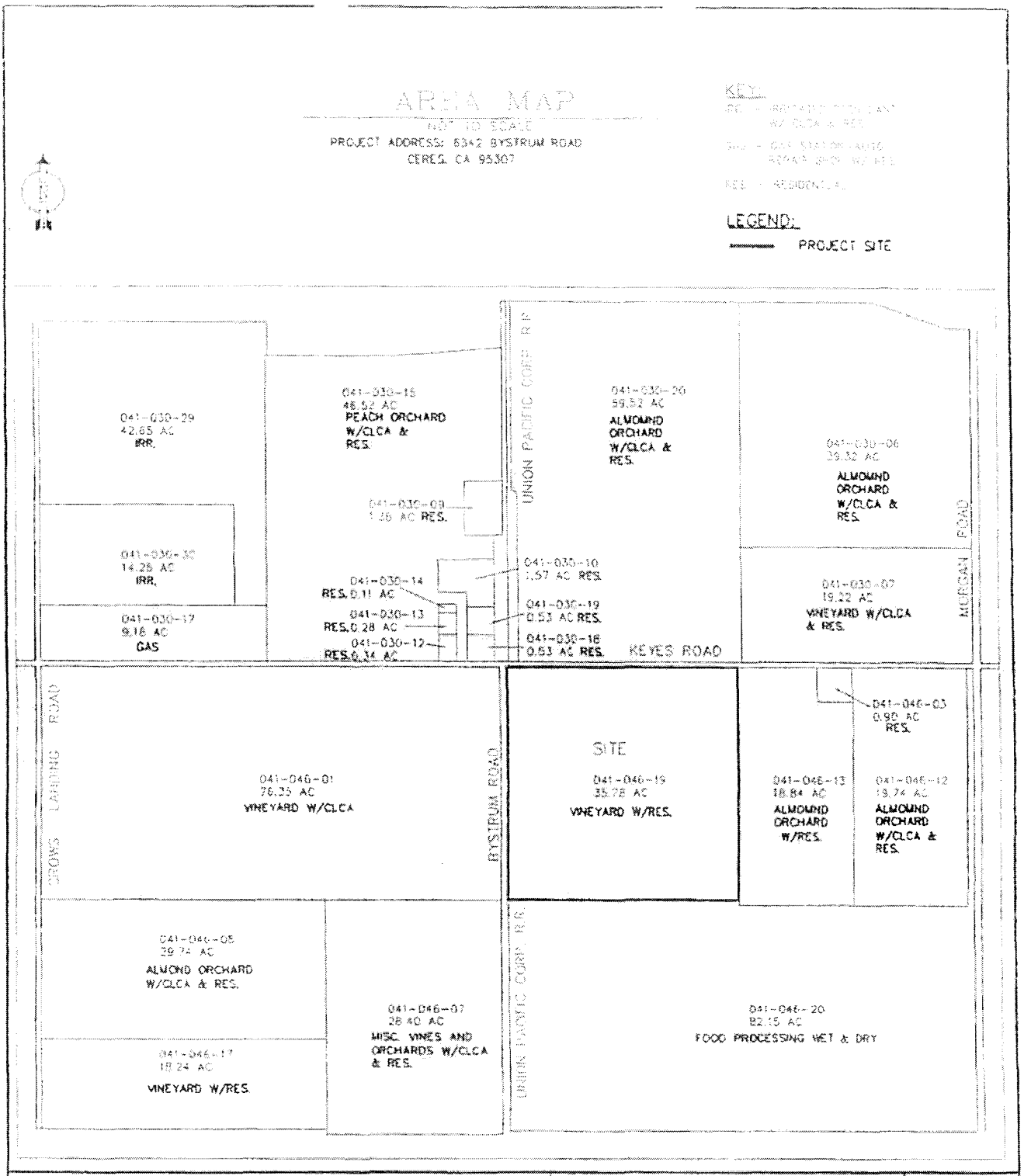
Proposed Site Plan

EXHIBIT A-4

REZ 2009-04 – BRONCO WINE CO

Existing Planned Development (PD-6)

EXHIBIT A-5



R. B. WELTY & ASSOCIATES, Inc.
521 13th STREET / P.O. BOX 1724
MODESTO, CA. 95353-1724
(209) 526-1515

MAP / ILLUSTRATION
G3 PROPERTIES, INC.
502 E. WHITMORE AVENUE
MODESTO, CA 95358

JOB NO. 7809
DATE 6/13/08
BY LJF
SHEET 1 OF 1

EXHIBIT A-6

As Approved by the Planning Commission
March 18, 2010

DEVELOPMENT STANDARDS

REZONE APPLICATION NO. 2009-04
BRONCO WINE CO.

Department of Planning & Community Development

1. This use is to be conducted as described in the application and supporting information (including the plot plan), as approved by the Board of Supervisors and in accordance with other laws and ordinances.

2. Construction of the project shall comply with standardized dust controls adopted by the San Joaquin Valley Air Pollution Control District.

3. A plan for any proposed signs indicating the location, height, area of the sign, and message must be approved by the Planning Director (or their appointed designee) prior to installation.

4. Trash bins shall be kept in trash enclosures constructed of materials compatible with the architecture of the development. Trash enclosures shall be placed in locations as approved by the refuse collecting agency and the Planning Director.

5. All outside storage and mechanical equipment shall be screened from the view of any public right-of-way by a screen fence of uniform construction or landscaping as approved by the Planning Director. Any required water tanks for fire suppression shall be painted to blend with the surrounding landscape or screened with landscaping and shall not be used as a sign unless approved by the Planning Director.

6. Applicant, and/or subsequent property owner(s), must obtain building permits for all proposed structures, equipment, and utilities. Plans shall be prepared by a California licensed engineer working within the scope of their license.

7. Prior to occupancy, a landscaping plan indicating the type of plants, initial plant size, location, and method of irrigation shall be submitted to and approved by the Planning Director.

8. The applicant, or subsequent property owner, shall be responsible for maintaining landscape plants in a healthy and attractive condition. Dead or dying plants shall be replaced with materials of equal size and similar variety. Any dead trees shall be replaced with a similar variety of a 15-gallon size or larger.

9. Should any archeological or human remains be discovered during development, work shall be immediately halted within 150 feet of the find until it can be evaluated by a qualified archaeologist. If the find is determined to be historically or culturally significant, appropriate mitigation measures to protect and preserve the resource shall be formulated and implemented.

EXHIBIT B

10. The developer shall pay all applicable Public Facilities Impact Fees and Fire Protection Development/Impact Fees as adopted by Resolution of the Board of Supervisors. For the Public Facilities Impact Fees, the fees shall be based on the Guidelines Concerning the Fee Payment Provisions established by County Ordinance C.S. 824 as approved by the County Board of Supervisors, and shall be payable at the time determined by the Department of Public Works.

11. The applicant is required to defend, indemnify, or hold harmless the County, its officers and employees from any claim, action, or proceedings against the County to set aside the approval of the project which is brought within the applicable statute of limitations. The County shall promptly notify the applicant of any claim, action, or proceeding to set aside the approval and shall cooperate fully in the defense.

12. Pursuant to Section 404 of the Clean Water Act, prior to construction, the developer shall be responsible for contacting the US Army Corps of Engineers to determine if any "wetlands," "waters of the United States, or other areas under the jurisdiction of the Corps of Engineers are present on the project site, and shall be responsible for obtaining all appropriate permits or authorizations from the Corps, including all necessary water quality certifications, if necessary.

13. Pursuant to Section 1600 and 1603 of the California Fish and Game Code, prior to construction, the developer shall be responsible for contacting the California Department of Fish and Game and shall be responsible for obtaining all appropriate stream-bed alteration agreements, permits or authorizations, if necessary.

14. Prior to construction, the developer shall be responsible for contacting the California Regional Water Quality Control Board to determine if a "Notice of Intent" is necessary, and shall prepare all appropriate documentation, including a Storm Water Pollution Prevention Plan (SWPPP). Once complete, and prior to construction, a copy of the SWPPP shall be submitted to the Department of Planning and Community Development.

15. Pursuant to the federal and state Endangered Species Acts, prior to construction, the developer shall be responsible for contacting the US Fish and Wildlife Service and California Department of Fish and Game to determine if any special status plant or animal species are present on the project site, and shall be responsible for obtaining all appropriate permits or authorizations from these agencies, if necessary.

16. Prior to issuance of a building permit, the applicant shall provide a written release from the San Joaquin Valley Air Pollution Control District confirming that the applicant has submitted an Air Impact Assessment application and paid all applicable off-site mitigation fees as required to comply with District Rule 9510.

17. Pursuant to Section 711.4 of the California Fish and Game Code (effective January 1, 2010), the applicant is required to pay a Department of Fish and Game filing fee at the time of recording a "Notice of Determination." Within five (5) days of approval of this project by the Planning Commission or Board of Supervisors, the applicant shall submit to the Department of Planning and Community Development a check for $2,067.00, made payable to Stanislaus County, for the payment of Fish and Game, and Clerk Recorder filing fees.

Pursuant to Section 711.4 (e)(3) of the California Fish and Game Code, no project shall be operative, vested, or final, nor shall local government permits for the project be valid, until the filing fees required pursuant to this section are paid.

18. The Department of Planning and Community Development shall record a Notice of Administrative Conditions and Restrictions with the County Recorder's Office within 30 days of project approval. The Notice includes: Conditions of Approval/Development Standards and Schedule; any adopted Mitigation Measures; and a project area map.

Stanislaus Fire Prevention Bureau

19. Comply with California Fire Code as amended by the Keyes Fire Protection District.

Department of Environmental Resources

20. When converting the existing residence to an office for shipping and receiving, the existing septic system is to be destroyed and a new waste-water treatment system is to be installed which meets Measure X requirements. The new on-site wastewater disposal system (OSWDS) shall be by individual Primary & Secondary wastewater treatment units, operated under conditions and guidelines established by Measure X.

21. Future development of the administration office and the sales building shall require the wastewater disposal system(s) to meet Measure X requirements. The new on-site wastewater disposal system (OSWDS) shall be by individual Primary & Secondary wastewater treatment units, operated under conditions and guidelines established by Measure X.

22. The engineered on-site wastewater disposal system (OSWDS) design shall be designed for the maximum occupancy of the building. The leach field shall be designed and sized using data collected from soil profile and percolation tests performed at the location. The OSWDS designed system shall provide 100% expansion area.

23. The applicant shall determine, to the satisfaction of the Department of Environmental Resources (DER), that a site containing (or formerly containing) residences or farm buildings, or structures, has been fully investigated (via Phase I and II studies) prior to the issuance of a grading permit. Any discovery of underground storage tanks, former underground storage tank locations, buried chemicals, buried refuse, or contaminated soil shall be brought to the immediate attention of DER.

24. Any existing on-site well(s), utilized as a part of this project, shall comply with the following requirements:

Permits: Section 116550 (a) no person operating a public water system shall modify, add to or change his or her source of supply or method of treatment of, or change his or her distribution system unless the person first submits an application to the department and receives an amended permit as provided in this chapter authorizing the modification, addition, or change in his or her source of supply; and,

Technical report: A technical report for the public water system shall be submitted to the department as part of the permit application or when otherwise required by the department. This report may include, but not be limited to, detailed plans and specifications, water quality information, physical descriptions of the existing or proposed system, and financial assurance information. (A qualified registered engineer with at least three years experience in public water system design should prepare the report.)

25. If an additional well is required as a part of this project then water supply for the project is defined by State regulations as a public water system. Water system owner must submit plans for the water system construction or addition and obtain approval from this Department prior to construction. Prior to construction, the Supply Permit Application must include a technical report, prepared by a qualified professional engineer, that demonstrates compliance with State regulations and includes the technical, managerial, and financial capabilities of the owner to operate a public water system. Contact DER for the required submittal information.

Department of Public Works

26. A grading and drainage plan for the property shall be approved by the Department of Public Works prior to the issuance of any building permit. This plan shall verify all runoff is being kept on-site and not draining onto neighboring properties, railroad, or road rights-of-way. After the plan is determined to be acceptable to the Department of Public Works, the plans shall be implemented prior to the final and/or occupancy of any building.

27. If the street improvements are completed and accepted by the Department of Public Works before the issuance of a building permit, then a financial guarantee will not be required.

28. Prior to approval of the off-site improvement plans, the developer shall file a Notice of Intention (NOI) with the California Regional Water Quality Control Board and a Waste Discharge Identification Number must be obtained and provided to the Department of Public Works prior to building occupancy.

29. An Encroachment Permit must be obtained for any work in the County right-of-way.

30. No parking, loading, or unloading of vehicles shall be permitted within the right-of-way of Keyes Road.

31. Any new driveway locations and widths shall be approved by this Department.

Building Permits Division

32. Building permits are required for all structures and must comply with California Code of Regulations Title 24. Handicap accessibility to the entire site and all structures is required.

Turlock Irrigation District

33. District electric utility maps show existing distribution and transmission facilities within or near the proposed project. The owner/developer must apply for a facility change for any pole or electrical facility relocation. Facility changes are performed at developer's expense.

San Joaquin Valley Air Pollution Control District

34. Based on information provided to the District, the proposed project would equal or exceed 25,000 square feet of light industrial space. Therefore, the District concludes that the proposed project is subject to District Rule 9510 (Indirect Source Review).

35. Prior to issuance of any building permit the applicant shall demonstrate compliance with District Rule 9510, including payment of all applicable fees before issuance of a building permit.

36. The proposed project may require District permits. Prior to the start of construction, the project proponent should contact the District's Small Business Assistance Office to determine if an Authority to Construct (ATC) is required.

37. The proposed project may be subject to the following District rules:

- Regulation VIII (Fugitive PM 10 Prohibitions)
- Rule 4102 (Nuisance)
- Rule 4601 (Architectural Coatings)
- Rule 4641 (Cutback, Slow Cure, Emulsified Asphalt, Paving and Maintenance Operations)

38. In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants).

Mitigation Measures

(Pursuant to California Public Resources Code 15074.1: Prior to deleting and substituting for a mitigation measure, the lead agency shall do both of the following:
1) Hold a public hearing to consider the project; and
2) Adopt a written finding that the new measure is equivalent or more effective in mitigating or avoiding potential significant effects and that it in itself will not cause any potentially significant effect on the environment.)

39. All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include but not be limited to the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and the installation of shielded fixtures to prevent light trespass (glare and spill light that shines onto neighboring properties).

40. Roadway improvement plans shall be submitted to Public Works prior to the issuance of a building or grading permit, whichever comes first. The improvement plans shall include left turn acceleration and deceleration lanes for the proposed main (truck) entrance and a left turn lane for the employees entrance on the east side of the property from Keyes Road. The plans shall use CalTrans Traffic Manual and Stanislaus County Standards and Specifications. A four-foot asphalt shoulder, as per Stanislaus County Standards and Specifications, will be included on Keyes Road. The roadway improvement plans shall be approved and installed prior to occupancy of any building permit associated with this site.

41. Keyes Road is classified as a 60-foot collector in this area. The applicant's engineer or surveyor shall prepare an Easement Deed for 30-feet south of the centerline of Keyes Road along the entire frontage of the project's parcel. If additional road right-of-way is needed for Keyes Road along the parcel frontage as per the approved roadway improvement plans, that additional width shall be included in the Easement Deed. The Easement Deed shall be submitted to Public Works after the roadway improvement plans are approved and prior to occupancy of any building associated with this site.

42. An Engineer's Estimate shall be provided so the amount of the financial guarantee can be determined. This will be based on the County approved street improvement plans. This shall be submitted prior to issuance of a building permit and once the improvement plans have been approved by the County.

43. A Financial Guarantee in a form acceptable to the Department of Public Works shall be deposited for the street improvement installation along the frontage on Keyes Road with the department prior to the issuance of the first building permit.

****

Please note: If Development Standards are amended by the Planning Commission or Board of Supervisors, such amendments will be noted in the upper right hand corner of the first page of the Development Standards, new wording is in ***bold,*** *and deleted wording will have a ~~line through it.~~*

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As Approved by the Planning Commission
March 18, 2010

DEVELOPMENT SCHEDULE

REZONE APPLICATION NO. 2009-04
BRONCO WINE CO.

The conversion of the single-family dwelling to a shipping and receiving office, construction of the employee and truck parking lots and access roads, and compliance with all applicable development standards shall begin within 18 months of project approval.

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EXHIBIT C

TO WHOM IT MAY CONCERN;

-REGARDING REZONING OF BRONCO WINE CO.

I AM EVELYN BURNS AND I OWN THE PROPERTY ON THE EAST SIDE OF PROPOSED REZONING. MY SON NICK DOES THE FARMING. MY CONCERN IS THE ROAD THAT WILL RUN IN FRONT OF MY HOUSE. MY BEDROOM IS ABOUT 30 FEET FROM THE PROPOSED ROAD. IT WILL BE LIKE CARS DRIVING IN MY BEDROOM,.. BUSHES ARE NOT THE ANSWER TO THIS PROBLEM. A SOUND BARRIER WALL MIGHT HELP. I AM 75 YEARS OLD AND SHOULD BE ABLE TO ENJOY MY LAST YEARS HERE. THE TRAFFIC WILL BE LIKE KEYES RD.

NOW THE ROAD ISSUE. THERE WILL BE 3 DRIVEWAYS MAKING AN ENTRANCE AND EXIT AT KEYES RD.. I THINK THAT IS A LITTLE BIT MUCH FOR THAT AREA. WE HAVE TROUBLE GETTING ON THE ROAD NOW AT QUITTING TIME AND IT IS A HALF A MILE AWAY AND NOW THEY WILL BE CLOSE COMING AND GOING.,NOT TO SAYA MADHOUSE AND DANGEROUS AND UNSAFE. HEAVEN HELP US.

RECEIVED

EXHIBIT H

THE LAST ISSUE IS THE REZONING OF FARM GROUND TO WAREHOUSE STATUS. IF YOU WANT A WAREHOUSE FACILITY GO TO THE BEARD TRACT AND LEAVE THE FARM GROUND FOR FARMING AS IT SHOULD BE.

Evelyn Burns

From: Planning Planning
To: Wyse, Rachel
CC: Ford, Kirk
Date: 3/5/10 8:03 AM
Subject: Fwd: REZONE APPLICATION NO. 2009-04-BRONCO WINE CO.

-- -- -- Let Us Know How We Are Doing -- -- --

Please take a moment and complete the Customer Satisfaction Survey by clicking on the following link:

http://www.co.stanislaus.ca.us/SurveyChoice.htm

>>> "Pat Titus" <patpilot@clearwire.net> 3/4/10 6:37 PM >>>
To whom it might concern:

We are residents at 1112 E. Keyes Rd., directly in front of Bronco Winery. In the 40 plus years we have lived here this road has gone from one where our children could ride bikes and run their 4-H sheep down the road to one where you take your life into your hands to try to get out of the driveway. After the Highway 99 and Keyes Rd. overpass was completed the traffic increased at least threefold. With the addition of the winery the traffic again increased greatly. The hundreds of trucks and vehicles entering and existing the road create severe congestion and dangerous conditions.

The speed limit has not changed and passing is still allowed on most of Keyes Road and I'm certain you would find that most of the traffic is going faster than 55 mph. The commuters to the bay area treat this road like a freeway. They don't treat it as a country road. Yet, it is a two lane country road and a dangerous one. There needs to be a posted 45 mph zone with no passing where ever these trucks and other vehicles are accessing the road.

Putting a employee road on the East side of the property with 180 or more vehicles will create a serious noise problem for the residents living adjacent to it. They built that house well off the road to avoid noise. Now they have the noise of the winery and if the winery has its way they will have 180 vehicles driving right by their bedroom. How would you like that? Day and night!

Mrs. Patricia Titus

Chair Navarro and Commissioners Layman and Pires left the Chambers.

D. **REZONE APPLICATION NO. 2009-04 - BRONCO WINE CO.** - Request to rezone
a 35.78 acre parcel from A-2-40 (General Agriculture) to P-D (Planned Development) to allow expansion of the adjoining Bronco Wine facility by conversion of an existing house into an office, construction of two (2) new 14,400 square foot office buildings, an associated parking lot and two (2) driveways on E. Keyes Road. The project site is located at 800 E. Keyes Road, at the southeast corner of E. Keyes and Bystrum Roads, in the Ceres area. The Planning Commission will consider a CEQA Mitigated Negative Declaration on this project.
APN: 041-046-019
Staff Report: Rachel Wyse Recommends **APPROVAL.**
Public hearing opened.
OPPOSITION: Alice Roche, 1130 E Keyes Road, Ceres.
FAVOR: No one spoke.
Public hearing closed.
Ramos/Assali, 5-0, **APPROVED THE STAFF RECOMMENDATIONS AS OUTLINED IN THE STAFF REPORT.**

Chair Navarro and Commissioners Layman and Pires returned to the Chambers.

EXCERPT

PLANNING COMMISSION

MINUTES

Secretary, Planning Commission

4/6/2010
Date

ATTACHMENT 2

TRAFFIC IMPACT ANALYSIS

FOR

BRONCO WINERY DISTRIBUTION CENTER

Stanislaus County

Prepared For:

Anderson-Litfin, Inc.
1385 Venture Lane
Turlock, CA 95380

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(916) 660-1555

November 23, 2016
Revised March 15, 2017

0480-01



TRAFFIC IMPACT ANALYSIS FOR
BRONCO WINERY DISTRIBUTION CENTER
Stanislaus County

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KDA

TRAFFIC IMPACT ANALYSIS FOR
BRONCO WINERY DISTRIBUTION CENTER
Stanislaus County

INTRODUCTION

This report summarizes **KD Anderson & Associates** analysis of the traffic impacts associated with development of the proposed Bronco Winery Distribution Center. The project consists of development of additional warehouse and building space at the existing winery facility located south of Keyes Road and east of Bystrum Road. The project includes development of a rail spur connection to the existing U.P.R.R. line to permit shipment of product by rail. The existing U.P.R.R. line runs along the west border of the site adjacent to Bystrum Road. Warehouse space will be developed in phases over a number of years and will dependent on market conditions. Figures 1 displays the project location.

This study provides a focused analysis of traffic impacts in the immediate vicinity of the site associated with the expanded winery facilities. The scope of the analysis is based upon input from Stanislaus County following the County's initial review of the project application. The analysis focuses on impacts to the Keyes Road / Bystrum Road intersection immediately adjacent to the U.P.R.R. crossing of Keyes Road. The main access to the existing winery is located on Bystrum Road approximately 2,000 feet south of Keyes Road. A second project access is located on Keyes Road 3/4 of a mile east of Bystrum Road.

Traffic operations have been quantified relative to "in season" conditions which include trucking and employee operations associated with grape harvest and crush in addition to typical shipping and receiving winery operations. In season operations typically occur from mid July through mid November and include 24 hour facility operations, 7 days a week. Additionally, although the proposed winery expansion would be realized over a number of years, this study assumes build out of the proposed project to quantify resulting "Existing plus Project" traffic operating conditions.

Project Description

Build out of the entire project will include construction of eight warehouses totaling 629,500 sf, 4 office buildings totaling 101,000 sf and 2 assembly buildings totaling 12,600 sf immediately north of the company's existing winery facilities. The proposed Phase 1 portion of the project will consist of one 120,000 sf warehouse building and the railroad spur lines. The railroad spur lines will extend for approximately 1,400' immediately east of the existing U.P.R.R. line between Keyes Road and the project main access. The two existing access gates will continue to serve the expanded project site. Figure 2 displays the proposed site plan.

Project proponents expect that the project will not increase the capacity of the site for wine making. As a result, the project is not expected to see an increase in the number of trucks

bringing grapes to the site during Crush. However, the project involves creation of an appreciable amount of wine storage to accommodate wine produced on-site or to accommodate wine created or bottled elsewhere and trucked to this site for bottling and/or storage prior to eventual shipment. As such, the project would involve some additional employee trips to and from the site by automobile, as well as wine deliveries and shipments by truck and rail.

General Study Methodology

The methodology used to prepare this Traffic Impact Study follows an approach that is recognized by members of the traffic engineering profession, is consistent with CEQA guidelines and conforms to Stanislaus County guidelines for traffic impact studies.

The first phase of the study included the collection of traffic data and the analysis of that data to determine existing operating conditions. Peak hour and daily traffic counts were conducted in the vicinity of the project site. This data was used to calculate current operating Levels of Service using procedures accepted by Stanislaus County.

The second phase of the analysis involved identifying the number of trips expected to be generated by the proposed project. Traffic count data together with information on existing and proposed employee numbers and truck traffic numbers has been used to estimate trip generation quantities associated with the wine facility expansion.

Lastly, new trips associated with the proposed project were assigned to the study area street system to quantify Existing plus Project operating conditions. The analysis considers new automobile and truck traffic quantities as well as rail operations.



VICINITY MAP

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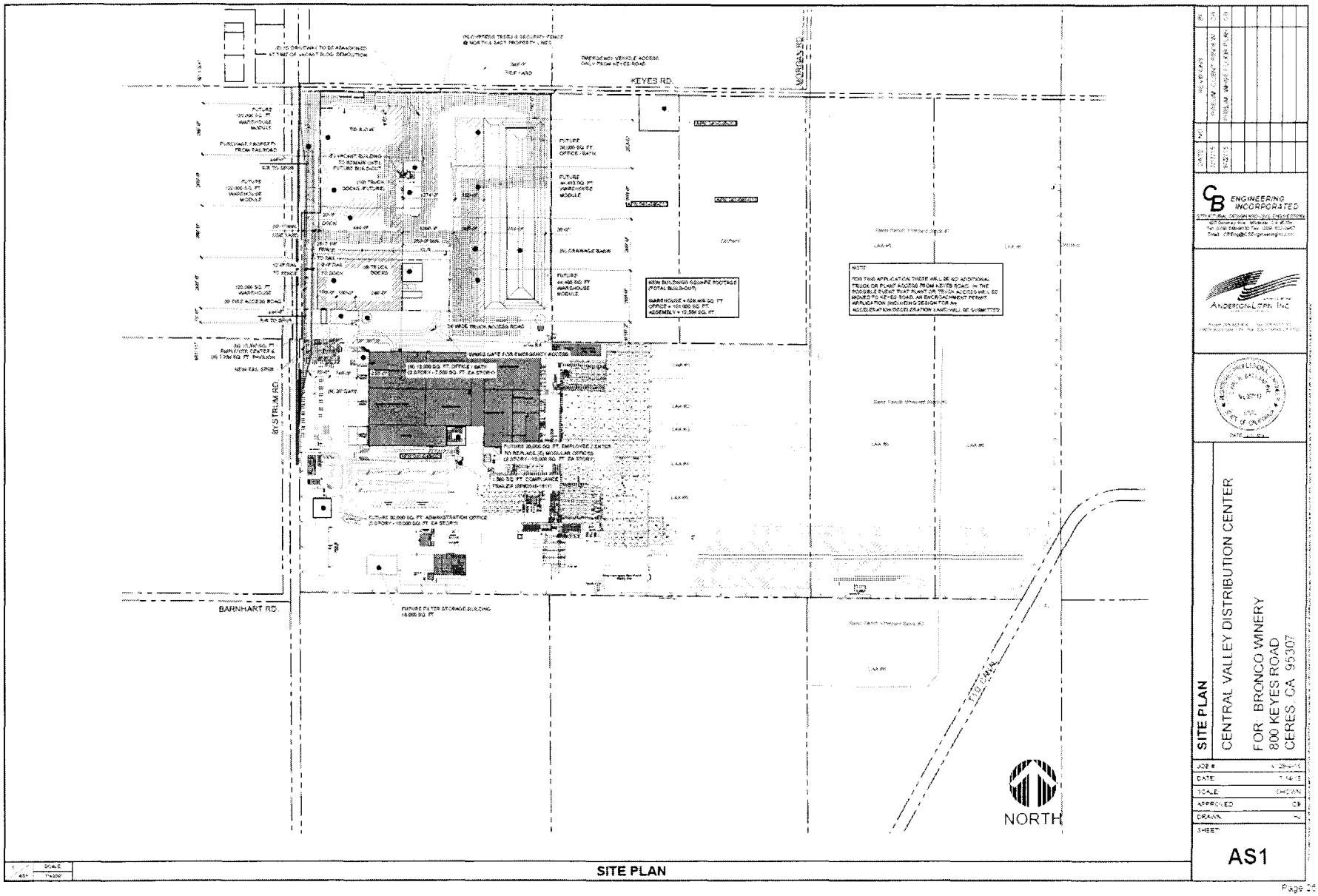
figure 1



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SITE PLAN

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figure 2

EXISTING SETTING

Study Area

The limits of this analysis were identified in consultation with Stanislaus County staff and include intersections and roadway segments in the vicinity of the project site as well as access to the site. The traffic impact analysis investigates the operational characteristics of the following intersections.

1. Keyes Road / Bystrum Road (Bystrum Rd stop sign controlled)
2. Keyes Road / Bronco Winery East Truck Access (East access stop sign controlled)

The locations of these intersections along with the existing road network are shown on Figure 3. The text that follows describes the characteristics of each facility.

Keyes Road is an east-west facility extending through the southerly portion of Stanislaus County. The roadway extends from Laird Road in the west past the east county line, a distance of approximately 27 miles. Interchange access to SR 99 is provided approximately 4 miles east of the project site. Keyes Road is a 2-lane rural roadway and classified as a Collector Road adjacent to the project site. The roadway provides 12' travel lanes and 1'-2' paved shoulders. No left turn channelization is provided at intersecting streets other than in the immediate vicinity of SR 99. Keyes Road has a 55 mph prima facie speed limit. The roadway currently carries approximately 6,650 daily vehicles adjacent to the project site, with 11% large truck traffic based upon classification counts conducted for this study.

Bystrum Road is a local road on the west border of the project site which extends from Keyes Road south to Taylor Road. The roadway is a paved for approximately 2,000' to the Bronco Winery entrance and then continues as a dirt/gravel facility to the south with a 1-lane bridge crossing of the canal immediately north of Taylor Road. Bystrum Road provides a connection to Barnhart Road at the southwest corner of the winery site and also provides access to other agricultural uses south of the winery site. North of the winery access, the roadway provides two travel lanes and 24' of pavement. Bystrum Road is stop sign controlled at Keyes Road. Traffic counts conducted for this analysis indicate the roadway carries approximately 1,480 daily vehicles north of the winery access.

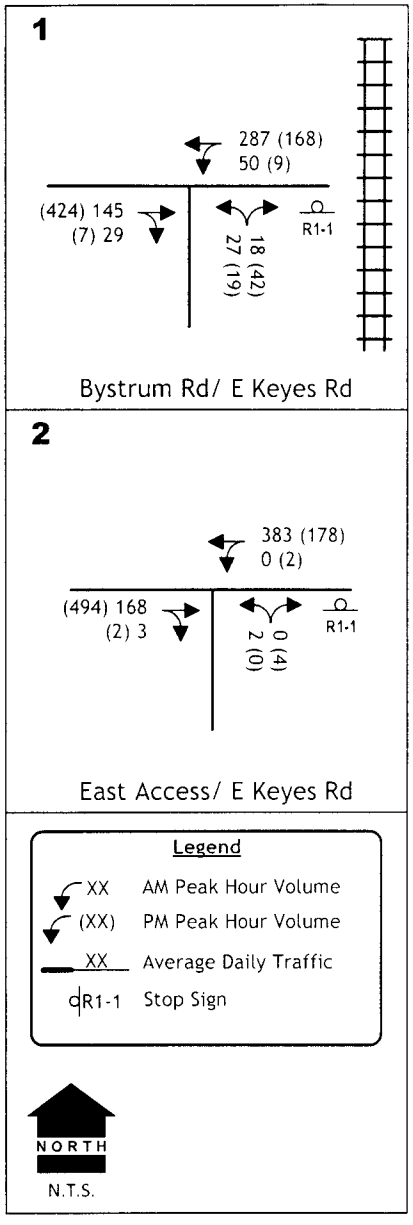
Union Pacific Rail Line. A north-south U.P. rail line extends along the west border of the project site. This local line extends from Modesto in the north to Turlock in the south. The rail line crosses Keyes Road approximately 45' east of the centerline of Bystrum Road. The rail crossing has active traffic controls, consisting of crossing arms, warning lights and pavement delineation. Advance pavement delineation and signs are also provided on Keyes Road approximately 400' to the east and west. Pavement condition at the crossing is judged to be "good". There are no vehicle pull outs at the crossing. Adequate sight distance is provided to the arms and warning lights from eastbound and westbound Keyes Road. The crossing conforms to requirements presented in the CA MUTCD for active traffic control devices for grade crossings.

Existing Traffic Volumes. To determine existing traffic volumes and obtain more information about traffic conditions in the study area, information regarding daily, a.m. and p.m. peak hour traffic volumes was assembled. New weekday intersection and roadway counts were conducted on October 4, 2016. Intersection counts were performed from 7:00 - 9:00 a.m. and 4:00 - 6:00 p.m. at the two study intersections. Daily 24 hour roadway counts were also conducted on four roadway segments. These included:

- Keyes Road west of Bystrum Road
- Keyes Road east of the East Truck Access to Bronco Winery
- Bystrum Road south of Keyes Road
- East Truck Access road south of Keyes Road

All intersection and roadway counts were conducted in 15 minute increments and included separate truck classification counts. The peak hour intersection volumes and daily roadway volumes are shown in Figures 3 and 4. Figure 3 displays total traffic volumes, while Figure 4 displays truck traffic volumes. All traffic counts are included in the Appendix to this report. Table 1 summarizes hourly volumes on each of the roadways providing access to the project site to illustrate the distribution of traffic throughout the day. As shown, traffic volumes on each roadway are dispersed throughout the day and nighttime hours over the 24 hour period. This reflects the 24 hour operation and multiple employee shifts associated with the existing winery operations.





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EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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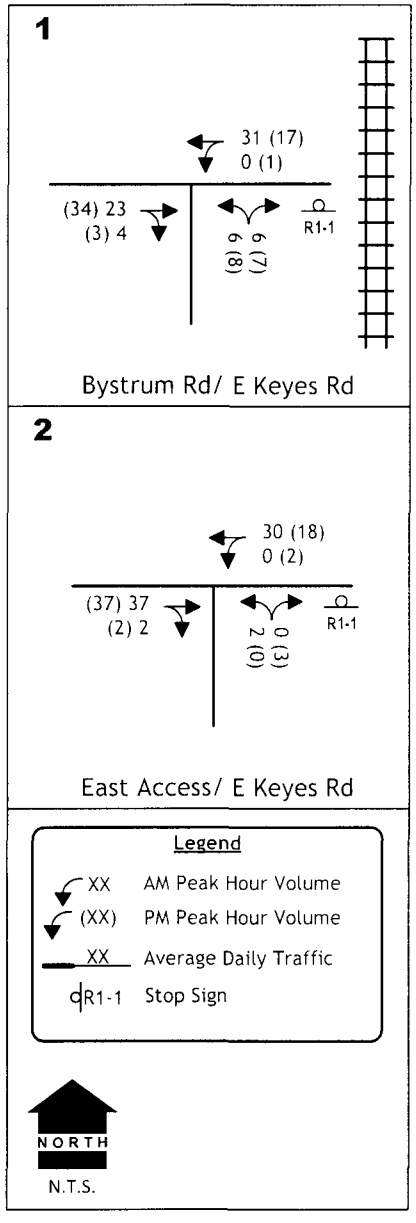
figure 3





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EXISTING TRUCK
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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figure 4

TABLE 1
HOURLY VOLUME SUMMARY
ON ACCESS ROADS SERVING PROJECT SITE

	Bystrum Road (Auto and Truck Access)		East Access Road (Truck Access)	
	Total Traffic	Percent of Daily Traffic	Truck Traffic	Percent of Daily Traffic
12-1 a.m.	26	1.7%	7	4.0%
1-2	9	0.6%	9	5.5%
2-3	19	1.3%	11	6.5%
3-4	22	1.5%	13	7.5%
4-5	32	2.1%	4	2.5%
5-6	86	5.8%	7	4.0%
6-7	111	7.5%	1	0.5%
7-8	110	7.5%	2	1.0%
8-9	87	5.9%	2	1.0%
9-10	44	3.0%	5	3.0%
10-11	55	3.7%	12	7.0%
11-12 p.m.	51	3.5%	11	6.5%
12-1	67	4.5%	2	1.0%
1-2	93	6.3%	13	7.5%
2-3	144	9.8%	12	7.0%
3-4	101	6.8%	3	1.5%
4-5	76	5.2%	3	1.5%
5-6	104	7.0%	7	4.0%
6-7	63	4.3%	8	4.5%
7-8	34	2.3%	4	2.5%
8-9	19	1.3%	5	3.0%
9-10	24	1.6%	10	6.0%
10-11	40	2.7%	11	6.5%
11-12	60	4.0%	7	4.0%
	1,477	**100%**	**169**	**100%**

Information has been assembled by the project proponents to quantify the average number of existing truck trips generated by the site for "in season" operating conditions. This is as presented in "Exhibit A" of the initial project application to the County. This information has been compared to traffic counts conducted by the consultant on 10/4/16 to establish an in season baseline traffic condition for purposes of evaluating project impacts. Table 2 summarizes the average number of in season truck trips generated by the winery site. This information is summarized by the type of distribution truck. As shown, five categories of truck traffic have been identified with an average of 183 trucks per day. These trucks in turn generate an average of 366 truck trips per day.

Table 3 provides a comparison of this average daily truck information verse that observed by the consultant on 10/4/16. As shown, a slightly lower number of trucks was generated by the site on that day when roadway and intersection counts were conducted for this analysis. The site was observed to generate 347 truck trips over a 24 hour period, or 5% less than the volume discussed above. Total truck traffic generated by the site has therefore been increased to reflect average in season conditions for purposes of this analysis.

TABLE 2
BRONCO WINERY AVERAGE DAILY TRUCK TRAFFIC VOLUMES
EXISTING CONDITIONS (IN SEASON)

Distribution Type	Existing Baseline Conditions			
	Number Trucks	Average Daily Trips		
		In	Out	Total
Shipping Trucks	14	14	14	28
Tanker Trucks	34	34	34	68
Grape Trucks [1]	105	105	105	210
Pomace Trucks [1]	23	23	23	46
Delivery Trucks	7	7	7	14
	183			366

[1] Grape and Pomace trucks only operate in season during grape harvest and crush.

TABLE 3
BRONCO WINERY SITE DAILY TRUCK VOLUME COMPARISON

10/4/16 Traffic Counts			Estimated Average Daily Trucks, Baseline Condition throughout Season		
In	Out	Total	In	Out	Total
173	174	347	183	183	366

Total trucks counted on 10/4/16 was 5% lower than estimated average daily trucks throughout the season.

Existing Train Volumes. Observations conducted on Tuesday, 10/04/16, indicated one southbound and one northbound train crossing during this 24 hour period. The duration of these train crossings (railroad arms down) were 40 seconds and 54 seconds, respectively. Table 4 summarizes this information.

TABLE 4
24 HOUR TRAIN VOLUME AT KEYES ROAD CROSSING (10/04/2016)

No.	Direction	Gates Down		Duration
		Start	End	
1	Southbound	8:02:48	8:03:28	40 sec
2	Northbound	10:16:01	10:16:55	54 sec

Standards of Significance: Capacity / Level of Service Analysis

Level of Service. The quality of traffic flow through intersections and on individual roadway segments is described in terms of operating Level of Service. "Level of Service (LOS)" is a qualitative measure of traffic operating conditions whereby a letter grade "A" through "F", corresponding to progressively worsening operating conditions, is assigned to an intersection or roadway segment. Tables 5 presents the characteristics associated with each LOS grade.

The *Highway Capacity Manual* presents methodologies for calculating practical capacity and Level of Service at intersections. At signalized intersections and intersections controlled by all-way stop signs, traffic conditions are described in terms of the average length of the delays experienced by all motorists. Intersection configuration, traffic volumes and traffic signal timing are all factors that enter into determination of the length of average delay and the resulting Level of Service. The delays experienced at intersection controlled by side street stop signs are different. Motorists waiting to turn must yield the right of way to through traffic, and the length of delays can vary on each approach to the intersection. For this analysis the length of delays experienced by motorists on each approach has been calculated. Intersection operations have been quantified based upon Highway Capacity Manual procedures, consistent with Stanislaus County requirements.

TABLE 5
LEVEL OF SERVICE DEFINITION

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay ≤ 10.0 sec	Little or no delay. Delay ≤ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and ≤ 20.0 sec	Short traffic delays. Delay > 10 sec/veh and ≤ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and ≤ 35.0 sec	Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestions of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35.0 sec and ≤ 55.0 sec	Longer traffic delays. Delay > 25 sec/veh and ≤ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and ≤ 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay > 80.0 sec	Intersection blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.
Sources: Highway Capacity Manual.			

Significance Thresholds. A traffic impact is considered significant if it renders an unacceptable Level of Service on a street segment or at an intersection, or if it worsens already unacceptable conditions. Local jurisdictions typically adopt minimum Level of Service standards for use in traffic studies and environmental impact reports.

The Stanislaus County General Plan Circulation Element indicates that the County shall maintain LOS "D" or better for all County roadways and intersections, except within the sphere of influence of a city that has adopted a lower level of service standard, the City standard shall apply. As such, the LOS "D" standard has been used for this analysis to quantify the significance of traffic impacts at intersections.

Signal Warrant Criteria. At intersections controlled by side street stop signs, a supplemental signal warrant analysis is also typically used in determining the adequacy of operations and/or the need for improvements. As minor street traffic can experience significant delays when accessing a major street, side street delays at any single approach are typically not considered significant

unless side street volumes are large enough to meet peak hour warrants for installation of a traffic signal. Peak hour traffic signal warrants as presented in the California Manual of Uniform Traffic Control Devices (MUTCD) have been used for this analysis.

Criteria for Determining the Need for Left Turn Channelization. Lastly, as the subject intersections on Keyes Road do not provide left turn lane channelization, guidelines for the installation of left turn lanes have been reviewed for this analysis. The American Association of State Highway Transportation Officials (AASHTO) has identified guidelines for the installation of left turn lanes in their publication *A Policy on Geometric Design of Highways and Streets*. These guidelines, which are presented in their Table 9-23 of the publication and summarized below in Table 6, base the need for a left turn lane on the volume of traffic on the mainline road and the relative percentage of that traffic which turns left.

TABLE 6
TRAFFIC VOLUMES JUSTIFYING LEFT TURN LANES

Opposing Volume (veh/hr)	Advancing Volume (veh/hr)			
	5% Left Turns	10% Left Turns	20% Left Turns	30% Left Turns
40-mph operating speed				
800	330	240	180	160
600	410	305	225	200
400	510	380	275	245
200	640	470	350	305
100	720	515	390	340
50-mph operating speed				
800	280	210	165	135
600	350	260	195	170
400	430	320	240	210
200	550	400	300	270
100	615	445	335	295
60-mph operating speed				
800	230	170	125	115
600	290	210	160	140
400	365	270	200	175
200	450	330	250	215
100	505	370	275	240

Source: *A Policy on Geometric Design of Highway and Streets, AASHTO, 2012.*

Existing Intersection Operation / Levels of Service. Existing study area intersection operations are summarized in Table 7. As shown, study area intersections currently operate within acceptable standards. Satisfactory level of service "A" to "C" operations are currently experienced at each of the study intersections in the a.m. and p.m. peak traffic hours. These calculations consider the peak hour percentage of truck traffic at each approach to the intersections.

Existing peak hour volumes at the side street stop sign controlled study intersections do not warrant installation of a traffic signal. Existing side street volumes are below the minimum volume threshold required to meet the peak hour signal warrant.

The a.m. peak hour volumes at the Keyes Road / Bystrum Road intersection meet the AASHTO guideline criteria for consideration of left turn channelization. However, this threshold is only met for the one morning hour and review of hourly roadway volumes throughout the balance of the day indicates that these threshold volumes would not be met during any other hours of the day.

TABLE 7
EXISTING INTERSECTION LEVELS OF SERVICE

Location	Control	AM Peak Hour		PM Peak Hour	
		LOS	Average Delay	LOS	Average Delay
Keyes Road / Bystrum Road	NB Stop				
NB Approach		B	12.6	B	13.5
WB Approach		A	1.5	A	0.5
Keyes Road / East Access Road	NB Stop				
NB Approach		C	15.7	B	14.2
WB Approach		A	0.0	A	0.2

PROJECT IMPACTS

To evaluate the impacts of the proposed project on traffic conditions in the study area it is necessary to identify the volume of traffic expected to be generated by the proposed facility and to superimpose this traffic onto current background traffic conditions.

Project Characteristics

Project Employee Traffic. The winery operation currently has 486 in season employees, 389 of which are employed in wholesale / production and operate under three shifts. Build out of the proposed facility expansion is projected to result in modest employee increases, with total employees increasing to 516 persons, an increase of 30 employees or 6%. As occurs today, employees will access the facility via the Bystrum Road entrance.

To quantify this employee increase in terms of traffic volumes, automobile traffic at the Bystrum Road / Keyes Road intersection associated with the existing winery operations has been increased by this same 6%. Inbound and outbound patterns, as well as the directional distribution of employee trips has been assumed to be the same as existing employee traffic. Table 8 displays this employee trip generation information. Existing employee traffic volumes are based upon gate counts at the winery main access. As shown in Table 8, an additional 60 daily employee trips are projected to be generated by the site with the proposed project. Figure 5 displays peak hour and daily employee generated traffic volumes projected to be added to the study street system.

Project Truck Traffic. The proposed project will generate additional truck traffic. In season truck traffic generated by the site consists of shipping trucks, tanker trucks, grape trucks, pomace trucks and various delivery trucks. This is as previously presented in Table 2. Shipping, tanker, pomace and delivery trucks utilize the Bystrum Road main access, while grape trucks utilize the easterly access during the season. Build out of the project is projected to result in an increase in shipping truck traffic, while other truck traffic is projected to remain at existing levels. An additional 25 shipping trucks are projected to exit and enter the site with build out of the proposed expansion project. The additional truck traffic is expected to have similar travel patterns to existing truck traffic generated by the site, with regards to both the distribution of traffic to Keyes Road as well as arrival and departure times to and from the site. Truck traffic volumes are summarized in Table 9. As shown, an additional 50 daily truck trips are projected to be generated by the site with the proposed project. Figure 6 displays peak hour and daily truck traffic volumes projected to be added to the study street system with the proposed project.

TABLE 8
EXISTING PLUS PROJECT
EMPLOYEE TRIP GENERATION (IN SEASON)

Existing Conditions				Existing Plus Project Buildout				Net Increase			
Number of Employees (3 shifts)	Daily Employee Trips[1]			Number of Employees (3 shifts)	Daily Employee Trips			Number of Employees			
	In	Out	Total		In	Out	Total		In	Out	Total
486	427	549	976	516	453	583	1,036	30	26	34	60

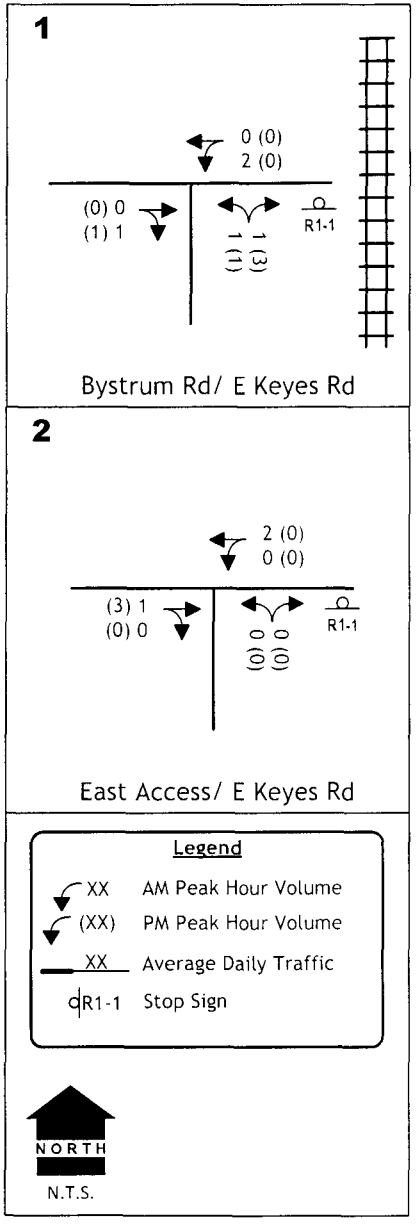
[1] Employee Trip Gate Count, 10/4/16.

TABLE 9
EXISTING PLUS PROJECT TRIP GENERATION
BRONCO WINERY AVERAGE DAILY TRUCK TRAFFIC VOLUMES (IN SEASON)

Distribution Type	Existing Baseline Conditions				With Project Buildout				Net Increase Total Trips
	Number Trucks	Daily Trips			Number Trucks	Daily Trips			
		In	Out	Total		In	Out	Total	
Shipping Trucks	14	14	14	28	39	39	39	78	50
Tanker Trucks	34	34	34	68	34	34	34	68	0
Grape Trucks [1]	105	105	105	210	105	105	105	210	0
Pomace Trucks [1]	23	23	23	46	23	23	23	46	0
Delivery Trucks	7	7	7	14	7	7	7	14	0
	183			366	208			416	50

[1] Grape and Pomace trucks only operate in season during grape harvest and crush.





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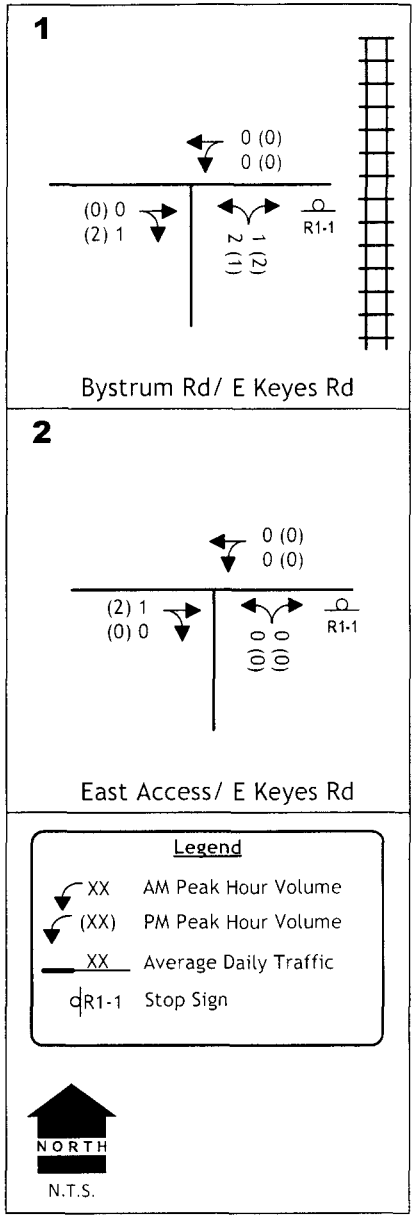
PROJECT ONLY AUTOMOBILE
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

0480-01 RA 11/16/2016

figure 5





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PROJECT ONLY TRUCK
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers
0480-01 RA 11/16/2016

figure 6

Rail Car Traffic. Construction of the proposed railroad spur lines will permit shipping of product via rail. Rail car volume is projected at five cars per day, four days a week, resulting in one train trip to and from the site four days a week. Rail cars will be delivered and picked up as part of the existing train schedule serving this rail route. This is summarized in Table 10.

TABLE 10
PROPOSED RAIL SERVICES

Number of Trains serving site per day	1
Number of Rail Cars per Train	5
Projected Train Service days per week	4

Existing Plus Project Traffic Volumes and Levels of Service

Figure 7 displays resulting "Existing Plus Project" traffic volumes with project traffic added to existing background baseline traffic volumes. Projected intersection Levels of Service are presented in Table 11.

As shown in Table 11, traffic generated by build out of the proposed winery expansion project will have a very minor effect on current intersection operations. No changes to current operating levels of service are projected and any increases in delay are projected to be very minor. Satisfactory operating levels of service are projected to continue. The minor increases in peak hour traffic will not warrant signalization of the study intersections. Similarly, project traffic will not measurably effect the need for left turn channelization at the Keyes Road / Bystrum Road intersection. As such, while no significant project impacts have been identified, to respond to existing concerns the Keyes Road / Bystrum Road intersection will be improved as part of the proposed project.

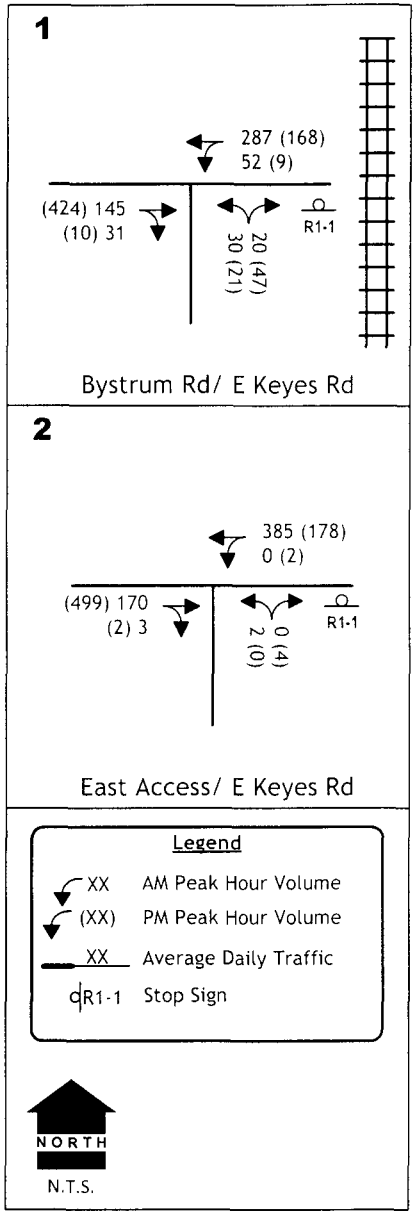
TABLE 11
INTERSECTION LEVELS OF SERVICE
EXISTING PLUS PROJECT BUILD OUT

		Existing				Existing Plus Project				Net Changes/Increase			
Intersection		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Location	Control	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Keyes Rd / Bystrum Rd	NB												
NB Approach	Stop	B	12.6	B	13.5	B	12.8	B	13.7	-	0.2	-	0.2
WB Approach		A	1.5	A	0.5	A	1.5	A	0.5	-	0.0	-	0.0
Keyes Rd / East Access Rd	NB												
NB Approach	Stop	C	15.7	B	14.2	C	15.7	B	14.2	-	0.0	-	0.0
WB Approach		A	0.0	A	0.2	A	0.0	A	0.2	-	0.0	-	0.0

LOS = Level of Service
Delay = Average Delay in seconds

KDA





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EXISTING BASELINE PLUS PROJECT BUILDOUT
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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0480-01 RA 11/16/2016

figure 7

Railroad Spur Line Operation

The proposed railroad spur line will be located immediately east of the existing U.P.R.R. line along the west border of the site and will extend for approximately 1,400' between Keyes Road and the winery main entrance to the south. Figure 8 displays the proposed design. Two parallel spur lines will be constructed to facilitate train car pick-up and drop off and to minimize potential delays to traffic on Keyes Road. Projected operations are as follows: 1) The train will originate from the north and pass the southerly spur switch, 2) Train will back into the easterly spur to pick up loaded cars and transfer them to the westerly spur, 3) Train then moves back to the easterly spur to drop off empty cars, 4) Train proceeds south to Turlock were it turns around and then proceeds north picking up loaded cars along the service route, 5) At the winery, the train will back into the westerly spur line at the northerly spur switch to pick up loaded cars, then proceeds north.

With respect to current train activity, the addition of the winery spur lines will not significantly increase delays to Keyes Road for the southbound train trip. The train crossing duration may increase somewhat, as the train will be slowing in order to stop and back-up into the southerly spur line switch south of Keyes Road. As previously discussed, this existing southbound crossing time was observed to be 40 seconds and this would be expected to increase somewhat due to the train slowing as it crosses Keyes Road.

The northbound trip for picking up loaded cars will require the train to stop just north of Keyes Road and then back into the westerly spur line at the northerly spur switch, pick up loaded cars, and then proceed north. The time to cross Keyes Road and perform this maneuver is estimated at four (4) to eight (8) minutes by U.P.R.R personnel. As previously discussed, the current northbound train crossing duration was observed at 54 seconds, and this resulted in observed vehicle queues at the crossing on eastbound and westbound Keyes Road of two (2) vehicles and four (4) vehicles, respectively. Extrapolating this information out for the additional three minutes of delay associated with the shorter duration estimate, it would be expected that vehicle queues of 8 vehicles and 16 vehicles would form on eastbound and westbound Keyes Road, respectively. For the longer eight minute duration estimate, vehicle queues of 16 and 32 vehicles would be expected on eastbound and westbound Keyes Road. This information is summarized in Table 12. Following departure of the train, it is estimated that a 32 vehicle queue would require another 70 seconds to disperse.

Observations of the northbound train crossing indicated that the northbound crossing occurred at 10:15 a.m. and that this is roughly typical of the train schedule serving the area. Vehicle queue estimates identified above assume a similar train crossing schedule, with northbound trains crossing Keyes Road during the late morning hours.

The sensitivity of the train schedule on vehicle queue estimates for Keyes Road has been evaluated based upon hourly counts conducted for the roadway. Review of 24 hour traffic counts indicates volumes on westbound Keyes Road are fairly consistent for the hours from 10:00 a.m. to about 1:00 p.m. As such, a train picking up product from the winery during this three hour period would be expected to cause vehicle queues on westbound Keyes Road as discussed above.

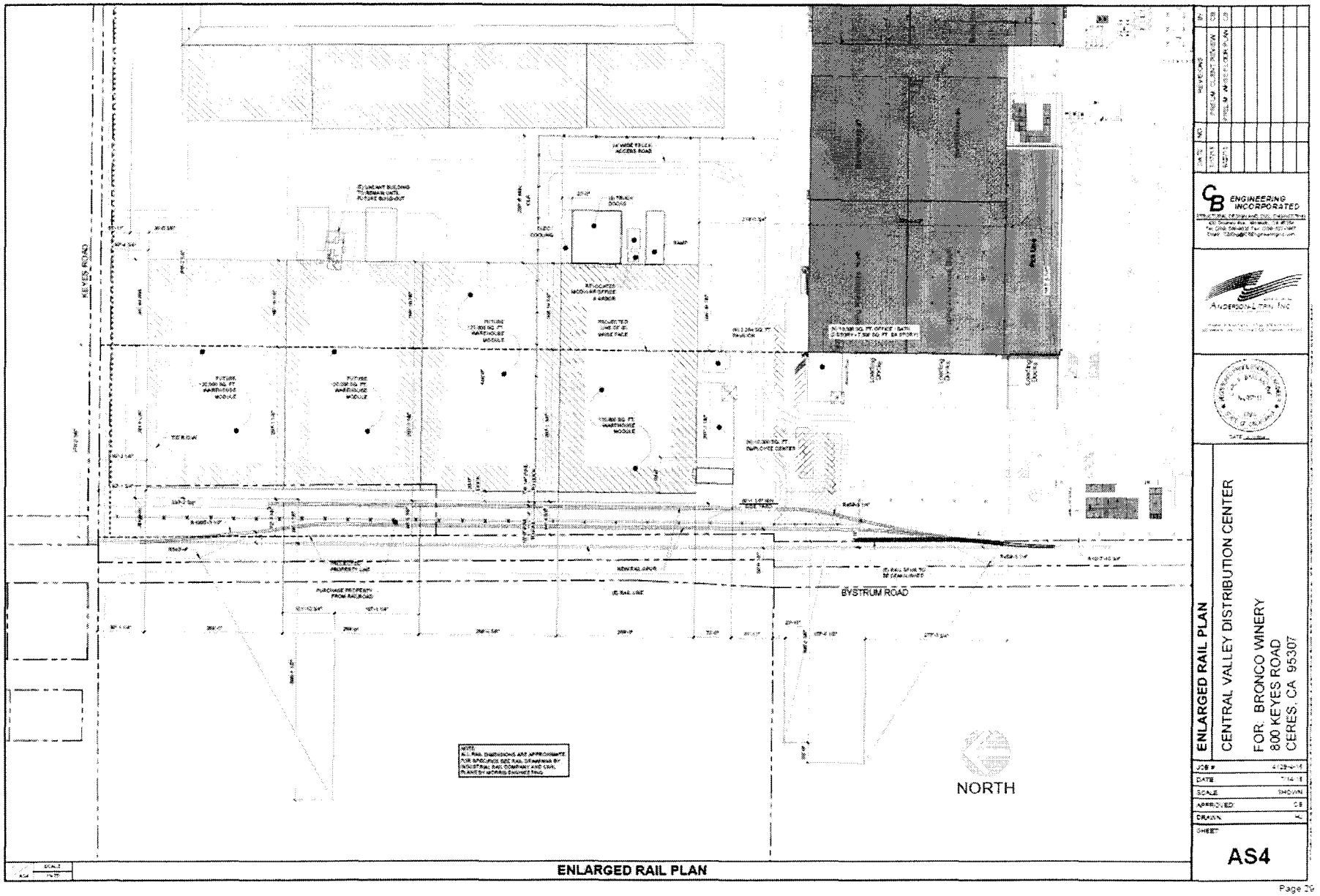
Conversely, traffic on eastbound Keyes Road is lower in the morning and steadily increases over these hours, surpassing the westbound flow rate after about 1:00 p.m. Therefore, the 8 to 16 vehicle eastbound queue estimated for the 10:00 hour would be expected to increase and reach 16 to 32 vehicles by 1:00 p.m., similar to the westbound direction.

As noted in the project application, the statement has been made that *the train engineers will be as courteous as possible, by pulling clear of Keyes Road throughout this process if any large backups are seen.* Should this occur, it is likely that the loaded car pickup could be accomplished in two steps, with the northbound train first clearing Keyes Road and permitting traffic to clear, then followed by backing across Keyes Road to secure the loaded cars and then proceeding north.

TABLE 12
PROJECTED VEHICLE QUEUES AT KEYES ROAD TRAIN CROSSING

Direction	Vehicle Queue (# cars)		
	Existing Conditions 10/4/16 observation NB Train	With Proposed Project, Product Pick-up, NB Train	
		4 Minute Duration	8 Minute Duration
Eastbound Keyes Road	2	8	16
Westbound Keyes Road	4	16	32

Rail Car Equivalent Truck Traffic. As previously discussed, the proposed project includes shipping of product both by truck and rail car. Rail shipments are estimated at five (5) cars per day, 4 days per week. The equivalent truck traffic volume is discussed here, should rail shipments not be available. Information provided by the applicant indicates that the shipping capacity of one rail car is equivalent to three (3) trucks. As such, five rail cars per day would be the equivalent of 15 trucks, or 30 truck trips per day to and from the site. As presented in this analysis, with the inclusion of rail service, the proposed project is expected to result in an additional 25 trucks serving the site or 50 daily truck trips generated by the site. Therefore, in the absence of rail service, the additional truck traffic would increase by approximately 60%. Associated traffic impacts would be expected to be proportionately less than that identified for the proposed project. As the traffic impacts associated with the proposed project have been projected to be relatively minor, this additional truck traffic would not be expected to have a significant impact.


KEYES ROAD
BYSTRUM ROAD
NORTH
ENLARGED RAIL PLAN
ENLARGED RAIL PLAN
CENTRAL VALLEY DISTRIBUTION CENTER
FOR BRONCO WINERY
800 KEYES ROAD
CERES, CA 95307
AS4

SITE PLAN

SUMMARY AND CONCLUSIONS

This report summarizes analysis of the traffic impacts associated with development of the proposed Bronco Winery Distribution Center. The project consists of development of additional warehouse and building space at the existing winery facility located south of Keyes Road and east of Bystrum Road. The project includes development of a rail spur connection to permit shipment of product by rail as well as by truck. The analysis focuses on impacts to the Keyes Road / Bystrum Road intersection immediately adjacent to the U.P.R.R. crossing of Keyes Road. The main access to the existing winery is located on Bystrum Road approximately 2,000 feet south of Keyes Road. A second project access is located on Keyes Road 3/4 of a mile east of Bystrum Road.

Traffic operations have been quantified relative to "in season" conditions which include trucking and employee operations associated with grape harvest and crush in addition to typical shipping and receiving winery operations. Additionally, although the proposed winery expansion would be realized over a number of years, this study assumes build out of the proposed project to quantify resulting "Existing plus Project" traffic operating conditions.

Project Description

Build out of the entire project will include construction of eight warehouses totaling 629,500 sf, 4 office buildings totaling 101,000 sf and 2 assembly buildings totaling 12,600 sf immediately north of the company's existing winery facilities. The proposed Phase 1 portion of the project will consist of one 120,000 sf warehouse building and the railroad spur lines. The railroad spur lines will extend for approximately 1,400' immediately east of the existing U.P.R.R. line between Keyes Road and the project main access. The two existing access gates will continue to serve the expanded project site.

Project proponents expect that the project will not increase the capacity of the site for wine making. As a result, the project is not expected to see an increase in the number of trucks bringing grapes to the site during Crush. However, the project involves creation of an appreciable amount of wine storage to accommodate wine produced on-site or to accommodate wine created or bottled elsewhere and trucked to this site for bottling and/or storage prior to eventual shipment. As such, the project would involve some additional employee trips to and from the site by automobile, as well as wine deliveries and shipments by truck and rail.

Existing Traffic Conditions

To determine existing traffic volumes and obtain more information about traffic conditions in the study area, information regarding daily, a.m. and p.m. peak hour traffic volumes was assembled. New weekday intersection and roadway counts were conducted on October 4, 2016. Intersection counts were performed from 7:00 - 9:00 a.m. and 4:00 - 6:00 p.m. at the two study intersections. Daily 24 hour roadway counts were also conducted on four roadway segments. These included:

- Keyes Road west of Bystrum Road
- Keyes Road east of the East Truck Access to Bronco Winery
- Bystrum Road south of Keyes Road
- East Truck Access road south of Keyes Road

All intersection and roadway counts were conducted in 15 minute increments and included separate truck classification counts.

The study area intersections currently operate within acceptable standards. Satisfactory level of service "A" to "C" operations are currently experienced at each of the study intersections in the a.m. and p.m. peak traffic hours. These calculations consider the peak hour percentage of truck traffic at each approach to the intersections.

Existing peak hour volumes at the side street stop sign controlled study intersections do not warrant installation of a traffic signal. Existing side street volumes are below the minimum volume threshold required to meet the peak hour signal warrant. The a.m. peak hour volumes at the Keyes Road / Bystrum Road intersection meet the AASHTO guideline criteria for consideration of left turn channelization. However, this threshold is only met for the one morning hour and review of hourly roadway volumes throughout the balance of the day indicates that these threshold volumes would not be met during any other hours of the day.

Project Characteristics

Project Employee Traffic. The winery operation currently has 486 in season employees, 389 of which are employed in wholesale / production and operate under three shifts. Build out of the proposed facility expansion is projected to result in modest employee increases, with total employees increasing to 516 persons, an increase of 30 employees or 6%. As occurs today, employees will access the facility via the Bystrum Road entrance.

To quantify this employee increase in terms of traffic volumes, automobile traffic at the Bystrum Road / Keyes Road intersection associated with the existing winery operations has been increased by this same 6%. Inbound and outbound patterns, as well as the directional distribution of employee trips has been assumed to be the same as existing employee traffic. Table 8 displays this employee trip generation information. Existing employee traffic volumes are based upon gate counts at the winery main access. An additional 60 daily employee trips are projected to be generated by the site with the proposed project.

Project Truck Traffic. The proposed project will generate additional truck traffic. In season truck traffic generated by the site consists of shipping trucks, tanker trucks, grape trucks, pomace trucks and various delivery trucks. Shipping, tanker, pomace and delivery trucks utilize the Bystrum Road main access, while grape trucks utilize the easterly access during the season. Development of the project is projected to result in an increase in shipping truck traffic, while other truck traffic is projected to remain at existing levels. An additional 25 shipping trucks are projected to exit and enter the site with build out of the proposed expansion project. The

additional truck traffic is expected to have similar travel patterns to existing truck traffic generated by the site, with regards to both the distribution of traffic to Keyes Road as well as arrival and departure times to and from the site. An additional 50 daily truck trips are projected to be generated by the site with the proposed project.

Rail Car Traffic. Construction of the proposed railroad spur lines will permit shipping of product via rail. Rail car volume is projected at five cars per day, four days a week, resulting in one train trip to and from the site four days a week. Rail cars will be delivered and picked up as part of the existing train schedule serving this rail route.

Existing Plus Project Traffic Volumes and Levels of Service

Traffic generated by build out of the proposed winery expansion project will have a very minor effect on current intersection operations. No changes to current operating levels of service are projected and any increases in delay are projected to be very minor. Satisfactory operating levels of service are projected to continue. The minor increases in peak hour traffic will not warrant signalization of the study intersections. While project traffic will not measurably effect the need for left turn channelization at the Keyes Road / Bystrum Road intersection, to address current concerns the intersection will be improved as part of the project. This considers build out of the expansion project. As previously noted, the initial Phase 1 project consists of one 120,000 sf warehouse building.

Railroad Spur Line Operation

The proposed railroad spur line will be located immediately east of the existing U.P.R.R. line along the west border of the site and will extend for approximately 1,400' between Keyes Road and the winery main entrance to the south. Two parallel spur lines will be constructed to facilitate train car pick-up and drop off and to minimize potential delays to traffic on Keyes Road. Projected operations are as follows: 1) The train will originate from the north and pass the southerly spur switch, 2) Train will back into the easterly spur to pick up loaded cars and transfer them to the westerly spur, 3) Train then moves back to the easterly spur to drop off empty cars, 4) Train proceeds south to Turlock were it turns around and then proceeds north picking up loaded cars along the service route, 5) At the winery, the train will back into the westerly spur line at the northerly spur switch to pick up loaded cars, then proceeds north.

With respect to current train activity, the addition of the winery spur lines will not significantly increase delays to Keyes Road for the southbound train trip. The train crossing duration may increase somewhat, as the train will be slowing in order to stop and back-up into the southerly spur line switch south of Keyes Road. As previously discussed, this existing southbound crossing time was observed to be 40 seconds and this would be expected to increase somewhat due to the train slowing as it crosses Keyes Road.

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duration was observed at 54 seconds, and this resulted in observed vehicle queues at the crossing on eastbound and westbound Keyes Road of two (2) vehicles and four (4) vehicles, respectively. Extrapolating this information out for the additional three minutes of delay associated with the shorter duration estimate, it would be expected that vehicle queues of 8 vehicles and 16 vehicles would form on eastbound and westbound Keyes Road, respectively. For the longer eight minute duration estimate, vehicle queues of 16 and 32 vehicles would be expected on eastbound and westbound Keyes Road. Following departure of the train, it is estimated that a 32 vehicle queue would require another 70 seconds to disperse.

As noted in the project application, the statement has been made that *the train engineers will be as courteous as possible, by pulling clear of Keyes Road throughout this process if any large backups are seen.* Should this occur, it is likely that the loaded car pickup could be accomplished in two steps, with the northbound train first clearing Keyes Road and permitting traffic to clear, then followed by backing across Keyes Road to secure the loaded cars and then proceeding north.

APPENDIX

EXISTING
LEVEL OF SERVICE

EXISTING PLUS PROJECT
LEVELS OF SERVICE

TRAFFIC COUNTS

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	145	29	50	287	27	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	156	31	54	309	29	19
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			187		588	172
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			187		588	172
tC, single (s)			4.1		6.6	6.5
tC, 2 stage (s)						
tF (s)			2.2		3.7	3.6
p0 queue free %			96		93	98
cM capacity (veh/h)			1387		423	798

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	187	362	48
Volume Left	0	54	29
Volume Right	31	0	19
cSH	1700	1387	521
Volume to Capacity	0.11	0.04	0.09
Queue Length 95th (ft)	0	3	8
Control Delay (s)	0.0	1.5	12.6
Lane LOS		A	B
Approach Delay (s)	0.0	1.5	12.6
Approach LOS			B

Intersection Summary			
Average Delay	1.9		
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	168	3	0	383	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	181	3	0	412	2	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			184		594	182
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			184		594	182
tC, single (s)			5.1		7.4	7.2
tC, 2 stage (s)						
tF (s)			3.1		4.4	4.2
p0 queue free %			100		99	100
cM capacity (veh/h)			968		339	661

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	184	412	2
Volume Left	0	0	2
Volume Right	3	0	0
cSH	1700	968	339
Volume to Capacity	0.11	0.00	0.01
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	15.7
Lane LOS			C
Approach Delay (s)	0.0	0.0	15.7
Approach LOS			C

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	30.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	424	7	9	168	19	42
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	456	8	10	181	20	45
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			463		660	460
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			463		660	460
tC, single (s)			4.2		6.8	6.4
tC, 2 stage (s)						
tF (s)			2.3		3.9	3.5
p0 queue free %			99		94	92
cM capacity (veh/h)			1052		368	572

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	463	190	66
Volume Left	0	10	20
Volume Right	8	0	45
cSH	1700	1052	488
Volume to Capacity	0.27	0.01	0.13
Queue Length 95th (ft)	0	1	12
Control Delay (s)	0.0	0.5	13.5
Lane LOS		A	B
Approach Delay (s)	0.0	0.5	13.5
Approach LOS			B

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	494	2	2	178	0	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	531	2	2	191	0	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			533		728	532
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			533		728	532
tC, single (s)			5.1		7.4	7.2
tC, 2 stage (s)						
tF (s)			3.1		4.4	4.2
p0 queue free %			100		100	99
cM capacity (veh/h)			680		276	397

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	533	194	4
Volume Left	0	2	0
Volume Right	2	0	4
cSH	1700	680	397
Volume to Capacity	0.31	0.00	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.2	14.2
Lane LOS		A	B
Approach Delay (s)	0.0	0.2	14.2
Approach LOS			B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	36.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	145	31	52	287	30	20
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	156	33	56	309	32	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			189		593	173
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			189		593	173
tC, single (s)			4.1		6.6	6.5
tC, 2 stage (s)						
tF (s)			2.2		3.7	3.6
p0 queue free %			96		92	97
cM capacity (veh/h)			1385		419	797

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	189	365	54
Volume Left	0	56	32
Volume Right	33	0	22
cSH	1700	1385	517
Volume to Capacity	0.11	0.04	0.10
Queue Length 95th (ft)	0	3	9
Control Delay (s)	0.0	1.5	12.8
Lane LOS		A	B
Approach Delay (s)	0.0	1.5	12.8
Approach LOS			B

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	170	3	0	385	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	183	3	0	414	2	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			186		598	184
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			186		598	184
tC, single (s)			5.1		7.4	7.2
tC, 2 stage (s)						
tF (s)			3.1		4.4	4.2
p0 queue free %			100		99	100
cM capacity (veh/h)			966		337	659

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	186	414	2
Volume Left	0	0	2
Volume Right	3	0	0
cSH	1700	966	337
Volume to Capacity	0.11	0.00	0.01
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	15.7
Lane LOS			C
Approach Delay (s)	0.0	0.0	15.7
Approach LOS			C

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	30.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	424	10	9	168	21	47
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	456	11	10	181	23	51
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			467		661	461
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			467		661	461
tC, single (s)			4.2		6.8	6.4
tC, 2 stage (s)						
tF (s)			2.3		3.9	3.5
p0 queue free %			99		94	91
cM capacity (veh/h)			1049		367	570

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	467	190	73
Volume Left	0	10	23
Volume Right	11	0	51
cSH	1700	1049	487
Volume to Capacity	0.27	0.01	0.15
Queue Length 95th (ft)	0	1	13
Control Delay (s)	0.0	0.5	13.7
Lane LOS		A	B
Approach Delay (s)	0.0	0.5	13.7
Approach LOS			B

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	33.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	499	2	2	178	0	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	537	2	2	191	0	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			539		733	538
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			539		733	538
tC, single (s)			5.1		7.4	7.2
tC, 2 stage (s)						
tF (s)			3.1		4.4	4.2
p0 queue free %			100		100	99
cM capacity (veh/h)			677		274	394

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	539	194	4
Volume Left	0	2	0
Volume Right	2	0	4
cSH	1700	677	394
Volume to Capacity	0.32	0.00	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.2	14.2
Lane LOS		A	B
Approach Delay (s)	0.0	0.2	14.2
Approach LOS			B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	36.4%	ICU Level of Service	A
Analysis Period (min)	15		

ALL TRAFFIC DATA

0480-01

(916) 771-8700
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County of Stanislaus
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Heavy Trucks On Bank 2

File Name : 16-7710-001 Bystrum Rd & Keyes Rd
Date : 10/4/2016

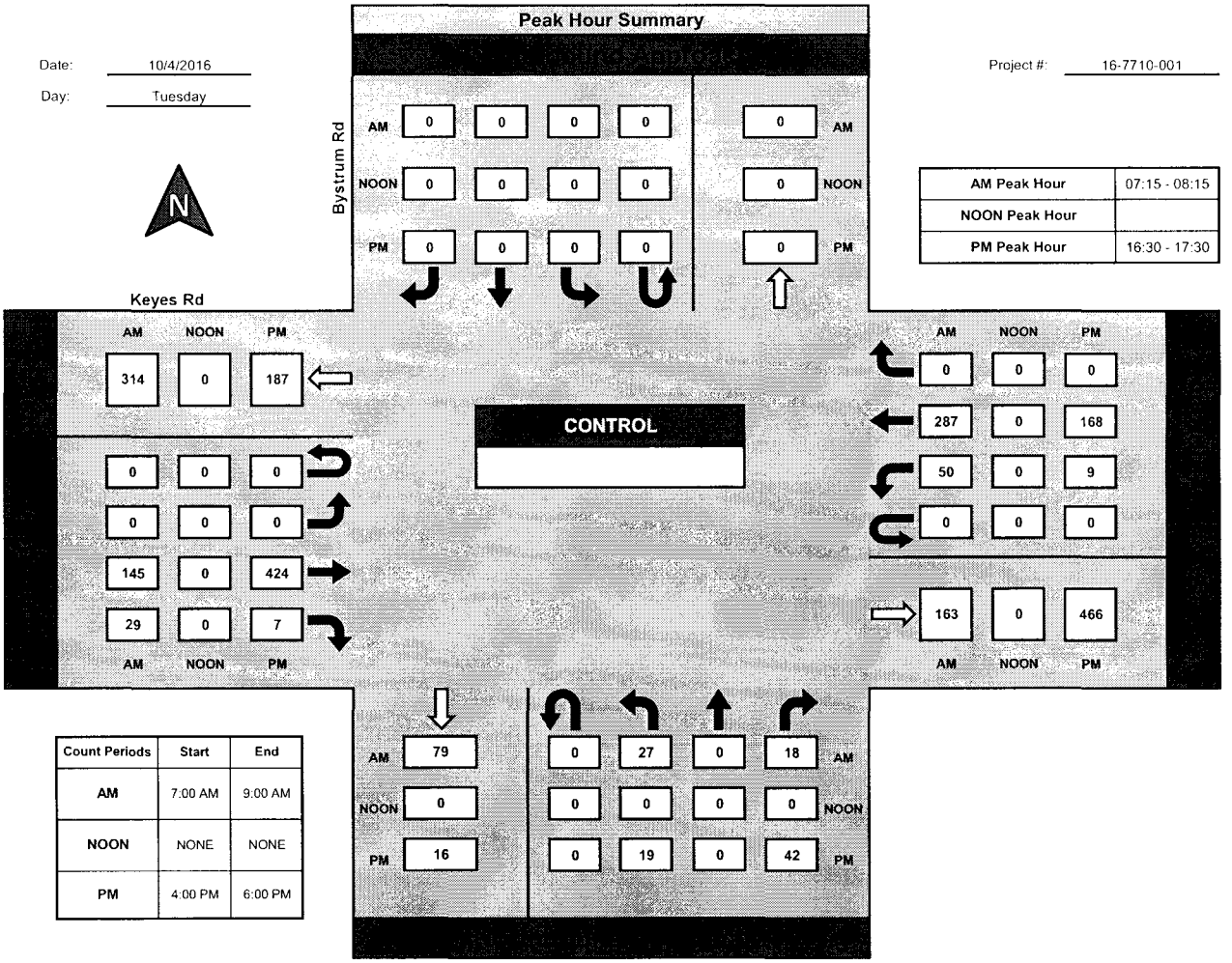
Unshifted Count = All Vehicles & Uturns

	Bystrum Rd Southbound					Keyes Rd Westbound					Bystrum Rd Northbound					Keyes Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	0	0	0	0	0	8	36	0	0	44	1	0	3	0	4	0	30	5	0	35	83	0
7:15	0	0	0	0	0	12	67	0	0	79	10	0	5	0	15	0	40	9	0	49	143	0
7:30	0	0	0	0	0	11	70	0	0	81	4	0	3	0	7	0	40	4	0	44	132	0
7:45	0	0	0	0	0	14	79	0	0	93	6	0	4	0	10	0	36	10	0	46	149	0
Total	0	0	0	0	0	45	252	0	0	297	21	0	15	0	36	0	146	28	0	174	507	0
8:00	0	0	0	0	0	13	71	0	0	84	7	0	6	0	13	0	29	6	0	35	132	0
8:15	0	0	0	0	0	13	62	0	0	75	0	0	3	0	3	0	26	6	0	32	110	0
8:30	0	0	0	0	0	3	40	0	0	43	5	0	5	0	10	0	38	5	0	43	96	0
8:45	0	0	0	0	0	6	35	0	0	41	0	0	2	0	2	0	30	4	0	34	77	0
Total	0	0	0	0	0	35	208	0	0	243	12	0	16	0	28	0	123	21	0	144	415	0
16:00	0	0	0	0	0	2	43	0	0	45	8	0	21	0	29	0	87	0	0	87	161	0
16:15	0	0	0	0	0	4	47	0	0	51	2	0	7	0	9	0	81	3	0	84	144	0
16:30	0	0	0	0	0	1	34	0	0	35	5	0	7	0	12	0	108	2	0	110	157	0
16:45	0	0	0	0	0	1	50	0	0	51	5	0	2	0	7	0	96	0	0	96	154	0
Total	0	0	0	0	0	8	174	0	0	182	20	0	37	0	57	0	372	5	0	377	616	0
17:00	0	0	0	0	0	2	45	0	0	47	6	0	20	0	26	0	107	0	0	107	180	0
17:15	0	0	0	0	0	5	39	0	0	44	3	0	13	0	16	0	113	5	0	118	178	0
17:30	0	0	0	0	0	10	34	0	0	44	5	0	8	0	13	0	93	8	0	101	158	0
17:45	0	0	0	0	0	7	35	0	0	42	1	0	5	0	6	0	105	5	0	110	158	0
Total	0	0	0	0	0	24	153	0	0	177	15	0	46	0	61	0	418	18	0	436	674	0
Grand Total	0	0	0	0	0	112	787	0	0	899	68	0	114	0	182	0	1059	72	0	1131	2212	0
Apprch %	0.0%	0.0%	0.0%	0.0%		12.5%	87.5%	0.0%	0.0%		37.4%	0.0%	62.6%	0.0%		0.0%	93.6%	6.4%	0.0%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	35.6%	0.0%	0.0%	40.6%	3.1%	0.0%	5.2%	0.0%	8.2%	0.0%	47.9%	3.3%	0.0%	51.1%	100.0%	

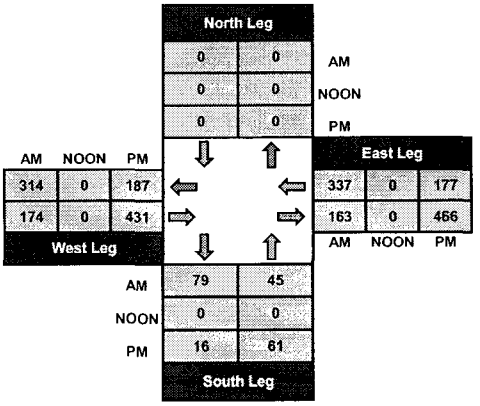
AM PEAK HOUR	Bystrum Rd Southbound					Keyes Rd Westbound					Bystrum Rd Northbound					Keyes Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:15 to 08:15																					
Peak Hour For Entire Intersection Begins at 07:15																					
7:15	0	0	0	0	0	12	67	0	0	79	10	0	5	0	15	0	40	9	0	49	143
7:30	0	0	0	0	0	11	70	0	0	81	4	0	3	0	7	0	40	4	0	44	132
7:45	0	0	0	0	0	14	79	0	0	93	6	0	4	0	10	0	36	10	0	46	149
8:00	0	0	0	0	0	13	71	0	0	84	7	0	6	0	13	0	29	6	0	35	132
Total Volume	0	0	0	0	0	50	287	0	0	337	27	0	18	0	45	0	145	29	0	174	556
% App Total	0.0%	0.0%	0.0%	0.0%		14.8%	85.2%	0.0%	0.0%		60.0%	0.0%	40.0%	0.0%		0.0%	83.3%	16.7%	0.0%		
PHF	.000	.000	.000	.000	.000	.893	.908	.000	.000	.906	.675	.000	.750	.000	.750	.000	.906	.725	.000	.888	.933

PM PEAK HOUR	Bystrum Rd Southbound					Keyes Rd Westbound					Bystrum Rd Northbound					Keyes Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	0	0	0	1	34	0	0	35	5	0	7	0	12	0	108	2	0	110	157
16:45	0	0	0	0	0	1	50	0	0	51	5	0	2	0	7	0	96	0	0	96	154
17:00	0	0	0	0	0	2	45	0	0	47	6	0	20	0	26	0	107	0	0	107	180
17:15	0	0	0	0	0	5	39	0	0	44	3	0	13	0	16	0	113	5	0	118	178
Total Volume	0	0	0	0	0	9	168	0	0	177	19	0	42	0	61	0	424	7	0	431	669
% App Total	0.0%	0.0%	0.0%	0.0%		5.1%	94.9%	0.0%	0.0%		31.1%	0.0%	68.9%	0.0%		0.0%	98.4%	1.6%	0.0%		
PHF	.000	.000	.000	.000	.000	.450	.840	.000	.000	.868	.792	.000	.525	.000	.587	.000	.938	.350	.000	.913	.929

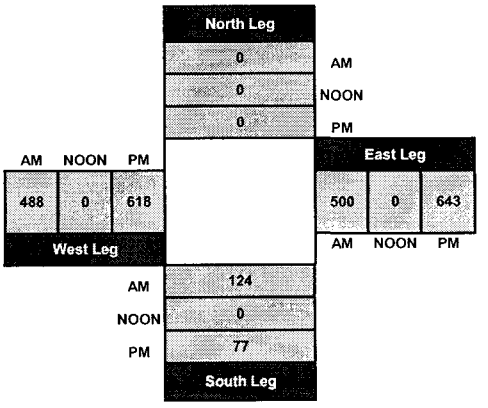
Bystrum Rd & Keyes Rd



Total Ins & Outs



Total Volume Per Leg



ALL TRAFFIC DATA

County of Stanislaus
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Heavy Trucks On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7710-001 Bystrum Rd & Keyes Rd
Date : 10/4/2016

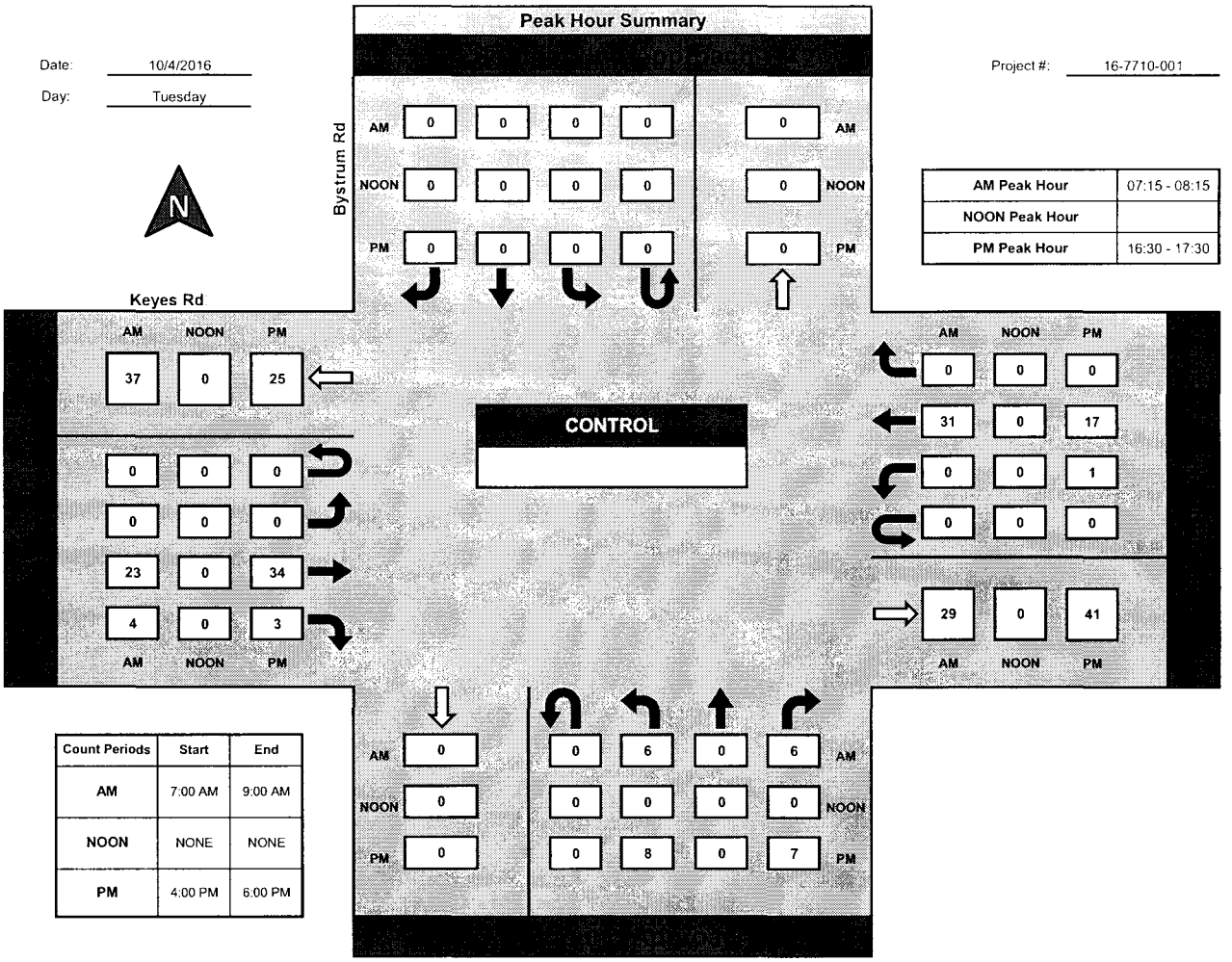
Bank 2 Count = Heavy Trucks

	Bystrum Rd Southbound					Keyes Rd Westbound					Bystrum Rd Northbound					Keyes Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	0	0	1	4	0	0	5	1	0	0	0	1	0	2	2	0	4	10	0
7:15	0	0	0	0	0	0	8	0	0	8	3	0	3	0	6	0	8	1	0	9	23	0
7:30	0	0	0	0	0	0	6	0	0	6	1	0	2	0	3	0	4	1	0	5	14	0
7:45	0	0	0	0	0	0	10	0	0	10	1	0	1	0	2	0	7	1	0	8	20	0
Total	0	0	0	0	0	1	28	0	0	29	6	0	6	0	12	0	21	5	0	26	67	0
8:00	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	0	4	1	0	5	13	0
8:15	0	0	0	0	0	1	10	0	0	11	0	0	1	0	1	0	5	2	0	7	19	0
8:30	0	0	0	0	0	1	2	0	0	3	3	0	1	0	4	0	3	2	0	5	12	0
8:45	0	0	0	0	0	1	5	0	0	6	0	0	1	0	1	0	6	2	0	8	15	0
Total	0	0	0	0	0	3	24	0	0	27	4	0	3	0	7	0	18	7	0	25	59	0
16:00	0	0	0	0	0	2	6	0	0	8	1	0	2	0	3	0	4	0	0	4	15	0
16:15	0	0	0	0	0	1	4	0	0	5	1	0	2	0	3	0	2	3	0	5	13	0
16:30	0	0	0	0	0	1	2	0	0	3	3	0	0	0	3	0	12	2	0	14	20	0
16:45	0	0	0	0	0	0	6	0	0	6	2	0	1	0	3	0	7	0	0	7	16	0
Total	0	0	0	0	0	4	18	0	0	22	7	0	5	0	12	0	25	5	0	30	64	0
17:00	0	0	0	0	0	0	7	0	0	7	2	0	2	0	4	0	7	0	0	7	18	0
17:15	0	0	0	0	0	0	2	0	0	2	1	0	4	0	5	0	8	1	0	9	16	0
17:30	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	5	0	0	5	10	0
17:45	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	0	7	1	0	8	12	0
Total	0	0	0	0	0	1	16	0	0	17	3	0	7	0	10	0	27	2	0	29	56	0
Grand Total	0	0	0	0	0	9	86	0	0	95	20	0	21	0	41	0	91	19	0	110	246	0
Apprch %	0.0%	0.0%	0.0%			9.5%	90.5%	0.0%			48.8%	0.0%	51.2%			0.0%	82.7%	17.3%				
Total %	0.0%	0.0%	0.0%		0.0%	3.7%	35.0%	0.0%		38.6%	8.1%	0.0%	8.5%		16.7%	0.0%	37.0%	7.7%		44.7%	100.0%	

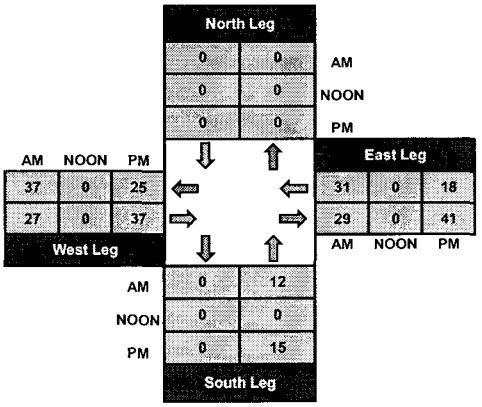
AM PEAK HOUR	Bystrum Rd Southbound					Keyes Rd Westbound					Bystrum Rd Northbound					Keyes Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:15 to 08:15																					
Peak Hour For Entire Intersection Begins at 07:15																					
7:15	0	0	0	0	0	0	8	0	0	8	3	0	3	0	6	0	8	1	0	9	23
7:30	0	0	0	0	0	0	6	0	0	6	1	0	2	0	3	0	4	1	0	5	14
7:45	0	0	0	0	0	0	10	0	0	10	1	0	1	0	2	0	7	1	0	8	20
8:00	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	0	4	1	0	5	13
Total Volume	0	0	0	0	0	0	31	0	0	31	6	0	6	0	12	0	23	4	0	27	70
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			50.0%	0.0%	50.0%			0.0%	85.2%	14.8%			
PHF	.000	.000	.000		.000	.000	.775	.000		.775	.500	.000	.500		.500	.000	.719	1.000		.750	.761

PM PEAK HOUR	Bystrum Rd Southbound					Keyes Rd Westbound					Bystrum Rd Northbound					Keyes Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	0	0	0	1	2	0	0	3	3	0	0	0	3	0	12	2	0	14	20
16:45	0	0	0	0	0	0	6	0	0	6	2	0	1	0	3	0	7	0	0	7	16
17:00	0	0	0	0	0	0	7	0	0	7	2	0	2	0	4	0	7	0	0	7	18
17:15	0	0	0	0	0	0	2	0	0	2	1	0	4	0	5	0	8	1	0	9	16
Total Volume	0	0	0	0	0	1	17	0	0	18	8	0	7	0	15	0	34	3	0	37	70
% App Total	0.0%	0.0%	0.0%			5.6%	94.4%	0.0%			53.3%	0.0%	46.7%			0.0%	91.9%	8.1%			
PHF	.000	.000	.000		.000	.250	.607	.000		.643	.667	.000	.438		.750	.000	.708	.375		.661	.875

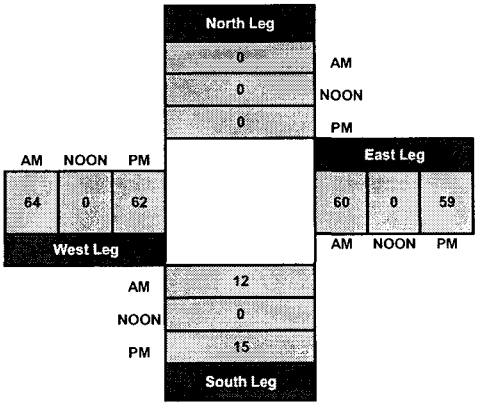
Bystrum Rd & Keyes Rd



Total Ins & Outs



Total Volume Per Leg



ALL TRAFFIC DATA

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0480-01

County of Stanislaus
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Heavy Trucks On Bank 2

File Name : 16-7710-002 East Entrance to Bronco Winery & Keyes Rd
Date : 10/4/2016

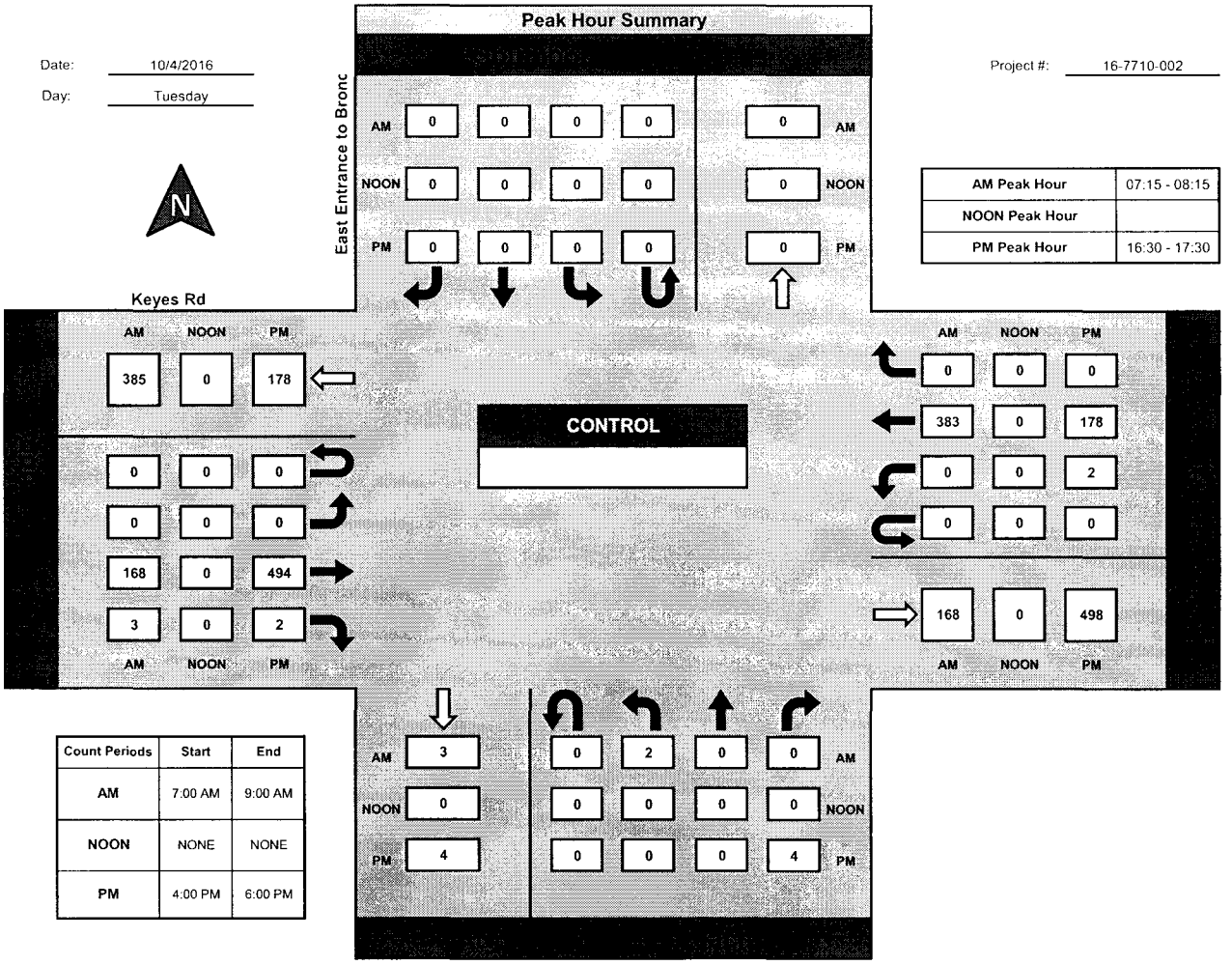
Unshifted Count = All Vehicles & Uturns

	East Entrance to Bronco Winery Southbound					Keyes Rd Westbound					East Entrance to Bronco Winery Northbound					Keyes Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	0	0	0	0	0	0	54	0	0	54	0	0	0	0	0	0	31	0	0	31	85	0
7:15	0	0	0	0	0	0	73	0	0	73	0	0	0	0	0	0	35	1	0	36	109	0
7:30	0	0	0	0	0	0	104	0	0	104	0	0	0	0	0	0	53	1	0	54	158	0
7:45	0	0	0	0	0	0	109	0	0	109	0	0	0	0	0	0	42	0	0	42	151	0
Total	0	0	0	0	0	0	340	0	0	340	0	0	0	0	0	0	161	2	0	163	503	0
8:00	0	0	0	0	0	0	97	0	0	97	2	0	0	0	2	0	38	1	0	39	138	0
8:15	0	0	0	0	0	1	71	0	0	72	0	0	0	0	0	0	26	0	0	26	98	0
8:30	0	0	0	0	0	0	53	0	0	53	0	0	0	0	0	0	45	0	0	45	98	0
8:45	0	0	0	0	0	0	41	0	0	41	0	0	0	0	0	0	35	0	0	35	76	0
Total	0	0	0	0	0	1	262	0	0	263	2	0	0	0	2	0	144	1	0	145	410	0
16:00	0	0	0	0	0	0	49	0	0	49	0	0	0	0	0	0	120	0	0	120	169	0
16:15	0	0	0	0	0	0	50	0	0	50	0	0	0	0	0	0	94	0	0	94	144	0
16:30	0	0	0	0	0	1	38	0	0	39	0	0	0	0	0	0	130	0	0	130	169	0
16:45	0	0	0	0	0	0	49	0	0	49	0	0	1	0	1	0	108	1	0	109	159	0
Total	0	0	0	0	0	1	186	0	0	187	0	0	1	0	1	0	452	1	0	453	641	0
17:00	0	0	0	0	0	1	48	0	0	49	0	0	1	0	1	0	127	0	0	127	177	0
17:15	0	0	0	0	0	0	43	0	0	43	0	0	2	0	2	0	129	1	0	130	175	0
17:30	0	0	0	0	0	0	43	0	0	43	0	0	1	0	1	0	104	1	0	105	149	0
17:45	0	0	0	0	0	0	44	0	0	44	0	0	1	0	1	0	121	0	0	121	166	0
Total	0	0	0	0	0	1	178	0	0	179	0	0	5	0	5	0	481	2	0	483	667	0
Grand Total	0	0	0	0	0	3	966	0	0	969	2	0	6	0	8	0	1238	6	0	1244	2221	0
Apprch %	0.0%	0.0%	0.0%	0.0%		0.3%	99.7%	0.0%	0.0%		25.0%	0.0%	75.0%	0.0%		0.0%	99.5%	0.5%	0.0%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	43.5%	0.0%	0.0%	43.6%	0.1%	0.0%	0.3%	0.0%	0.4%	0.0%	55.7%	0.3%	0.0%	56.0%	100.0%	

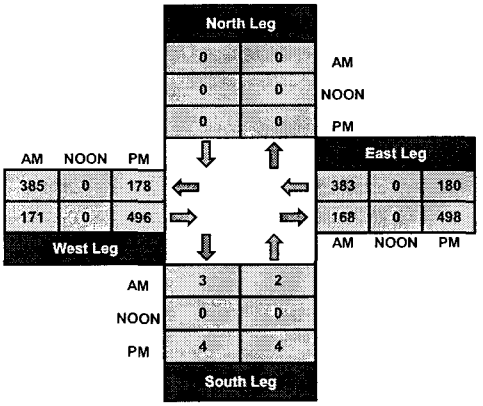
AM PEAK HOUR	East Entrance to Bronco Winery Southbound					Keyes Rd Westbound					East Entrance to Bronco Winery Northbound					Keyes Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:15 to 08:15																					
Peak Hour For Entire Intersection Begins at 07:15																					
7:15	0	0	0	0	0	0	73	0	0	73	0	0	0	0	0	0	35	1	0	36	109
7:30	0	0	0	0	0	0	104	0	0	104	0	0	0	0	0	0	53	1	0	54	158
7:45	0	0	0	0	0	0	109	0	0	109	0	0	0	0	0	0	42	0	0	42	151
8:00	0	0	0	0	0	0	97	0	0	97	2	0	0	0	2	0	38	1	0	39	138
Total Volume	0	0	0	0	0	0	383	0	0	383	2	0	0	0	2	0	168	3	0	171	556
% App Total	0.0%	0.0%	0.0%	0.0%		0.0%	100.0%	0.0%	0.0%		100.0%	0.0%	0.0%	0.0%		0.0%	98.2%	1.8%	0.0%		
PHF	.000	.000	.000	.000	.000	.000	.878	.000	.000	.878	.250	.000	.000	.000	.250	.000	.792	.750	.000	.792	.880

PM PEAK HOUR	East Entrance to Bronco Winery Southbound					Keyes Rd Westbound					East Entrance to Bronco Winery Northbound					Keyes Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	0	0	0	1	38	0	0	39	0	0	0	0	0	0	130	0	0	130	169
16:45	0	0	0	0	0	0	49	0	0	49	0	0	1	0	1	0	108	1	0	109	159
17:00	0	0	0	0	0	1	48	0	0	49	0	0	1	0	1	0	127	0	0	127	177
17:15	0	0	0	0	0	0	43	0	0	43	0	0	2	0	2	0	129	1	0	130	175
Total Volume	0	0	0	0	0	2	178	0	0	180	0	0	4	0	4	0	494	2	0	496	680
% App Total	0.0%	0.0%	0.0%	0.0%		1.1%	98.9%	0.0%	0.0%		0.0%	0.0%	100.0%	0.0%		0.0%	99.6%	0.4%	0.0%		
PHF	.000	.000	.000	.000	.000	.500	.908	.000	.000	.918	.000	.000	.500	.000	.500	.000	.950	.500	.000	.954	.960

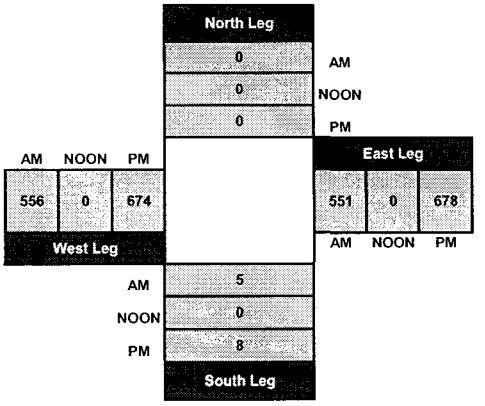
East Entrance to Bronco Winery & Keyes Rd



Total Ins & Outs



Total Volume Per Leg



ALL TRAFFIC DATA

County of Stanislaus
(916) 771-8700
orders@atdtraffic.com

All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Heavy Trucks On Bank 2

File Name : 16-7710-002 East Entrance to Bronco Winery & Keyes Rd
Date : 10/4/2016

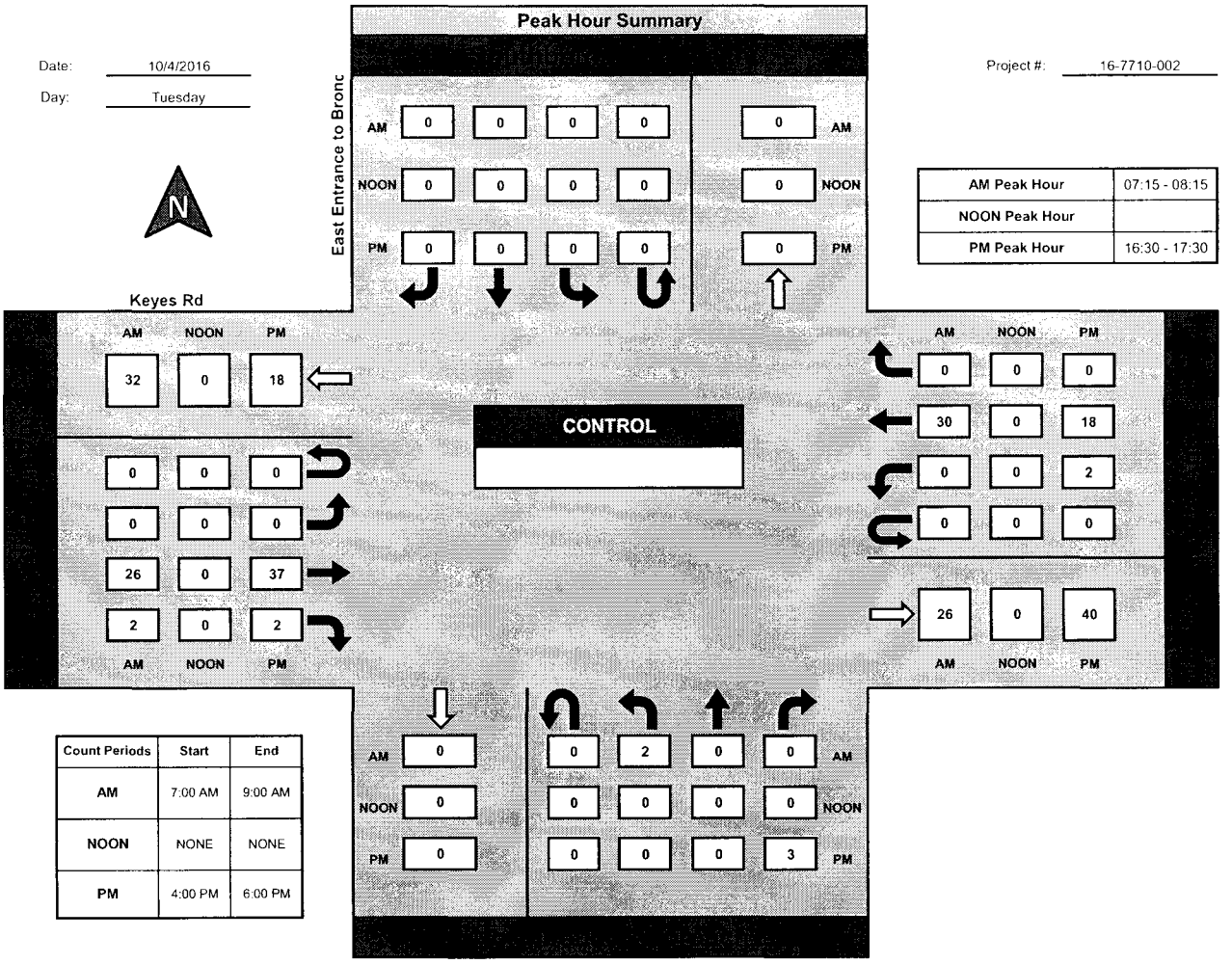
Bank 2 Count = Heavy Trucks

	East Entrance to Bronco Winery Southbound					Keyes Rd Westbound					East Entrance to Bronco Winery Northbound					Keyes Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	2	0	0	2	8	0
7:15	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	5	1	0	6	12	0
7:30	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	7	1	0	8	18	0
7:45	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	8	0	0	8	17	0
Total	0	0	0	0	0	0	31	0	0	31	0	0	0	0	0	0	22	2	0	24	55	0
8:00	0	0	0	0	0	0	5	0	0	5	2	0	0	0	2	0	6	0	0	6	13	0
8:15	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	7	0	0	7	16	0
8:30	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	6	0	0	6	10	0
8:45	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	7	0	0	7	15	0
Total	0	0	0	0	0	0	26	0	0	26	2	0	0	0	2	0	26	0	0	26	54	0
16:00	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	5	0	0	5	12	0
16:15	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	10	0
16:30	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	13	0	0	13	18	0
16:45	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	7	1	0	8	14	0
Total	0	0	0	0	0	1	21	0	0	22	0	0	1	0	1	0	30	1	0	31	54	0
17:00	0	0	0	0	0	1	6	0	0	7	0	0	0	0	0	0	9	0	0	9	16	0
17:15	0	0	0	0	0	0	3	0	0	3	0	0	2	0	2	0	8	1	0	9	14	0
17:30	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	6	1	0	7	13	0
17:45	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	0	6	0	0	6	10	0
Total	0	0	0	0	0	1	17	0	0	18	0	0	4	0	4	0	29	2	0	31	53	0
Grand Total	0	0	0	0	0	2	95	0	0	97	2	0	5	0	7	0	107	5	0	112	216	0
Apprch %	0.0%	0.0%	0.0%			2.1%	97.9%	0.0%			28.6%	0.0%	71.4%			0.0%	95.5%	4.5%				
Total %	0.0%	0.0%	0.0%		0.0%	0.9%	44.0%	0.0%		44.9%	0.9%	0.0%	2.3%		3.2%	0.0%	49.5%	2.3%		51.9%	100.0%	

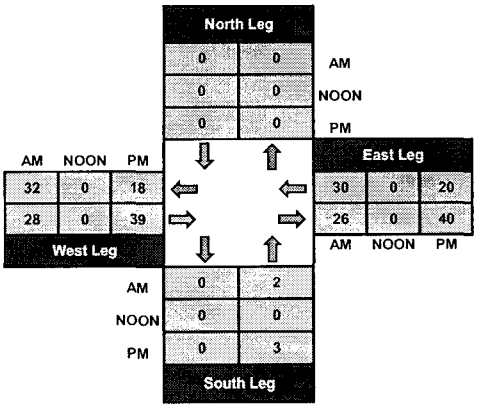
AM PEAK HOUR	East Entrance to Bronco Winery Southbound					Keyes Rd Westbound					East Entrance to Bronco Winery Northbound					Keyes Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:15 to 08:15																					
Peak Hour For Entire Intersection Begins at 07:15																					
7:15	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	5	1	0	6	12
7:30	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	7	1	0	8	18
7:45	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	8	0	0	8	17
8:00	0	0	0	0	0	0	5	0	0	5	2	0	0	0	2	0	6	0	0	6	13
Total Volume	0	0	0	0	0	0	30	0	0	30	2	0	0	0	2	0	26	2	0	28	60
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			0.0%	92.9%	7.1%			
PHF	.000	.000	.000		.000	.000	.750	.000		.750	.250	.000	.000		.250	.000	.813	.500		.875	.833

PM PEAK HOUR	East Entrance to Bronco Winery Southbound					Keyes Rd Westbound					East Entrance to Bronco Winery Northbound					Keyes Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	13	0	0	13	18
16:45	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	7	1	0	8	14
17:00	0	0	0	0	0	1	6	0	0	7	0	0	0	0	0	0	9	0	0	9	16
17:15	0	0	0	0	0	0	3	0	0	3	0	0	2	0	2	0	8	1	0	9	14
Total Volume	0	0	0	0	0	2	18	0	0	20	0	0	3	0	3	0	37	2	0	39	62
% App Total	0.0%	0.0%	0.0%			10.0%	90.0%	0.0%			0.0%	0.0%	100.0%			0.0%	94.9%	5.1%			
PHF	.000	.000	.000		.000	.500	.750	.000		.714	.000	.000	.375		.375	.000	.712	.500		.750	.861

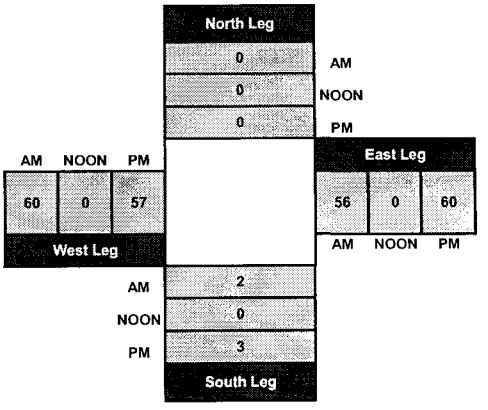
East Entrance to Bronco Winery & Keyes Rd



Total Ins & Outs



Total Volume Per Leg



Prepared by National Data & Surveying Services

CLASSIFICATION

Bystrum Rd S/O Keyes Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_004

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	21	2	0	1	0	0	0	1	0	1	0	0	26
1:00	0	5	1	0	1	0	0	0	2	0	0	0	0	9
2:00	0	15	1	1	0	0	0	1	1	0	0	0	0	19
3:00	1	13	1	0	5	0	0	1	1	0	0	0	0	22
4:00	0	10	6	0	11	0	0	0	5	0	0	0	0	32
5:00	0	49	8	0	20	0	0	0	9	0	0	0	0	86
6:00	0	73	20	1	8	1	0	1	5	0	2	0	0	111
7:00	0	65	16	0	14	0	0	0	12	0	1	2	0	110
8:00	0	54	6	2	13	0	0	2	10	0	0	0	0	87
9:00	0	18	3	1	7	0	0	1	12	0	2	0	0	44
10:00	1	13	13	4	12	0	0	1	10	0	1	0	0	55
11:00	0	20	8	0	8	0	0	1	12	0	2	0	0	51
12:00 PM	1	31	8	0	10	1	0	1	12	0	1	2	0	67
13:00	0	50	14	1	11	3	0	1	12	0	0	1	0	93
14:00	0	88	24	5	14	0	0	0	12	0	0	1	0	144
15:00	1	62	16	3	13	0	0	0	5	0	0	1	0	101
16:00	0	36	10	0	11	0	0	2	15	0	2	0	0	76
17:00	0	75	13	1	6	0	0	0	8	0	1	0	0	104
18:00	0	45	9	0	0	1	0	1	7	0	0	0	0	63
19:00	0	18	4	1	3	0	0	0	8	0	0	0	0	34
20:00	0	10	2	0	1	0	0	0	6	0	0	0	0	19
21:00	0	18	3	0	2	0	0	0	1	0	0	0	0	24
22:00	0	33	5	0	1	0	0	0	1	0	0	0	0	40
23:00	0	57	1	0	1	0	0	0	1	0	0	0	0	60
Totals	4	879	194	20	173	6		15	168		13	7		1477
% of Totals	0%	60%	13%	1%	12%	0%		1%	11%		1%	0%		100%

AM Volumes	2	356	85	9	100	1	0	8	80	0	9	2	0	652
% AM	0%	24%	6%	1%	7%	0%		1%	5%		1%	0%		44%
AM Peak Hour	10:00	6:00	6:00	10:00	5:00	6:00		8:00	7:00		6:00	7:00		6:00
Volume	1	73	20	4	20	1		2	12		2	2		111
PM Volumes	2	523	109	11	73	5	0	5	88	0	4	5	0	825
% PM	0%	35%	7%	1%	5%	0%		0%	6%		0%	0%		56%
PM Peak Hour	12:00	14:00	14:00	14:00	14:00	13:00		16:00	16:00		16:00	12:00		14:00
Volume	1	88	24	5	14	3		2	15		2	2		144

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	197		13%	160		11%	180		12%	940		64%

Classification Definitions

1. Motorcycles
2. Passenger Cars
3. 2-Axle, 4-Tire Single Units
4. Buses
5. 2-Axle, 6-Tire Single Units
6. 3-Axle Single Units
7. > =4-Axle Single Units
8. <=4-Axle Single Trailers
9. 5-Axle Single Trailers
10. >=6-Axle Single Trailers
11. <=5-Axle Multi-Trailers
12. 6-Axle Multi-Trailers
13. >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Bystrum Rd S/O Keyes Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_004s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:00	0	2	1	0	1	0	0	0	0	0	0	0	0	4
2:00	0	9	1	0	0	0	0	0	1	0	0	0	0	11
3:00	1	11	0	0	1	0	0	0	1	0	0	0	0	14
4:00	0	9	4	0	7	0	0	0	4	0	0	0	0	24
5:00	0	48	7	0	15	0	0	0	7	0	0	0	0	77
6:00	0	32	11	1	7	0	0	0	3	0	2	0	0	56
7:00	0	46	11	0	11	0	0	0	5	0	0	1	0	74
8:00	0	36	4	1	10	0	0	2	6	0	0	0	0	59
9:00	0	12	1	1	6	0	0	1	5	0	0	0	0	26
10:00	1	5	6	3	9	0	0	1	3	0	1	0	0	29
11:00	0	7	1	0	5	0	0	0	7	0	1	0	0	21
12:00 PM	1	11	4	0	9	1	0	1	6	0	0	1	0	34
13:00	0	39	7	1	8	0	0	1	8	0	0	0	0	64
14:00	0	38	10	5	6	0	0	0	6	0	0	1	0	66
15:00	0	14	5	2	11	0	0	0	3	0	0	0	0	35
16:00	0	0	2	0	4	0	0	2	6	0	1	0	0	15
17:00	0	29	6	1	5	0	0	0	1	0	0	0	0	42
18:00	0	4	1	0	0	1	0	0	4	0	0	0	0	10
19:00	0	4	2	1	1	0	0	0	5	0	0	0	0	13
20:00	0	5	2	0	1	0	0	0	0	0	0	0	0	8
21:00	0	15	3	0	2	0	0	0	0	0	0	0	0	20
22:00	0	16	3	0	1	0	0	0	1	0	0	0	0	21
23:00	0	19	0	0	1	0	0	0	0	0	0	0	0	20
Totals	3	411	92	16	122	2		8	82		5	3		744
% of Totals	0%	55%	12%	2%	16%	0%		1%	11%		1%	0%		100%

AM Volumes	2	217	47	6	73	0	0	4	42	0	4	1	0	396
% AM	0%	29%	6%	1%	10%			1%	6%		1%	0%		53%
AM Peak Hour	10:00	5:00	6:00	10:00	5:00			8:00	5:00		6:00	7:00		5:00
Volume	1	48	11	3	15			2	7		2	1		77
PM Volumes	1	194	45	10	49	2	0	4	40	0	1	2	0	348
% PM	0%	26%	6%	1%	7%	0%		1%	5%		0%	0%		47%
PM Peak Hour	12:00	13:00	14:00	14:00	15:00	12:00		16:00	13:00		16:00	12:00		14:00
Volume	1	39	10	5	11	1		2	8		1	1		66

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	133		18%	98		13%	57		8%	456		61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Bystrum Rd S/O Keyes Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_004n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	21	2	0	0	0	0	0	1	0	1	0	0	25
1:00	0	3	0	0	0	0	0	0	2	0	0	0	0	5
2:00	0	6	0	1	0	0	0	1	0	0	0	0	0	8
3:00	0	2	1	0	4	0	0	1	0	0	0	0	0	8
4:00	0	1	2	0	4	0	0	0	1	0	0	0	0	8
5:00	0	1	1	0	5	0	0	0	2	0	0	0	0	9
6:00	0	41	9	0	1	1	0	1	2	0	0	0	0	55
7:00	0	19	5	0	3	0	0	0	7	0	1	1	0	36
8:00	0	18	2	1	3	0	0	0	4	0	0	0	0	28
9:00	0	6	2	0	1	0	0	0	7	0	2	0	0	18
10:00	0	8	7	1	3	0	0	0	7	0	0	0	0	26
11:00	0	13	7	0	3	0	0	1	5	0	1	0	0	30
12:00 PM	0	20	4	0	1	0	0	0	6	0	1	1	0	33
13:00	0	11	7	0	3	3	0	0	4	0	0	1	0	29
14:00	0	50	14	0	8	0	0	0	6	0	0	0	0	78
15:00	1	48	11	1	2	0	0	0	2	0	0	1	0	66
16:00	0	36	8	0	7	0	0	0	9	0	1	0	0	61
17:00	0	46	7	0	1	0	0	0	7	0	1	0	0	62
18:00	0	41	8	0	0	0	0	1	3	0	0	0	0	53
19:00	0	14	2	0	2	0	0	0	3	0	0	0	0	21
20:00	0	5	0	0	0	0	0	0	6	0	0	0	0	11
21:00	0	3	0	0	0	0	0	0	1	0	0	0	0	4
22:00	0	17	2	0	0	0	0	0	0	0	0	0	0	19
23:00	0	38	1	0	0	0	0	0	1	0	0	0	0	40
Totals	1	468	102	4	51	4		5	86		8	4		733
% of Totals	0%	64%	14%	1%	7%	1%		1%	12%		1%	1%		100%

AM Volumes	0	139	38	3	27	1	0	4	38	0	5	1	0	256
% AM		19%	5%	0%	4%	0%		1%	5%		1%	0%		35%
AM Peak Hour		6:00	6:00	2:00	5:00	6:00		2:00	7:00		9:00	7:00		6:00
Volume		41	9	1	5	1		1	7		2	1		55
PM Volumes	1	329	64	1	24	3	0	1	48	0	3	3	0	477
% PM	0%	45%	9%	0%	3%	0%		0%	7%		0%	0%		65%
PM Peak Hour	15:00	14:00	14:00	15:00	14:00	13:00		18:00	16:00		12:00	12:00		14:00
Volume	1	50	14	1	8	3		1	9		1	1		78

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	64		9%	62		8%	123		17%	484		66%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Bystrum Rd S/O Keyes Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_004

DAILY TOTALS	NB	SB	EB	WB	Total
	733	744	0	0	1,477

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	19		0		0	0	19		12:00	9		8		0	0	17	
0:15	3		1		0	0	4		12:15	9		8		0	0	17	
0:30	3		0		0	0	3		12:30	9		8		0	0	17	
0:45	0	25	0	1	0	0		26	12:45	6	33	10	34	0	0	16	67
1:00	3		0		0	0	3		13:00	6		11		0	0	17	
1:15	0		0		0	0			13:15	8		14		0	0	22	
1:30	2		1		0	0	3		13:30	8		20		0	0	28	
1:45	0	5	3	4	0	0	3	9	13:45	7	29	19	64	0	0	26	93
2:00	4		1		0	0	5		14:00	12		9		0	0	21	
2:15	2		3		0	0	5		14:15	12		15		0	0	27	
2:30	1		2		0	0	3		14:30	41		18		0	0	59	
2:45	1	8	5	11	0	0	6	19	14:45	13	78	24	66	0	0	37	144
3:00	1		2		0	0	3		15:00	19		10		0	0	29	
3:15	3		3		0	0	6		15:15	14		11		0	0	25	
3:30	3		3		0	0	6		15:30	22		6		0	0	28	
3:45	1	8	6	14	0	0	7	22	15:45	11	66	8	35	0	0	19	101
4:00	1		2		0	0	3		16:00	28		4		0	0	32	
4:15	3		5		0	0	8		16:15	12		7		0	0	19	
4:30	2		6		0	0	8		16:30	11		3		0	0	14	
4:45	2	8	11	24	0	0	13	32	16:45	10	61	1	15	0	0	11	76
5:00	3		3		0	0	6		17:00	27		2		0	0	29	
5:15	2		11		0	0	13		17:15	15		8		0	0	23	
5:30	3		18		0	0	21		17:30	13		20		0	0	33	
5:45	1	9	45	77	0	0	46	86	17:45	7	62	12	42	0	0	19	104
6:00	4		9		0	0	13		18:00	9		3		0	0	12	
6:15	7		8		0	0	15		18:15	8		2		0	0	10	
6:30	32		16		0	0	48		18:30	32		3		0	0	35	
6:45	12	55	23	56	0	0	35	111	18:45	4	53	2	10	0	0	6	63
7:00	3		14		0	0	17		19:00	8		4		0	0	12	
7:15	15		21		0	0	36		19:15	4		3		0	0	7	
7:30	8		16		0	0	24		19:30	5		5		0	0	10	
7:45	10	36	23	74	0	0	33	110	19:45	4	21	1	13	0	0	5	34
8:00	12		20		0	0	32		20:00	4		3		0	0	7	
8:15	3		18		0	0	21		20:15	2		1		0	0	3	
8:30	11		10		0	0	21		20:30	4		3		0	0	7	
8:45	2	28	11	59	0	0	13	87	20:45	1	11	1	8	0	0	2	19
9:00	5		3		0	0	8		21:00	1		2		0	0	3	
9:15	5		7		0	0	12		21:15	0		1		0	0	1	
9:30	5		6		0	0	11		21:30	1		6		0	0	7	
9:45	3	18	10	26	0	0	13	44	21:45	2	4	11	20	0	0	13	24
10:00	9		7		0	0	16		22:00	1		3		0	0	4	
10:15	4		6		0	0	10		22:15	2		2		0	0	4	
10:30	8		2		0	0	10		22:30	10		11		0	0	21	
10:45	5	26	14	29	0	0	19	55	22:45	6	19	5	21	0	0	11	40
11:00	10		3		0	0	13		23:00	3		4		0	0	7	
11:15	4		5		0	0	9		23:15	5		10		0	0	15	
11:30	11		9		0	0	20		23:30	28		2		0	0	30	
11:45	5	30	4	21	0	0	9	51	23:45	4	40	4	20	0	0	8	60
TOTALS		256		396				652	TOTALS		477		348				825
SPLIT %		39.3%		60.7%				44.1%	SPLIT %		57.8%		42.2%				55.9%

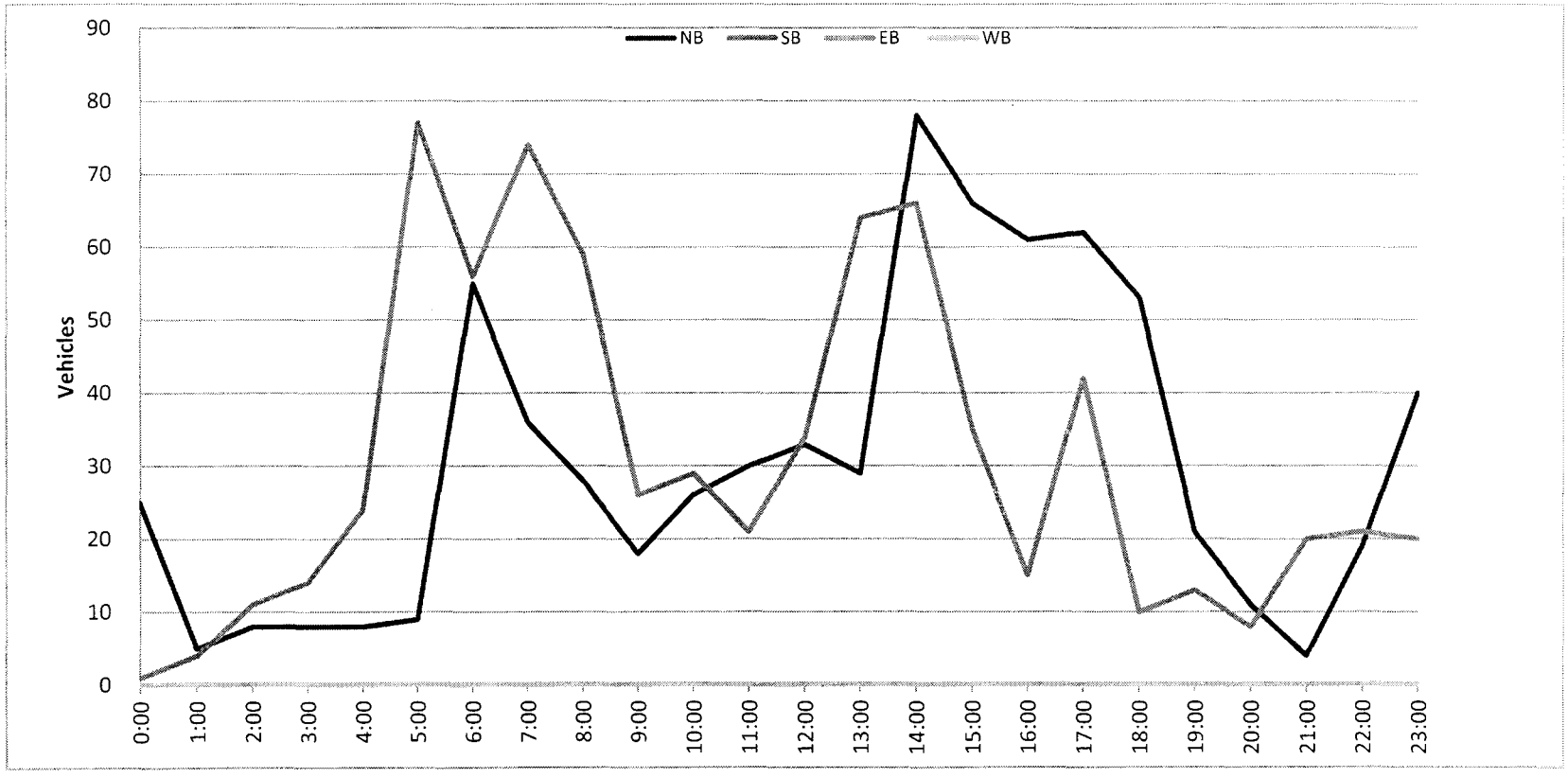
DAILY TOTALS	NB	SB	EB	WB	Total
	733	744	0	0	1,477

AM Peak Hour	6:30	5:15			6:30	PM Peak Hour	15:00	14:45			14:45
AM Pk Volume	62	83			136	PM Pk Volume	87	67			152
Pk Hr Factor	0.484	0.461			0.708	Pk Hr Factor	0.750	0.531			0.804
7 - 9 Volume	64	133	0	0	197	4 - 6 Volume	123	57	0	0	180
7 - 9 Peak Hour	7:15	7:15			7:15	4 - 6 Peak Hour	16:45	17:00			17:00
7 - 9 Pk Volume	45	80	0	0	125	4 - 6 Pk Volume	65	42	0	0	104
Pk Hr Factor	0.750	0.870	0.000	0.000	0.868	Pk Hr Factor	0.602	0.525	0.000	0.000	0.788

Prepared by NDS/ATD

Project #: CA16_7709_004 **County:** Stanislaus

Location: Bystrum Rd S/O Keyes Rd **Date:** 10/4/2016



Prepared by National Data & Surveying Services

CLASSIFICATION

East Entrance to Bronco Winery S/O Keyes Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_003

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	7
1:00	0	0	0	0	0	0	0	0	0	0	9	0	0	9
2:00	0	0	0	0	0	0	0	0	0	0	11	0	0	11
3:00	0	1	0	0	0	0	0	0	0	0	13	0	0	14
4:00	0	0	0	0	0	0	0	0	0	0	4	0	0	4
5:00	0	0	0	0	0	0	0	0	0	0	0	7	0	7
6:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:00	0	0	0	0	0	0	0	0	0	0	0	2	0	2
8:00	0	2	0	0	0	0	0	0	0	0	0	2	0	4
9:00	0	0	0	0	0	0	0	0	0	0	4	1	0	5
10:00	0	0	0	0	0	0	0	0	0	0	9	3	0	12
11:00	0	0	0	0	0	0	0	0	0	0	8	3	0	11
12:00 PM	0	2	0	0	0	0	0	0	0	0	1	1	0	4
13:00	0	1	0	0	0	0	0	0	0	0	0	13	0	14
14:00	0	3	0	0	0	0	0	0	0	0	0	12	0	15
15:00	0	0	0	0	0	0	0	0	0	0	1	2	0	3
16:00	0	0	0	0	0	0	0	0	0	0	3	0	0	3
17:00	0	1	0	0	0	0	0	0	0	0	7	0	0	8
18:00	0	0	0	0	0	0	0	0	0	0	6	2	0	8
19:00	0	1	0	0	0	0	0	0	0	0	4	0	0	5
20:00	0	4	0	0	0	0	0	0	0	0	5	0	0	9
21:00	0	1	0	0	0	0	0	0	0	0	10	0	0	11
22:00	0	0	0	0	0	0	0	0	0	0	10	1	0	11
23:00	0	0	0	0	0	0	0	0	0	0	7	0	0	7
Totals		15									120	49		185
% of Totals		9%									65%	26%		100%

AM Volumes	0	3	0	0	0	0	0	0	0	0	66	18	0	87
% AM		2%									36%	10%		47%
AM Peak Hour		8:00									3:00	5:00		3:00
Volume		2									13	7		14
PM Volumes	0	13	0	0	0	0	0	0	0	0	54	31	0	98
% PM		7%									29%	17%		53%
PM Peak Hour		20:00									21:00	13:00		14:00
Volume		4									10	13		15

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	6		3%	18		10%	11		6%	150		81%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

East Entrance to Bronco Winery S/O Keyes Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_003s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	3
1:00	0	0	0	0	0	0	0	0	0	0	5	0	0	5
2:00	0	0	0	0	0	0	0	0	0	0	8	0	0	8
3:00	0	1	0	0	0	0	0	0	0	0	4	0	0	5
4:00	0	0	0	0	0	0	0	0	0	0	3	0	0	3
5:00	0	0	0	0	0	0	0	0	0	0	0	2	0	2
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	0	0	0	0	0	0	0	0	0	0	0	2	0	2
8:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
9:00	0	0	0	0	0	0	0	0	0	0	3	1	0	4
10:00	0	0	0	0	0	0	0	0	0	0	4	1	0	5
11:00	0	0	0	0	0	0	0	0	0	0	4	2	0	6
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	1	0	0	0	0	0	0	0	0	0	7	0	8
14:00	0	2	0	0	0	0	0	0	0	0	0	6	0	8
15:00	0	0	0	0	0	0	0	0	0	0	0	1	0	1
16:00	0	0	0	0	0	0	0	0	0	0	2	0	0	2
17:00	0	0	0	0	0	0	0	0	0	0	3	0	0	3
18:00	0	0	0	0	0	0	0	0	0	0	3	1	0	4
19:00	0	0	0	0	0	0	0	0	0	0	2	0	0	2
20:00	0	2	0	0	0	0	0	0	0	0	4	0	0	6
21:00	0	0	0	0	0	0	0	0	0	0	3	0	0	3
22:00	0	0	0	0	0	0	0	0	0	0	6	0	0	6
23:00	0	0	0	0	0	0	0	0	0	0	4	0	0	4
Totals		8									61	23		92
% of Totals		9%									66%	25%		100%

AM Volumes	0	3	0	0	0	0	0	0	0	0	34	8	0	45
% AM		3%									37%	9%		49%
AM Peak Hour		8:00									2:00	5:00		2:00
Volume		2									8	2		8
PM Volumes	0	5	0	0	0	0	0	0	0	0	27	15	0	47
% PM		5%									29%	16%		51%
PM Peak Hour		14:00									22:00	13:00		13:00
Volume		2									6	7		8

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	4		4%	8		9%	5		5%	75		82%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

East Entrance to Bronco Winery S/O Keyes Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_003n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	4
1:00	0	0	0	0	0	0	0	0	0	0	4	0	0	4
2:00	0	0	0	0	0	0	0	0	0	0	3	0	0	3
3:00	0	0	0	0	0	0	0	0	0	0	9	0	0	9
4:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00	0	0	0	0	0	0	0	0	0	0	0	5	0	5
6:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	2	0	2
9:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1
10:00	0	0	0	0	0	0	0	0	0	0	5	2	0	7
11:00	0	0	0	0	0	0	0	0	0	0	4	1	0	5
12:00 PM	0	2	0	0	0	0	0	0	0	0	1	1	0	4
13:00	0	0	0	0	0	0	0	0	0	0	0	6	0	6
14:00	0	1	0	0	0	0	0	0	0	0	0	6	0	7
15:00	0	0	0	0	0	0	0	0	0	0	1	1	0	2
16:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1
17:00	0	1	0	0	0	0	0	0	0	0	4	0	0	5
18:00	0	0	0	0	0	0	0	0	0	0	3	1	0	4
19:00	0	1	0	0	0	0	0	0	0	0	2	0	0	3
20:00	0	2	0	0	0	0	0	0	0	0	1	0	0	3
21:00	0	1	0	0	0	0	0	0	0	0	7	0	0	8
22:00	0	0	0	0	0	0	0	0	0	0	4	1	0	5
23:00	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Totals		**8**									**99**	**26**		**93**
% of Totals		9%									63%	28%		100%

AM Volumes	0	0	0	0	0	0	0	0	0	0	32	10	0	42
% AM											34%	11%		45%
AM Peak Hour											3:00	5:00		3:00
Volume											9	5		9
PM Volumes	0	8	0	0	0	0	0	0	0	0	27	16	0	51
% PM		9%									29%	17%		55%
PM Peak Hour		12:00									21:00	13:00		21:00
Volume		2									7	6		8

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	2		2%	10		11%	6		6%	75		81%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

East Entrance to Bronco Winery S/O Keyes Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_003

DAILY TOTALS	NB	SB	EB	WB	Total
	93	92	0	0	185

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
0:00	0	2	0	0	2	12:00	3	0	0	0	3
0:15	4	0	0	0	4	12:15	1	0	0	0	1
0:30	0	0	0	0		12:30	0	0	0	0	
0:45	0 4	1 3	0	0	1 7	12:45	0 4	0	0	0	4
1:00	1	2	0	0	3	13:00	0	1	0	0	1
1:15	3	2	0	0	5	13:15	0	3	0	0	3
1:30	0	0	0	0		13:30	1	3	0	0	4
1:45	0 4	1 5	0	0	1 9	13:45	5 6	1 8	0	0	6 14
2:00	0	2	0	0	2	14:00	1	3	0	0	4
2:15	2	0	0	0	2	14:15	2	0	0	0	2
2:30	0	1	0	0	1	14:30	0	3	0	0	3
2:45	1 3	5 8	0	0	6 11	14:45	4 7	2 8	0	0	6 15
3:00	6	4	0	0	10	15:00	1	0	0	0	1
3:15	0	0	0	0		15:15	0	1	0	0	1
3:30	3	1	0	0	4	15:30	1	0	0	0	1
3:45	0 9	0 5	0	0	14	15:45	0 2	0 1	0	0	3
4:00	0	0	0	0		16:00	0	0	0	0	
4:15	0	0	0	0		16:15	0	0	0	0	
4:30	0	2	0	0	2	16:30	0	1	0	0	1
4:45	1 1	1 3	0	0	2 4	16:45	1 1	1 2	0	0	2 3
5:00	1	0	0	0	1	17:00	1	1	0	0	2
5:15	1	1	0	0	2	17:15	2	1	0	0	3
5:30	1	0	0	0	1	17:30	1	1	0	0	2
5:45	2 5	1 2	0	0	3 7	17:45	1 5	0 3	0	0	1 8
6:00	0	0	0	0		18:00	0	1	0	0	1
6:15	1	0	0	0	1	18:15	1	2	0	0	3
6:30	0	0	0	0		18:30	2	1	0	0	3
6:45	0 1	0	0	0	1	18:45	1 4	0 4	0	0	1 8
7:00	0	0	0	0		19:00	1	1	0	0	2
7:15	0	1	0	0	1	19:15	1	1	0	0	2
7:30	0	1	0	0	1	19:30	1	0	0	0	1
7:45	0	0 2	0	0	2	19:45	0 3	0 2	0	0	5
8:00	2	1	0	0	3	20:00	0	0	0	0	
8:15	0	1	0	0	1	20:15	0	0	0	0	
8:30	0	0	0	0		20:30	2	2	0	0	4
8:45	0 2	0 2	0	0	4	20:45	1 3	4 6	0	0	5 9
9:00	0	0	0	0		21:00	4	1	0	0	5
9:15	0	0	0	0		21:15	1	0	0	0	1
9:30	0	1	0	0	1	21:30	0	2	0	0	2
9:45	1 1	3 4	0	0	4 5	21:45	3 8	0 3	0	0	3 11
10:00	0	2	0	0	2	22:00	0	2	0	0	2
10:15	2	1	0	0	3	22:15	1	2	0	0	3
10:30	2	1	0	0	3	22:30	3	1	0	0	4
10:45	3 7	1 5	0	0	4 12	22:45	1 5	1 6	0	0	2 11
11:00	1	3	0	0	4	23:00	0	0	0	0	
11:15	1	0	0	0	1	23:15	0	1	0	0	1
11:30	2	1	0	0	3	23:30	1	0	0	0	1
11:45	1 5	2 6	0	0	3 11	23:45	2 3	3 4	0	0	5 7
TOTALS	42	45			87	TOTALS	51	47			98
SPLIT %	48.3%	51.7%			47.0%	SPLIT %	52.0%	48.0%			53.0%

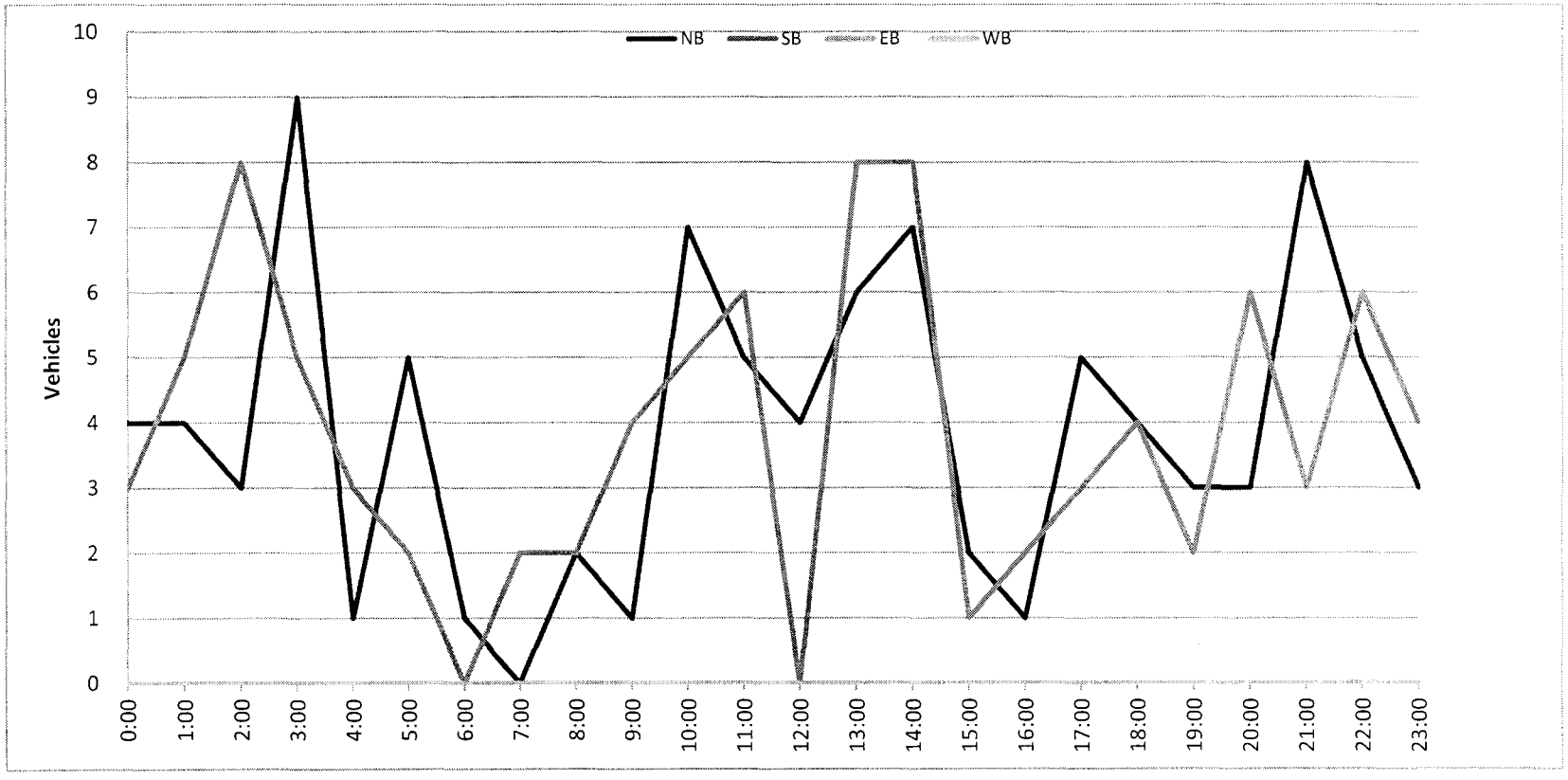
DAILY TOTALS	NB	SB	EB	WB	Total
	93	92	0	0	185

AM Peak Hour	2:45	2:15			2:45	PM Peak Hour	14:00	13:45			13:45
AM Pk Volume	10	10			20	PM Pk Volume	9	10			17
Pk Hr Factor	0.417	0.500			0.500	Pk Hr Factor	0.438	0.583			0.625
7 - 9 Volume	2	4	0	0	6	4 - 6 Volume	6	5	0	0	11
7 - 9 Peak Hour	7:15	7:15			7:15	4 - 6 Peak Hour	16:45	16:30			16:45
7 - 9 Pk Volume	2	3	0	0	5	4 - 6 Pk Volume	5	4	0	0	9
Pk Hr Factor	0.250	0.750	0.000	0.000	0.417	Pk Hr Factor	0.625	1.000	0.000	0.000	0.750

Prepared by NDS/ATD

Project #: CA16_7709_003 **County:** Stanislaus

Location: East Entrance to Bronco Winery S/O Keyes **Date:** 10/4/2016



Prepared by National Data & Surveying Services

CLASSIFICATION

Keyes Rd W/O Bystrum Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	26	2	0	5	0	0	2	5	0	5	1	0	46
1:00	0	12	2	0	5	0	0	4	4	0	5	3	0	35
2:00	0	20	4	1	2	0	0	3	3	0	4	2	0	39
3:00	1	37	15	4	11	1	0	6	2	0	1	4	0	82
4:00	0	88	31	4	38	2	0	4	10	0	4	1	0	182
5:00	1	187	53	1	65	2	0	5	20	0	1	2	0	337
6:00	2	191	52	1	60	1	0	11	21	0	3	3	0	345
7:00	1	265	62	4	64	5	0	9	25	0	4	3	0	442
8:00	2	204	43	5	69	4	0	7	21	0	7	2	0	364
9:00	2	101	48	2	46	3	0	7	24	0	10	1	0	244
10:00	2	100	37	1	43	3	0	12	17	0	6	3	0	224
11:00	3	104	41	0	63	4	0	8	16	0	7	1	0	247
12:00 PM	0	127	40	2	57	1	0	9	27	0	5	1	0	269
13:00	1	156	51	1	51	4	0	13	23	0	10	5	0	315
14:00	5	206	60	4	49	7	0	6	28	0	14	1	0	380
15:00	2	257	94	6	64	3	0	9	19	0	8	0	0	462
16:00	1	358	85	4	65	3	1	10	20	1	8	0	0	556
17:00	1	402	96	5	68	6	2	7	10	0	7	0	0	604
18:00	2	230	59	0	33	1	1	4	17	0	10	1	0	358
19:00	1	116	40	0	29	0	0	2	13	0	6	0	0	207
20:00	1	83	18	0	16	1	0	1	4	0	2	1	0	127
21:00	0	72	16	1	11	0	0	0	1	0	8	1	0	110
22:00	1	62	9	0	5	0	0	1	5	0	6	1	0	90
23:00	0	46	6	0	1	0	0	0	3	0	7	1	0	64
Totals	29	3450	964	46	920	51	4	140	338	1	148	38		6129
% of Totals	0%	56%	16%	1%	15%	1%	0%	2%	6%	0%	2%	1%		100%

AM Volumes	14	1335	390	23	471	25	0	78	168	0	57	26	0	2587
% AM	0%	22%	6%	0%	8%	0%		1%	3%		1%	0%		42%
AM Peak Hour	11:00	7:00	7:00	8:00	8:00	7:00		10:00	7:00		9:00	3:00		7:00
Volume	3	265	62	5	69	5		12	25		10	4		442
PM Volumes	15	2115	574	23	449	26	4	62	170	1	91	12	0	3542
% PM	0%	35%	9%	0%	7%	0%	0%	1%	3%	0%	1%	0%		58%
PM Peak Hour	14:00	17:00	17:00	15:00	17:00	14:00	17:00	13:00	14:00	16:00	14:00	13:00		17:00
Volume	5	402	96	6	68	7	2	13	28	1	14	5		604

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	806		13%	584		10%	1160		19%	3579		58%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Keyes Rd W/O Bystrum Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_001w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	20	1	0	5	0	0	2	2	0	2	0	0	32
1:00	0	4	1	0	5	0	0	4	3	0	1	1	0	19
2:00	0	12	1	1	2	0	0	2	0	0	0	0	0	18
3:00	0	29	12	4	10	1	0	6	2	0	0	1	0	65
4:00	0	65	24	4	34	2	0	3	4	0	0	0	0	136
5:00	1	119	35	1	58	2	0	5	9	0	1	1	0	232
6:00	0	118	40	0	51	0	0	10	10	0	2	1	0	232
7:00	0	154	37	3	50	3	0	8	11	0	3	1	0	270
8:00	0	121	23	3	59	2	0	7	6	0	3	2	0	226
9:00	0	45	26	1	35	0	0	4	9	0	2	0	0	122
10:00	2	56	13	1	30	1	0	12	11	0	3	2	0	131
11:00	1	47	19	0	42	2	0	7	5	0	3	0	0	126
12:00 PM	0	59	20	0	42	0	0	5	8	0	1	1	0	136
13:00	0	58	19	1	34	1	0	8	7	0	4	0	0	132
14:00	1	66	22	2	24	3	0	3	14	0	6	1	0	142
15:00	1	74	29	2	34	1	0	7	3	0	2	0	0	153
16:00	1	102	22	3	37	3	0	5	7	0	2	0	0	182
17:00	0	92	31	2	35	4	1	2	3	0	2	0	0	172
18:00	2	80	23	0	15	0	0	3	6	0	4	0	0	133
19:00	0	51	15	0	21	0	0	2	4	0	4	0	0	97
20:00	0	41	9	0	13	1	0	1	4	0	0	0	0	69
21:00	0	25	8	1	7	0	0	0	0	0	6	0	0	47
22:00	1	24	4	0	5	0	0	1	2	0	2	0	0	39
23:00	0	27	2	0	1	0	0	0	2	0	3	0	0	35
Totals	10	1489	436	29	649	26	1	107	132		56	11		2946
% of Totals	0%	51%	15%	1%	22%	1%	0%	4%	4%		2%	0%		100%

AM Volumes	4	790	232	18	381	13	0	70	72	0	20	9	0	1609
% AM	0%	27%	8%	1%	13%	0%		2%	2%		1%	0%		55%
AM Peak Hour	10:00	7:00	6:00	3:00	8:00	7:00		10:00	7:00		7:00	8:00		7:00
Volume	2	154	40	4	59	3		12	11		3	2		270
PM Volumes	6	699	204	11	268	13	1	37	60	0	36	2	0	1337
% PM	0%	24%	7%	0%	9%	0%	0%	1%	2%		1%	0%		45%
PM Peak Hour	18:00	16:00	17:00	16:00	12:00	17:00	17:00	13:00	14:00		14:00	12:00		16:00
Volume	2	102	31	3	42	4	1	8	14		6	1		182

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	496		17%	268		9%	354		12%	1828		62%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Keyes Rd W/O Bystrum Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_001e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	6	1	0	0	0	0	0	3	0	3	1	0	14
1:00	0	8	1	0	0	0	0	0	1	0	4	2	0	16
2:00	0	8	3	0	0	0	0	1	3	0	4	2	0	21
3:00	1	8	3	0	1	0	0	0	0	0	1	3	0	17
4:00	0	23	7	0	4	0	0	1	6	0	4	1	0	46
5:00	0	68	18	0	7	0	0	0	11	0	0	1	0	105
6:00	2	73	12	1	9	1	0	1	11	0	1	2	0	113
7:00	1	111	25	1	14	2	0	1	14	0	1	2	0	172
8:00	2	83	20	2	10	2	0	0	15	0	4	0	0	138
9:00	2	56	22	1	11	3	0	3	15	0	8	1	0	122
10:00	0	44	24	0	13	2	0	0	6	0	3	1	0	93
11:00	2	57	22	0	21	2	0	1	11	0	4	1	0	121
12:00 PM	0	68	20	2	15	1	0	4	19	0	4	0	0	133
13:00	1	98	32	0	17	3	0	5	16	0	6	5	0	183
14:00	4	140	38	2	25	4	0	3	14	0	8	0	0	238
15:00	1	183	65	4	30	2	0	2	16	0	6	0	0	309
16:00	0	256	63	1	28	0	1	5	13	1	6	0	0	374
17:00	1	310	65	3	33	2	1	5	7	0	5	0	0	432
18:00	0	150	36	0	18	1	1	1	11	0	6	1	0	225
19:00	1	65	25	0	8	0	0	0	9	0	2	0	0	110
20:00	1	42	9	0	3	0	0	0	0	0	2	1	0	58
21:00	0	47	8	0	4	0	0	0	1	0	2	1	0	63
22:00	0	38	5	0	0	0	0	0	3	0	4	1	0	51
23:00	0	19	4	0	0	0	0	0	1	0	4	1	0	29
Totals	19	1961	528	17	271	25	3	33	206	1	92	27		3183
% of Totals	1%	62%	17%	1%	9%	1%	0%	1%	6%	0%	3%	1%		100%

AM Volumes	10	545	158	5	90	12	0	8	96	0	37	17	0	978
% AM	0%	17%	5%	0%	3%	0%		0%	3%		1%	1%		31%
AM Peak Hour	6:00	7:00	7:00	8:00	11:00	9:00		9:00	8:00		9:00	3:00		7:00
Volume	2	111	25	2	21	3		3	15		8	3		172
PM Volumes	9	1416	370	12	181	13	3	25	110	1	55	10	0	2205
% PM	0%	44%	12%	0%	6%	0%	0%	1%	3%	0%	2%	0%		69%
PM Peak Hour	14:00	17:00	15:00	15:00	17:00	14:00	16:00	13:00	12:00	16:00	14:00	13:00		17:00
Volume	4	310	65	4	33	4	1	5	19	1	8	5		432

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	310		10%	316		10%	806		25%	1751		55%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Keyes Rd W/O Bystrum Rd

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,183	2,946	6,129

AM Period	NB		SB		EB		WB		TOTAL	
0:00	0		0		5		10		15	
0:15	0		0		4		13		17	
0:30	0		0		2		5		7	
0:45	0		0		3	14	4	32	7	46
1:00	0		0		10		4		14	
1:15	0		0		2		6		8	
1:30	0		0		1		6		7	
1:45	0		0		3	16	3	19	6	35
2:00	0		0		5		5		10	
2:15	0		0		2		6		8	
2:30	0		0		4		4		8	
2:45	0		0		10	21	3	18	13	39
3:00	0		0		3		12		15	
3:15	0		0		5		12		17	
3:30	0		0		3		16		19	
3:45	0		0		6	17	25	65	31	82
4:00	0		0		4		22		26	
4:15	0		0		12		25		37	
4:30	0		0		15		39		54	
4:45	0		0		15	46	50	136	65	182
5:00	0		0		20		51		71	
5:15	0		0		21		65		86	
5:30	0		0		31		63		94	
5:45	0		0		33	105	53	232	86	337
6:00	0		0		13		52		65	
6:15	0		0		31		38		69	
6:30	0		0		33		78		111	
6:45	0		0		36	113	64	232	100	345
7:00	0		0		35		36		71	
7:15	0		0		45		78		123	
7:30	0		0		45		74		119	
7:45	0		0		47	172	82	270	129	442
8:00	0		0		33		84		117	
8:15	0		0		32		61		93	
8:30	0		0		42		47		89	
8:45	0		0		31	138	34	226	65	364
9:00	0		0		35		33		68	
9:15	0		0		29		23		52	
9:30	0		0		29		34		63	
9:45	0		0		29	122	32	122	61	244
10:00	0		0		21		27		48	
10:15	0		0		22		36		58	
10:30	0		0		30		35		65	
10:45	0		0		20	93	33	131	53	224
11:00	0		0		34		33		67	
11:15	0		0		22		41		63	
11:30	0		0		41		19		60	
11:45	0		0		24	121	33	126	57	247
TOTALS						978		1609		2587
SPLIT %						37.8%		62.2%		42.2%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	0		0		29		34		63	
12:15	0		0		35		27		62	
12:30	0		0		33		42		75	
12:45	0		0		36	133	33	136	69	269
13:00	0		0		43		27		70	
13:15	0		0		42		27		69	
13:30	0		0		55		40		95	
13:45	0		0		43	183	38	132	81	315
14:00	0		0		75		30		105	
14:15	0		0		61		33		94	
14:30	0		0		43		45		88	
14:45	0		0		59	238	34	142	93	380
15:00	0		0		65		41		106	
15:15	0		0		79		33		112	
15:30	0		0		69		49		118	
15:45	0		0		96	309	30	153	126	462
16:00	0		0		87		48		135	
16:15	0		0		83		48		131	
16:30	0		0		108		34		142	
16:45	0		0		96	374	52	182	148	556
17:00	0		0		106		53		159	
17:15	0		0		118		42		160	
17:30	0		0		99		39		138	
17:45	0		0		109	432	38	172	147	604
18:00	0		0		71		34		105	
18:15	0		0		68		31		99	
18:30	0		0		51		40		91	
18:45	0		0		35	225	28	133	63	358
19:00	0		0		39		26		65	
19:15	0		0		27		31		58	
19:30	0		0		23		20		43	
19:45	0		0		21	110	20	97	41	207
20:00	0		0		11		18		29	
20:15	0		0		11		14		25	
20:30	0		0		20		16		36	
20:45	0		0		16	58	21	69	37	127
21:00	0		0		17		18		35	
21:15	0		0		17		10		27	
21:30	0		0		13		9		22	
21:45	0		0		16	63	10	47	26	110
22:00	0		0		15		10		25	
22:15	0		0		11		6		17	
22:30	0		0		14		10		24	
22:45	0		0		11	51	13	39	24	90
23:00	0		0		10		9		19	
23:15	0		0		7		6		13	
23:30	0		0		4		16		20	
23:45	0		0		8	29	4	35	12	64
TOTALS						2205		1337		3542
SPLIT %						62.3%		37.7%		57.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,183	2,946	6,129

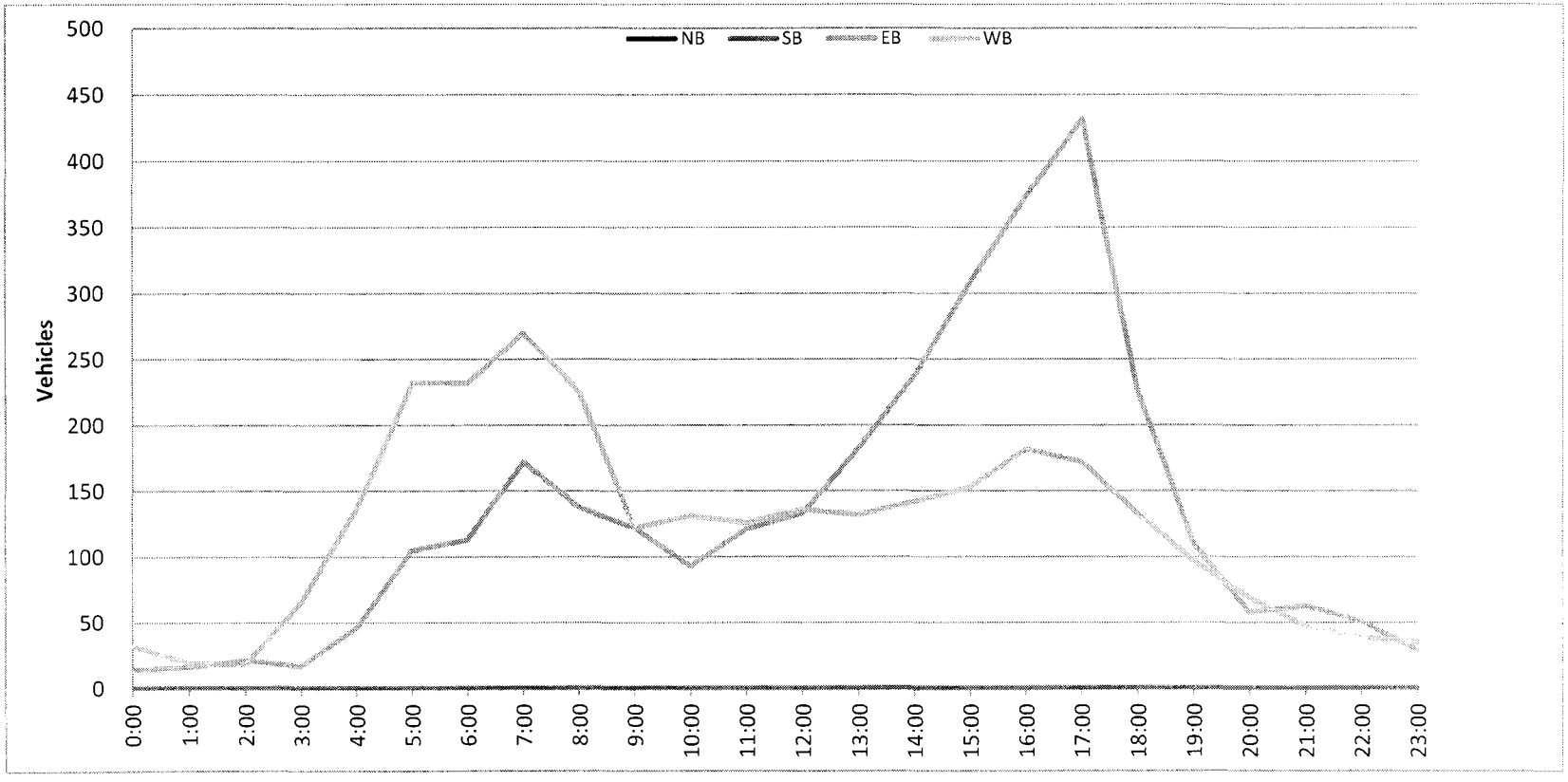
AM Peak Hour			7:00	7:15	7:15
AM Pk Volume			172	318	488
Pk Hr Factor			0.915	0.946	0.946
7 - 9 Volume	0	0	310	496	806
7 - 9 Peak Hour			7:00	7:15	7:15
7 - 9 Pk Volume	0	0	172	318	488
Pk Hr Factor	0.000	0.000	0.915	0.946	0.946

PM Peak Hour			17:30	16:45	17:00
PM Pk Volume			347	187	609
Pk Hr Factor			0.796	0.877	0.944
4 - 6 Volume	0	0	806	354	1160
4 - 6 Peak Hour			17:00	16:15	16:30
4 - 6 Pk Volume	0	0	432	187	609
Pk Hr Factor	0.000	0.000	0.915	0.882	0.952

Prepared by NDS/ATD

Project #: CA16_7709_001 **County:** Stanislaus

Location: Keyes Rd W/O Bystrum Rd **Date:** 10/4/2016



Prepared by National Data & Surveying Services

CLASSIFICATION

Keyes Rd E/O Entrance to Bronco Winery

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	24	6	0	4	0	0	1	6	0	10	1	0	52
1:00	0	18	1	0	3	1	0	3	2	0	2	4	0	34
2:00	1	24	5	0	3	0	0	2	3	0	10	3	0	51
3:00	0	56	13	0	6	1	0	4	2	0	7	5	0	94
4:00	1	131	25	0	11	1	0	6	11	0	2	1	0	189
5:00	9	230	56	0	24	2	0	6	14	0	3	2	2	348
6:00	1	237	65	1	23	1	0	11	19	0	3	2	0	363
7:00	2	343	78	1	31	7	0	6	21	1	6	2	0	498
8:00	1	267	80	2	15	3	0	10	19	0	5	1	1	404
9:00	1	143	59	1	15	3	0	14	20	0	11	1	0	268
10:00	3	131	41	0	28	3	0	8	15	0	13	3	0	245
11:00	3	127	48	0	33	3	0	9	16	0	11	1	0	251
12:00 PM	0	159	49	2	26	2	0	11	22	0	10	0	0	281
13:00	3	198	59	0	23	6	0	9	22	1	11	7	0	339
14:00	6	269	70	2	26	4	0	8	21	0	14	1	0	421
15:00	3	316	103	5	55	4	0	8	22	0	4	0	0	520
16:00	1	438	105	1	49	1	1	9	20	0	6	0	0	631
17:00	0	475	97	3	59	2	2	11	10	0	5	0	0	664
18:00	1	269	53	0	22	2	1	5	13	0	2	2	0	370
19:00	3	131	38	1	19	0	0	3	12	0	5	0	0	212
20:00	0	102	19	0	7	1	0	1	0	0	9	1	0	140
21:00	0	81	14	0	7	0	0	0	2	0	6	3	0	113
22:00	0	65	7	0	2	0	0	1	4	0	2	1	0	82
23:00	0	69	8	0	0	0	0	0	3	0	3	3	0	86
Totals	39	4303	1099	19	491	47	4	146	299	2	160	44	3	6656
% of Totals	1%	65%	17%	0%	7%	1%	0%	2%	4%	0%	2%	1%	0%	100%

AM Volumes	22	1731	477	5	196	25	0	80	148	1	83	26	3	2797
% AM	0%	26%	7%	0%	3%	0%		1%	2%	0%	1%	0%	0%	42%
AM Peak Hour	5:00	7:00	8:00	8:00	11:00	7:00		9:00	7:00	7:00	10:00	3:00	5:00	7:00
Volume	9	343	80	2	33	7		14	21	1	13	5	2	498
PM Volumes	17	2572	622	14	295	22	4	66	151	1	77	18	0	3859
% PM	0%	39%	9%	0%	4%	0%	0%	1%	2%	0%	1%	0%		58%
PM Peak Hour	14:00	17:00	16:00	15:00	17:00	13:00	17:00	12:00	12:00	13:00	14:00	13:00		17:00
Volume	6	475	105	5	59	6	2	11	22	1	14	7		664

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	902		14%	620		9%	1295		19%	3839		58%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Keyes Rd E/O Entrance to Bronco Winery

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_002e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	15	3	0	4	0	0	0	4	0	6	1	0	33
1:00	0	12	1	0	2	0	0	0	1	0	0	2	0	18
2:00	0	10	4	0	3	0	0	1	3	0	9	2	0	32
3:00	0	9	3	0	5	0	0	0	0	0	6	3	0	26
4:00	0	23	9	0	2	0	0	1	6	0	0	1	0	42
5:00	0	50	13	0	12	0	0	0	10	0	2	1	0	88
6:00	0	78	12	1	9	1	0	1	12	0	0	2	0	116
7:00	0	103	22	1	13	3	0	1	14	0	1	2	0	160
8:00	1	96	22	2	4	2	0	0	15	0	0	0	0	142
9:00	1	65	24	1	6	3	0	3	15	0	9	1	0	128
10:00	0	59	27	0	9	2	0	0	8	0	5	1	0	111
11:00	2	63	23	0	20	2	0	1	11	0	6	1	0	129
12:00 PM	0	78	23	2	14	2	0	4	20	0	5	0	0	148
13:00	1	103	33	0	12	6	0	5	17	0	4	5	0	186
14:00	2	163	43	2	16	3	0	3	16	0	6	0	0	254
15:00	1	219	74	4	39	3	0	2	21	0	1	0	0	364
16:00	0	314	77	1	32	0	1	5	19	0	1	0	0	450
17:00	0	348	71	3	45	2	2	5	10	0	3	0	0	489
18:00	0	190	42	0	17	1	1	1	13	0	1	1	0	267
19:00	0	72	27	0	10	0	0	0	10	0	1	0	0	120
20:00	0	47	10	0	5	0	0	0	0	0	9	1	0	72
21:00	0	44	8	0	5	0	0	0	1	0	1	1	0	60
22:00	0	39	5	0	0	0	0	0	3	0	0	1	0	48
23:00	0	38	8	0	0	0	0	0	2	0	2	1	0	51
Totals	8	2238	584	17	284	30	4	33	231		78	27		3534
% of Totals	0%	63%	17%	0%	8%	1%	0%	1%	7%		2%	1%		100%

AM Volumes	4	583	163	5	89	13	0	8	99	0	44	17	0	1025
% AM	0%	16%	5%	0%	3%	0%		0%	3%		1%	0%		29%
AM Peak Hour	11:00	7:00	10:00	8:00	11:00	7:00		9:00	8:00		2:00	3:00		7:00
Volume	2	103	27	2	20	3		3	15		9	3		160
PM Volumes	4	1655	421	12	195	17	4	25	132	0	34	10	0	2509
% PM	0%	47%	12%	0%	6%	0%	0%	1%	4%		1%	0%		71%
PM Peak Hour	14:00	17:00	16:00	15:00	17:00	13:00	17:00	13:00	15:00		20:00	13:00		17:00
Volume	2	348	77	4	45	6	2	5	21		9	5		489

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	302		9%	334		9%	939		27%	1959		55%

Classification Definitions

1 Motorcycles
2 Passenger Cars
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4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Keyes Rd E/O Entrance to Bronco Winery

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_002w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	9	3	0	0	0	0	1	2	0	4	0	0	19
1:00	0	6	0	0	1	1	0	3	1	0	2	2	0	16
2:00	1	14	1	0	0	0	0	1	0	0	1	1	0	19
3:00	0	47	10	0	1	1	0	4	2	0	1	2	0	68
4:00	1	108	16	0	9	1	0	5	5	0	2	0	0	147
5:00	9	180	43	0	12	2	0	6	4	0	1	1	2	260
6:00	1	159	53	0	14	0	0	10	7	0	3	0	0	247
7:00	2	240	56	0	18	4	0	5	7	1	5	0	0	338
8:00	0	171	58	0	11	1	0	10	4	0	5	1	1	262
9:00	0	78	35	0	9	0	0	11	5	0	2	0	0	140
10:00	3	72	14	0	19	1	0	8	7	0	8	2	0	134
11:00	1	64	25	0	13	1	0	8	5	0	5	0	0	122
12:00 PM	0	81	26	0	12	0	0	7	2	0	5	0	0	133
13:00	2	95	26	0	11	0	0	4	5	1	7	2	0	153
14:00	4	106	27	0	10	1	0	5	5	0	8	1	0	167
15:00	2	97	29	1	16	1	0	6	1	0	3	0	0	156
16:00	1	124	28	0	17	1	0	4	1	0	5	0	0	181
17:00	0	127	26	0	14	0	0	6	0	0	2	0	0	175
18:00	1	79	11	0	5	1	0	4	0	0	1	1	0	103
19:00	3	59	11	1	9	0	0	3	2	0	4	0	0	92
20:00	0	55	9	0	2	1	0	1	0	0	0	0	0	68
21:00	0	37	6	0	2	0	0	0	1	0	5	2	0	53
22:00	0	26	2	0	2	0	0	1	1	0	2	0	0	34
23:00	0	31	0	0	0	0	0	0	1	0	1	2	0	35
Totals	31	2065	515	2	207	17		113	68	2	82	17	3	3122
% of Totals	1%	66%	16%	0%	7%	1%		4%	2%	0%	3%	1%	0%	100%

AM Volumes	18	1148	314	0	107	12	0	72	49	1	39	9	3	1772
% AM	1%	37%	10%		3%	0%		2%	2%	0%	1%	0%	0%	57%
AM Peak Hour	5:00	7:00	8:00		10:00	7:00		9:00	6:00	7:00	10:00	1:00	5:00	7:00
Volume	9	240	58		19	4		11	7	1	8	2	2	338
PM Volumes	13	917	201	2	100	5	0	41	19	1	43	8	0	1350
% PM	0%	29%	6%	0%	3%	0%		1%	1%	0%	1%	0%		43%
PM Peak Hour	14:00	17:00	15:00	15:00	16:00	14:00		12:00	13:00	13:00	14:00	13:00		16:00
Volume	4	127	29	1	17	1		7	5	1	8	2		181

Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	600 ⟷	19%	286 ⟷	9%	356 ⟷	11%	1880 ⟷	60%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Keyes Rd E/O Entrance to Bronco Winery

Day: Tuesday
Date: 10/4/2016

County: Stanislaus
Project #: CA16_7709_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,534	3,122	6,656

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00	0	0	16		3		19		12:00	0	0	37		28		65	
0:15	0	0	4		9		13		12:15	0	0	44		33		77	
0:30	0	0	4		4		8		12:30	0	0	33		40		73	
0:45	0	0	9	33	3	19	12	52	12:45	0	0	34	148	32	133	66	281
1:00	0	0	8		2		10		13:00	0	0	38		31		69	
1:15	0	0	4		5		9		13:15	0	0	52		26		78	
1:30	0	0	3		5		8		13:30	0	0	49		53		102	
1:45	0	0	3	18	4	16	7	34	13:45	0	0	47	186	43	153	90	339
2:00	0	0	7		3		10		14:00	0	0	72		42		114	
2:15	0	0	4		6		10		14:15	0	0	58		39		97	
2:30	0	0	3		3		6		14:30	0	0	53		41		94	
2:45	0	0	18	32	7	19	25	51	14:45	0	0	71	254	45	167	116	421
3:00	0	0	9		12		21		15:00	0	0	78		45		123	
3:15	0	0	6		10		16		15:15	0	0	84		32		116	
3:30	0	0	5		19		24		15:30	0	0	96		51		147	
3:45	0	0	6	26	27	68	33	94	15:45	0	0	106	364	28	156	134	520
4:00	0	0	4		21		25		16:00	0	0	110		51		161	
4:15	0	0	8		28		36		16:15	0	0	98		49		147	
4:30	0	0	11		43		54		16:30	0	0	116		36		152	
4:45	0	0	19	42	55	147	74	189	16:45	0	0	126	450	45	181	171	631
5:00	0	0	26		39		65		17:00	0	0	127		48		175	
5:15	0	0	17		76		93		17:15	0	0	135		41		176	
5:30	0	0	26		72		98		17:30	0	0	115		41		156	
5:45	0	0	19	88	73	260	92	348	17:45	0	0	112	489	45	175	157	664
6:00	0	0	15		53		68		18:00	0	0	89		27		116	
6:15	0	0	31		43		74		18:15	0	0	81		26		107	
6:30	0	0	44		73		117		18:30	0	0	63		28		91	
6:45	0	0	26	116	78	247	104	363	18:45	0	0	34	267	22	103	56	370
7:00	0	0	30		54		84		19:00	0	0	39		25		64	
7:15	0	0	39		70		109		19:15	0	0	38		27		65	
7:30	0	0	53		104		157		19:30	0	0	22		18		40	
7:45	0	0	38	160	110	338	148	498	19:45	0	0	21	120	22	92	43	212
8:00	0	0	37		97		134		20:00	0	0	13		17		30	
8:15	0	0	28		73		101		20:15	0	0	17		15		32	
8:30	0	0	42		52		94		20:30	0	0	18		16		34	
8:45	0	0	35	142	40	262	75	404	20:45	0	0	24	72	20	68	44	140
9:00	0	0	38		43		81		21:00	0	0	19		16		35	
9:15	0	0	25		22		47		21:15	0	0	16		11		27	
9:30	0	0	30		39		69		21:30	0	0	12		11		23	
9:45	0	0	35	128	36	140	71	268	21:45	0	0	13	60	15	53	28	113
10:00	0	0	27		27		54		22:00	0	0	12		7		19	
10:15	0	0	27		39		66		22:15	0	0	9		4		13	
10:30	0	0	35		29		64		22:30	0	0	16		14		30	
10:45	0	0	22	111	39	134	61	245	22:45	0	0	11	48	9	34	20	82
11:00	0	0	37		33		70		23:00	0	0	9		10		19	
11:15	0	0	22		34		56		23:15	0	0	10		14		24	
11:30	0	0	47		20		67		23:30	0	0	20		7		27	
11:45	0	0	23	129	35	122	58	251	23:45	0	0	12	51	4	35	16	86
TOTALS				1025		1772		2797	TOTALS				2509		1350		3859
SPLIT %				36.6%		63.4%		42.0%	SPLIT %				65.0%		35.0%		58.0%

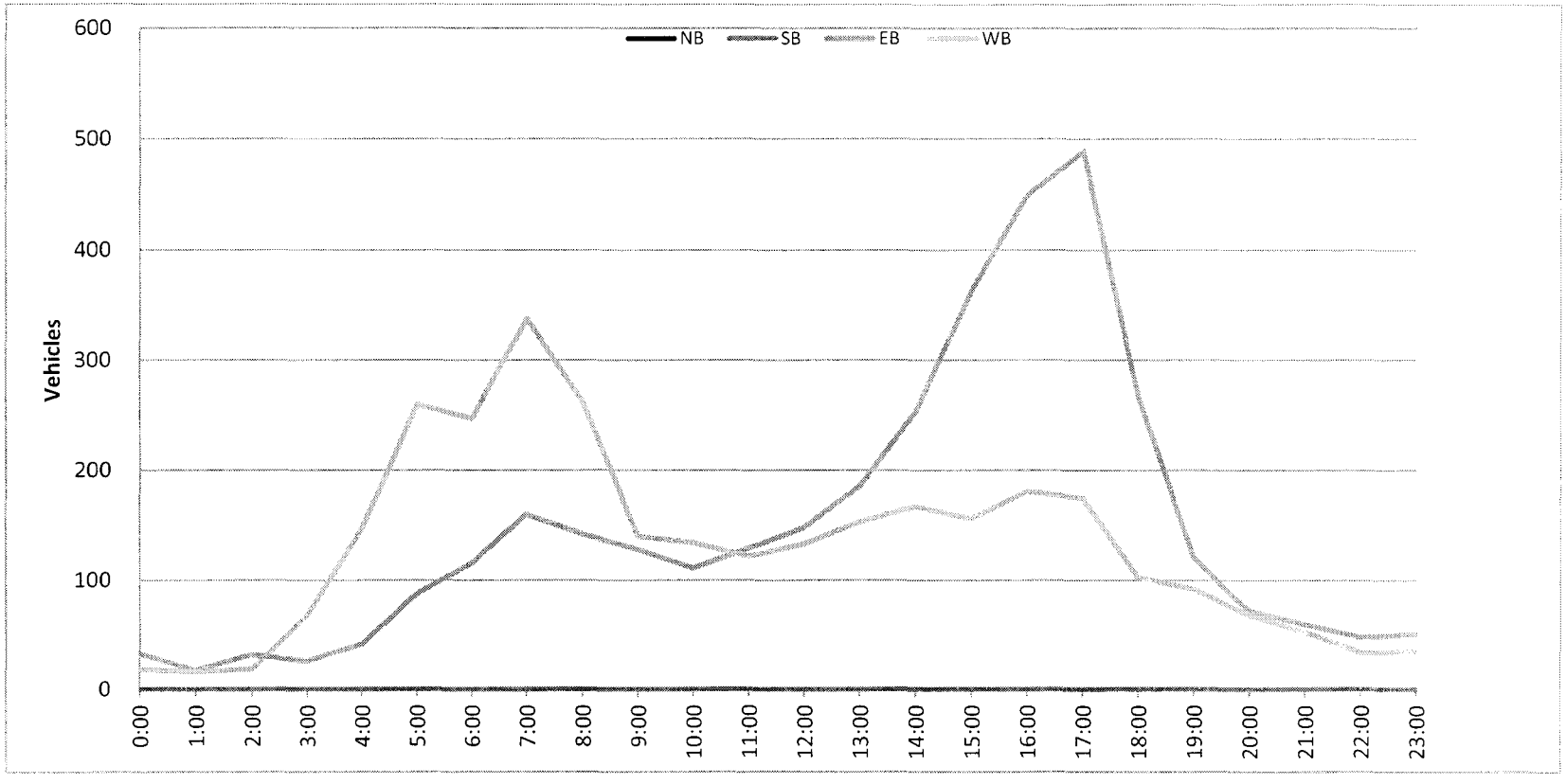
DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,534	3,122	6,656

AM Peak Hour			7:15	7:30	7:15	PM Peak Hour			17:00	16:30	17:15
AM Pk Volume			167	384	548	PM Pk Volume			489	181	678
Pk Hr Factor			0.788	0.873	0.873	Pk Hr Factor			0.906	0.885	0.859
7 - 9 Volume	0	0	302	600	902	4 - 6 Volume	0	0	939	356	1295
7 - 9 Peak Hour			7:15	7:30	7:15	4 - 6 Peak Hour			16:30	16:00	16:45
7 - 9 Pk Volume	0	0	167	384	548	4 - 6 Pk Volume	0	0	504	181	678
Pk Hr Factor	0.000	0.000	0.788	0.873	0.873	Pk Hr Factor	0.000	0.000	0.933	0.887	0.963

Prepared by NDS/ATD

Project #: CA16_7709_002 **County:** Stanislaus

Location: Keyes Rd E/O Entrance to Bronco Winery **Date:** 10/4/2016



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING

April 24, 2017

Kristin Doud
County of Stanislaus
Department of Planning and Community Development
1010 10th Street, Suite 3400
Modesto, CA 95354

Project: Rezone Application No. PLN2016-0066-Bronco Wine Company
District CEQA Reference No: 20170352

Dear Ms. Doud:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above consisting of rezoning a 117.93 acre parcel from existing Planned Development (PD-6 and PD-321) zones to a new Planned Development (P-D) zone to allow for the expansion of an existing winery and bottling facility developed on 82.15 acres of the project site. The expansion includes 14 proposed buildings, totaling 1,462,186 square feet, the construction of two rail spurs, and the addition of a fleet of 53 foot long trucks and tanker trucks. The project is located at the southeast corner of Bystrum and E. Keyes Roads, east of Crows Landing Road, west of State Highway 99 and south of Ceres, CA. The District offers the following comments:

1. Based on information provided to the District, project specific emissions of criteria pollutants may exceed District significance thresholds of 10 tons/year NOX, 10 ton/year ROG, and 15 tons/year PM10.

   It should be noted that compliance with District Rules and Regulations may not reduce project emissions to below the District's threshold of significance. The District's permitting process typically ensures that emissions of criteria pollutants from permitted equipment and activities at stationary sources are reduced or mitigated to below the District's thresholds of significance. However, the permitting process for projects subject to District Permits will not address construction and non-permitted source emissions. The District recommends that the County provide a more detailed assessment.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

EXHIBIT I

a) Criteria Pollutants: Project related criteria pollutant emissions should be identified and quantified. The discussion should include existing and post-project emissions.

   i) Construction Emissions: Construction emissions are short-term emissions and should be evaluated separate from operational emissions. The District recommends preparation of an Environmental Impact Report (EIR) if annual construction emissions cannot be reduced or mitigated to below the following levels of significance: 10 tons per year of oxides of nitrogen (NOx), 10 tons per year of reactive organic gases (ROG), or 15 tons per year particulate matter of 10 microns or less in size (PM10).

   ii) Operational Emissions: Operational Emissions: Permitted (stationary sources) and non-permitted (mobile sources) sources should be analyzed separately. The District recommends preparation of an Environmental Impact Report (EIR) if the sum of annual permitted and the sum of the annual non-permitted emissions each cannot be reduced or mitigated to below the following levels of significance: 10 tons per year of oxides of nitrogen (NOx), 10 tons per year of reactive organic gases (ROG), or 15 tons per year particulate matter of 10 microns or less in size (PM10).

2. Health Impacts: Project related health impacts should be evaluated to determine if emissions of toxic air contaminants (TAC) will pose a significant health risk to nearby sensitive receptors. TACs are defined as air pollutants that which may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. The most common source of TACs can be attributed to diesel exhaust fumes that are emitted from both stationary and mobile sources. Health impacts may require a detailed health risk assessment (HRA).

   Prior to conducting an HRA, an applicant may perform a prioritization on all sources of emissions to determine if it is necessary to conduct an HRA. A prioritization is a screening tool used to identify projects that may have significant health impacts. If the project has a prioritization score of 1.0 or more, the project has the potential to exceed the District's significance threshold for health impacts of 20 in a million and an HRA should be performed.

   If an HRA is to be performed, it is recommended that the project proponent contact the District to review the proposed modeling approach. The project would be considered to have a significant health risk if the HRA demonstrates that project related health impacts would exceed the District's significance threshold of 20 in a million.

More information on TACs, prioritizations and HRAs can be obtained by:
- E-mailing inquiries to: hramodeler@valleyair.org; or
- Visiting the District's website at:

http://www.valleyair.org/busind/pto/Tox_Resources/AirQualityMonitoring.htm.

3. This project will be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and will require District permits. Prior to construction, the project proponent should submit to the District an application for an Authority to Construct (ATC). For further information or assistance, the project proponent may contact the District's Small Business Assistance (SBA) Office at (209) 557-6446 or visit http://www.valleyair.org/busind/pto/ptoforms/1ptoformidx.htm.

4. The proposed project may be subject to District rules and regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm.

5. The District recommends that a copy of the District's comments be provided to the project proponent.

If you have any questions or require further information, please call Michael Corder, at (559) 230-5818.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Michael Corder

For: Brian Clements
Program Manager

DW: mc

Stanislaus County
Striving to be the Best

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

1010 10th Street, Suite 3400, Modesto, CA 95354
Phone: 209.525.6330 Fax: 209.525.5911

CEQA INITIAL STUDY

Adapted from CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, December 30, 2009

1.	**Project title:**	Rezone Application No. PLN2016-0066 – Bronco Wine Company. SCH No.2016082036
2.	**Lead agency name and address:**	Stanislaus County 1010 10th Street, Suite 3400 Modesto, CA 95354
3.	**Contact person and phone number:**	Kristin Doud, Senior Planner (209) 525-6330
4.	**Project location:**	6342 Bystrum Road, at the southeast corner of Bystrum and E. Keyes Roads, east of Crows Landing Road, west of State Highway 99, and south of Ceres. APN: 041-046-021
5.	**Project sponsor's name and address:**	John Franzia, Bronco Wine Company 6342 Bystrum Road Ceres, CA 95307
6.	**General Plan designation:**	AG (Agriculture)
7.	**Zoning:**	Planned Development (6) & Planned Development (321)

8. **Description of project:**

This is a request to rezone a 117.93 acre parcel from existing Planned Development (PD-6 and PD-321) zones to a new Planned Development (P-D) zone to allow for expansion of an existing winery and bottling facility developed on 82.15 acres of the project site. The expansion includes construction of 14 proposed buildings, totaling 1,462,186 square feet (see Buildings labeled N-BB on the site plan included in Attachment A), which includes: four 120,000 square foot warehouses (Buildings N, O, P, and Q), two with 10 additional truck docks each; three 44,483 square foot warehouses (Buildings V, W, and X); one 13,000 square foot office (Building T); one 38,000 square foot office (Building U); one 10,300 square foot employee center (commercial kitchen, cafeteria, and conference area, Building R); one 2,264 square foot pavilion (roof only shade structure, Building S); one 20,000 square foot employee center (lockers and restrooms, Building Y); one 30,000 square foot administration building (Building Z); and, a 16,000 square foot filter storage building (Building AA). Phase one of development will occur within five years of project approval, which includes construction of a 120,000 square foot warehouse (Building Q) to be utilized for the storage of bottled wine stock. Future phases will be built as market demands. The hours of operation for the winery are Monday-Friday, 24 hours a day year round and additionally Sunday-Saturday 24 hours per day during seasonal months, which is from mid-July to mid-November. There are currently 396 employees year round with an additional 90 employees during seasonal months, for a total of 486 employees maximum. At full build-out there will be approximately 30 additional year round employees, for a total of 426 employees year round and 516 employees seasonally. The addition of the employee center and pavilion will be utilized for educational seminars and meetings, to be held up to two times per year for up to 68 people, for Bronco's National sales force, and for Bronco's Wholesale Division's monthly meetings (Northern California sales force), which proposes to utilize the Ceres site up to four times per year for up to 50 managers. All access to the project site will occur along Bystrum Road. All entrances to the operation are fenced and include security gates. The expansion also includes railroad access to Union Pacific Railroad by constructing two rail spurs, which will minimize traffic impacts in surrounding areas. As part of the rezone, a fleet of 53 foot long trucks and tanker trucks will be added to the operation and stored on-site to allow both bulk and bottled wines to be picked up and delivered to partner wineries. On-site truck maintenance will be limited to minor maintenance activities. Any required

major maintenance will be performed at off-site truck repair shops. The project proposes to maintain their current operational ratio of approximately 88% of product produced and owned by Bronco, 8% produced by other California wineries, and 4% imported from other countries. See attachment B for an expanded project description.

9.	**Surrounding land uses and setting:**	Scattered single family in all directions. To the north, orchards and row crops. To the east, a vineyard, orchards, and row crops. To the west orchards, row crops, and a dairy farm. To the south a chicken farm, orchard, row crops, and a dairy farm.
10.	**Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):**	Building Permits Division Department of Environmental Resources DER Hazardous Materials Division Department of Public Works Regional Water Quality Control Board Turlock Irrigation District

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 & Forestry Resources	☐ Air Quality
☐Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☒ Transportation / Traffic	☐ Utilities / Service Systems	☐ 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.

Kristin Doud, Senior Planner
Signature

March 22, 2017
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, than 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 -- Would 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) Substantially degrade the existing visual character or quality of the site and its surroundings?			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 a unique scenic vista. Community standards generally do not dictate the need or desire for architectural review of agricultural uses. The 117± acre project site is currently developed with structures to support the on-site wine manufacturing facility. The additional buildings proposed as part of this project will be consistent with existing construction and will include additional fencing and landscaping along the northern property boundary. The proposed buildings will not exceed 45 feet in height, with the warehouses totaling 26 feet in height.

A Mitigation Measure has been applied to the project to ensure that any additional lighting will be aimed down to prevent any glaring impacts onto adjacent properties or roadways. With this mitigation measure in place, aesthetic impacts are considered to be less than significant with mitigation included.

Mitigation:

No. 1 Mitigation Measure: All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include but not be limited to: the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and to prevent light trespass (glare and spill light that shines onto neighboring properties).

References: Application information; and 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 property is not currently restricted by a Williamson Act Contract. The project site is classified as Prime Farmland and Urban and Built-Up Land by the Farmland Mapping and Monitoring Program. The soils on site are listed as Grade 1 Hanford sandy loams (0-3% slopes, Index Rating of 95), Grade 2 Dinuba sandy loam (0-1% slopes, Index Rating between 60-72), and Grade 2 Tujunga loamy sand (0-3% slopes, Index Rating of 76).

The project will result in the paving over of prime farmland; however, the County recognizes that the proposed project is directly related to the production of commercial agricultural product on the subject parcel and adjacent southern parcel. Compatible uses include activities such as harvesting, processing and shipping. The rezoning of this parcel constitutes an expansion of the existing operation, which processes grapes and produces wine.

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. The purpose of these guidelines is to protect the long-term health of agriculture by minimizing conflicts such as spray drift 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. Although the development proposed on the northern portion of the property does not meet the 300 foot buffer setback standard for people intensive uses on the northern and western property lines, the project does currently include six foot high security chain link fencing, and cypress trees along the eastern and western property borders and proposes to extend the fencing and cypress trees to act as an ag buffer along the northern property line.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1], Stanislaus County Agricultural Element[1], Stanislaus County Zoning Ordinance, California State Department of Conservation Farmland Mapping and Monitoring Program - Stanislaus County Farmland 2004, United States Department of Agriculture Soil Survey 1964 - Eastern Stanislaus Area, California.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management 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) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			x	

c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

Discussion: The project site is within the San Joaquin Valley Air Basin, which has been classified as "severe non-attainment" for ozone and respirable particulate matter (PM-10) as defined by the Federal Clean Air Act. The San Joaquin Valley Air Pollution Control District (SJVAPCD) has been established by the State in an effort to control and minimize air pollution. As such, the District maintains permit authority over stationary sources of pollutants.

The expansion includes construction of 14 proposed buildings, totaling 1,462,186 square feet (see Buildings labeled N-BB on the site plan included in Attachment A), which includes: four 120,000 square foot warehouses (Buildings N, O, P, and Q), two with 10 additional truck docks each; three 44,483 square foot warehouses (Buildings V, W, and X); one 13,000 square foot office (Building T); one 38,000 square foot office (Building U); one 10,300 square foot employee center (commercial kitchen, cafeteria, and conference area, Building R); one 2,264 square foot pavilion (roof only shade structure, Building S); one 20,000 square foot employee center (lockers and restrooms, Building Y); one 30,000 square foot administration building (Building Z); and, a 16,000 square foot filter storage building (Building AA). Minimal emissions will occur during construction. Construction activities are considered to be less than significant as they are temporary in nature and are subject to meeting SJVAPCD standards for air quality control.

The primary source of air pollutants generated by this project would be classified as being generated from "mobile" sources created from increased truck trips generated from the expansion. Mobile sources would generally include dust from roads, farming, and vehicle exhausts. However, the addition of a fleet of trucks and the utilization of rail will allow the current truck trip to inventory ratio to be decreased. Trucks currently arrive to the site empty or leave the site empty. The addition of their own truck fleet will allow truck trips to be full both on the way to the site and on the way to a delivery/pick-up destination. The use of rail will also offset truck trips as the equivalent of four fully stocked trucks can fit into one rail car. At full build-out there will be approximately 30 additional year round employees, for a total of 426 employees year round and 516 employees seasonally. The addition of the employee center and pavilion will be utilized for educational seminars and meetings, to be held up to two times per year for up to 68 people, for Bronco's National sales force, and for Bronco's Wholesale Division's monthly meetings (Northern California sales force), which proposes to utilize the Ceres site up to four times per year for up to 50 managers. 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. Although no response was received from SJVAPCD, the applicant will be required to meet all Air District standards and to obtain any necessary Air District permits, including but not limited to an Air Impact Assessment (AIA). This requirement will be incorporated into the project's Conditions of Approval. With conditions of approval in place, no significant impacts to air quality are anticipated.

Mitigation: None.

References: Application information; 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 federally protected wetlands as defined by Section 404 of the Clean Water Act (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?				
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 Ceres Quad of the California Natural Diversity Database. There are 14 plants and animals which are state or federally listed, threatened, or identified as species of special concern within the Waterford California Natural Diversity Database Quad. These species include the Swainson's hawk, tricolored blackbird, burrowing owl, riffle sculpin, hardhead, steelhead, chinook salmon, obscure bumble bee, Crotch bumble bee, valley elderberry longhorn beetle, moestan blister beetle, Townsend's big-eared bat, heartscale, and subtle orache. However, the project site is already developed and hardscaped or graded, making the likelihood for existence of these species on the project site very low.

An Early Consultation was sent to the California Department of Fish and Wildlife (formerly the Department of Fish and Game) and no response was received. 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, wildlife dispersal or mitigation corridors are considered to be less than significant.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1]; California Department of Fish and Game California Natural Diversity Database.

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 as defined in § 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			X	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d) Disturb any human remains, including those interred outside of formal cemeteries?			X	

Discussion: It does not appear this project will result in significant impacts to any archaeological or cultural resources. The applicant submitted a records search from the Central California Information Center (CCIC) which indicates that the project area has a low sensitivity for the possible discovery of prehistoric resources, due to the distance from a natural

water source, as well as a low sensitivity for historic archaeological resources. A Sacred Lands File Check, completed by the Native American Heritage Commission, indicated that no sacred sites were present within the project site. Conditions of Approval will be placed on the project, requiring that construction activities will be halted if any resources are found, until appropriate agencies are contacted and an archaeological survey is completed.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1]; records search dated May 27, 2009, from the Central California Information Center; referral response from the Native American Heritage Commission dated November 17, 2009.

VI. GEOLOGY AND SOILS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
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 creating substantial 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	

Discussion: The soils on site are listed as Grade 1 Hanford sandy loams (0-3% slopes, Index Rating of 95), Grade 2 Dinuba sandy loam (0-1% slopes, Index Rating between 60-72), and Grade 2 Tujunga loamy sand (0-3% slopes, Index Rating of 76). 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 2007 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. Results from the soils test will determine if unstable or expansive soils are present. If such soils are present, special engineering of the structure will be required to compensate for the soil deficiency. Any structures resulting from this project will be designed and built according to building standards appropriate to withstand shaking for the area in which they are constructed. Any earth moving is subject to Public Works Standards and Specifications which considers the potential for erosion and run-off prior to permit approval. Likewise, any addition of a septic tank or alternative waste water disposal system would require the approval of the Department of Environmental Resources (DER) through the building permit process, which also takes soil type into consideration within the specific design requirements.

Stanislaus County Department of Public Works has already reviewed and approved a grading and drainage plan for proposed Phase 1 of this project, which includes the 120,000 square foot warehouse (labeled on the site plan as Building Q) and a drainage basin, located on the northeast portion of the project site. Additional grading and drainage plans are required to be submitted to the Department of Public Works for review and approval for any additional grading activities, which will be reflected as a Condition of Approval for the project.

Mitigation: None.

References: California Building Code (2016); Stanislaus County General Plan and Support Documentation - Safety Element[1].

VII. 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 (HCFCs), and tropospheric Ozone (O3). 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.

The expansion includes construction of 14 proposed buildings, totaling 1,462,186 square feet (see Buildings labeled N-BB on the site plan included in Attachment A), which includes: four 120,000 square foot warehouses (Buildings N, O, P, and Q), two with 10 additional truck docks each; three 44,483 square foot warehouses (Buildings V, W, and X); one 13,000 square foot office (Building T); one 38,000 square foot office (Building U); one 10,300 square foot employee center (commercial kitchen, cafeteria, and conference area, Building R); one 2,264 square foot pavilion (roof only shade structure, Building S); one 20,000 square foot employee center (lockers and restrooms, Building Y); one 30,000 square foot administration building (Building Z); and a 16,000 square foot filter storage building (Building AA).

The proposed structures are 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). Minimal greenhouse gas emissions will occur during construction. Construction activities are considered to be less than significant as they are temporary in nature and are subject to meeting SJVAPCD standards for air quality control.

Minimal greenhouse gas emissions will also be generated from additional vehicle and truck trips. However, the addition of a fleet of trucks and the utilization of rail will allow the current truck trip to inventory ratio to be decreased. Trucks currently arrive to the site empty or leave the site empty. The addition of their own truck fleet will allow truck trips to be full both on the way to the site and on the way to a delivery/pick-up destination. The use of rail will also offset truck trips as the equivalent of four fully stocked trucks can fit into one rail car. There are currently 396 employees year round with an additional 90 employees during seasonal months, for a total of 486 employees maximum. At full build-out there will be approximately 30 additional year round employees, for a total of 426 employees year round and 516 employees seasonally. The addition of the employee center and pavilion will be utilized for educational seminars and meetings, to be held up to two times per year for up to 68 people, for Bronco's National sales force, and for Bronco's Wholesale Division's

monthly meetings (Northern California sales force), which proposes to utilize the Ceres site up to four times per year for up to 50 managers. Although no response was received from SJVAPCD, the applicant will be required to meet all Air District standards and to obtain any necessary Air District permits, including but not limited to an Air Impact Assessment (AIA). This will be incorporated into the project's conditions of approval.

Mitigation: None.

References: Application information; Stanislaus County General Plan and Support Documentation[1]

VIII. 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 for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

Discussion: DER is responsible for overseeing hazardous materials in this area. Pesticide exposure is a risk in areas located in the vicinity of agriculture. Sources of exposure include contaminated groundwater, which is consumed and drift from spray applications. Application of sprays is strictly controlled by the Agricultural Commissioner and can only be accomplished after first obtaining permits. Spraying activities on adjacent properties will be conditioned by the Agricultural Commissioner's Office. The project site is not located within an airport land use plan or a wildlands area. The project site is not located in a very high or high fire severity zone and is located within the Keyes Fire District. Standard conditions of approval regarding fire protection will be incorporated into the project.

An Early Consultation referral response from DER requested standard conditions regarding hazardous materials associated with the proposed project and site be incorporated into the project's conditions of approval.

Mitigation: None.

References: Application information; referral response dated from the Stanislaus County Department of Environmental Resources on August 16, 2016; Stanislaus County General Plan and Support Documentation[1]

IX. 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?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			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, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) 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?			X	
f) Otherwise substantially degrade water quality?				
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?			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 will be addressed by the Building Permits Division during the building permit process. The Central Valley Regional Water Quality Control Board (RWQCB) provided an Early Consultation referral response requesting that the applicant coordinate with their agency to determine if any permits or Water Board requirements must be obtained/met prior to operation. Conditions of approval will be added to the project requiring the applicant comply with this request prior to issuance of a building permit.

Stanislaus County Department of Public Works has already reviewed and approved a grading and drainage plan for proposed Phase 1 of this project, which includes the 120,000 square foot warehouse (labeled on the site plan as Building Q) and a drainage basin, located on the northeast portion of the project site. Additional grading and drainage plans are required to be submitted to the Department of Public Works for review and approval for any additional grading activities. A Notice of Intention (NOI) may be required to be filed with the California Regional Water Quality Control Board and a Waste Discharge Identification Number obtained, in conjunction with future grading or building permits. These requirements will be reflected as Conditions of Approval for the project.

The California Safe Drinking Water Act (CA Health and Safety Code Section 116275(h)) defines a Public Water System as a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. A public water system includes the following:

(1) Any collection, treatment, storage, and distribution facilities under control of the operator of the system that are used primarily in connection with the system.
(2) Any collection or pretreatment storage facilities not under the control of the operator that are used primarily in connection with the system.
(3) Any water system that treats water on behalf of one or more public water systems for the purpose of rendering it safe for human consumption.

This project is subject to the public water system permit and will be required to work with DER to ensure these permit requirements are met. This will be applied to the project as a Condition of Approval.

Mitigation: None.

References: Referral response from the Central Valley Regional Water Quality Control Board dated August 23, 2016; Application information; Stanislaus County General Plan and Support Documentation[1]

X. 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) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			X	

Discussion: This is a request to expand the northern portion of Bronco Winery. The expansion includes construction of 14 proposed buildings, totaling 1,462,186 square feet (see Buildings labeled N-BB on the site plan included in Attachment A), which includes: four 120,000 square foot warehouses (Buildings N, O, P, and Q), two with 10 additional truck docks each; three 44,483 square foot warehouses (Buildings V, W, and X); one 13,000 square foot office (Building T); one 38,000 square foot office (Building U); one 10,300 square foot employee center (commercial kitchen, cafeteria, and conference area, Building R); one 2,264 square foot pavilion (roof only shade structure, Building S); one 20,000 square foot employee center (lockers and restrooms, Building Y); one 30,000 square foot administration building (Building Z); and a 16,000 square foot filter storage building (Building AA).

The project site is has a general plan designation of Agriculture. The southern portion of the site was re-zoned to Planned Development (6) in 1974, with Rezone 74-2, which allowed for the existing winery operations. The northern portion of the property was rezoned to Planned Development (321) in 2009, with Rezone 2009-04, which permitted conversion of an existing house to a shipping and receiving office, and to construct two 14,400 square foot office buildings, associated parking lot, and two driveways on E. Keyes Road to provide access to the proposed site and the existing Bronco Wine

Company processing and bottling plant. A Time Extension processed for PD-321 extended the Development Schedule to October 20, 2016. Although some grading occurred on the northern portion of the site prior to the date allowed by the Time Extension, the development schedule has not been met; and, as such, a new Rezone is required to develop the site. Additionally, the northern parcel (previously APN: 041-046-019) and the existing winery facility to the south (previously APN: 041-046-020) have been merged into one parcel, and a new and expanded project description is now being proposed, further requiring a new Rezone for the entire 117+ acre merged property (now APN: 041-046-021). If approved, the entire 117+ acre property would maintain a General Plan designation of Agriculture. The "Agriculture" General Plan designation is consistent with a Planned Development zoning designation when, *"it is used for agriculturally-related uses or for uses of a demonstrably unique character, which due to specific agricultural needs or to their transportation needs or to needs that can only be satisfied in the agriculture designation, may be properly located within areas designated as "agricultural" on the General Plan. Such uses can include, facilities for packing fresh fruit, facilities for the processing of agricultural commodities utilized in the County's agriculture community, etc."*

This request will not physically divide an existing community, nor does it conflict with any applicable land use plan, policy, or regulation, or any habitat or natural community conservation plan. The project must be consistent with the county's general plan, zoning ordinance, and noise ordinance in order to be approved. Through the application of mitigation measures, the project will be consistent will these policies.

Mitigation: None.

References: Application information; Rezone No. 74-02 – Bronco Winery; Rezone No. 2009-04 – Bronco Winery; Stanislaus County Zoning Ordinance (Title 21); Stanislaus County General Plan and Support Documentation[1]

XI. 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.

Mitigation: None.

References: State Division of Mining & Geology - Special Report 173 (1993); Stanislaus County General Plan and Support Documentation[1]

XII. NOISE -- Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			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 expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Discussion: A temporary noise increase will be associated with construction of the proposed buildings. Days and hours of operation are expected to remain the same, operating Monday thru Friday, 24 hours a day, and seasonally seven days a week, 24 hours a day. The project proposes an addition of a fleet of trucks and the utilization of rail, which will allow the current truck trip to inventory ratio to be decreased. There are currently 396 employees year round with an additional 90 employees during seasonal months, for a total of 486 employees maximum. At full build-out there will be approximately 30 additional year round employees, for a total of 426 employees year round and 516 employees seasonally. The addition of the employee center and pavilion will be utilized for educational seminars and meetings, to be held up to two times per year for up to 68 people, for Bronco's National sales force, and for Bronco's Wholesale Division's monthly meetings (Northern California sales force), which proposes to utilize the Ceres site up to four times per year for up to 50 managers. These additional employee, truck, and rail trips will generate some additional noise. However, the activities associated with the project will take place mostly indoors. The operation is exempted from the County's Noise Control Ordinance, as described in Stanislaus County Code Sections 10.46.080(H) and 9.32.10(B). Impacts associated with noise are considered to be less than significant.

Mitigation: None.

References: Application information; Stanislaus County Noise Control Ordinance (Title 10, Chapter 10.46); Stanislaus County General Plan and Support Documentation[1]

XIII. POPULATION AND HOUSING -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial 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 housing, necessitating the construction of replacement housing elsewhere?			X	
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			X	

Discussion: The proposed use of the site will not create significant service extensions or new infrastructure which could be considered as growth inducing, as services are already available to this property. No housing or persons will be displaced by this project. An increased ability to hire additional employees may result in the relocation of working families closer to the site. However, as the project site is surrounded by agricultural land it is unlikely that residential development will occur due to the fact that County voters passed the Measure E vote in February of 2008. Measure E, which was incorporated into Zoning Ordinance Chapter 21.118 (the 30-Year Land Use Restriction), requires that redesignation or rezoning of land from agricultural/open space to residential use shall require approval by a majority vote of the County voters at a general or special local election.

Mitigation: None.

References: Application information; Stanislaus County Zoning Ordinance (Title 21); Stanislaus County General Plan and Support Documentation[1]

XIV. 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:			X	
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

Discussion: The County has adopted Public Facilities Fees, as well as one for the Fire Facility Fees on behalf of the appropriate fire district, to address impacts to public services. Such fees are required to be paid at the time of building permit issuance. Conditions of Approval will be added to this project to ensure that the proposed development complies with all applicable fire department standards, with respect to access and water for fire protection. The applicant will construct all buildings in accordance with the current adopted building and fire codes. With conditions of approval and public facility fees in place, no impacts to public services are anticipated.

Mitigation: None.

References: Application information; Stanislaus County General Plan and Support Documentation[1]

XV. 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 proposed project is not anticipated to significantly increase demand on recreational facilities or to have an adverse physical effect on the environment.

Mitigation: None.

References: Application information; Stanislaus County General Plan and Support Documentation[1]

XVI. TRANSPORATION/TRAFFIC -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?		X		
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		X		
e) Result in inadequate emergency access?			X	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	

Discussion: The expansion includes construction of 14 proposed buildings, totaling 1,462,186 square feet (see Buildings labeled N-BB on the site plan included in Attachment A), which includes: four 120,000 square foot warehouses (Buildings N, O, P, and Q), two with 10 additional truck docks each; three 44,483 square foot warehouses (Buildings V, W, and X); one 13,000 square foot office (Building T); one 38,000 square foot office (Building U); one 10,300 square foot employee center (commercial kitchen, cafeteria, and conference area, Building R); one 2,264 square foot pavilion (roof only shade structure, Building S); one 20,000 square foot employee center (lockers and restrooms, Building Y); one 30,000 square foot administration building (Building Z); and, a 16,000 square foot filter storage building (Building AA).

A Traffic Impact Analysis for the proposed project was prepared by KD Anderson & Associates, Inc., dated November 23, 2016. The analysis evaluated traffic impacts from the project based on the proposed new structures and based on the addition of a fleet of trucks and the utilization of rail, which will allow the current truck trip to inventory ratio to be decreased. Trucks currently arrive to the site empty or leave the site empty. The addition of their own truck fleet will allow truck trips to be full both on the way to the site and on the way to a delivery/pick-up destination. The use of rail will also offset truck trips as the equivalent of four fully stocked trucks can fit into one rail car. There are currently 396 employees year round with an additional 90 employees during seasonal months, for a total of 486 employees maximum. At full build-out there will be approximately 30 additional year round employees, for a total of 426 employees year round and 516 employees seasonally. The addition of the employee center and pavilion will be utilized for educational seminars and meetings, to be held up to two times per year for up to 68 people, for Bronco's National sales force, and for Bronco's Wholesale Division's monthly meetings (Northern California sales force), which proposes to utilize the Ceres site up to four times per year for up to 50 managers.

Stanislaus County Public Works and the Stanislaus County Environmental Review Committee both provided referral responses requesting that the Traffic Impact Analysis be amended to address safety concerns. The Traffic Impact Analysis was revised on March 15, 2017, to include improvements to the intersection of Keyes Road and Bystrum Road, including dedicated turn lanes per the California Highway Design Manual, to address traffic safety concerns. This has been incorporated into the project as a Mitigation Measure. With mitigation applied, impacts to transportation and traffic are considered to be less than significant with mitigation included.

Mitigation:

No. 2 Mitigation Measure: Prior to issuance of a building permit, not including the building permit for Phase 1 which includes construction of the 120,000 square foot warehouse (Building Q), improvements to alleviate traffic congestion at the intersection of Keyes Road and Bystrum Road and to improve safety conditions along Keyes Road, to include dedicated turn lanes per the California Highway Design Manual, shall be completed. Improvement plans shall bereviewed and approved by the Stanislaus County Department of Public Works.

References: Traffic Impact Analysis prepared by KD Anderson & Associates, Inc., dated November 23, 2016, revised March 15, 2017; referral response from the Stanislaus County Environmental Review Committee dated August 30, 2016; Referral response from Stanislaus County Public Works dated January 6, 2017; Application information; Stanislaus County General Plan and Support Documentation[1]

XVII. UTILITIES AND SERVICE SYSTEMS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e) 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	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Discussion: Limitations on providing services have not been identified. Conditions of Approval will be added to the project to address necessary permits from DER. On-site services will be provided by an approved septic system and water well as determined by DER. A public water system permit will be required to be obtained through DER.

A referral response was received from the Turlock Irrigation District, which included Conditions of Approval regarding existing irrigation infrastructure and electrical capacity for the project site. These comments will be applied to the project as Conditions of Approval.

With Conditions of Approval in place, no impacts to utilities and service systems are anticipated.

Mitigation: None.

References: Application information; Referral response from the Turlock Irrigation District dated August 29, 2016; Stanislaus County General Plan and Support Documentation[1]

XVIII. 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 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, 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. Any potential impacts from this project have been mitigated to a level of less than significant.

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

Stanislaus County

Planning and Community Development

1010 10th Street, Suite 3400
Modesto, CA 95354

Phone: (209) 525-6330
Fax: (209) 525-5911

Mitigation Monitoring Plan

Adapted from CEQA Guidelines sec. 15097 Final Text, October 26, 1998

March 20, 2017

1. Project title and location:	Rezone Application No. PLN2016-0066 – Bronco Wine Company 6342 Bystrum Road, at the southeast corner of Bystrum and E. Keyes roads, east of Crows Landing Road, west of State Highway 99, and south of Ceres. APN: 041-046-021
2. Project Applicant name and address:	John Franzia, Bronco Wine Company 6342 Bystrum Road Ceres, CA 95307
3. Contact person at County:	Kristin Doud, Senior 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.

I. AESTHETICS

No. 1 Mitigation Measure: All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include but not be limited to: the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and to prevent light trespass (glare and spill light that shines onto neighboring properties).

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Ongoing.
When should it be completed:	Ongoing.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	None.

XVI. TRANSPORTATION/TRAFFIC

No. 2 Mitigation Measure: Prior to issuance of a building permit, not including the building permit for Phase 1, which includes construction of the 120,000 square foot warehouse (Building Q), improvements to alleviate traffic congestion at the intersection of Keyes Road and Bystrum Road and to improve safety conditions along Keyes Road, to include dedicated turn lanes per the

California Highway Design Manual, shall be completed. Improvement plans shall be reviewed and approved by the Stanislaus County Department of Public Works.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Prior to issuance of a building permit
When should it be completed:	Prior to issuance of a building permit
Who verifies compliance:	Stanislaus County Department of Public Works
Other Responsible Agencies:	Stanislaus County Planning and Community Development Department

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 **March 2, 2017**
Person Responsible for Implementing Mitigation Program **Date**

MITIGATED NEGATIVE DECLARATION

NAME OF PROJECT: Rezone Application No. PLN2016-0066 – Bronco Wine Company

LOCATION OF PROJECT: 6342 Bystrum Road, at the southeast corner of Bystrum and E. Keyes Roads, east of Crows Landing Road, west of State Highway 99, and south of Ceres. APN: 041-046-021

PROJECT DEVELOPER: John Franzia, Bronco Wine Company
6342 Bystrum Road
Ceres, CA 95307

DESCRIPTION OF PROJECT: Request to rezone a 117.93 acre parcel from existing Planned Development (PD-6 and PD-321) zones to a new Planned Development (P-D) zone to allow for the expansion of an existing winery and bottling facility developed on 82.15 acres of the project site. The expansion includes 14 proposed buildings, totaling 1,462,186 square feet, the construction of two rail spurs, and the addition of a fleet of 53 foot long trucks and tanker trucks.

Based upon the Initial Study, dated **March 22, 2017**, 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. All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include but not be limited to: the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and to prevent light trespass (glare and spill light that shines onto neighboring properties).

2. Prior to issuance of a building permit, not including the building permit for Phase 1 which includes construction of the 120,000 square foot warehouse (Building Q), improvements to alleviate traffic congestion at the intersection of Keyes Road and Bystrum Road and to improve safety conditions along Keyes Road, to include dedicated turn lanes per the California Highway Design Manual, shall be completed. Improvement plans shall be reviewed and approved by the Stanislaus County Department of Public Works.

EXHIBIT L

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.

Initial Study prepared by: Kristin Doud, Senior Planner

Submit comments to: Stanislaus County
Planning and Community Development Department
1010 10th Street, Suite 3400
Modesto, California 95354

(I:\PLANNING\STAFF REPORTS\REZ\2016\REZ PLN2016-0066 - BRONCO WINE COMPANY\CEQA-30-DAY-REFERRAL\MITIGATED NEGATIVE DECLARATION.DOC)

SUMMARY OF RESPONSES FOR ENVIRONMENTAL REVIEW REFERRALS

PROJECT: REZONE APPLICATION NO. PLN2016-0066 - BRONCO WINE COMPANY

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 CONSERVATION	X	X	X		X							
CA DEPT OF FISH & WILDLIFE	X	X	X		X							
CA DEPT OF TRANSPORTATION	X	X	X		X							
CA NATIVE AMERICAN HERITAGE COMM				X				X		X		X
CA OPR STATE CLEARINGHOUSE	X	X	X	X				X		X		X
CENTRAL VALLEY RWQCB	X	X	X	X				X		X	X	
COOPERATIVE EXTENSION	X	X	X		X							
FIRE PROTECTION DIST: KEYES	X	X	X		X							
IRRIGATION DISTRICT: TURLOCK	X	X	X	X				X		X	X	
MOSQUITO DISTRICT: TURLOCK	X	X	X		X							
MT VALLEY EMERGENCY MEDICAL	X	X	X		X							
PG&E	X	X	X		X							
SAN JOAQUIN VALLEY APCD	X	X	X	X			X			X	X	
SCHOOL DISTRICT 1: CERES UNIFIED	X	X	X		X							
STAN CO AG COMMISSIONER	X	X	X		X							
STAN CO BUILDING PERMITS DIVISION	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 FARM BUREAU	X	X	X		X							
STAN CO HAZARDOUS MATERIALS	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 & RESPONDING NEIGHBORS		X	X		X							
TELEPHONE COMPANY: AT&T	X	X	X		X							
TRIBAL CONTACTS: TULE RIVER INDIAN TRIBE, NORTH VALLEY YOKUTS TRIBE, SOUTHERN SIERRA MIWUK NATION	X	X	X		X							
US FISH AND WILDLIFE	X	X	X		X							
US MILITARY	X	X	X		X							

EXHIBIT M

Attachment 2

Stanislaus County Planning Commission
Minutes
May 4, 2017
Pages 2 & 3

NON-CONSENT ITEMS

C. **REZONE APPLICATION NO. PLN2016-0066 - BRONCO WINE COMPANY** – Request to rezone a 117.93 acre parcel from existing Planned Development P-D (6) and P-D (321) zones to a new Planned Development (P-D) zone to allow for the expansion of an existing winery and bottling facility developed on 82.15 acres of the project site. The expansion includes 14 proposed buildings, totaling 1,462,186 square feet, the construction of two rail spurs, and the addition of a fleet of 53-foot-long trucks and tanker trucks. The project is located at 6342 Bystrum Road, at the southeast corner of Bystrum and E. Keyes Roads, east of Crows Landing Road, west of State Highway 99, and south of Ceres. The Planning Commission will consider adoption of a CEQA Mitigated Negative Declaration for the project.
Staff Report: Kristin Doud, Senior Planner, Recommends **APPROVAL**

The staff report presentation clarified that the total project square footage is 743,013 and not the 1,462,186 square feet incorrectly referenced in the project description.

Public hearing opened.
OPPOSITION: None
FAVOR: Carl Ballantyne, C B Engineering, Inc., 420 Downey Avenue, Modesto, CA; Daniel Leonard, Vice-President, Treasurer, Bronco Winery Company
Public hearing closed.
Blom/Borges (7/0) **RECOMMEDED APPROVAL TO THE BOARD OF SUPERVISORS AS OUTLINED IN THE STAFF REPORT INCLUDING THE DELETION OF DEVELOPMENT STANDARD NO. 23**

~~23. Prior to the issuance of any building or grading permit, not including building or grading permits issued for Building Q, street improvement plans, per the California Highway Design Manual, for dedicated turn lanes at the intersection of Keyes Road and Bystrum Road shall be submitted to and approved by the Department of Public Works. These plans shall be approved prior to the issuance of any building or grading permit submitted after Building Q.~~

EXCERPT

PLANNING COMMISSION

MINUTES

Signature on file.

Angela Freitas, Secretary

May 19, 2017
Date

May 23, 2017
9:15
2017-284

STANISLAUS COUNTY ORDINANCE NO. C.S. 1193

AN ORDINANCE ADOPTING SECTIONAL DISTRICT MAP NO. 9-110-1009 FOR THE PURPOSE OF REZONING A 117.93 ACRE PARCEL FROM EXISTING PLANNED DEVELOPMENT P-D (6) AND P-D (321) ZONES TO A NEW PLANNED DEVELOPMENT (P-D) ZONE TO ALLOW FOR THE EXPANSION OF AN EXISTING WINERY AND BOTTLING FACILITY DEVELOPED ON 82.15 ACRES OF THE PROJECT SITE LOCATED ON PROPERTY LOCATED AT 800 E. KEYES ROAD AND 6342 BYSTRUM ROAD, EAST OF CROWS LANDING ROAD, WEST OF STATE HIGHWAY 99, AND SOUTH OF CERES. APN: 041-046-021

The Board of Supervisors of the County of Stanislaus, State of California, ordains as follows:

Section 1. Sectional District Map No. 9-110-1009 is adopted for the purpose of designating and indicating the location and boundaries of the District, such map to appear as follows:

(Map to be inserted upon rezone approval)

Section 2. This ordinance shall take effect and be in full force thirty (30) days from and after the date of its passage and before the expiration of fifteen (15) days after its passage it shall be published once, with the names of the members voting for and against same, in the Modesto Bee, a newspaper of general circulation published in Stanislaus County, State of California.

Upon motion of Supervisor Withrow, seconded by Supervisor Olsen, the foregoing ordinance was passed and adopted at a regular meeting of the Board of Supervisors of the County of Stanislaus, State of California, this 23rd day of May, 2017, by the following called vote:

AYES:	Supervisors: Olsen, Withrow, Montieth, DeMartini, and Chairman Chiesa
NOES:	Supervisors: None
ABSENT:	Supervisors: None
ABSTAINING:	Supervisors: None

Vito Chiesa
CHAIRMAN OF THE BOARD OF SUPERVISORS
of the County of Stanislaus,
State of California

ATTEST: ELIZABETH A. KING, Clerk of
the Board of Supervisors of
the County of Stanislaus,
State of California

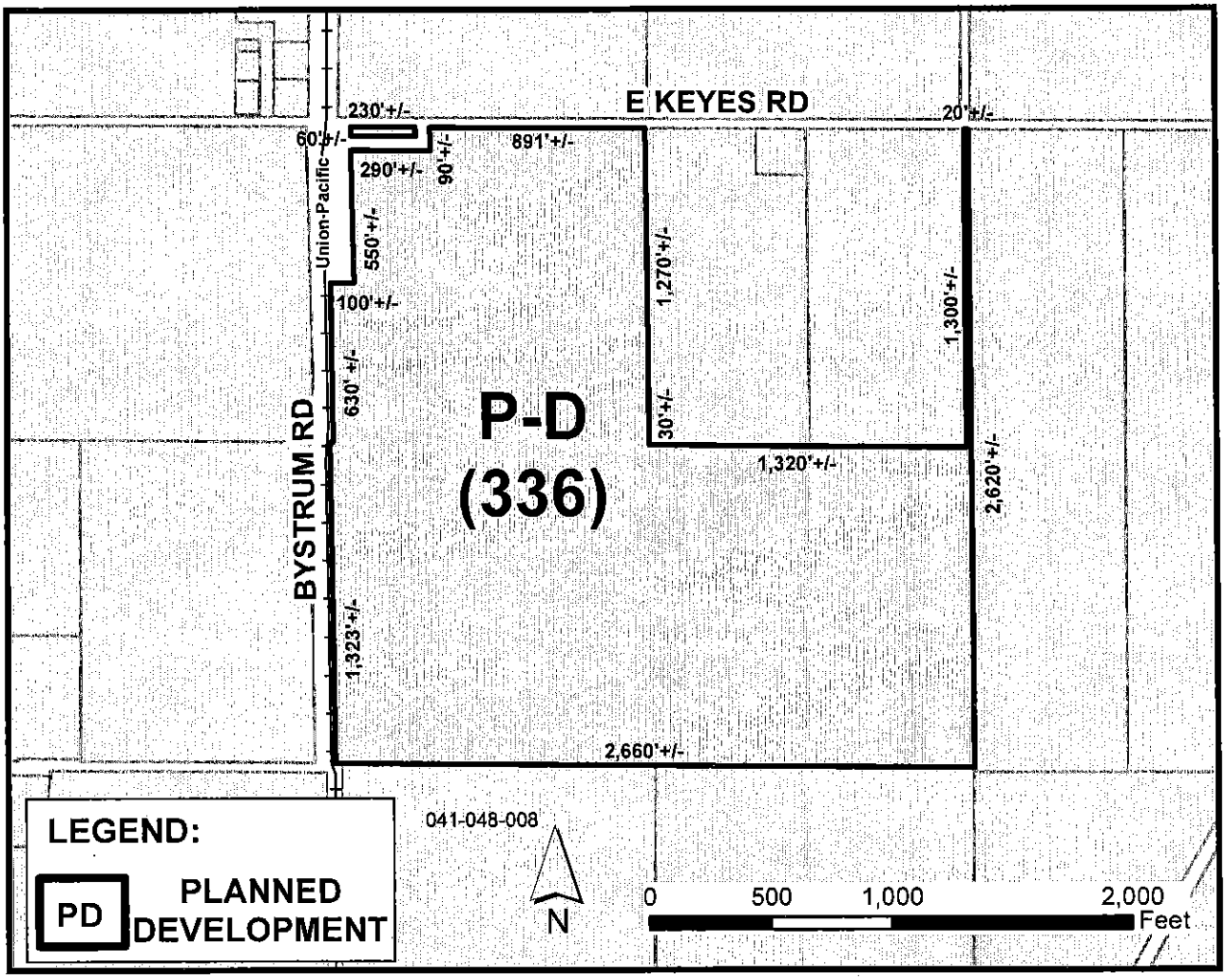
BY: _____
Pam Villarreal, Assistant Clerk of the Board

APPROVED AS TO FORM:

JOHN P. DOERING
County Counsel

By _____
Thomas E. Boze
Assistant County Counsel

SECTIONAL DISTRICT MAP NO. 9-110-1009



EFFECTIVE DATE: 06.22.2017

PREVIOUS MAPS: 991, 671E, 517, 395