Draft
Environmental Impact Report

SCH# 2022080056

Volume 1

Chapters 1 through 10

MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT

by Malibu Vineyards, LP

(PP21116)

Adoption of Specific Plan
General Plan Amendment No. 9, Map No. 80
General Plan Amendment No. 23, Map No. 81
Zone Classification Change No. 13, Map No. 80
Zone Classification Change No. 92, Map No. 81
Precise Development Plan No. 2, Map No. 80
Precise Development Plan No. 74, Map No. 81
Precise Development Plan No. 75, Map No. 81

Kern County
Planning and Natural Resources Department
Bakersfield, CA

July 2024

Lorelei H. Oviatt, AICP, Director
2700 "M" Street, Suite 100
Bakersfield, CA 93301-2323
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Email: planning@kerncounty.com
Web Address: http://kernplanning.com/

PLANNING AND NATURAL RESOURCES DEPARTMENT

Planning
Community Development
Administrative Operations

NOTICE OF AVAILABILITY FOR PUBLIC REVIEW AND HEARING ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT

This is to advise that the Kern County Planning and Natural Resources Department has prepared a Draft Environmental Impact Report (EIR) for the project identified below. As mandated by State law, the minimum public review period for this document is 45 days.

PROJECT TITLE: Malibu Vineyards Industrial Parkway Project by Malibu Vineyards, LP (PP21116); Adoption of Specific Plan; GPA 9, Map 80; GPA 23, Map 81; ZCC 13, Map 80; ZCC 92, Map 81; PD 2, Map 80; PD 74, Map 81; PD 75, Map 81

PROJECT LOCATION: The project site is located north of Imperial Avenue, immediately east of State Route (SR) 99, east of the City of Shafter, and approximately 1.5 miles north of the City of Bakersfield, in unincorporated Kern County.

DOCUMENT AVAILABILITY: The Draft EIR and the documents referenced in it are available for public review at the Planning and Natural Resources Department, which is located at 2700 "M" Street, Suite 100, in Bakersfield, CA 93301 or on the Department website at:

https://kernplanning.com/environmental-doc/malibu-vineyards-industrial-parkway

PUBLIC COMMENT: The required Draft EIR public review period is 45 days.

July 15, 2024 – August 29, 2024

Written comments may be submitted to the project planner identified below prior to the close of the DEIR public review period on **August 29, 2024, at 5:00 p.m.** to:

Kern County Planning and Natural Resources Department
ATTN: Katrina Slayton, Division Chief
2700 "M" Street, Suite 100, Bakersfield, CA 93301
Phone: (661) 862-8957
E-mail: Slaytonk@kerncounty.com

PUBLIC HEARING: A public hearing has been scheduled with the Kern County Planning Commission to consider a recommendation on the project and solicit comments on the adequacy and completeness of the analysis and proposed mitigation measures described in the Draft EIR. You may comment by providing testimony at the public hearing on:

DATE: **October 24, 2024**
TIME: **7:00 P.M. or soon thereafter**
LOCATION: **Chambers of the Board of Supervisors**
Kern County Administrative Center, First Floor
1115 Truxtun Avenue, Bakersfield, CA 93301

After consideration by the Planning Commission, a public hearing will be scheduled for the Kern County Board of Supervisors for final consideration and action. Comments may be provided at that hearing or prior to any action by the Board of Supervisors on any matter. The Board of Supervisors' decision is final.

If you challenge the action taken on this request in court, you may be limited to raising only those issues you or someone else raised at this public hearing, or in written correspondence delivered to the Planning and Natural Resources Department at, or prior to, the public hearing.

PROJECT DESCRIPTION: A proposed 8,907,446-square-foot industrial park comprised of 24 warehouse and distribution buildings and related improvements on a proposed 739-acre project site.

Implementation of the proposed project includes the following requests:

- Adoption of the Malibu Vineyard Industrial Parkway Specific Plan;
- Amendment to the Kern County General Plan Land Use, Open Space and Conservation Element from Map Code 8.1 (Intensive Agriculture) to Map Code 4.1 (Accepted County Plan Area) for approximately 193 acres; upon approval of the Malibu Vineyards Industrial Parkway Specific Plan, the Map Code 7.2 (Service Industrial) would be established (GPA No. 9, Map 80);
- Amendment to the Kern County Metropolitan Bakersfield General Plan Land Use Element from Map Code R-IA (Intensive Agriculture) to Map Code SI (Service Industrial) for approximately 545 acres; upon approval of the Malibu Vineyards Industrial Parkway Specific Plan, the Map Code SI (Service Industrial) would be established (GPA No. 23, Map 81);
- Change in zone classification from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development) on approximately 193.33 acres (Zone Change No. 13, Map 80);
- Change in zone classification from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development) on approximately 545.15 acres (Zone Change No. 92, Map 81);
- Approval of Precise Development Plan No. 2, Map 80 for site development and implementation of the M-2 PD zoning request;
- Approval of Precise Development Plan No. 75, Map 81 for site development and implementation of the M-2 PD zoning request; and
- Approval of Precise Development Plan No. 75, Map 81 for site development and implementation of the M-2PD zoning request.

ENVIRONMENTAL REVIEW FINDINGS: Anticipated significant and unavoidable impacts on Aesthetics, Agricultural Resources, Air Quality, Greenhouse Gases, Hydrology and Water Quality, Noise, Population and Housing, Transportation and Traffic, and Utilities (Water Supply)

LORELEI H. OVIATT, AICP, Director
Planning and Natural Resources Department

To be published once only on <u>next available date and as soon as possible</u>

THE BAKERSFIELD CALIFORNIAN
THE SHAFTER PRESS

KAS (07/15/24)

cc: County Clerk (2) (with fee)
Environmental Status Board
Supervisorial District No. 4

Malibu Vineyards Industrial Parkway

Agency List

AN: 6/24/24

City of Shafter
336 Pacific Avenue
Shafter, CA 93263

Bakersfield City Planning Dept
1715 Chester Avenue
Bakersfield, CA 93301

Bakersfield City Public Works Dept
1501 Truxtun Avenue
Bakersfield, CA 93301

Inyo County Planning Dept
P.O. Drawer "L"
Independence, CA 93526

Kings County Planning Agency
1400 West Lacey Blvd, Bldg 6
Hanford, CA 93230

Los Angeles Co Reg Planning Dept
320 West Temple Street
Los Angeles, CA 90012

San Bernardino Co Planning Dept
385 North Arrowhead Avenue, 1st Floor
San Bernardino, CA 92415-0182

San Luis Obispo Co Planning Dept
Planning and Building
976 Osos Street
San Luis Obispo, CA 93408

Santa Barbara Co Resource Mgt Dept
123 East Anapamu Street
Santa Barbara, CA 93101

Tulare County Planning & Dev Dept
5961 South Mooney Boulevard
Visalia, CA 93291

Ventura County RMA Planning Div
800 South Victoria Avenue, L1740
Ventura, CA 93009-1740

U.S. Bureau of Land Management
Caliente/Bakersfield
35126 McMurtrey Avenue
Bakersfield, CA 93308

Federal Aviation Administration
Western Reg Office/
777 South Aviation Boulevard
Suite 150
El Segundo, CA 90245

Federal Communications Comm
18000 Studebaker Road, #660
Cerritos, CA 90701

U. S. Fish & Wildlife Service
Division of Ecological Services
2800 Cottage Way #W-2605
Sacramento, CA 95825-1846

U.S. Dept of Agriculture/NRCS
5080 California Avenue, Ste 150
Bakersfield, CA 93309-0711

State Air Resources Board
Stationary Resource Division
P.O. Box 2815
Sacramento, CA 95812

So. San Joaquin Valley Arch Info Ctr
California State University of Bkfd
9001 Stockdale Highway
Bakersfield, CA 93311

Caltrans/Dist 6
Planning/Land Bank Bldg.
P.O. Box 12616
Fresno, CA 93778

Caltrans/
Division of Aeronautics, MS #40
P.O. Box 942873
Sacramento, CA 94273-0001

State Dept of Conservation
Geologic Energy Management Division
11000 River Run Boulevard
Bakersfield, CA 93311

State Dept of Conservation
Geologic Energy Management Division
801 "K" Street, MS 20-20
Sacramento, CA 95814-3530

State Dept of Conservation
Division of Land Resource Protection
715 "P" Street, MS 1904
Sacramento, CA 95814

California State University
Bakersfield - Library
9001 Stockdale Highway
Bakersfield, CA 93309

California Fish & Wildlife
1234 East Shaw Avenue
Fresno, CA 93710

State Dept of Food & Agriculture
1220 "N" Street
Sacramento, CA 95814

California Highway Patrol
Planning & Analysis Division
P.O. Box 942898
Sacramento, CA 94298-0001

State Water Resources Control Board
Division of Drinking Water
Attn: Jesse Dhaliwal, Sr. Sanitary Eng
4925 Commerce Drive, Suite 120
Bakersfield, CA 93309

California Regional Water Quality
Control Board/Central Valley Region
1685 E Street
Fresno, CA 93706-2020

Kern County
Agriculture Department

Kern County Airports Department

Kern County Administrative Officer

Kern County Public Works Department/
Building & Development/Floodplain

Kern County Public Works Department/
Building & Development/Survey

Kern County
Env Health Services Department

Kern County Fire Dept
Aaron Duncan

Kern County Library/Beale
Local History Room

Kern County Library/Beale
Andie Sullivan

Kern County Sheriff's Dept
Administration

Kern County Public Works Department/
Building & Development/Development
Review

Kern County Public Works
Department/Operations &
Maintenance/Regulatory Monitoring &
Reporting

Richland-Lerdo Union School Dist
331 Shafter Avenue
Shafter, CA 93263

Kern High School Dist
5801 Sundale Avenue
Bakersfield, CA 93309

Kern County Superintendent of Schools
Attention School District Facility Services
1300 - 17th Street
Bakersfield, CA 93301

KernCOG
1401 19th Street - Suite 300
Bakersfield, CA 93301

Local Agency Formation Comm/LAFCO
5300 Lennox Avenue, Suite 303
Bakersfield, CA 93309

Cawelo Water Dist
17207 Industrial Farm Road
Bakersfield, CA 93308-9801

Kern County Water Agency
3200 Rio Mirada Drive
Bakersfield, CA 93308

Shafter Rec & Parks Dist
700 East Tulare Avenue
Shafter, CA 93263

San Joaquin Valley
Air Pollution Control District
1990 East Gettysburg Avenue
Fresno, CA 93726

Kern Mosquito Abatement Dist
4705 Allen Road
Bakersfield, CA 93314

Beardsley School Dist
1001 Roberts Lane
Bakersfield, CA 93308

Adams, Broadwell, Joseph & Cardozo
Attention: Janet M. Laurain
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

AT&T California
OSP Engineering/Right-of-Way
4901 Ashe Road
Bakersfield, CA 93313

Meadows Field Airport
3701 Wings Way, Suite 300
Bakersfield, CA 93308

Kern Audubon Society
Attn: Frank Bedard, Chairman
4124 Chardonnay Drive
Bakersfield, CA 93306

Center on Race, Poverty
& the Environment
5901 Christie Avenue, Suit 208
Emeryville, CA 94608

Center on Race, Poverty
& the Environmental/
CA Rural Legal Assistance Foundation
1012 Jefferson Street
Delano, CA 93215

Construction Materials Assoc of CA
1029 "J" Street, Suite 420
Sacramento, CA 95814

Defenders of Wildlife
P.O. Box 401
Folsom, CA 95763

California Farm Bureau
2300 River Plaza Drive, NRED
Sacramento, CA 95833

Native American Heritage Council
of Kern County
Attn: Gene Albitre
18169 Highway 155
Woody, CA 93287

Pacific Gas & Electric Co
Matt Coleman, Land Mgt
1918 "H" Street
Bakersfield, CA 93301-4319

Pacific Gas & Electric Co
Land Projects
650 "O" Street, First Floor
Fresno, CA 93760-0001

Sierra Club/Kern Kaweah Chapter
P.O. Box 3357
Bakersfield, CA 93385

Southern California Gas Co
35118 McMurtrey Avenue
Bakersfield, CA 93308-9477

Southern California Gas Co
Transportation Dept
P.O. Box 513249
Los Angeles, CA 90051

David Laughing Horse Robinson
P.O. Box 20849
Bakersfield, CA 93390

Tejon Indian Tribe
Octavio Escobedo III, Chairman
P.O. Box 640
Arvin, CA 93203F

Carol Bender
13340 Smoke Creek Avenue
Bakersfield, CA 93314-9025

Joyce LoBasso
P.O. Box 6003
Bakersfield, CA 93386

Kevin Johnston
2476 Buena Vista Avenue
Livermore, CA 94550

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85350 Bagdad Ave.
Coachella, CA 92236

LIUNA
Attn: Danny Zaragoza
2201 "H" Street
Bakersfield, CA 93301

Northcutt and Associates
4220 Poplar Street
Lake Isabella, CA 93240-9536

Thomas Roads Improvement Program
PARSONS
1600 Truxtun Avenue, 3rd Floor
Bakersfield, CA 93301

A E Corporation
Planning Department
901 Via Piemonte, 5th Floor
Ontario, CA 91764

California Resources Corp
Attn: Minerals Mgt
11109 River Run Boulevard
Bakersfield, CA 93311

North of the River Rec & Parks Dist
3825 Riverlakes Dr.
Bakersfield, CA 93312

North Kern Water Storage Dist
P.O. Box 81435
Bakersfield, CA 93380-1435

Oildale Mutual Water Co
P.O. Box 5638
Bakersfield, CA 93388

Rosedale-Rio Bravo Water Dist
849 Allen Road
Bakersfield, CA 93314

Supervisor David Couch
4th District

Mitchell M. Tsai Law Firm
139 South Hudson Ave., Ste 200
Pasadena, CA 91101

Rathbun Branch Library
200 West China Grade Loop
Bakersfield, CA 93308

Lozeau Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612

091 060 08 00 6
NORTH KERN WATER STORAGE DIST
33380 CAWELO AV
BAKERSFIELD CA 93308-9575

091 130 04 01 3
MZIRP INC
31381 POND RD
MC FARLAND CA 93250

091 130 14 00 3
BIDART BROS
4813 CALLOWAY DR
BAKERSFIELD CA 93312-9702

091 140 10 00 4 **DUP**
BIDART BROS
4813 CALLOWAY DR
BAKERSFIELD CA 93312-9702

091 150 01 00 1
WONDERFUL NUT ORCHARDS LLC
6801 E LERDO HW
SHAFTER CA 93263-9610

091 150 02 01 3 **DUP**
WONDERFUL NUT ORCHARDS LLC
6801 E LERDO HW
SHAFTER CA 93263-9610

091 150 03 00 7 **PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 150 06 01 5 **DUP**
WONDERFUL NUT ORCHARDS LLC
6801 E LERDO HW
SHAFTER CA 93263-9610

091 160 01 00 4 **PROJECT SITE DUP**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 160 02 00 7 **PROJECT SITE DUP**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 160 03 00 0 **PROJECT SITE DUP**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 160 08 01 4 **DUP**
WONDERFUL NUT ORCHARDS LLC
6801 E LERDO HW
SHAFTER CA 93263-9610

091 160 09 00 8 **PROJECT SITE DUP**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 160 10 01 9
GIUMARRA VINEYARDS CORP
PO BOX 1969
BAKERSFIELD CA 93303-1969

091 160 11 01 2 **DUP**
GIUMARRA VINEYARDS CORP
PO BOX 1969
BAKERSFIELD CA 93303-1969

091 160 12 00 6 **DUP**
BIDART BROS
4813 CALLOWAY DR
BAKERSFIELD CA 93312-9702

091 160 13 00 9 **PROJECT SITE DUP**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 160 16 00 8 **PROJECT SITE DUP**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 160 22 00 5
CAWELO WATER DIST
17207 INDUSTRIAL FARM RD RR 1
BAKERSFIELD CA 93308

091 190 12 00 5 **DUP**
NORTH KERN WATER STORAGE DIST
33380 CAWELO AV
BAKERSFIELD CA 93308-9575

091 200 01 01 4 **DUP**
GIUMARRA VINEYARDS CORP
PO BOX 1969
BAKERSFIELD CA 93303-1969

091 200 02 01 7 **DUP**
GIUMARRA VINEYARDS CORP
PO BOX 1969
BAKERSFIELD CA 93303-1969

091 200 03 01 0 **DUP**
GIUMARRA VINEYARDS CORP
PO BOX 1969
BAKERSFIELD CA 93303-1969

091 200 04 01 3 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 200 05 01 6 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 200 07 01 2 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 200 13 01 9 **PROJECT SITE**
MALIBU VINEYARDS
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 200 14 01 2 **DUP**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

091 210 08 00 9
LENNAR HOMES OF CAL INC
8080 N PALM AV STE 110
FRESNO CA 93711

481 060 10 01 3
PARAMOUNT RANCH CO ET AL
33374 LERDO HW
BAKERSFIELD CA 93308

481 060 11 00 7
VIGNOLO FARM T I LLC
PO BOX 1270
SHAFTER CA 93263

481 060 12 01 9
VIGNOLO FAMILY L P
PO BOX 1270
SHAFTER CA 93263-1270

482 010 01 00 0 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

482 010 02 00 3 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

482 010 03 01 5 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

482 010 05 00 2
NORTH KERN WATER STORAGE DIST
P O BOX 81435
BAKERSFIELD CA 93380-1435

482 010 07 00 8
UNION PACIFIC R/R CO
1400 DOUGLAS ST # 1610
OMAHA NE 68179-1610

482 010 08 00 1
UNION PACIFIC R/R CO
1400 DOUGLAS ST
OMAHA NE 68179

482 010 09 00 4 **DUP**
NORTH KERN WATER STORAGE DIST
33380 CAWELO AV
BAKERSFIELD CA 93308-9575

482 010 11 00 9 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

482 010 12 00 2 **DUP**
MZIRP INC
31381 POND RD
MC FARLAND CA 93250

482 010 17 01 6 **DUP**
MZIRP INC
31381 POND RD
MC FARLAND CA 93250

482 010 18 01 9 **DUP**
MZIRP INC
31381 POND RD
MC FARLAND CA 93250

482 010 20 01 4 **DUP**
MZIRP INC
31381 POND RD
MC FARLAND CA 93250

482 010 39 00 1 **DUP**
UNION PACIFIC R/R CO
1400 DOUGLAS ST # 1610
OMAHA NE 68179-1610

482 010 43 00 2 **DUP**
UNION PACIFIC R/R CO
1400 DOUGLAS ST # 1610
OMAHA NE 68179-1610

482 010 52 00 8 **DUP**
NORTH KERN WATER STORAGE DIST
33380 CAWELO AV
BAKERSFIELD CA 93308-9575

482 010 56 00 0
NO KERN WATER STORAGE DIST
P O BOX 81435
BAKERSFIELD CA 93380-1435

482 010 57 00 3 **DUP**
LENNAR HOMES OF CAL INC
8080 N PALM AV STE 110
FRESNO CA 93711

482 040 01 01 8 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

482 040 02 01 1 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

482 040 03 01 4 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

482 040 04 01 7 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

482 040 05 01 0 **DUP PROJECT SITE**
MALIBU VINEYARDS L P
9777 WILSHIRE BL STE 900
BEVERLY HILLS CA 90212-1902

482 040 12 00 1 **DUP**
LENNAR HOMES OF CAL INC
8080 N PALM AV STE 110
FRESNO CA 93711

482 040 13 00 4 **DUP**
LENNAR HOMES OF CAL INC
8080 N PALM AV STE 110
FRESNO CA 93711

482 040 14 01 6 **DUP**
GIUMARRA VINEYARDS CORP
PO BOX 1969
BAKERSFIELD CA 93303-1969

482 040 15 00 0
LENNAR HOMES OF CAL INC
8080 PALM AV # 110
FRESNO CA 93711

482 050 02 01 4
HALLIBURTON ENERGY SERV INC
P O DRAWER 1431
DUNCAN OK 73536-0222

482 050 03 00 8 **DUP**
MZIRP INC
31381 POND RD
MC FARLAND CA 93250

482 050 04 00 1
DOWNS GORDON L & JOYCE M
7500 CALLE NOBLEZA
BAKERSFIELD CA 93309

482 070 01 01 7 **DUP**
MZIRP INC
31381 POND RD
MC FARLAND CA 93250

482 370 06 00 0 **DUP**
LENNAR HOMES OF CAL INC
8080 N PALM AV STE 110
FRESNO CA 93711

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2022080056

Project Title: Malibu Vineyards Industrial Parkway Project by Malibu Vineyards, LP

Lead Agency: Kern County Planning and Natural Resources Department | Contact Person: Katrina Slayton

Mailing Address: 2700 "M" Street Suite 100 | Phone: (661) 862-8957

City: Bakersfield | Zip: 93301 | County: Kern

Project Location: County: Kern | City/Nearest Community: City of Shafter; City of Bakersfield

Cross Streets: Imperial Avenue & Saco Road | Zip Code: 93263

Lat. / Long.: 35.45672° N, 119.10655° W | Total Acres: 739

Assessor's Parcel No.: Multiple | Section: Multiple | Twp.: 28S | Range: 26E & 27E | Base: MDB&M

Within 2 Miles: State Hwy #: 99 & 65 | Waterways: Lerdo Canal

Airports: Meadows Field | Railways: Union Pacific | Schools: N/A

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☒ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other

Local Action Type:

☐ General Plan Update ☒ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☒ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☒ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other: PD Plan,

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☒ Industrial: Sq.ft. 8,907,446 Acres 739 Employees 5-6,000
☐ Educational ____
☐ Recreational ____

☐ Water Facilities: Type ____ MGD ____
☐ Transportation: Type ____
☐ Mining: Mineral ____
☐ Power: Type ____ MW ____
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type ____
☐ Other: ____

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☒ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☒ Drainage/Absorption
☒ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☒ Forest Land/Fire Hazard
☒ Geologic/Seismic
☐ Minerals
☒ Noise
☒ Population/Housing Balance
☒ Public Services/Facilities
☒ Recreation/Parks
☒ Schools/Universities
☒ Septic Systems
☒ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☒ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☒ Water Supply/Groundwater
☒ Wetland/Riparian
☒ Wildlife
☒ Growth Inducing
☒ Land Use
☒ Cumulative Effects
☒ Other GHG, Wildfire, Tribal Cultural Resources, Energy

Present Land Use/Zoning/General Plan Designation:

Agricultural Land/*Zoning:* A (Exclusive Agriculture)/*General Plan:* 8.1 & R-IA (Intensive Agriculture)

Project Description: The Malibu Vineyards Industrial Parkway Project is a proposal by Malibu Vineyards, LP for the construction and operation of an 8,907,446-square foot industrial park comprised of 24 warehouses and distribution buildings and related site improvements on a 739-acre project site. The project site is located north of Imperial Avenue, immediately east of State Route (SR) 99, east of the City of Shafter, and approximately 1.5 miles north of the City of Bakersfield, in unincorporated Kern County. Regionally, the project site is located within the Kern County General Plan and Kern County Metropolitan Bakersfield General Plan (unincorporated Planning Area).

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

S	Air Resources Board		Office of Emergency Services
	Boating & Waterways, Department of		Office of Historic Preservation
S	California Highway Patrol		Office of Public School Construction
	CalFire	X	Parks & Recreation
S	Caltrans District # 6		Pesticide Regulation, Department of
S	Caltrans Division of Aeronautics		Public Utilities Commission
	Caltrans Planning (Headquarters)	S	Regional WQCB # Central Valley
	Central Valley Flood Protection Board		Resources Agency
	Coachella Valley Mountains Conservancy		S.F. Bay Conservation & Development Commission
	Coastal Commission		San Gabriel & Lower L.A. Rivers and Mtns Conservancy
	Colorado River Board		San Joaquin River Conservancy
S	Conservation, Department of		Santa Monica Mountains Conservancy
	Corrections, Department of		State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of		SWRCB: Water Quality
	Energy Commission		SWRCB: Water Rights
S	Fish & Game Region # Fresno		Tahoe Regional Planning Agency
S	Food & Agriculture, Department of		Toxic Substances Control, Department of
	General Services, Department of	S	Water Resources, Department of
	Health Services, Department of		
	Housing & Community Development		Other _____
X	Integrated Waste Management Board		Other _____
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date July 15, 2024 Ending Date August 29, 2024

Lead Agency (Complete if applicable):

Consulting Firm: _____
Address: _____
City/State/Zip: _____
Contact: _____
Phone: _____

Applicant: _____
Address: _____
City/State/Zip: _____
Phone _____

Signature of Lead Agency Representative: /s/ **Date:** 07/15/2024

Katrina A. Slayton, Division Chief

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Draft
Environmental Impact Report

SCH# 2022080056

Volume 1

Chapters 1 through 10

MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT

by Malibu Vineyards, LP

(PP21116)

Adoption of Specific Plan
General Plan Amendment No. 9, Map No. 80
General Plan Amendment No. 23, Map No. 81
Zone Classification Change No. 13, Map No. 80
Zone Classification Change No. 92, Map No. 81
Precise Development Plan No. 2, Map No. 80
Precise Development Plan No. 74, Map No. 81
Precise Development Plan No. 75, Map No. 81

Kern County
Planning and Natural Resources Department
Bakersfield, CA

July 2024

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Appendices

Appendix A Notice of Preparation
Appendix B Malibu Vineyards Industrial Parkway Specific Plan
Appendix C Farmland Conversion Study
Appendix D Air Quality Impact Analysis
Appendix E San Joaquin Valley Air Pollution Control District Supporting Documents
Appendix F Biological Assessment
Appendix G Cultural Resource Survey
Appendix H Energy Study
Appendix I Geotechnical Feasibility Report Final
Appendix J Hazardous Material Evaluation Report
Appendix K Noise
Appendix L Traffic Study
Appendix M Water Supply Assessment

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Chapter 1

Executive Summary

Chapter 1

Executive Summary

1.1 Introduction

This Draft Environmental Impact Report (Draft EIR) has been prepared by Kern County (County), the Lead Agency, under the California Environmental Quality Act (CEQA). The Draft EIR provides information about the environmental setting and identifies and evaluates potential environmental impacts associated with construction and operation of the proposed project which consists of approximately 8,907,446 square-feet of industrial use space, comprised of 24 buildings on 739 acres of existing vineyard. The project is proposed by Malibu Vineyards, LP (project proponent), and would be developed over two phases.

Implementation of the project as proposed would require adoption of the Malibu Vineyards Industrial Parkway Specific Plan (included as Appendix B). Additionally, the project requires an amendment to the Kern County General Plan (KCGP) Land Use, Open Space and Conservation Element designation from Intensive Agriculture (8.1) to Service Industrial (7.2), an amendment to the Metropolitan Bakersfield General Plan Land Use Element designation from Intensive Agriculture (R-IA) to Service Industrial (SI), and a Zone Change from Exclusive Agriculture (A) to Medium Industrial, Precise Development (M-2 PD). The proposed project is described in detail in Chapter 3, *Project Description* of this EIR.

The proposed project site encompasses approximately 739-acres composed of 21 parcels within unincorporated Kern County, north of Imperial Avenue and generally east of State Route 99 (SR 99), with site access from Saco Road and Imperial Avenue. The project site is east of the City of Shafter, which is on the west side of SR 99, and approximately one mile north of the City of Bakersfield (**Figure 1-1**, *Vicinity Map*, and **Figure 1-2**, *Project Location Map*). The Lerdo Canal trends northwest to southeast through Phase 2 of the project site. **Figure 1-3**, *Assessor's Parcel Map* illustrates the existing parcel layout within the project site.

The proposed project would be developed in two Phases; Phase 1 includes seven existing parcels on approximately 534 acres, and is located between Burbank Street to the north, and Imperial Avenue to the south, with the western boundary being the Ledo Canal and frontage road. Phase 1 is located in Kern County Zone Map 81, as portions of Sections 29 and 30, Township 28 South, Range 27 East, in the Mount Diablo Base & Meridian (MDBM).

Phase 2 includes 14 existing parcels on approximately 205 acres, east of SR 99 and west of the Lerdo Canal. The site is located generally south of Ledo Highway, and north of Imperial Avenue. Phase 2 is in Zone Maps 80 and 81, as portions of Sections 24 and 25, Township 28 South, Range 26 East, MDBM, and Section 30, Township 28 South, Range 27 East, MDBM.

Figure 1-1: Vicinity Map

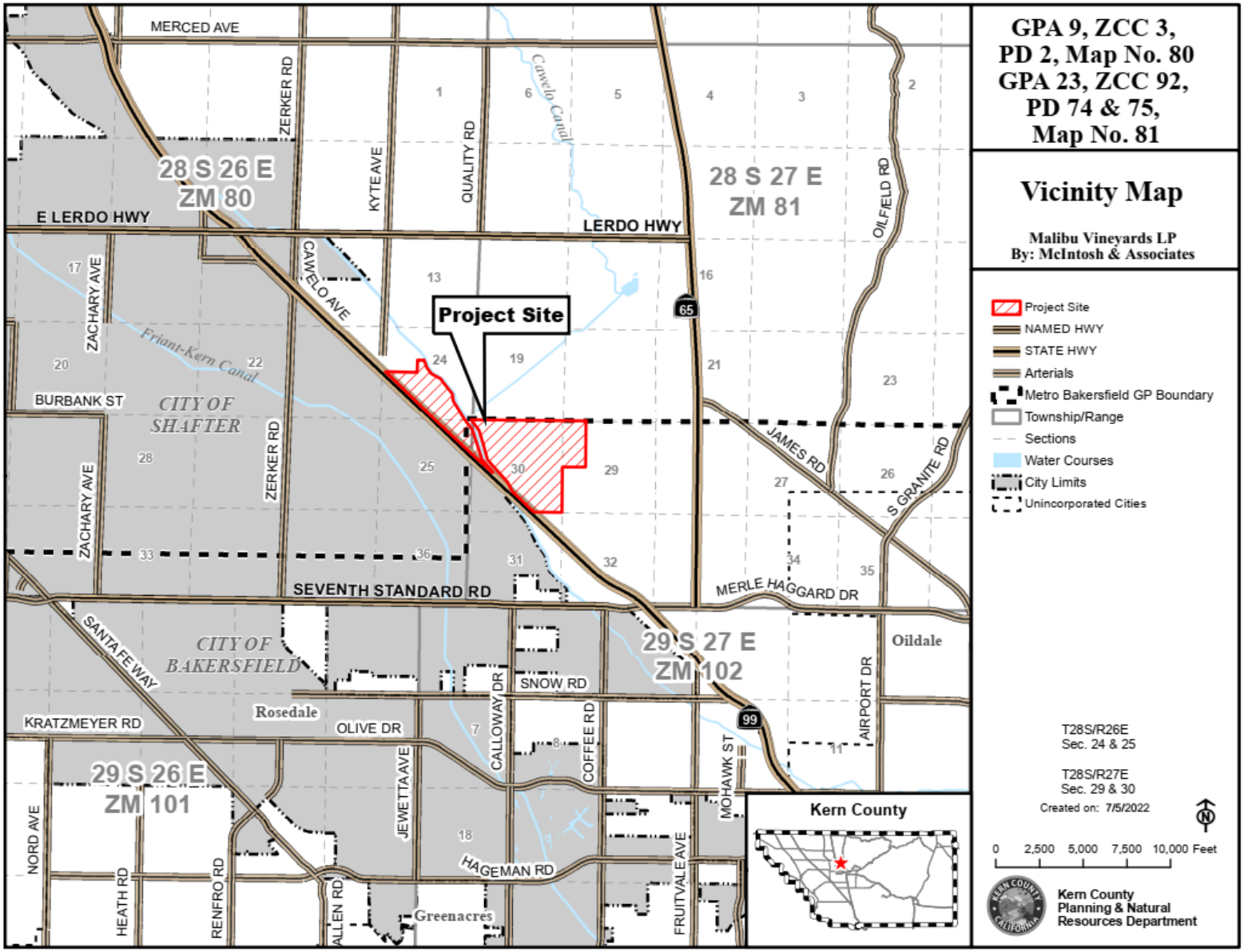


Figure 1-2: Project Location Map

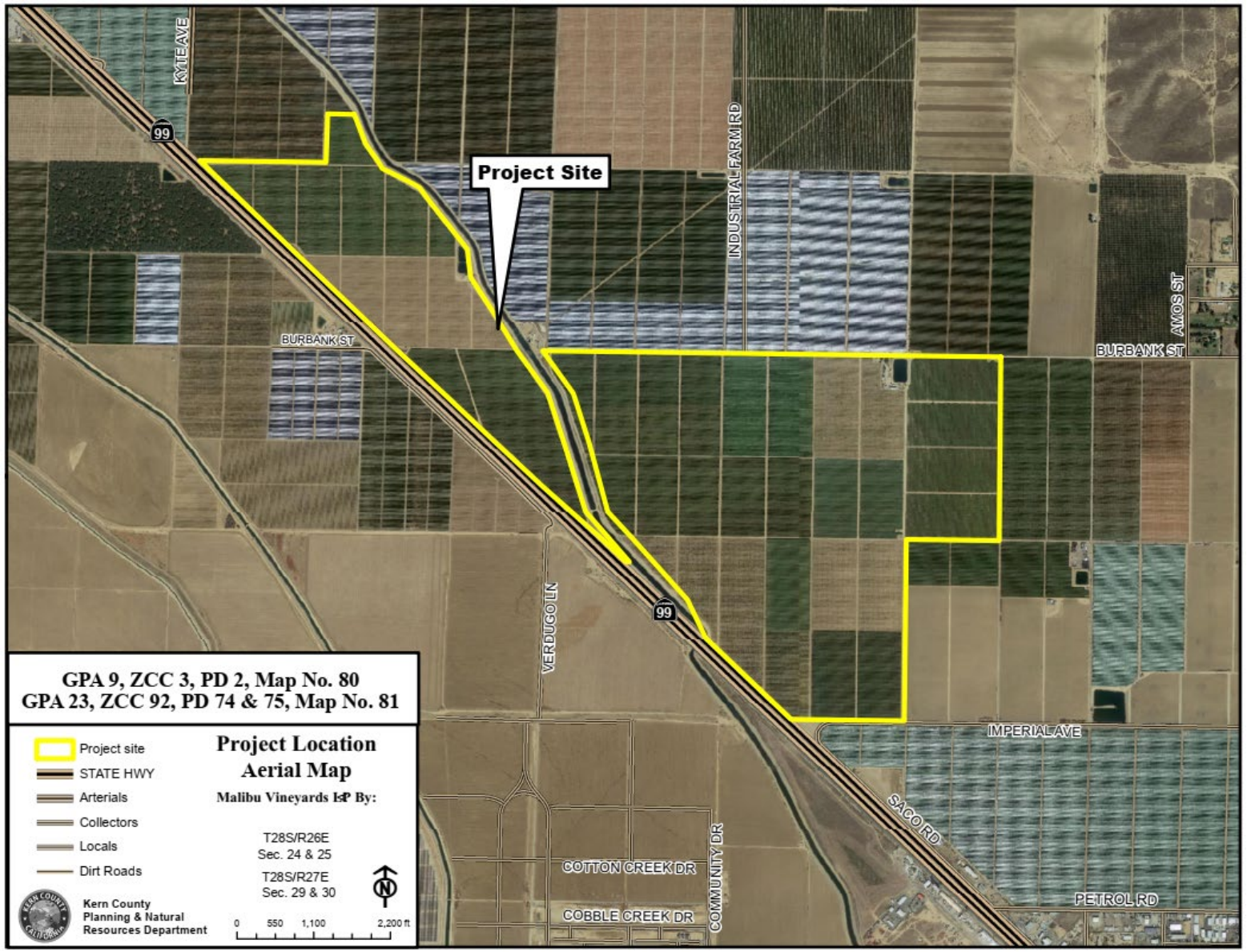
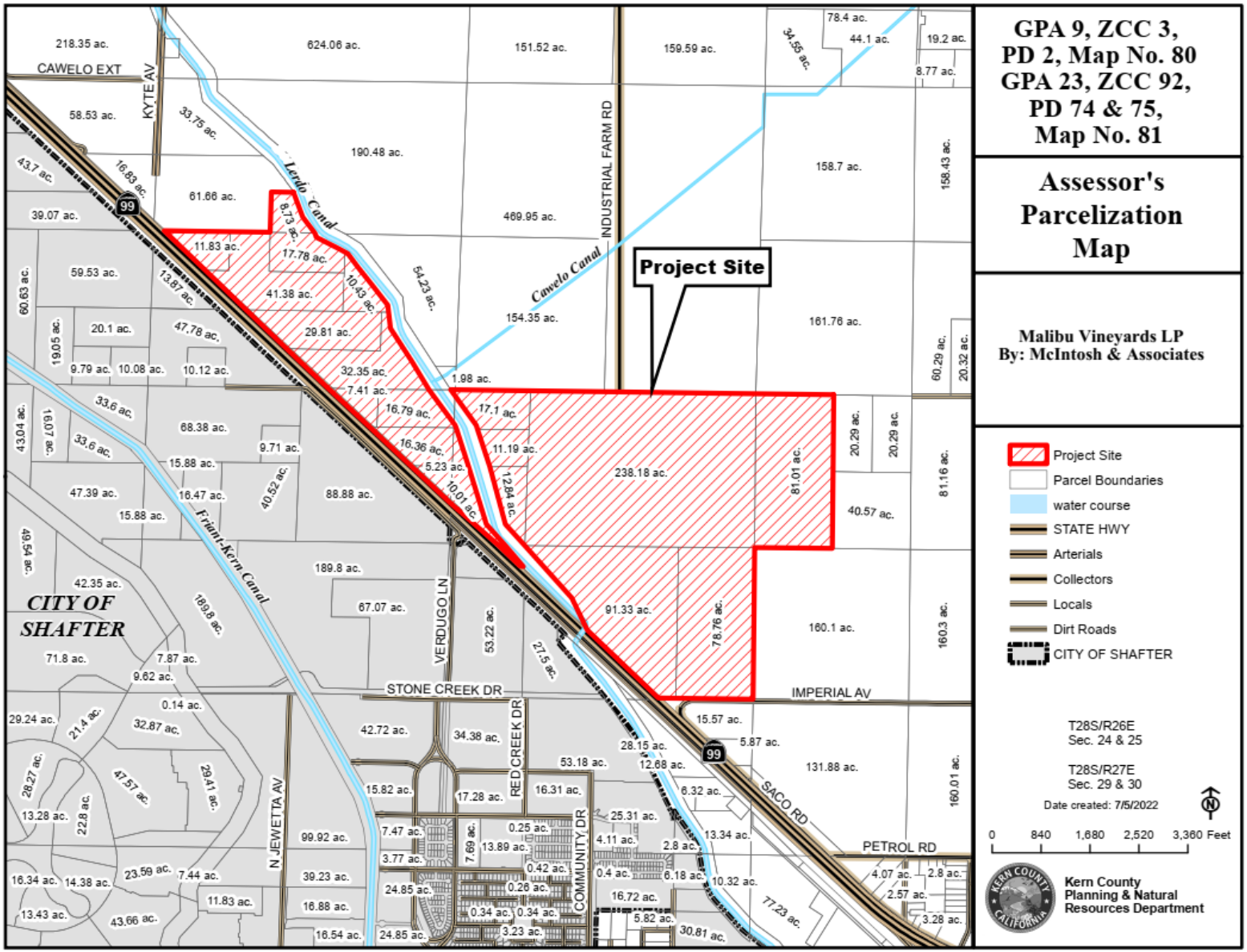


Figure 1-3: Assessor's Parcel Map



This Environmental Impact Report (EIR) has been prepared by Kern County as the Lead Agency under the California Environmental Quality Act (CEQA). This EIR provides information about the environmental setting and impacts of the proposed project and alternatives. It informs the public about the proposed project and its impacts, and provides information to meet the needs of federal, State, and local permitting agencies that may be required to consider the proposed project. The EIR will be used by Kern County to determine whether to grant the necessary approvals for the proposed project.

This Executive Summary summarizes the requirements of the *CEQA Guidelines*, provides an overview of the proposed project and alternatives, identifies the purpose of this EIR, outlines the potential impacts of the proposed project and the recommended mitigation measures, and discloses areas of controversy and issues to be resolved.

1.2 Project Summary

Implementation of the project as proposed would require the adoption of the Malibu Vineyards Industrial Parkway Specific Plan, amendments to the Kern County General Plan and the Kern County Metropolitan Bakersfield General Plan (Unincorporated Planning Area) from the existing agricultural land use designations to industrial, as well as a change in the Kern County Zoning Classification from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development Combining) to facilitate the future construction and operation of a warehouse/distribution center at the proposed project site (refer to **Figure 1-4**, **Figure 1-5**, and **Figure 1-6A,** *Proposed Precise Development Plan No. 74, Map 81 (Phase 1)* through **Figure 1-8D,** *Proposed Precise Development Plan No. 2 Map 80 (Phase 2)*. Additional figures and project details can be found in *Chapter 3 Project Description*.

Note that "parcels" shown on **Figure 1-6A,** *Proposed Precise Development Plan No. 74, Map 81 (Phase 1)* through **Figure 1-8D,** *Proposed Precise Development Plan No. 2 Map 80 (Phase 2),* do not represent the current parcel boundaries, rather they reflect the proposed future parcel boundaries. When the project site receives entitlements for the proposed industrial warehouse/distribution center, further mapping would be required to reconfigure the site parcels. This subdivision may occur through processing new parcel maps to ensure the future building footprints are not constructed over parcel lines.

The Malibu Vineyards Industrial Parkway Project, as proposed, includes the following discretionary actions:

a) Adoption of the Malibu Vineyards Industrial Parkway Specific Plan;

b) Amendment to Kern County General Plan Land Use, Open Space and Conservation Element from Map Code 8.1 (Intensive Agriculture) to Map Code 4.1 (Accepted County Plan Area) for approximately 193 acres; upon approval of the Malibu Vineyards Industrial Parkway Specific Plan, the Map Code 7.2 (Service Industrial) would be established (GPA No. 9, Map No. 80);

c) Amendment to the Kern County Metropolitan Bakersfield General Plan Land Use Element from Map Code R-IA (Intensive Agriculture) to Map Code SI (Service Industrial) for approximately 545 acres; upon approval of the Malibu Vineyards Industrial Parkway Specific Plan, the Map Code SI (Service Industrial) would be established (GPA No. 23, Map No. 81);

d) Change in zone classification from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development Combining) on approximately 739 acres (Zone Change No. 13, Map No. 80; Zone Change No. 92, Map No. 81); and

e) Approval of Precise Development Plans:

   1) Precise Development Plan No. 2, Map 80

   2) Precise Development Plan No. 74, Map 81

   3) Precise Development Plan No. 75, Map 81

Figure 1-4: Proposed General Plan Classifications

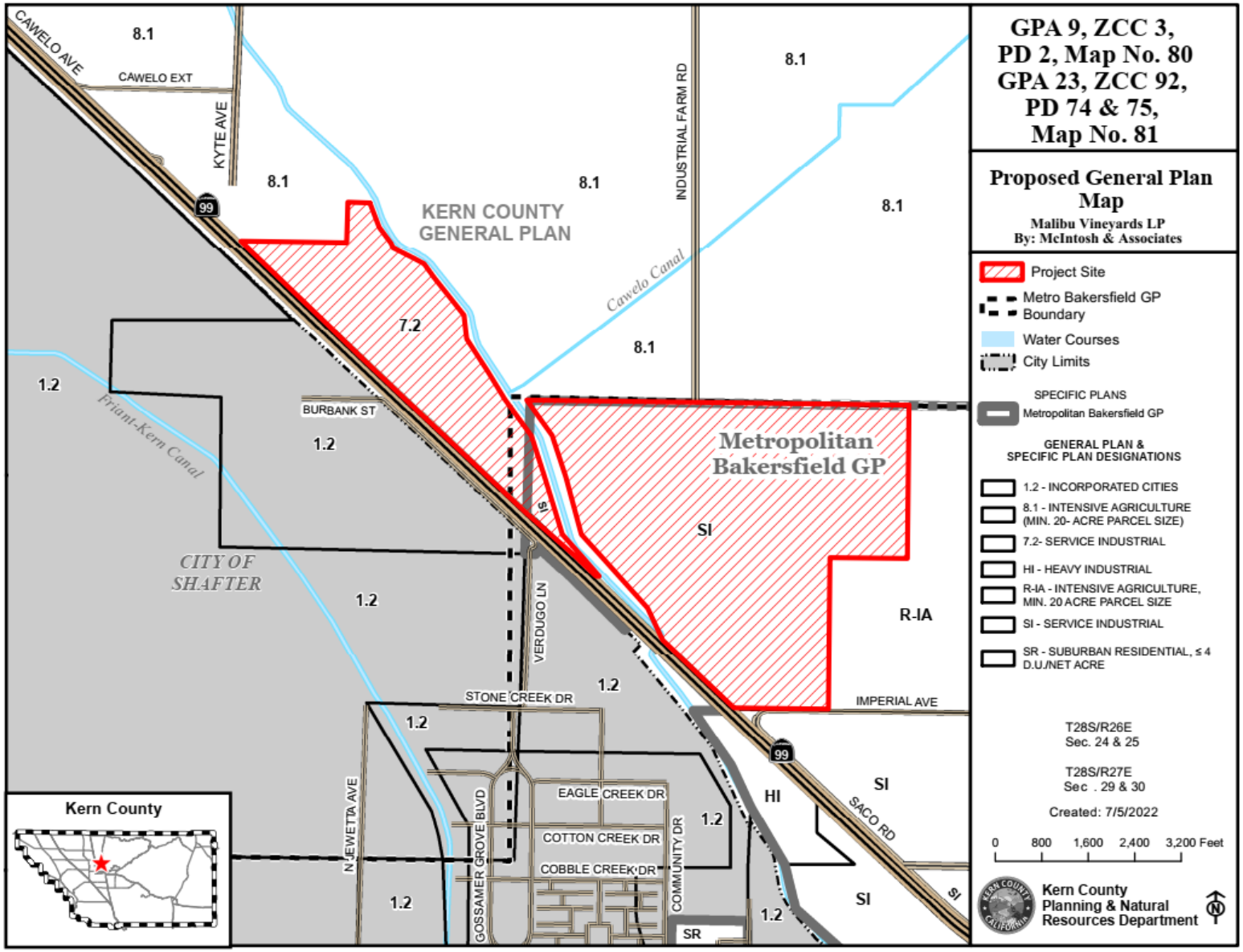


Figure 1-5: Proposed Zoning Classifications

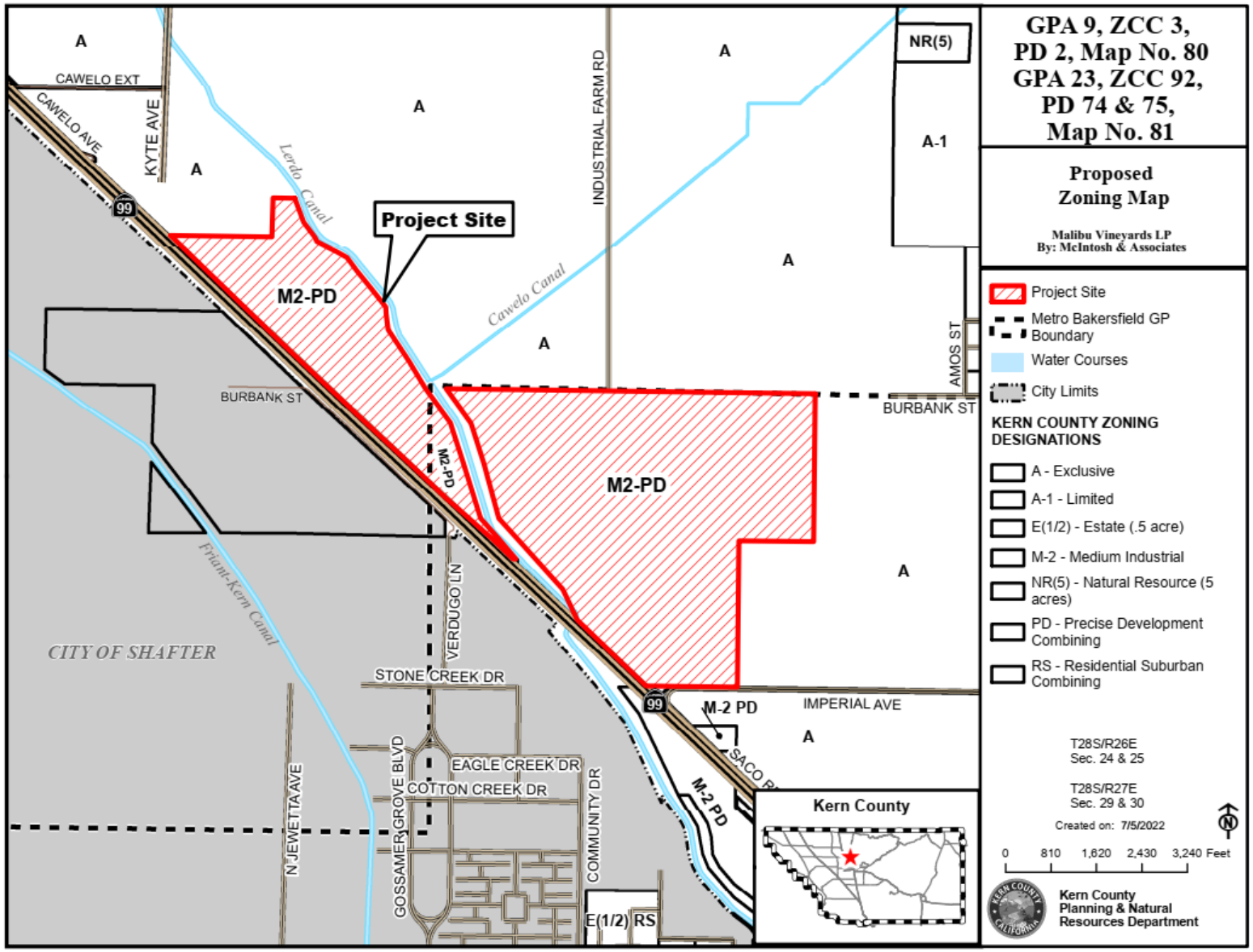


Figure 1-6A: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

OWNERS:

MALIBU VINEYARDS, LP
9777 WILSHIRE BLVD. STE. 900
BEVERLY HILLS, CA 90212
CONTACT: STEVEN GILFENBAIN
PHONE: (805) 305-0753

PREPARED BY:

McINTOSH & ASSOCIATES
2001 WHEELAN COURT
BAKERSFIELD, CA 93309
CONTACT: SAMUEL WALKER
PHONE: (661) 834-4814

PROJECT STATISTICS:

A.P.N.: 482-010-01, 02, 03, 11
482-040-01, 02, 03

PROJECT ACREAGE: 533.84 GR. AC./501.98 NET AC.

EXISTING ZONING: A (EXCLUSIVE AGRICULTURE)
PROPOSED ZONING: M-2 PD (MEDIUM INDUSTRIAL, PRECISE DEVELOPMENT)

EXISTING GENERAL PLAN DESIGNATION: R-IA (INTENSIVE AGRICULTURE)
PROPOSED GENERAL PLAN DESIGNATION: SI (SERVICE INDUSTRIAL)

EXISTING LAND USE: AGRICULTURE
PROPOSED LAND USE: INDUSTRIAL & COMMERCIAL

FLOOD ZONE: 0.2% ANNUAL CHANCE & ZONE "X"
SEE MAP SHEETS FOR INFORMATION

EARTHQUAKE FAULT ZONE: NONE

WATER: OILDALE MUTUAL WATER COMPANY
SEWER: NORTH OF RIVER SANITARY DISTRICT No. 1
ELECTRIC: P.G.&E.
GAS: SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE: A.T.&T.
CABLE: SPECTRUM

PUBLIC IMPROVEMENTS: TYPE "A"

STORM WATER DRAINAGE: ONSITE RETENTION FOR THE BENEFIT OF ALL PARCELS SHOWN HEREON. BASIN DEPTH TO BE 8' MINIMUM; CALCULATED PER DRAINAGE STUDY. MINIMUM 6' CHAIN LINK FENCE SURROUNDING BASIN WITH ACCESS FOR PRIVATE MAINTENANCE.

GENERAL NOTES:

ALL STREETS SHALL BE PUBLIC.
ALL RETURNS ARE ESTABLISHED WITH A 50' RADII.
ALL CUL-DE-SAC RETURN RADII ARE 25'.
ALL CUL-DE-SACS ARE 75' RADIUS.

SEE SHEET 2 FOR THE MAXIMUM BUILDING AREA SIZE ALLOWED FOR EACH PARCEL WITHIN THE BOUNDARY OF THIS PD PLAN.

NO BUILDING HEIGHT SHALL EXCEED WHAT IS ALLOWED IN THE M-2 PD/SI ZONE.

LANDSCAPE AREAS FOR EACH PARCEL SHALL BE DONE IN ACCORDANCE WITH THE KERN COUNTY ORDINANCE AND AGENCY STANDARDS.

SITE PLAN REVIEW SHALL BE SUBMITTED TO THE KERN COUNTY AIRPORTS DEPARTMENT FOR REVIEW AND COMMENT.

ALL EXISTING BUILDINGS/STRUCTURES WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE DEMOLISHED AND REMOVED.

PARCELS SHOWN HEREON ARE NOT LEGAL PARCELS AS DEFINED BY THE SUBDIVISION MAP ACT.

EXTERIOR BUILDING LIGHTS TO BE L.E.D. DOWN FACING LIGHTS IN ACCORDANCE WITH MUNICIPAL CODE. HEIGHT TO BE DETERMINED AND PROVIDED IN FUTURE LIGHTING PLAN WITH BUILDING PERMIT.

LEGAL DESCRIPTION:

BEING A PORTION OF THE WEST HALF OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 28 SOUTH, RANGE 27 EAST, MOUNT DIABLO MERIDIAN;

THAT PORTION OF THE EAST HALF AND THE EAST HALF OF THE WEST HALF OF SECTION 30, TOWNSHIP 28 SOUTH, RANGE 27 EAST, MOUNT DIABLO MERIDIAN, LYING NORTHEASTERLY OF THE NORTHEASTERLY LINES OF STATE HIGHWAY VI-Ker-99 AND THE LERDO CANAL;

THAT PORTION OF THE WEST HALF OF THE NORTHWEST QUARTER OF SECTION 30, TOWNSHIP 28 SOUTH, RANGE 27 EAST, MOUNT DIABLO MERIDIAN, LYING NORTHEASTERLY OF THE NORTHEASTERLY LINE OF THE LERDO CANAL;

THAT PORTION OF THE WEST HALF OF THE WEST HALF OF SECTION 30, TOWNSHIP 28 SOUTH, RANGE 27 EAST, MOUNT DIABLO MERIDIAN, LYING BETWEEN THE NORTHEASTERLY LINE OF STATE HIGHWAY VI-Ker-99 AND THE SOUTHWESTERLY LINE OF THE LERDO CANAL, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA.

CONTAINING 14 PARCELS
533.84 ACRES GROSS - 501.38 ACRES NET (NO ROADS)

MINOR MODIFICATION TABLE

MOD. NUMBER	DESCRIPTION	DATE

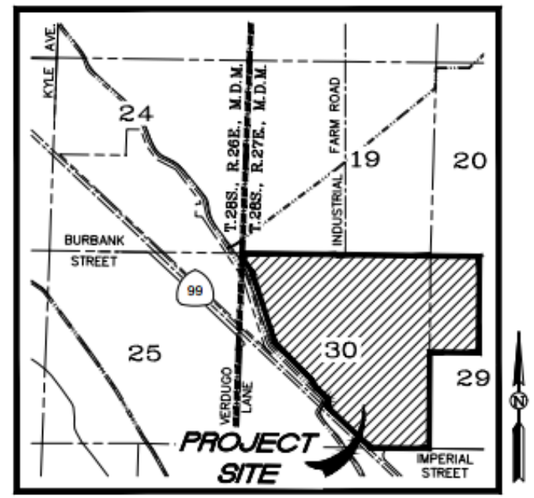
SHEET INDEX:

SHEET No. DESCRIPTION
1. OWNER'S, STATISTICAL INFORMATION, AND NOTES
2. EASEMENT LEGEND & TABLES-PARCEL & BUILDING SUMMARY
3. OVERALL PD PLAN BOUNDARY AND EASEMENTS
4. OVERALL PD PLAN BOUNDARY AND CONCEPTUAL SITE PLAN
5. TYPICAL ROADWAY SECTIONS & RIGHT OF WAY DIMENSIONS
6. CONCEPTUAL SITE PLAN (PARCEL 1 & 2)
7. CONCEPTUAL SITE PLAN (PARCEL 3 & 4)
8. CONCEPTUAL SITE PLAN (PARCEL 5, 10 & 11)
9. CONCEPTUAL SITE PLAN (PARCEL 6, 7 & 12)
10. CONCEPTUAL SITE PLAN (PARCEL 8 & 9)
11. CONCEPTUAL SITE PLAN (PARCEL 13 & 14)

FLOOD ZONE LEGEND:

ZONE X - FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

ZONE X (SHADED) - FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.



VICINITY MAP
NO SCALE

OWNER: DATE:

PLANNING DIRECTOR: DATE:

RECEIPT:

05/20/22
SHEET 1 OF 11

MASTER PD PLAN NO. 74, MAP NO. 81
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SECTIONS 29 AND 30, T.28S., R.27E., M.D.M.

Figure 1-6B: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

MALIBU VINEYARDS - PHASE 1 PARCEL SUMMARY

PARCEL	APN	PROPOSED USE	PARCEL SIZE(Sq. Ft.) NET	PARCEL SIZE (ACRES) NET	BUILDING SIZE (Sq. Ft.)	BUILDING COVERAGE	LANDSCAPE (Sq. Ft.)	LANDSCAPE COVERAGE	PARKING STALLS (STANDARD)	PARKING STALLS (TRUCK)
1	482-010-01 & 482-040-01, 02, 03	M-2 PD / SI	1,956,014	44.90	646,800	33%	611,350	31%	556	174
2	482-010-01	M-2 PD / SI	1,695,429	38.92	646,800	38%	342,487	20%	556	174
3	482-010-01	M-2 PD / SI	2,108,574	48.41	771,600	37%	500,158	24%	486	424
4	482-010-01	M-2 PD / SI	1,979,060	45.43	738,000	37%	464,870	23%	346	406
5	482-010-11	M-2 PD / SI	1,707,533	39.20	571,200	33%	503,896	30%	276	300
6	482-010-01, 03 & 482-040-03	M-2 PD / SI	1,039,531	23.86	248,640	24%	450,917	43%	212	162
7	482-010-01	M-2 PD / SI	619,511	14.22	147,000	24%	229,932	37%	160	300
8	482-010-01, 02, 03	M-2 PD / SI	2,074,348	47.62	771,600	37%	508,028	24%	416	424
9	482-010-01,02	M-2 PD / SI	2,003,797	46.00	771,600	39%	437,477	22%	416	424
10	482-010-11	M-2 PD / SI	734,208	16.86	174,720	24%	288,774	39%	260	52
11	482-010-11	M-2 PD / SI	730,087	16.76	174,720	24%	231,523	32%	270	52
12	482-010-01, 03	M-2 PD / SI	995,599	22.86	231,826	23%	398,050	40%	166	100
13	482-010-02, 03	M-2 PD / SI	1,962,746	45.06	576,000	29%	859,247	44%	260	152
14	482-010-02	M-2 PD / SI	2,233,629	51.28	771,600	35%	612,948	27%	416	424
NET TOTALS (%=AVERAGE):			21,840,066	501.38	7,242,106	33%	6,439,657	29%	4,796	3,568

STREET AREA (Sq. Ft.)	1,414,175
TOTAL SITE AREA (AC)	533.84

BUILDING SUMMARY

BLDG TYPE	SIZE (Sq. Ft.)	PROPOSED USE	Sq.Ft.	PARKING REQUIRED	TOTAL REQUIRED
A	771,600	WAREHOUSE	763,884	262	293
		OFFICE	7,716	31	
B	738,000	WAREHOUSE	730,620	251	281
		OFFICE	7,380	30	
C	646,800	WAREHOUSE	640,332	221	247
		OFFICE	6,468	26	
D	576,000	WAREHOUSE	570,240	197	221
		OFFICE	5,760	24	
E	571,200	WAREHOUSE	565,488	196	219
		OFFICE	5,712	23	
F	248,640	WAREHOUSE	246,154	89	99
		OFFICE	2,486	10	
G	231,826	WAREHOUSE	229,508	84	94
		OFFICE	2,318	10	
H	174,720	WAREHOUSE	172,973	65	72
		OFFICE	1,747	7	
I	147,000	WAREHOUSE	145,530	56	62
		OFFICE	1,470	6	
TOTAL WAREHOUSE				1365	1526
TOTAL OFFICE				161	

EASEMENT LEGEND:

1. AN EASEMENT GRANTED TO THE COUNTY OF KERN AND THE PUBLIC IN GENERAL FOR ROADS AND INCIDENTAL PURPOSES RECORDED DECEMBER 9, 1912 AS MAP OF THE LERDO SUBDIVISION "A", IN THE OFFICE OF THE KERN COUNTY RECORDER.
2. AN EASEMENT GRANTED TO PACIFIC COAST OIL COMPANY FOR PIPELINES & INCIDENTAL PURPOSES RECORDED FEBRUARY 15, 1902, BK. 131, PG. 125 OF DEEDS.
3. AN EASEMENT GRANTED TO TIDEWATER ASSOCIATED OIL COMPANY FOR PIPELINES & INCIDENTAL PURPOSES RECORDED JANUARY 8, 1937 IN BK. 687, PG. 23, O.R.
4. AN EASEMENT GRANTED TO THE COUNTY OF KERN FOR PUBLIC HIGHWAYS & INCIDENTAL PURPOSES RECORDED MAY 19, 1938 IN BK. 796, PG. 265, O.R.
5. AN EASEMENT GRANTED TO LERDO LAND COMPANY FOR PUBLIC ROADS & INCIDENTAL PURPOSES RECORDED AUGUST 10, 1951 IN BK. 1835, PG. 339, O.R.
6. A WAIVER OF DIRECT ACCESS RECORDED AUGUST 10, 1951 IN BK. 1835, PG. 333, O.R.
7. A WAIVER OF DIRECT ACCESS RECORDED AUGUST 21, 1962 IN BK. 3521, PG. 136, O.R.
8. AN EASEMENT GRANTED TO NORTH KERN WATER STORAGE DISTRICT FOR ROADS & INCIDENTAL PURPOSES RECORDED AUGUST 21, 1962 IN BK. 3521, PG. 143, O.R.
9. AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR PUBLIC UTILITIES & INCIDENTAL PURPOSES RECORDED AUGUST 21, 1962 IN BK. 3521, PG. 145, O.R.
10. AN EASEMENT GRANTED TO PACIFIC TELEPHONE & TELEGRAPH COMPANY FOR PUBLIC UTILITIES & INCIDENTAL PURPOSES RECORDED JANUARY 5, 1966 IN BK. 3907, PG. 87, O.R.
11. A WAIVER OF DIRECT ACCESS RECORDED AUGUST 9, 1968 IN BK. 3864, PG. 946, O.R.
12. AN EASEMENT GRANTED TO CAWELO WATER DISTRICT FOR PIPELINES & INCIDENTAL PURPOSES RECORDED AUGUST 15, 1984 IN BK. 5685, PG. 2043, O.R.
13. AN EXCLUSIVE EASEMENT GRANTED TO MARKO ZANINOVICH, INC. FOR UNDERGROUND PIPELINES & INCIDENTAL PURPOSES RECORDED MAY 24, 1985 IN BK. 5763, PG. 942, O.R.
14. AN EASEMENT GRANTED TO CALIFORNIA RESOURCES PRODUCTION CORPORATION FOR PIPELINES & INCIDENTAL PURPOSES RECORDED DECEMBER 23, 2015 AS DOC. NO. 0215179588, O.R.

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N 02°10'29" E	107.15'
L2	N 33°38'31" W	510.08'
L3	N 30°28'31" W	249.51'
L4	N 46°41'03" W	354.26'
L5	N 30°28'31" W	56.20'
L6	N 37°39'35" W	37.55'

CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	RADIAL	RADIAL
C1	167.00'	246.61'	151.99'	84°36'37"	N 52°04'26" W	N 43°18'57" E

05/20/22
SHEET 2 OF 11

MASTER PD PLAN NO. 74, MAP NO. 81
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SECTIONS 29 AND 30, T.28S., R.27E., M.D.M.

Figure 1-6C: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

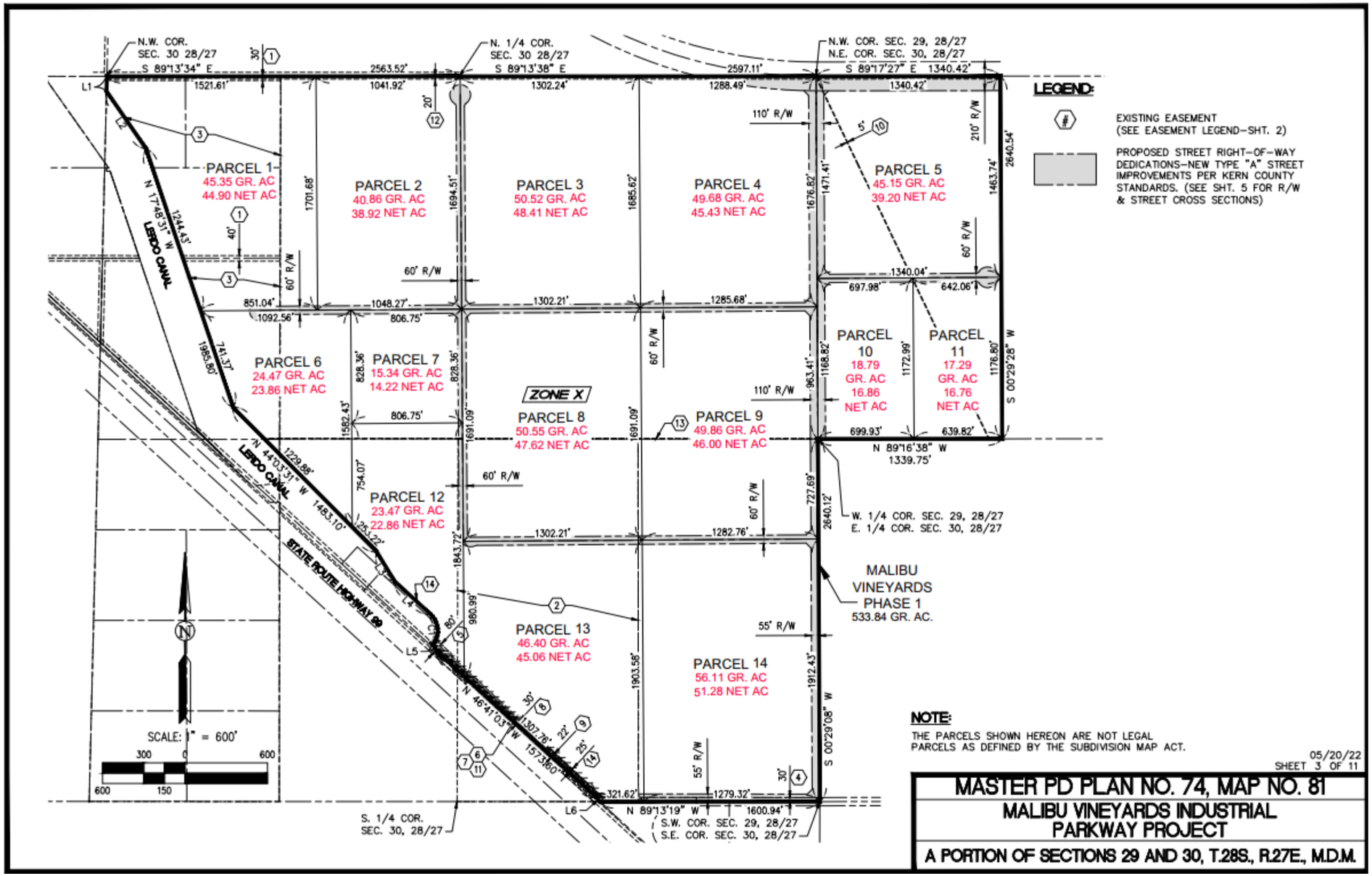


Figure 1-6D: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

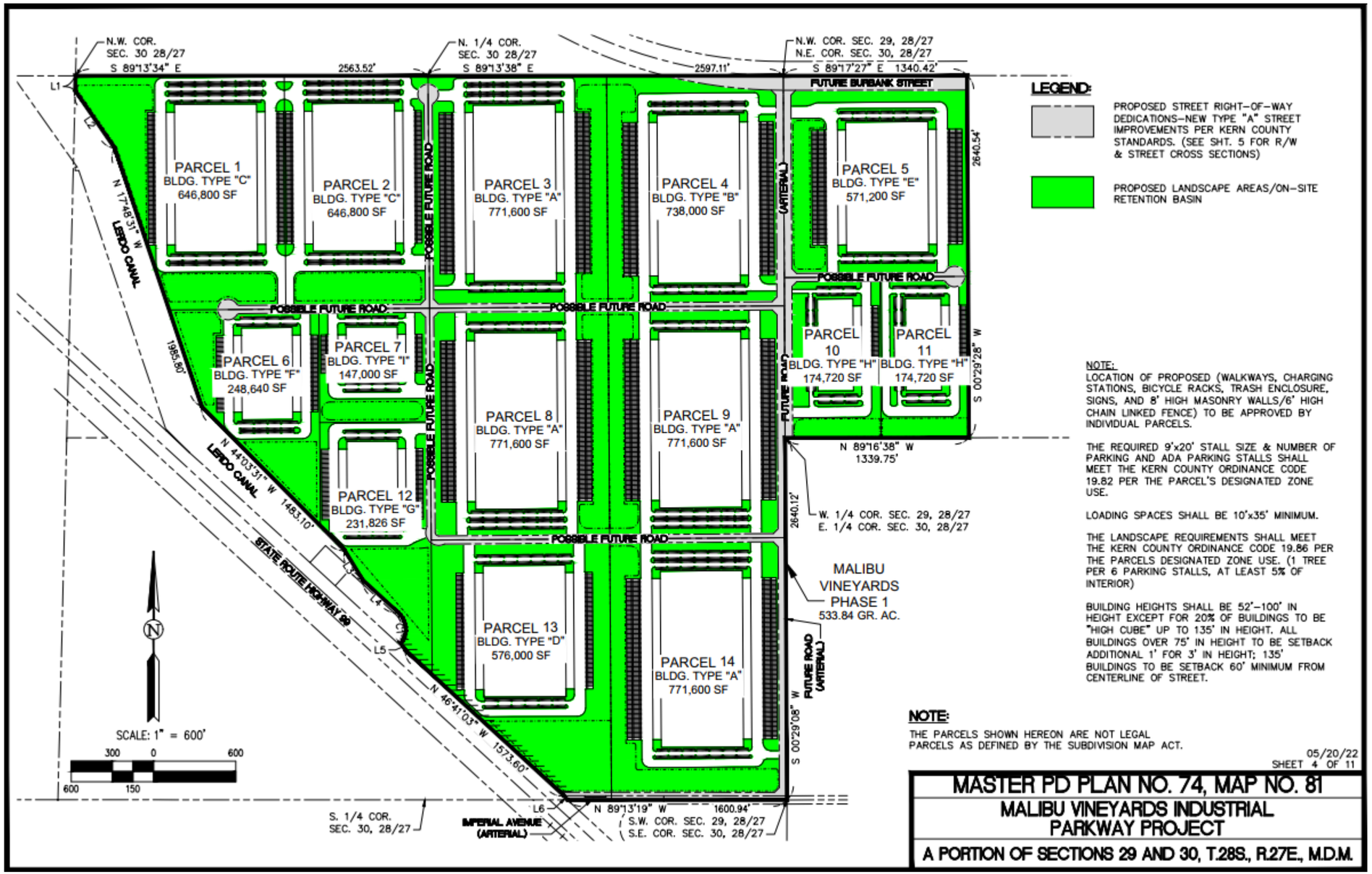


Figure 1-6E: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

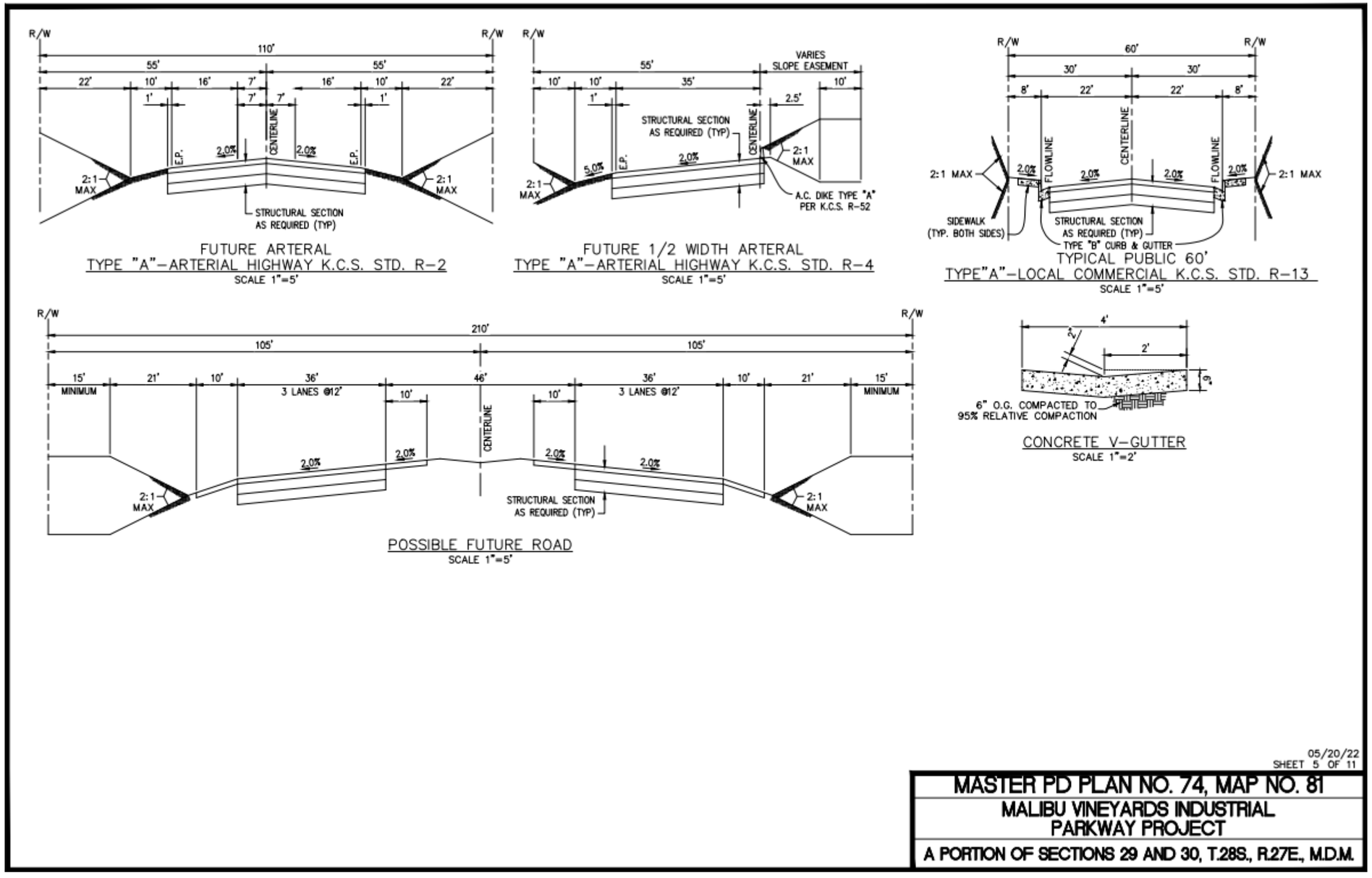


Figure 1-6F:Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

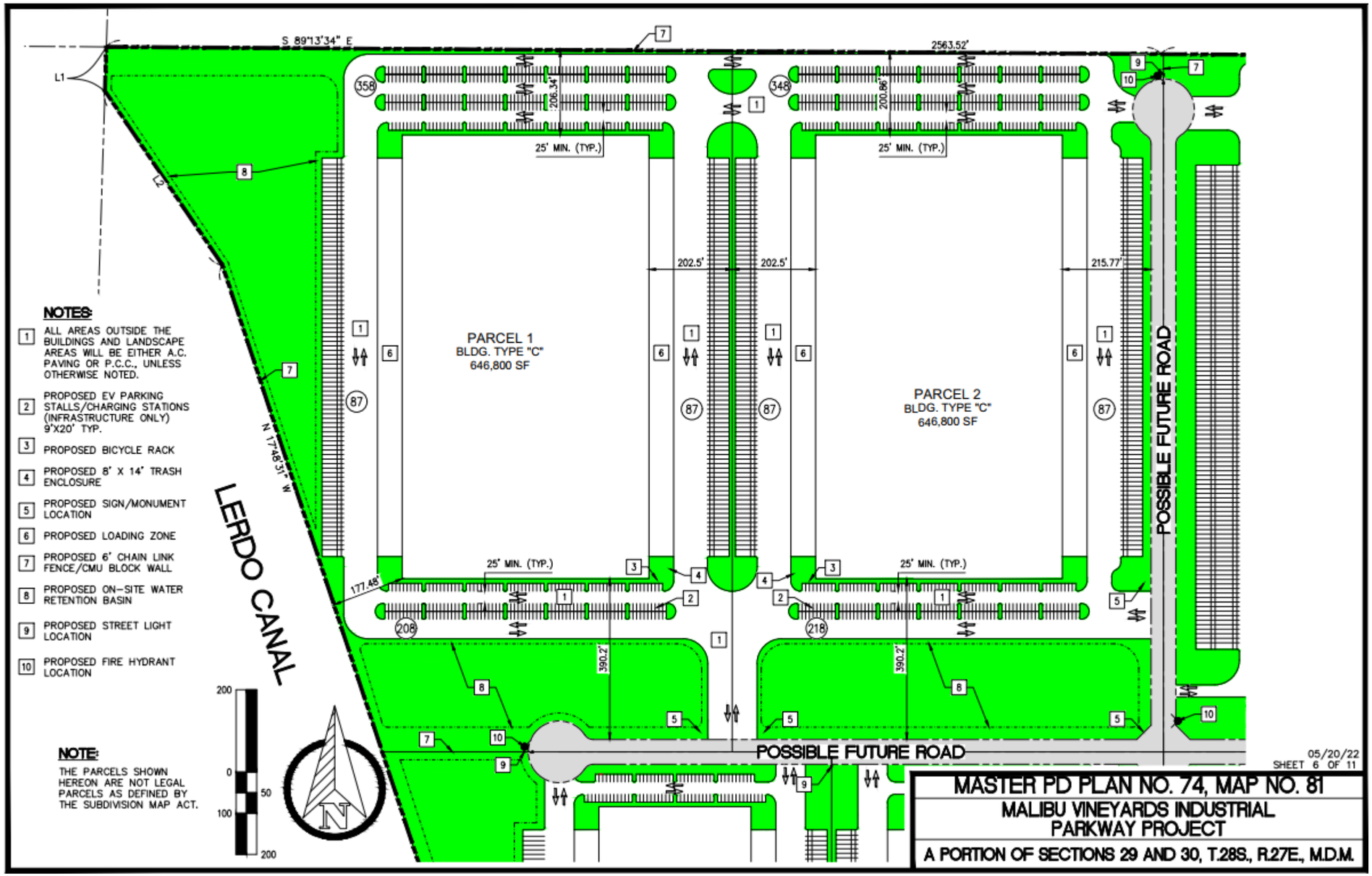


Figure 1-6G: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

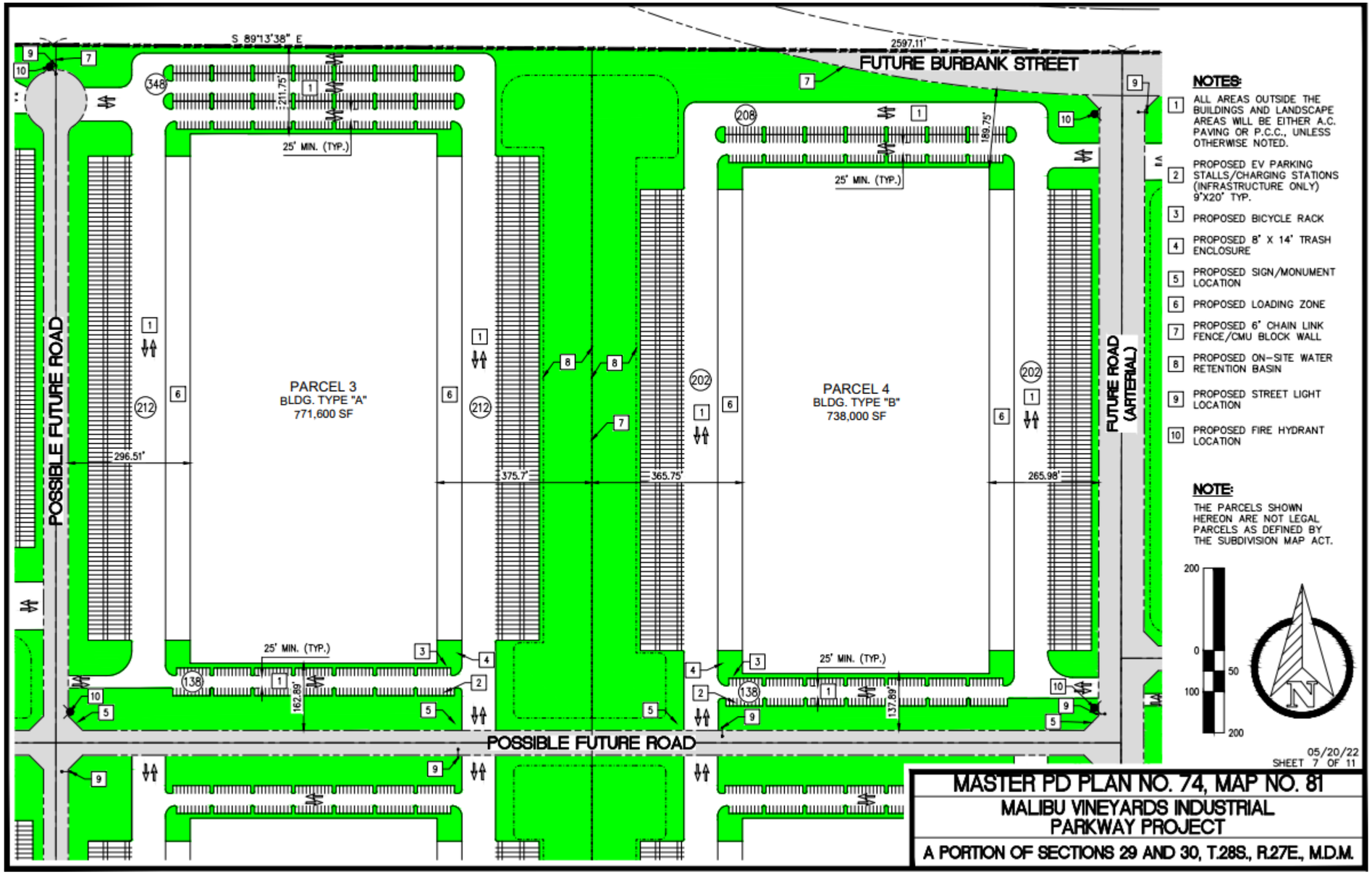


Figure 1-6H: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

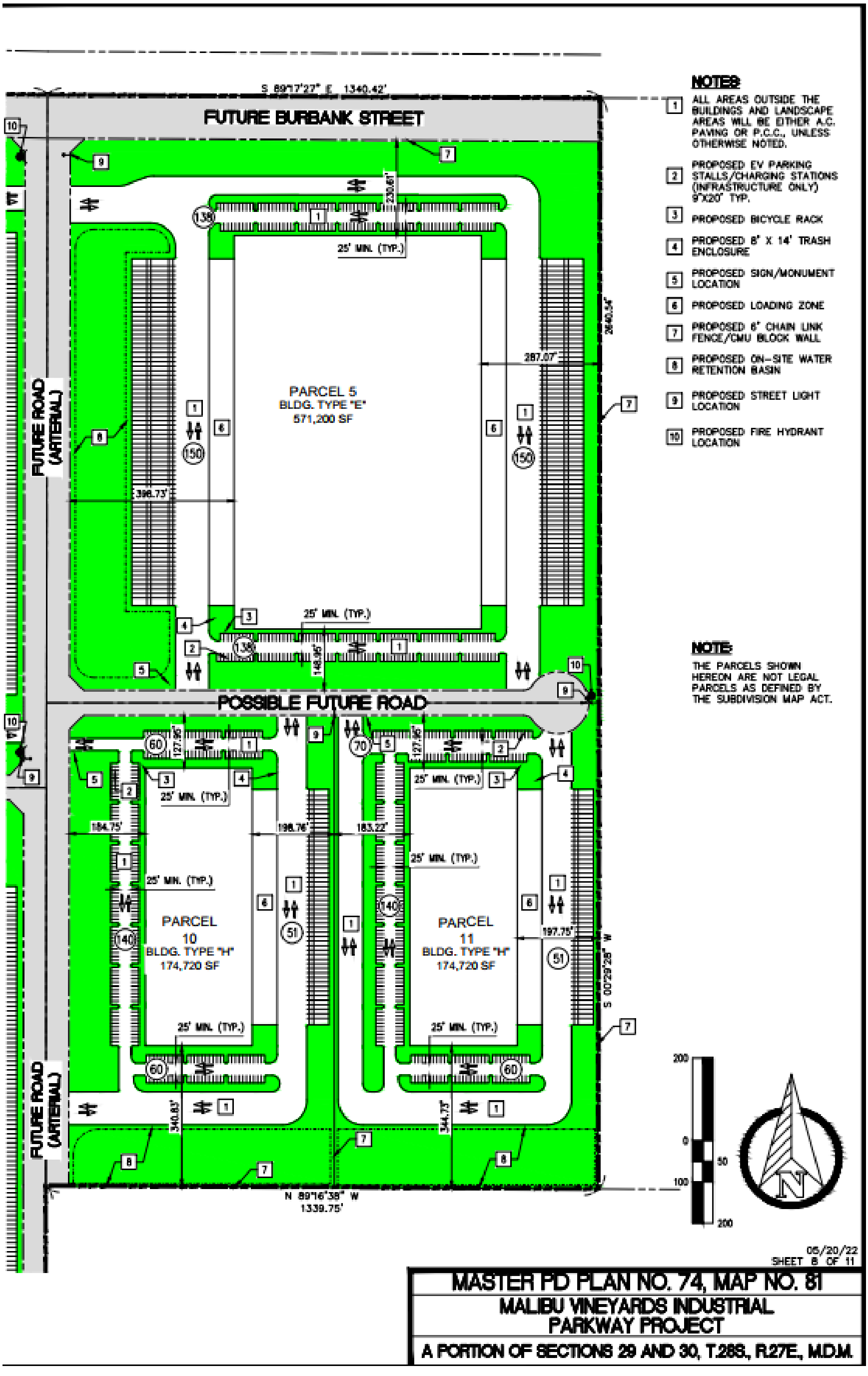


Figure 1-6I: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

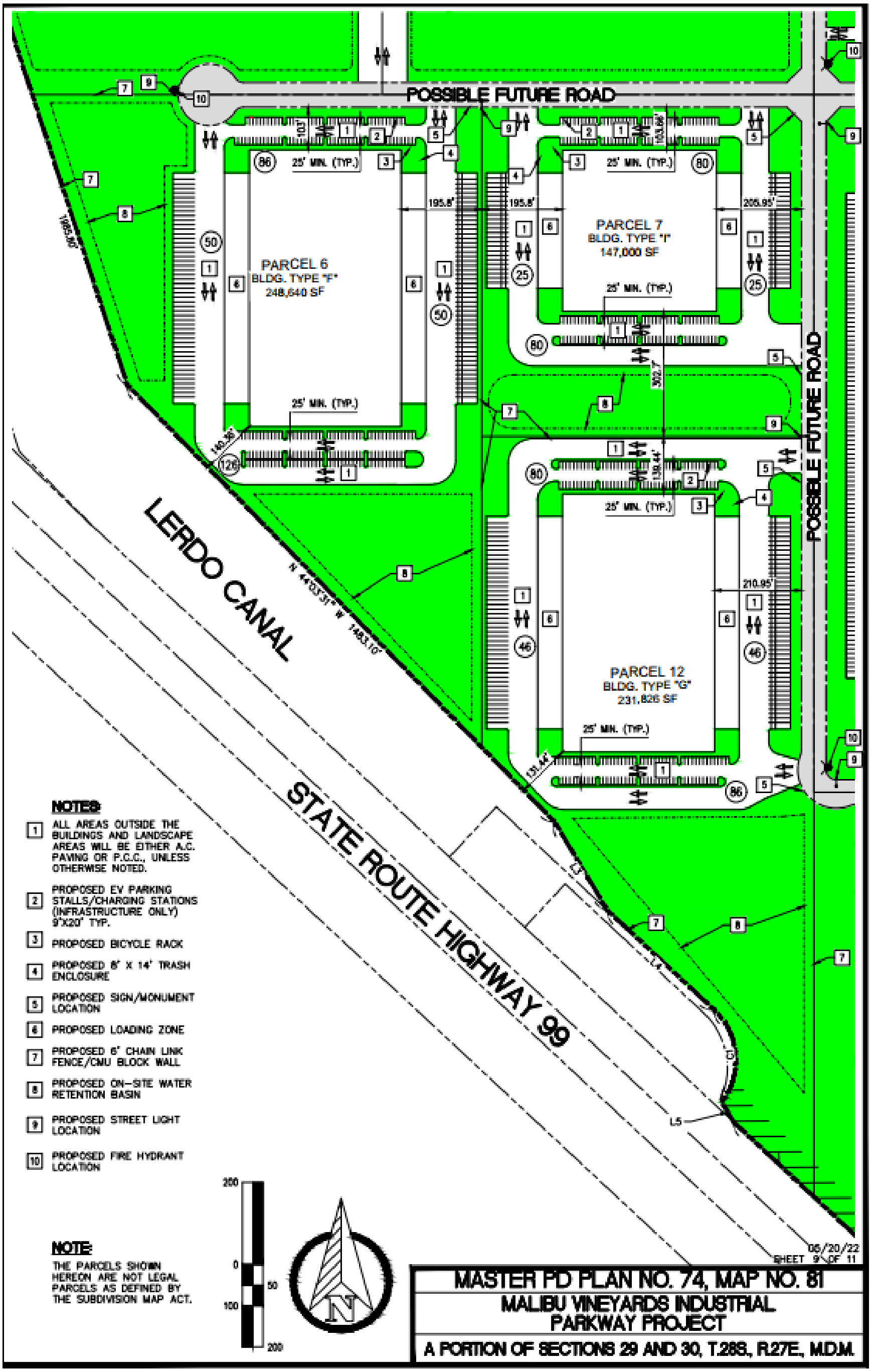


Figure 1-6J: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

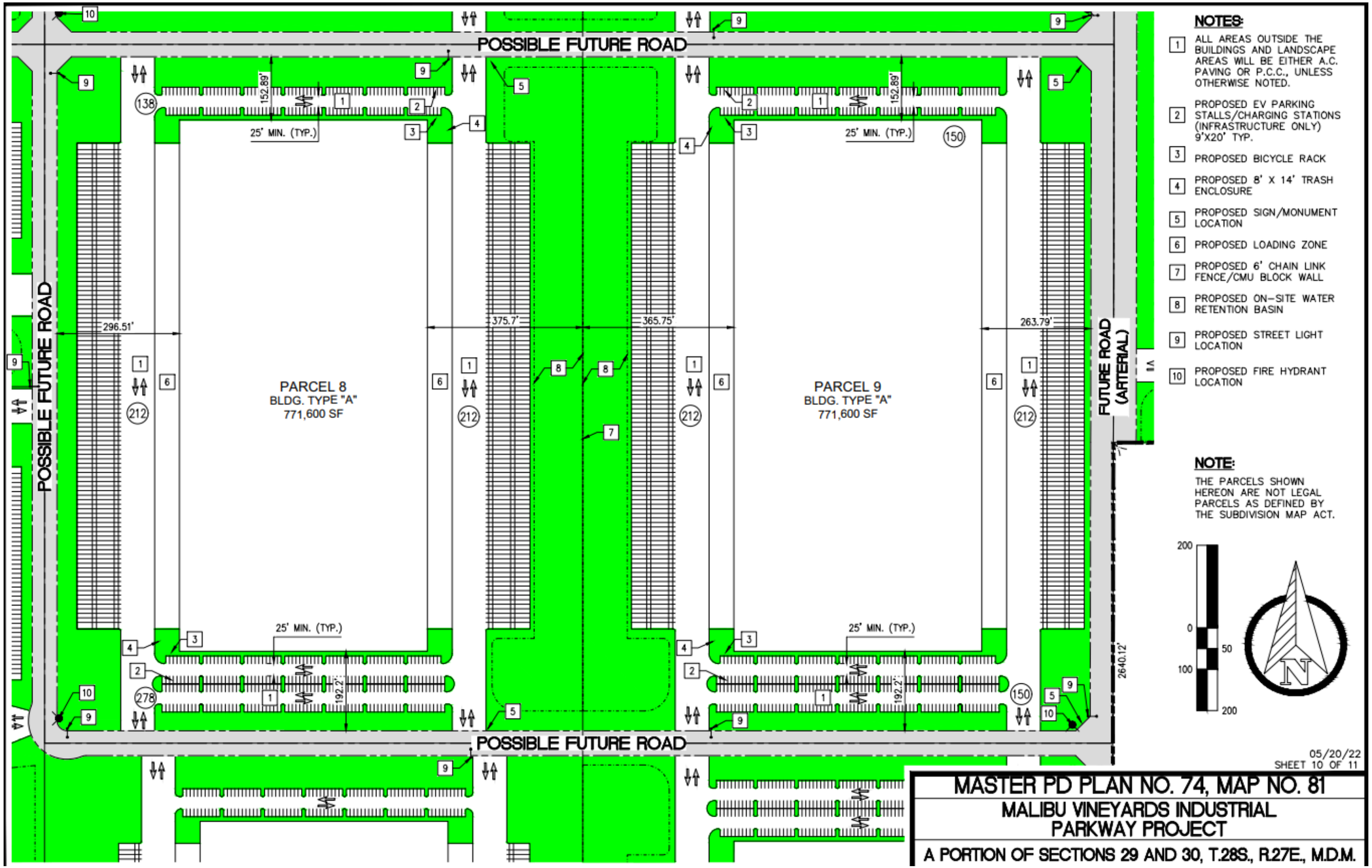


Figure 1-6J: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

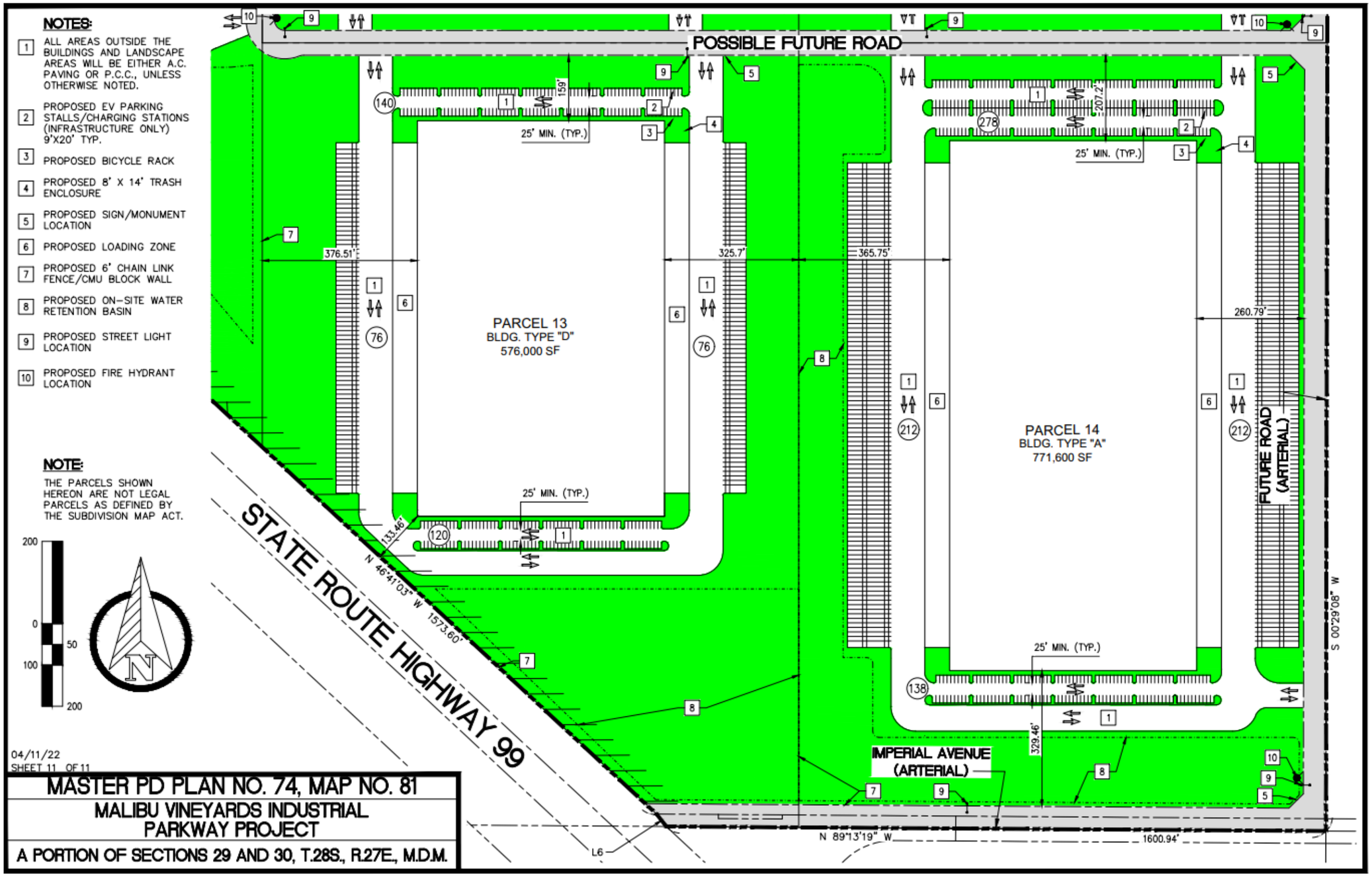


Figure 1-7A: Proposed Precise Development Plan No. 2, Map 80 (Phase 2)

OWNERS:

MALIBU VINEYARDS, LP
9777 WILSHIRE BLVD. STE. 900
BEVERLY HILLS, CA 90212
CONTACT: STEVEN GILFENBAIN
PHONE: (805) 305-0753

PREPARED BY:

McINTOSH & ASSOCIATES
2001 WHEELAN COURT
BAKERSFIELD, CA 93309
CONTACT: SAMUEL WALKER
PHONE: (661) 834-4814

PROJECT STATISTICS:

A.P.N.: 091-150-03, 091-160-01, 02, 03, 09, 13 & 16
091-200-04, 05, 07 & 14

PROJECT ACREAGE: 193.33 GR. AC./167.37 NET AC.

EXISTING ZONING: A (EXCLUSIVE AGRICULTURE)
PROPOSED ZONING: M-2 PD (MEDIUM INDUSTRIAL, PRECISE DEVELOPMENT)

EXISTING GENERAL PLAN DESIGNATION: 8.1 (INTENSIVE AGRICULTURE-MIN. 20 AC.)
PROPOSED GENERAL PLAN DESIGNATION: SI (SERVICE INDUSTRIAL)

EXISTING LAND USE: AGRICULTURE
PROPOSED LAND USE: INDUSTRIAL & COMMERCIAL

FLOOD ZONE: 0.2% ANNUAL CHANCE & ZONE "X"
SEE MAP SHEETS FOR INFORMATION

EARTHQUAKE FAULT ZONE: NONE

WATER: OILDALE MUTUAL WATER COMPANY
SEWER: NORTH OF RIVER SANITARY DISTRICT No. 1
ELECTRIC: P.G.&E.
GAS: SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE: A.T.&T.
CABLE: SPECTRUM

PUBLIC IMPROVEMENTS: TYPE "A"

STORM WATER DRAINAGE: ONSITE RETENTION FOR THE BENEFIT OF ALL PARCELS SHOWN HEREON. BASIN DEPTH TO BE 8' MINIMUM; CALCULATED PER DRAINAGE STUDY. MINIMUM 6' CHAIN LINK FENCE SURROUNDING BASIN WITH ACCESS FOR PRIVATE MAINTENANCE.

GENERAL NOTES:

ALL STREETS SHALL BE PUBLIC.
ALL RETURNS ARE ESTABLISHED WITH A 50' RADII.
ALL CUL-DE-SAC RETURN RADII ARE 25'.
ALL CUL-DE-SACS ARE 75' RADIUS.

SEE SHEET 4 FOR THE MAXIMUM BUILDING AREA SIZE ALLOWED FOR EACH PARCEL WITHIN THE BOUNDARY OF THIS PD PLAN.

NO BUILDING HEIGHT SHALL EXCEED WHAT IS ALLOWED IN THE M-2 PD/7.2 ZONE.

LANDSCAPE AREAS FOR EACH PARCEL SHALL BE DONE IN ACCORDANCE WITH THE KERN COUNTY ORDINANCE AND AGENCY STANDARDS.

SITE PLAN REVIEW SHALL BE SUBMITTED TO THE KERN COUNTY AIRPORTS DEPARTMENT FOR REVIEW AND COMMENT.

ALL EXISTING BUILDINGS/STRUCTURES WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE DEMOLISHED AND REMOVED.

PARCELS SHOWN HEREON ARE NOT LEGAL PARCELS AS DEFINED BY THE SUBDIVISION MAP ACT.

EXTERIOR BUILDING LIGHTS TO BE L.E.D. DOWN FACING LIGHTS IN ACCORDANCE WITH MUNICIPAL CODE. HEIGHT TO BE DETERMINED AND PROVIDED IN FUTURE LIGHTING PLAN WITH BUILDING PERMIT.

LEGAL DESCRIPTION:

BEING A PORTION SOUTH HALF OF SECTION 24, TOWNSHIP 28 SOUTH, RANGE 26 EAST, MOUNT DIABLO MERIDIAN, LYING BETWEEN THE NORTHEASTERLY LINE OF STATE HIGHWAY VI-Ker-99 AND THE SOUTHWESTERLY LINE OF THE LERDO CANAL;

THAT PORTION OF THE SOUTH 712 FEET OF LOT 25 IN SECTION 24, TOWNSHIP 28 SOUTH, RANGE 26 EAST, MOUNT DIABLO MERIDIAN, AS MEASURED FROM THE CENTERLINE OF ROAD 'G' ADJOINING SAID LOT ON THE SOUTH ALL AS SHOWN ON MAP OF THE LERDO SUBDIVISION "A" FILED FOR RECORD IN MAP BOOK 2, PAGE 54, IN THE OFFICE OF THE KERN COUNTY RECORDER;

THAT PORTION OF NORTHEAST QUARTER OF SECTION 25, TOWNSHIP 28 SOUTH , RANGE 26 EAST, MOUNT DIABLO MERIDIAN, LYING BETWEEN THE NORTHEASTERLY LINE OF STATE HIGHWAY VI-Ker-99 AND THE SOUTHWESTERLY LINE OF THE LERDO CANAL;

CONTAINING 10 PARCELS
193.33 ACRES GROSS - 167.37 ACRES NET (NO ROADS)

MINOR MODIFICATION TABLE

MOD. NUMBER	DESCRIPTION	DATE

SHEET INDEX:

SHEET No. DESCRIPTION
1. OWNER'S, STATISTICAL INFORMATION, AND NOTES
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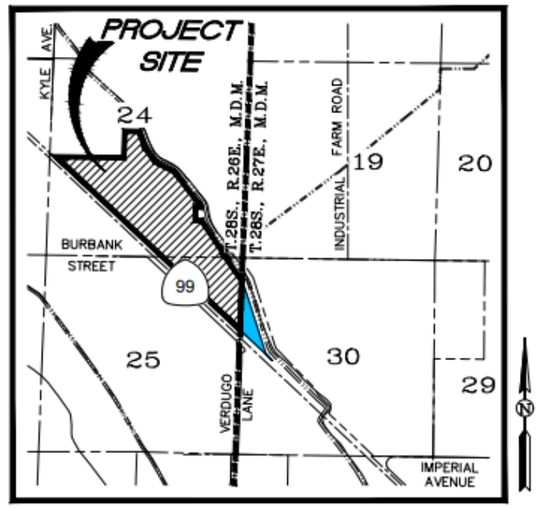
6. CONCEPTUAL SITE PLAN (PARCEL 1 & 2)
7. CONCEPTUAL SITE PLAN (PARCEL 3 & 6)
8. CONCEPTUAL SITE PLAN (PARCEL 4, 5 & 10)
9. CONCEPTUAL SITE PLAN (PARCEL 7, 8 & 9)

FLOOD ZONE LEGEND:

ZONE X — FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

ZONE X (SHADED AREA) — FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.



VICINITY MAP
NO SCALE

OWNER: DATE:

PLANNING DIRECTOR: DATE:

RECEIPT:

05/20/22
SHEET 1 OF 9

MASTER PD PLAN NO. 2, MAP NO. 80
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SEC. 24 and 25, 28/26

Figure 1-7B: Proposed Precise Development Plan No. 2, Map 80 (Phase 2)

MALIBU VINEYARDS - PHASE 2 PARCEL SUMMARY

PARCEL	APN	PROPOSED USE	SIZE (Sq. Ft.) NET	SIZE (ACRES) NET	BUILDING SIZE (Sq. Ft.)	BUILDING COVERAGE	LANDSCAPE (Sq. Ft.)	LANDSCAPE COVERAGE	PARKING STALLS (STANDARD)	PARKING STALLS (TRUCK)
1	091-160-01, 02, 03	M-2 PD / SI	933,528	21.43	150,000	16%	370,467	40%	354	90
2	091-160-02, 03, 09	M-2 PD / SI	973,004	22.34	262,500	27%	179,103	18%	352	158
3	091-160-02, 03, 09, 13	M-2 PD / SI	1,087,737	24.97	220,000	20%	225,708	21%	273	244
4	091-150-03 & 091-160-03	M-2 PD / SI	380,304	8.73	100,000	26%	63,991	17%	154	54
5	091-150-03 & 091-160-03, 13	M-2 PD / SI	229,790	5.28	74,725	33%	52,824	23%	21	-
6	091-160-02, 09,13, 16	M-2 PD / SI	1,050,254	24.11	123,750	12%	235,569	22%	192	100
7	091-160-09, 16 & 091-200-04, 05	M-2 PD / SI	1,134,380	26.04	231,826	20%	425,064	37%	166	92
8	091-200-04, 05, 14	M-2 PD / SI	940,688	21.60	231,826	25%	278,095	30%	324	92
9	091-200-05, 07, 14	M-2 PD / SI	603,161	13.85	150,000	25%	63,525	11%	294	94
10	091-160- 09, 13, 16, 091-200-05, 14	M-2 PD / SI	416,641	9.56	120,713	29%	75,325	18%	27	-
NET TOTALS (%=AVERAGE):			7,749,486	167.38	1,665,340	21%	1,969,671	25%	2,157	924
STREET AREA (Sq. Ft.)	672,002									
TOTAL SITE AREA (AC)	193.33									

BUILDING SUMMARY

BLDG TYPE	SIZE (Sq. Ft.)	PROPOSED USE	Sq.Ft.	PARKING REQUIRED	TOTAL REQUIRED
A	262,500	WAREHOUSE	259,875	94	105
		OFFICE	2,625	11	
B	231,826	WAREHOUSE	229,508	84	94
		OFFICE	2,318	10	
C	220,000	WAREHOUSE	217,800	80	89
		OFFICE	2,200	9	
D	150,000	WAREHOUSE	148,500	57	63
		OFFICE	1,500	6	
E	123,750	WAREHOUSE	122,513	48	53
		OFFICE	1,238	5	
F	100,000	WAREHOUSE	99,000	40	44
		OFFICE	1,000	4	
G	74,725	MINI-WAREHOUSE	73,978	32	35
		OFFICE	747	3	
H	120,713	MINI-WAREHOUSE	119,506	47	52
		OFFICE	1,207	5	
TOTAL WAREHOUSE				450	535
TOTAL OFFICE				50	

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S 89°10'37" E	382.88'
L2	S 19°56'59" E	468.29'
L3	S 35°13'59" E	456.78'
L4	S 04°53'59" E	52.93'
L5	N 89°11'59" W	124.00'
L6	S 02°11'59" W	350.00'
L7	S 89°11'59" E	173.10'
L8	N 89°13'33" W	16.06'

EASEMENT LEGEND:

(1) AN EASEMENT GRANTED TO THE COUNTY OF KERN AND THE PUBLIC IN GENERAL FOR ROADS AND INCIDENTAL PURPOSES RECORDED DECEMBER 9, 1912 AS MAP OF THE LERDO SUBDIVISION "A", IN THE OFFICE OF THE KERN COUNTY RECORDER.

(2) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED MARCH 19, 1920 IN BK. 347, PG. 225 OF DEEDS.

(3) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED NOVEMBER 8, 1924 IN BK. 36, PG. 470, O.R.

(4) AN EASEMENT GRANTED TO LERDO MUTUAL WATER COMPANY No. 1 FOR CEMENT PIPELINES AND INCIDENTAL PURPOSES RECORDED APRIL 23, 1925 IN BK. 69, PG. 243, O.R.

(5) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 17, 1928 IN BK. 267, PG. 143, O.R.

(6) AN EASEMENT RESERVED BY LERDO LAND COMPANY AND LERDO MUTUAL WATER COMPANY No. 1 FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 17, 1928 IN BK. 267, PG. 146, O.R.

(7) A WAIVER OF DIRECT ACCESS RECORDED FEBRUARY 17, 1932 IN BK. 430, PG. 15, O.R.

(8) AN EASEMENT GRANTED TO TIDEWATER ASSOCIATED OIL COMPANY FOR PIPELINES & INCIDENTAL PURPOSES RECORDED JANUARY 8, 1937 IN BK. 687, PG. 23, O.R.

(9) A WAIVER OF DIRECT ACCESS RECORDED NOVEMBER 25, 1938 IN BK. 831, PG. 307, O.R.

(10) A WAIVER OF DIRECT ACCESS RECORDED AUGUST 10, 1951 IN BK. 1835, PG. 333, O.R.

(11) AN EASEMENT GRANTED TO THE COUNTY OF KERN FOR ROAD RIGHT-OF-WAY AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 8, 1954 IN BK. 2285, PG. 79, O.R.

(12) A WAIVER OF DIRECT ACCESS RECORDED JUNE 26, 1962 IN BK. 3503, PG. 964, O.R.

(13) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES RECORDED JANUARY 27, 1975 IN BK. 4879, PG. 102, O.R.

(14) AN EASEMENT GRANTED TO CAWELO WATER DISTRICT FOR PIPELINES & INCIDENTAL PURPOSES RECORDED AUGUST 15, 1984 IN BK. 5685, PG. 2043, O.R.

(15) AN EASEMENT GRANTED TO NORTH KERN WATER STORAGE DISTRICT FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED APRIL 22, 1993 IN BK. 6835, PG. 258, O.R.

(16) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR FACILITIES AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 20, 2016 IN DOC. NO. 0216128006, O.R.

(17) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR PUBLIC UTILITIES & INCIDENTAL PURPOSES RECORDED JUNE 26, 1962 IN BK. 3503, PG. 968, O.R.

AN EASEMENT RESERVED BY SOUTHERN PACIFIC RAILROAD COMPANY FOR RAILROAD RIGHT-OF-WAY AND INCIDENTAL PURPOSES RECORDED AUGUST 4, 1883 IN BK. 15, PG. 301 AND BK. 16, PG. 108, BOTH OF DEEDS. (EXACT LOCATION NO ASCERTAINABLE FROM RECORD)

12/20/23
SHEET 2 OF 9

MASTER PD PLAN NO. 2, MAP NO. 80

MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT

A PORTION OF SEC. 24 and 25, 28/26

Figure 1-7C: Proposed Precise Development Plan No. 2, Map 80 (Phase 2)

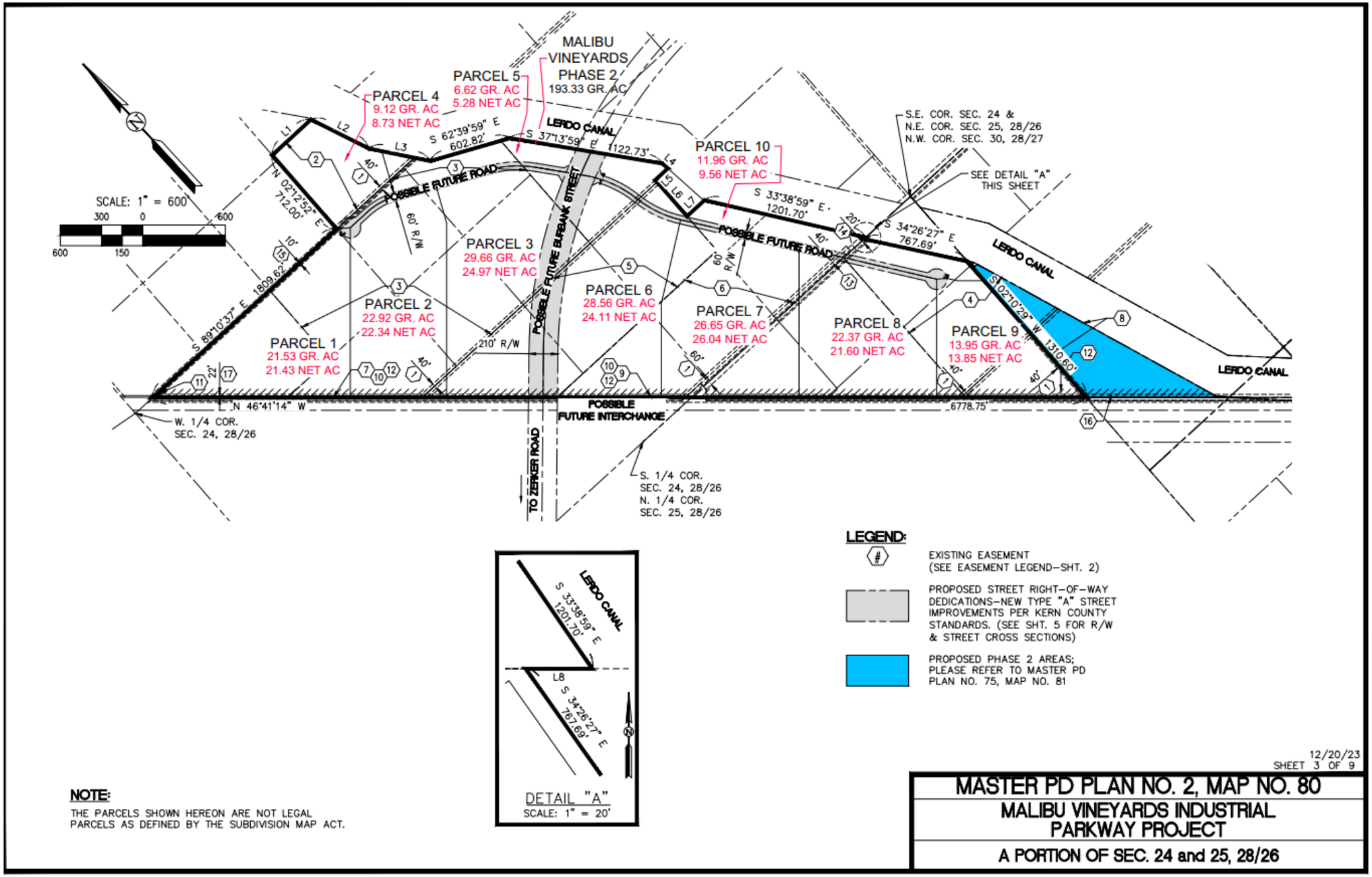


Figure 1-7D: Proposed Precise Development Plan No. 2, Map 80 (Phase 2)

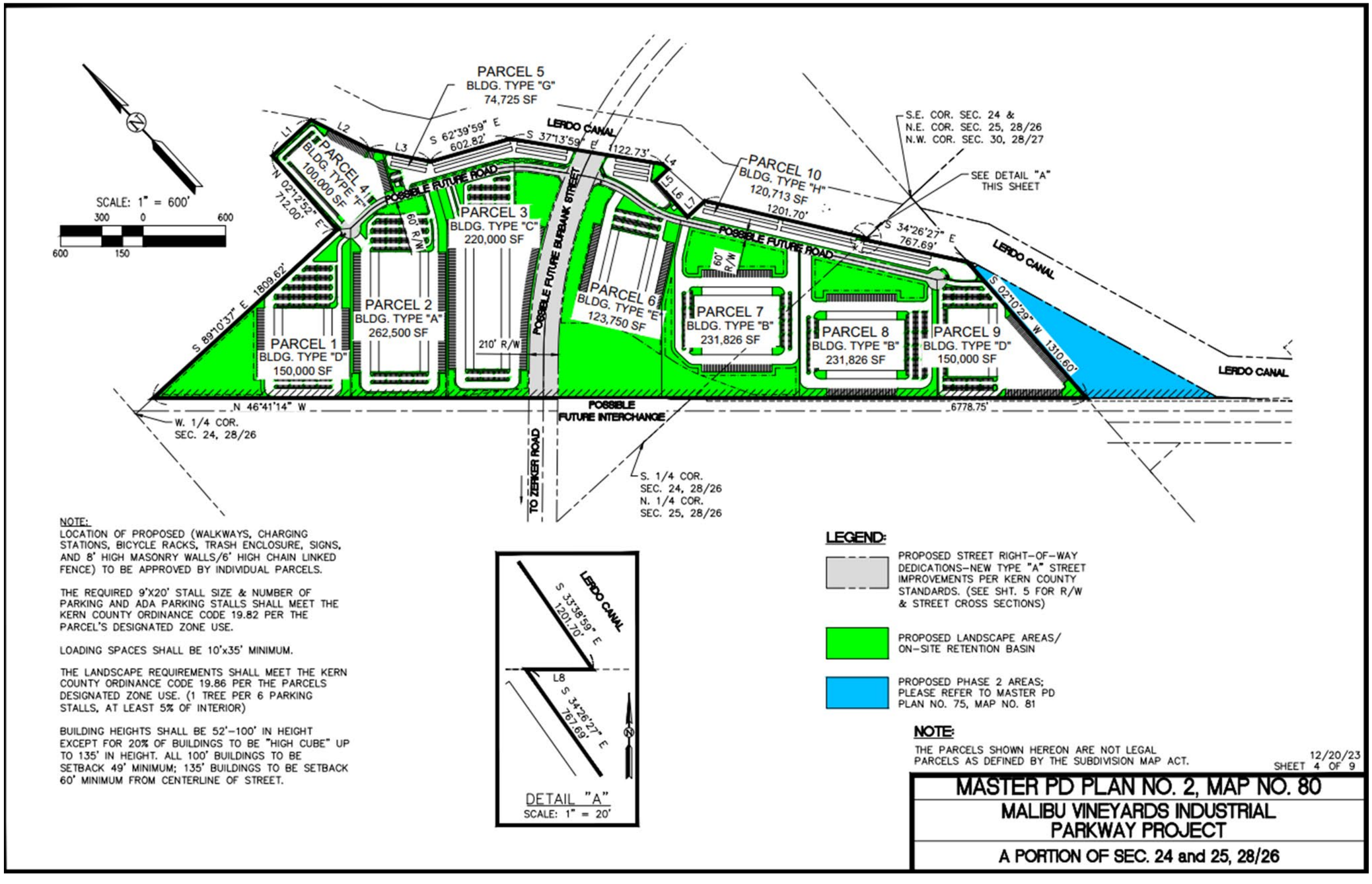


Figure 1-7E: Proposed Precise Development Plan No. 2, Map 80 (Phase 2)

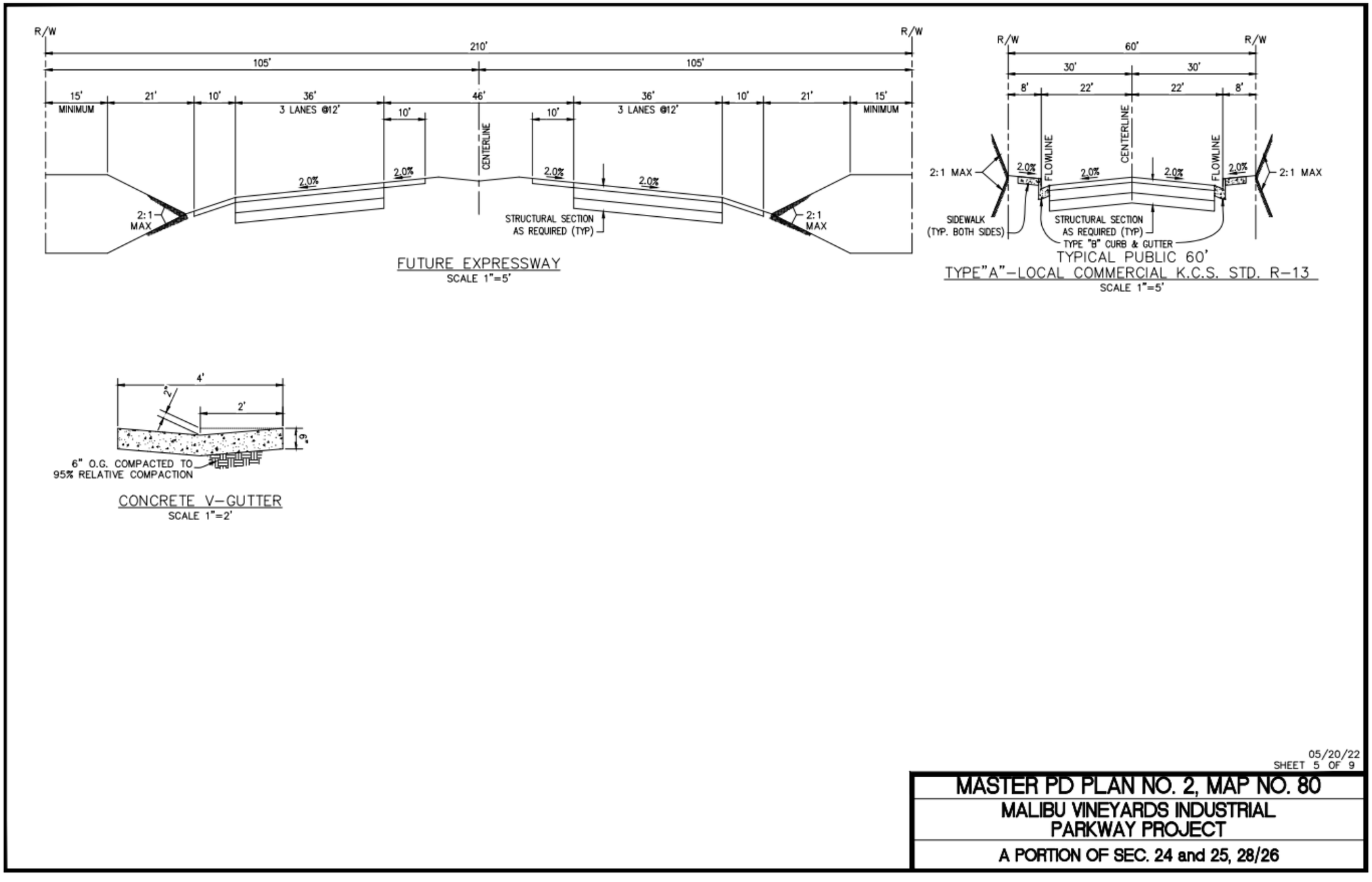


Figure 1-7F:Proposed Precise Development Plan No. 2, Map 80 (Phase 2)

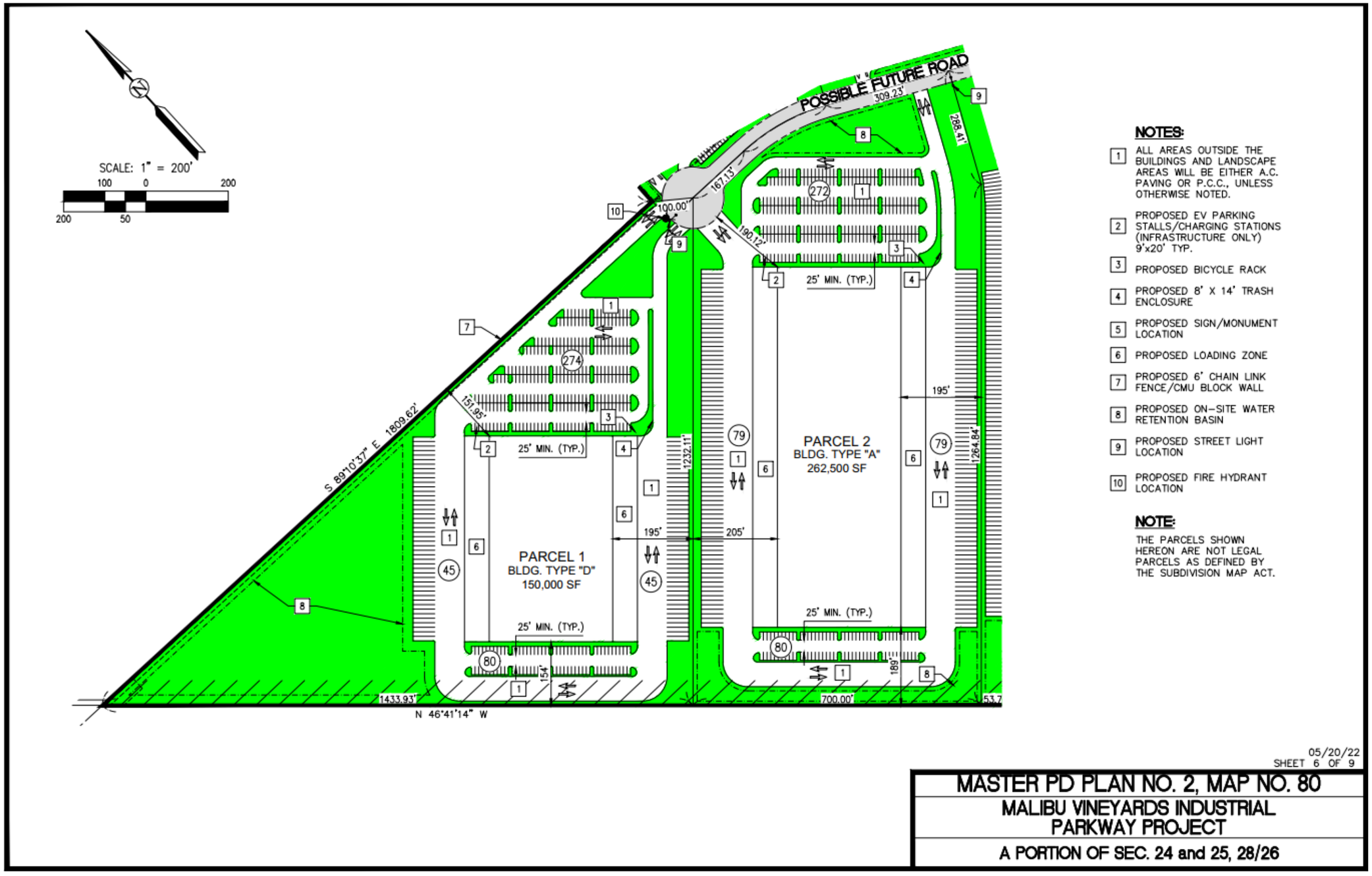
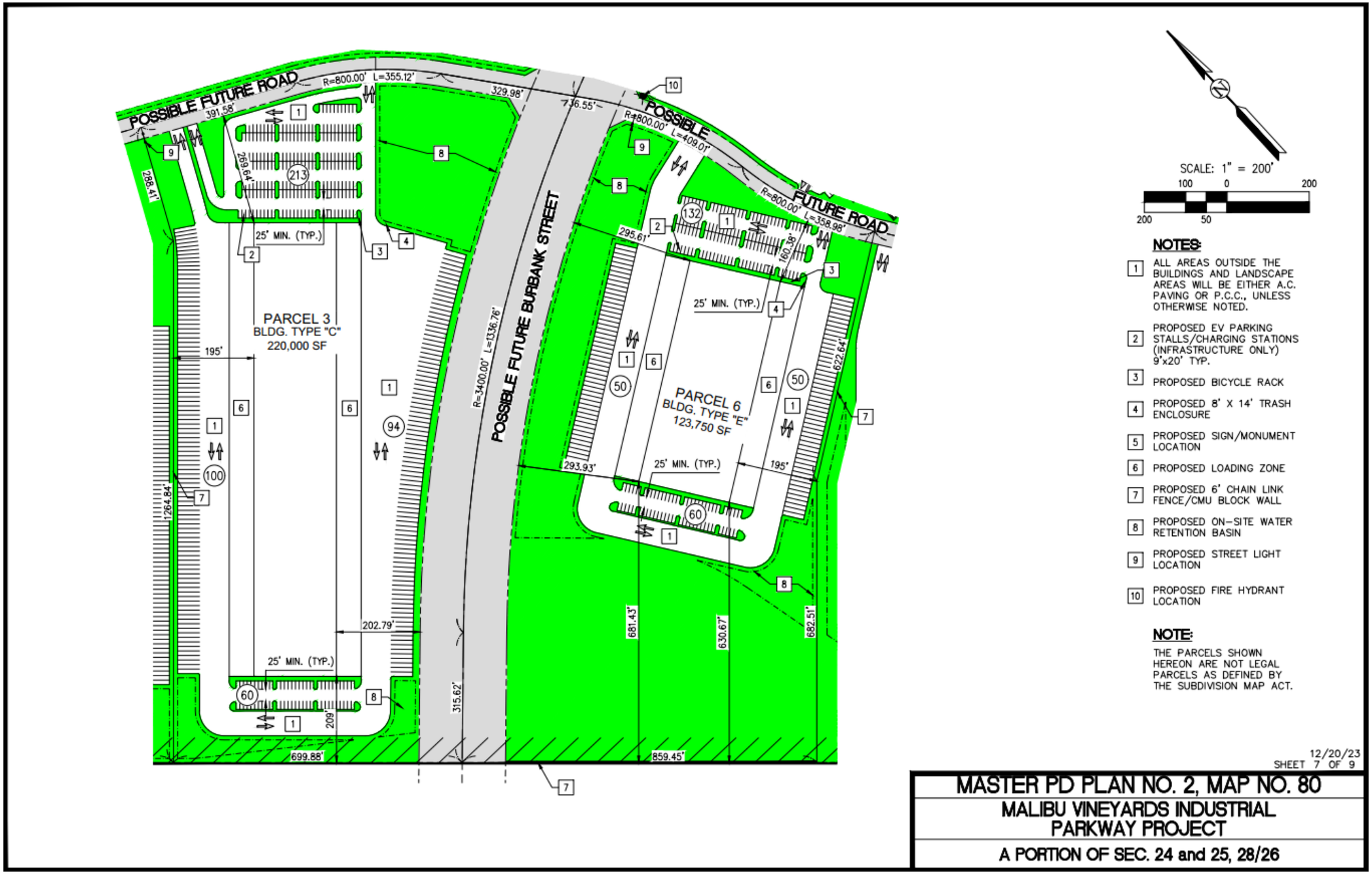


Figure 1-7G: Proposed Precise Development Plan No. 2, Map 80 (Phase 2)



NOTES:

1. ALL AREAS OUTSIDE THE BUILDINGS AND LANDSCAPE AREAS WILL BE EITHER A.C. PAVING OR P.C.C., UNLESS OTHERWISE NOTED.
2. PROPOSED EV PARKING STALLS/CHARGING STATIONS (INFRASTRUCTURE ONLY) 9'x20' TYP.
3. PROPOSED BICYCLE RACK
4. PROPOSED 8' X 14' TRASH ENCLOSURE
5. PROPOSED SIGN/MONUMENT LOCATION
6. PROPOSED LOADING ZONE
7. PROPOSED 6' CHAIN LINK FENCE/CMU BLOCK WALL
8. PROPOSED ON-SITE WATER RETENTION BASIN
9. PROPOSED STREET LIGHT LOCATION
10. PROPOSED FIRE HYDRANT LOCATION

NOTE:

THE PARCELS SHOWN HEREON ARE NOT LEGAL PARCELS AS DEFINED BY THE SUBDIVISION MAP ACT.

12/20/23
SHEET 7 OF 9

MASTER PD PLAN NO. 2, MAP NO. 80
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SEC. 24 and 25, 28/26

Figure 1-7H: Proposed Precise Development Plan No. 2, Map 80 (Phase 2)

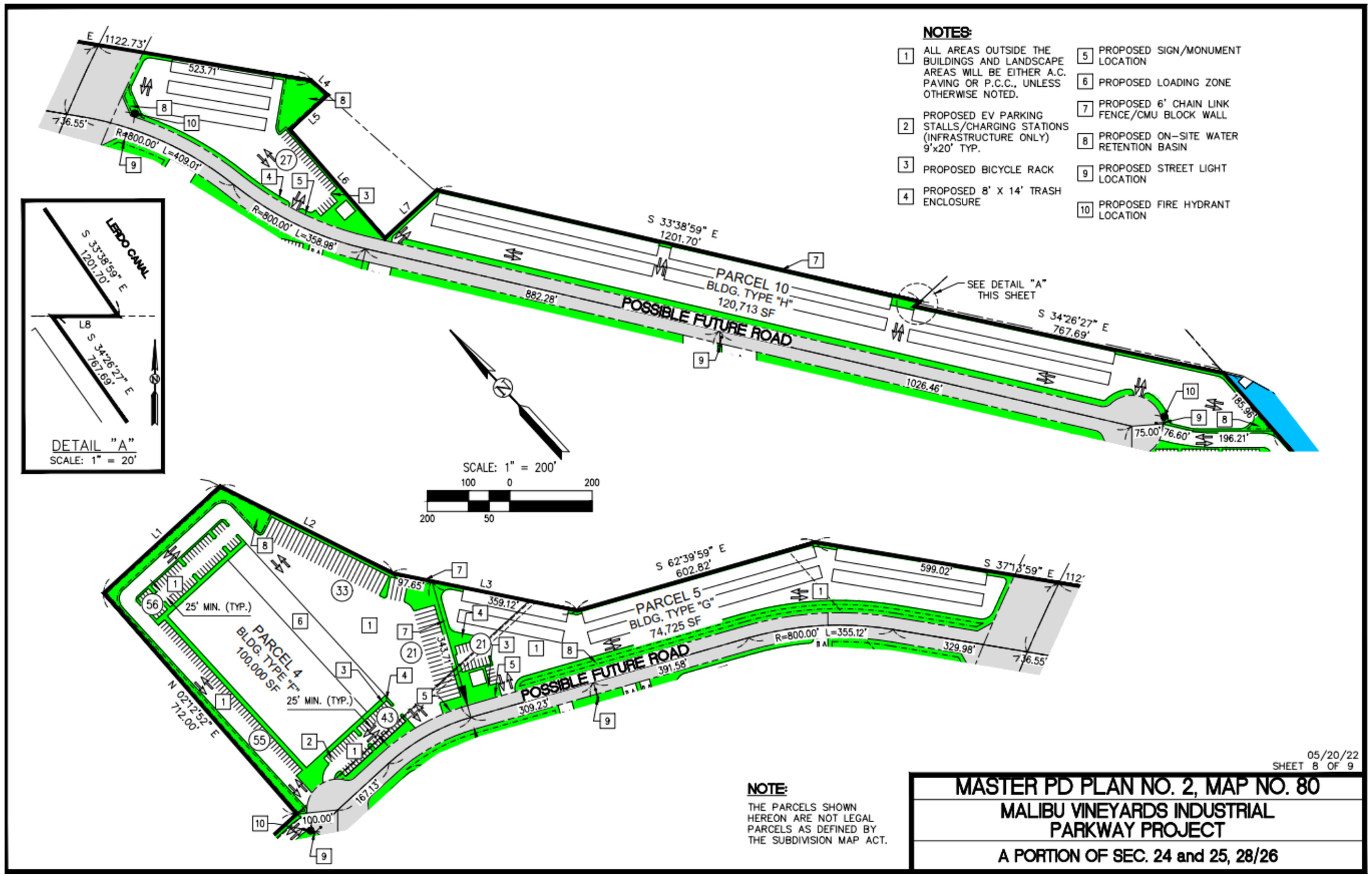


Figure 1-7I: Proposed Precise Development Plan No. 2, Map 80 (Phase 2)

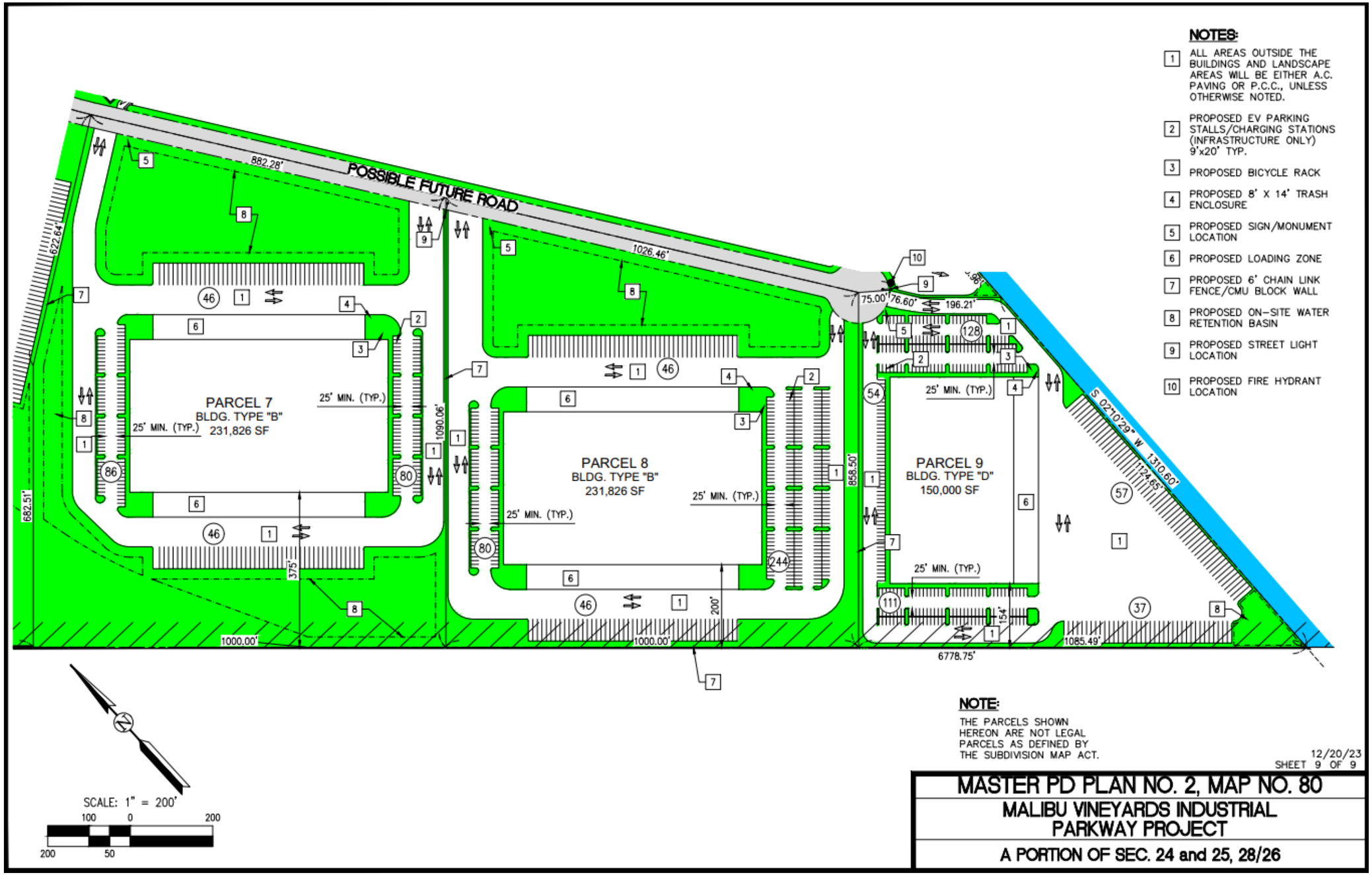


Figure 1-8A: Proposed Precise Development Plan No. 75 Map 81 (Phase 2)

OWNERS:

MALIBU VINEYARDS, LP
9777 WILSHIRE BLVD. STE. 900
BEVERLY HILLS, CA 90212
CONTACT: STEVEN GILFENBAIN
PHONE: (805) 305-0753

PREPARED BY:

McINTOSH & ASSOCIATES
2001 WHEELAN COURT
BAKERSFIELD, CA 93309
CONTACT: SAMUEL WALKER
PHONE: (661) 834-4814

PROJECT STATISTICS:

A.P.N.: 091-200-13 & 482-040-04 & 05

PROJECT ACREAGE: 11.31 GR. AC. & NET AC.

EXISTING & PROPOSED ZONING: M-2 PD (MED. INDUSTRIAL, PRECISE DEVELOPMENT)

EXISTING & PROPOSED GENERAL PLAN DESIGNATION: SI (SERVICE INDUSTRIAL)

EXISTING LAND USE: AGRICULTURE
PROPOSED LAND USE: INDUSTRIAL & COMMERCIAL

FLOOD ZONE: 0.2% ANNUAL CHANCE & ZONE "X" SEE MAP SHEETS FOR INFORMATION

EARTHQUAKE FAULT ZONE: NONE

WATER: OILDALE MUTUAL WATER COMPANY
SEWER: NORTH OF RIVER SANITARY DISTRICT No. 1
ELECTRIC: P.G.&E.
GAS: SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE: A.T.&T.
CABLE: SPECTRUM

PUBLIC IMPROVEMENTS: TYPE "A"

STORM WATER DRAINAGE: ONSITE RETENTION FOR THE BENEFIT OF ALL PARCELS SHOWN HEREON.

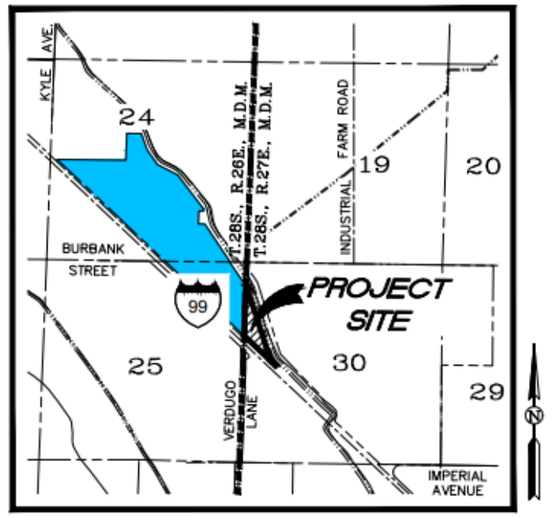
LEGAL DESCRIPTION:

BEING A PORTION OF THE WEST HALF OF THE WEST HALF OF SECTION 30, TOWNSHIP 28 SOUTH, RANGE 27 EAST, MOUNT DIABLO MERIDIAN, LYING BETWEEN THE NORTHEASTERLY LINE OF STATE HIGHWAY VI-Ker-99 AND THE SOUTHWESTERLY LINE OF THE LERDO CANAL, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA.

CONTAINING 1 DRAINAGE SUMP PARCEL
11.31 ACRES GROSS (NO ROADS)

MINOR MODIFICATION TABLE

MOD. NUMBER	DESCRIPTION	DATE



VICINITY MAP
NO SCALE

GENERAL NOTES:

ALL STREETS SHALL BE PUBLIC.
ALL RETURNS ARE ESTABLISHED WITH A 50' RADII.
ALL CUL-DE-SAC RETURN RADII ARE 25'.
ALL CUL-DE-SACS ARE 75' RADIUS.

PLEASE REFER TO MASTER PD PLAN NO. 2, MAP NO. 80 FOR THE MAXIMUM BUILDING AREA SIZE ALLOWED FOR EACH PARCEL WITHIN THE BOUNDARY OF THIS PD PLAN.

NO BUILDING HEIGHT SHALL EXCEED WHAT IS ALLOWED IN THE M-2 PD/7.2 ZONE.

LANDSCAPE AREAS FOR EACH PARCEL SHALL BE DONE IN ACCORDANCE WITH THE KERN COUNTY ORDINANCE AND AGENCY STANDARDS.

SITE PLAN REVIEW SHALL BE SUBMITTED TO THE KERN COUNTY AIRPORTS DEPARTMENT FOR REVIEW AND COMMENT.

ALL EXISTING BUILDINGS/STRUCTURES WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE DEMOLISED AND REMOVED.

PARCELS SHOWN HEREON ARE NOT LEGAL PARCELS AS DEFINED BY THE SUBDIVISION MAP ACT.

SHEET INDEX:

SHEET No. DESCRIPTION
1. OWNER'S, STATISTICAL INFORMATION, AND NOTES
2. EASEMENT LEGEND & DETAILS
3. PD PLAN BOUNDARY AND EASEMENTS
4. PD PLAN BOUNDARY, CONCEPTUAL SITE PLAN AND EASEMENTS

FLOOD ZONE LEGEND:

ZONE X — FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

ZONE X (SHADED AREA) — FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

OWNER: _____ DATE: _____

PLANNING DIRECTOR: _____ DATE: _____

RECEIPT: _____

06/13/22
SHEET 1 OF 4

MASTER PD PLAN NO. 75, MAP NO. 81
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SEC. 30, 28/27

Figure 1-8B: Proposed Precise Development Plan No. 75 Map 81 (Phase 2)

EASEMENT LEGEND:

(1) AN EASEMENT GRANTED TO THE COUNTY OF KERN AND THE PUBLIC IN GENERAL FOR ROADS AND INCIDENTAL PURPOSES RECORDED DECEMBER 9, 1912 AS MAP OF THE LERDO SUBDIVISION "A", IN THE OFFICE OF THE KERN COUNTY RECORDER.

(2) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED MARCH 19, 1920 IN BK. 347, PG. 225 OF DEEDS.

(3) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED NOVEMBER 8, 1924 IN BK. 36, PG. 470, O.R.

(4) AN EASEMENT GRANTED TO LERDO MUTUAL WATER COMPANY No. 1 FOR CEMENT PIPELINES AND INCIDENTAL PURPOSES RECORDED APRIL 23, 1925 IN BK. 69, PG. 243, O.R.

(5) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 17, 1928 IN BK. 267, PG. 143, O.R.

(6) AN EASEMENT RESERVED BY LERDO LAND COMPANY AND LERDO MUTUAL WATER COMPANY No. 1 FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 17, 1928 IN BK. 267, PG. 146, O.R.

(7) A WAIVER OF DIRECT ACCESS RECORDED FEBRUARY 17, 1932 IN BK. 430, PG. 15, O.R.

(8) AN EASEMENT GRANTED TO TIDEWATER ASSOCIATED OIL COMPANY FOR PIPELINES & INCIDENTAL PURPOSES RECORDED JANUARY 8, 1937 IN BK. 687, PG. 23, O.R.

(9) A WAIVER OF DIRECT ACCESS RECORDED NOVEMBER 25, 1938 IN BK. 831, PG. 307, O.R.

(10) A WAIVER OF DIRECT ACCESS RECORDED AUGUST 10, 1951 IN BK. 1835, PG. 333, O.R.

(11) AN EASEMENT GRANTED TO THE COUNTY OF KERN FOR ROAD RIGHT-OF-WAY AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 8, 1954 IN BK. 2285, PG. 79, O.R.

(12) A WAIVER OF DIRECT ACCESS RECORDED JUNE 26, 1962 IN BK. 3503, PG. 964, O.R.

(13) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES RECORDED JANUARY 27, 1975 IN BK. 4879, PG. 102, O.R.

(14) AN EASEMENT GRANTED TO CAWELO WATER DISTRICT FOR PIPELINES & INCIDENTAL PURPOSES RECORDED AUGUST 15, 1984 IN BK. 5685, PG. 2043, O.R.

(15) AN EASEMENT GRANTED TO NORTH KERN WATER STORAGE DISTRICT FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED APRIL 22, 1993 IN BK. 6835, PG. 258, O.R.

(16) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR FACILITIES AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 20, 2016 IN DOC. NO. 0216128006, O.R.

(17) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR PUBLIC UTILITIES & INCIDENTAL PURPOSES RECORDED JUNE 26, 1962 IN BK. 3503, PG. 968, O.R.

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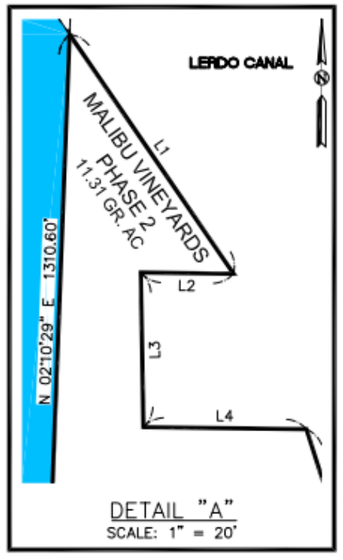


DETAIL "A"
SCALE: 1" = 20'

06/13/22
SHEET 2 OF 4

MASTER PD PLAN NO. 75, MAP NO. 81
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SEC. 30, 28/27

Figure 1-8C: Proposed Precise Development Plan No. 2 Map 80 (Phase 2)

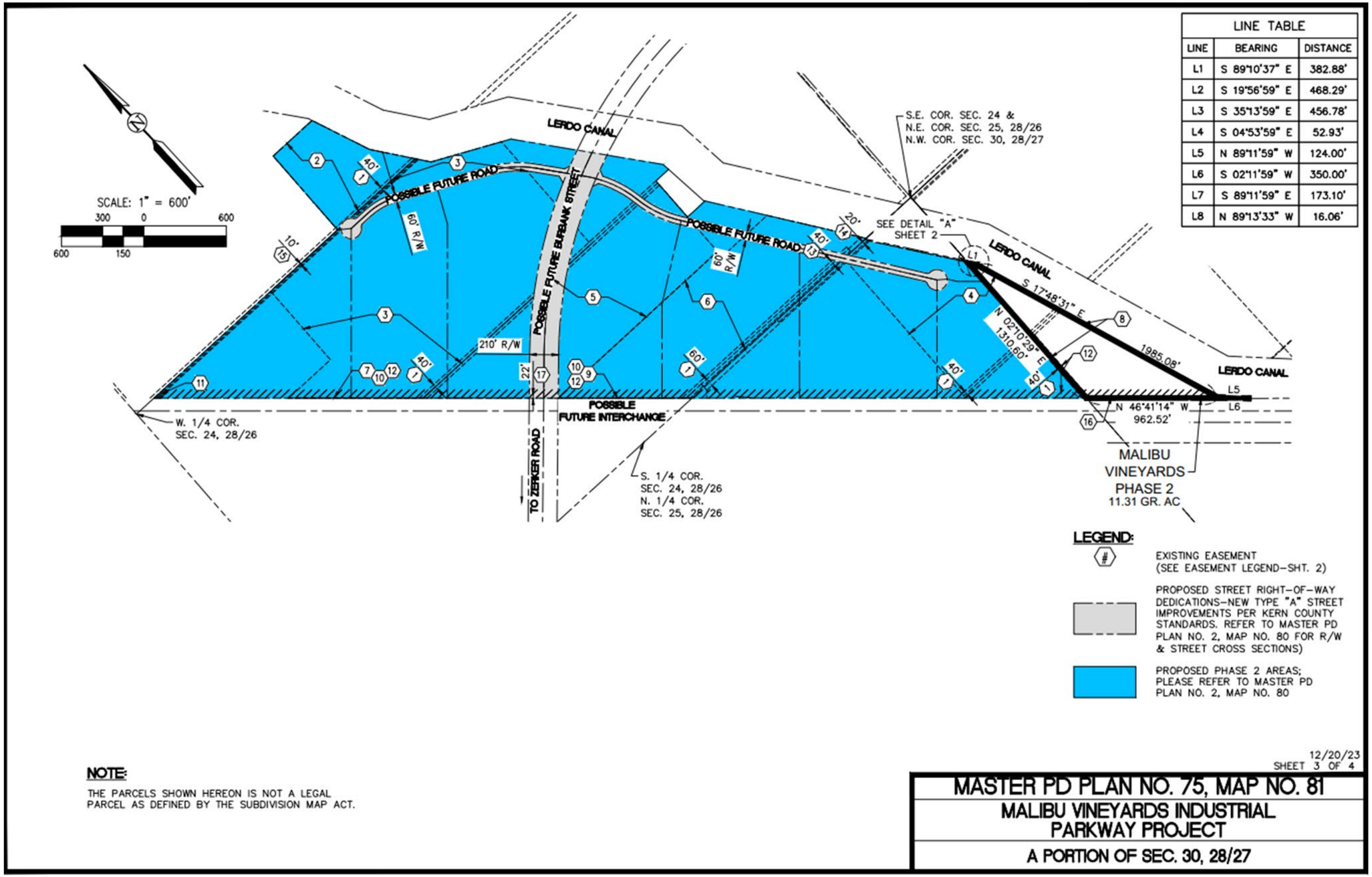
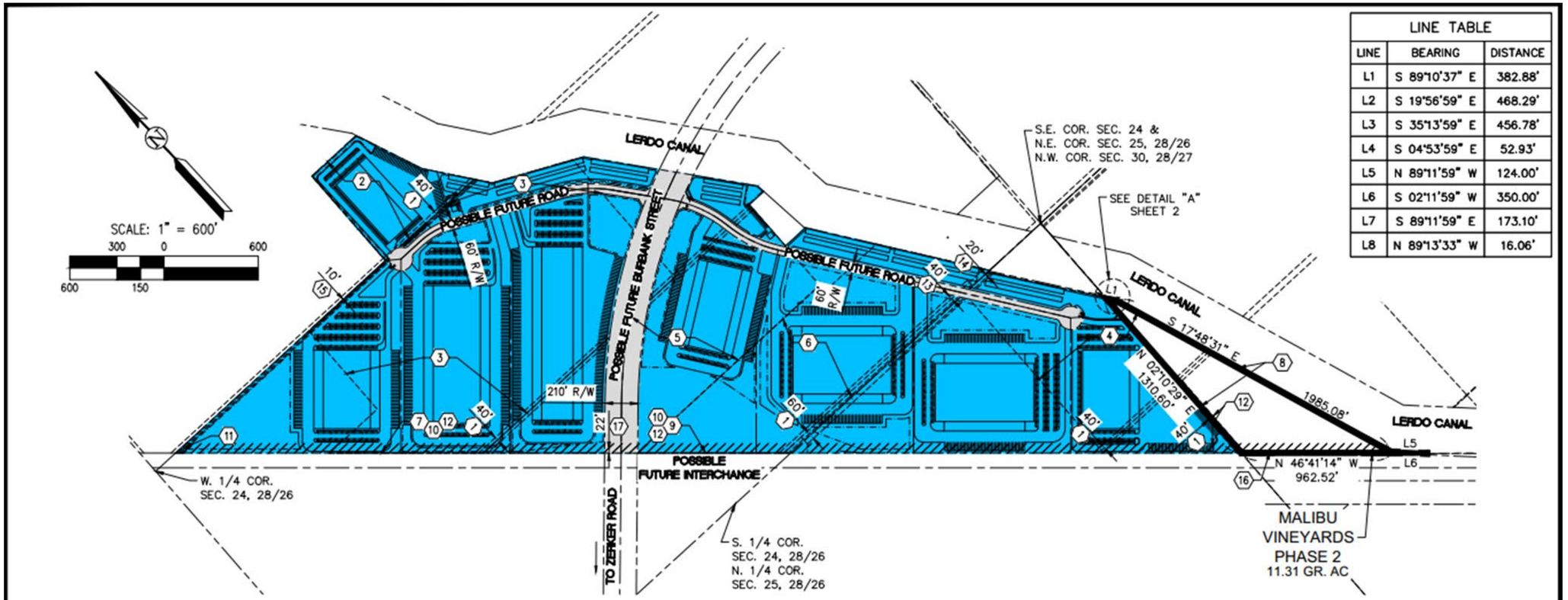


Figure 1-8D: Proposed Precise Development Plan No.2 Map 80 (Phase 2)



MALIBU VINEYARDS - PHASE 2 PARCEL SUMMARY

PARCEL	APN	PROPOSED USE	SIZE (Sq. Ft.) NET	SIZE (ACRES) NET	BUILDING SIZE (Sq. Ft.)	BUILDING COVERAGE	PARKING STALLS (STANDARD)	PARKING STALLS (TRUCK)
SUMP	091-200-05, 13 & 482-040-004, 05	DRAINAGE	492,536	11.31	0	0%	0	0
NET TOTALS:			**492,536**	**11.31**	**0**	**0%**	**0**	**0**

LEGEND:

(#) EXISTING EASEMENT (SEE EASEMENT LEGEND–SHT. 2)

PROPOSED STREET RIGHT–OF–WAY DEDICATIONS–NEW TYPE "A" STREET IMPROVEMENTS PER KERN COUNTY STANDARDS. REFER TO MASTER PD PLAN NO. 2, MAP NO. 80 FOR R/W & STREET CROSS SECTIONS)

PROPOSED PHASE 2 AREAS; PLEASE REFER TO MASTER PD PLAN NO. 2, MAP NO. 80

NOTE:

THE PARCELS SHOWN HEREON IS NOT A LEGAL PARCEL AS DEFINED BY THE SUBDIVISION MAP ACT.

12/20/23
SHEET 4 OF 4

MASTER PD PLAN NO. 75, MAP NO. 81

MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT

A PORTION OF SEC. 30, 28/27

Table 1-1: Project Components

Future Parcel	Area (sq ft)	Parking Stalls (standard)	Parking Stalls (trucks)
Phase 1			
1	646,800	556	174
2	646,800	556	174
3	771,600	486	424
4	738,000	346	406
5	571,200	276	300
6	248,640	212	162
7	147,000	160	300
8	771,600	416	424
9	771,600	416	424
10	174,720	260	52
11	174,720	270	52
12	231,826	166	100
13	576,000	260	152
14	771,600	416	424
Total	**7,242,106**	**4,796**	**3,568**
Phase 2			
1	150,000	354	90
2	262,500	352	158
3	220,000	273	244
4	100,000	154	54
5	74,725	21	0
6	123,750	192	100
7	231,826	166	92
8	231,826	324	92
9	150,000	294	94
10	120,713	27	0
Total	**1,665,340**	**2,130**	**924**

1.3 Purpose and Use of the Draft EIR

The Kern County Planning and Natural Resources Department, as the lead agency, has prepared this Draft EIR to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the project activities proposed by the project proponent. As described in *CEQA Guidelines* Section 15121(a), an EIR is a public informational document that assesses potential environmental effects of the proposed project and identifies mitigation measures and alternatives to the proposed project that could reduce or avoid its adverse environmental impacts. Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development, where feasible, and they are obligated to balance a variety of public objectives including economic, environmental, and social factors. The Kern County Planning Commission and Board of Supervisors will consider the information in the EIR, including the public comments and staff response to those comments, during the

public hearing process. The final decision is made by the Board of Supervisors, who may approve, conditionally approve, or deny the proposed project. The purpose of an EIR is to identify:

- The significant potential impacts of the proposed project on the environment and indicate the manner in which those significant impacts can be avoided or mitigated;
- Any unavoidable adverse impacts that cannot be mitigated; and,
- Reasonable and feasible alternatives to the proposed project that would eliminate any significant adverse environmental impacts or reduce the impacts to a less than significant level.

An EIR also discloses growth-inducing impacts, impacts found not to be significant, and significant cumulative impacts of the proposed project when taken into consideration with past, present, and reasonably anticipated future projects.

CEQA requires an EIR to reflect the independent judgment of the lead agency regarding the impacts, the level of significance of the impacts both before and after mitigation, and mitigation measures proposed to reduce the impacts. A Draft EIR is circulated to responsible agencies, trustee and responsible agencies who manage resources affected by the proposed project, and interested agencies and individuals.

The purposes of public and agency review of a Draft EIR include sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting mitigation measures and alternatives capable of avoiding or reducing the significant effects of the proposed project, while still attaining most of the basic objectives of the proposed project .

This Draft EIR is being distributed directly to agencies, organizations, and interested groups and persons for comment during a 45-day formal review period in accordance with Section 15087 of the *CEQA Guidelines*. The EIR process, including means by which members of the public can comment on the EIR, is discussed further in Chapter 2, *Introduction*, of this Draft EIR.

1.4 Project Overview

This section of the EIR describes the local and regional setting, surrounding land uses, objectives, and characteristics of the proposed project. The proposed project is described in further detail in Chapter 3, *Project Description*, of this EIR.

Local and Regional Setting

The proposed project site is located on agricultural land within unincorporated Kern County. The Lerdo Canal flows southeast to northwest along the eastern boundary of the Phase 2 portion of the project, and the western boundary of the Phase 1 portion of the project, effectively dividing the two phases of the project. SR 99 is located along the west side of the proposed project site. Surrounding roads are mostly dirt roads used for access to agricultural use areas. A portion of the proposed project site is utilized for growing table grapes.

The approximately 739-acre proposed project site currently consists of vineyards and vacant, undeveloped land. The proposed project site is located north of Imperial Avenue and generally east of SR 99, with site access from Saco Road and Imperial Avenue. The Lerdo Canal flows southeast to northwest along the eastern boundary of Phase 2 portion and the western boundary of Phase 1 of the project (refer to **Figure 1-2,** *Project Location Map*). Phase 1 includes seven existing parcels on approximately 534 acres, and is located between Burbank Street to the north, and Imperial Avenue to the south, with the western boundary being the Lerdo Canal and frontage road. Phase 1 is in Kern County Zone Map 81, as portions of Sections 29 and 30, Township 28 South, Range 27 East, MDBM. Phase 2 includes 14 existing parcels on approximately 205 acres, with the western boundary being SR 99, and the eastern boundary being the Lerdo Canal. The site is generally located south of Lerdo Highway, and north of Imperial Avenue. Phase 2 is in Zone Maps 80 and 81, as portions of Sections 24 and 25, Township 28 South, Range 26 East, MDBM, and Section 30 of Township 28 South, Range 27 East, MDBM. **Figure 1-3**, *Assessor's Parcel Map*, illustrates the existing parcel layout within the project site.

The proposed project site is currently zoned A (Exclusive Agriculture), with a land use designation of 8.1 (Intensive Agriculture) and R-IA (Intensive Agriculture) by the Kern County General and Metropolitan Bakersfield General Plans, respectively (refer to **Figure 1-2,** *Project Location Map*). Approximately 739 acres or 100 percent of the project site is designated by DOC as Prime Farmland if water for irrigation is available (DOC 2019). Portions of the project site are within the boundaries of, but excluded from, Agricultural Preserve Number 8 and 14 (County of Kern 2021). However, there are no active Williamson Act Land Use Contracts associated with the project site.

Southern portions of the project site are within the Airport Land Use Compatibility Plan (ALUCP) for the Meadows Field Airport located approximately 1.5 miles southeast. These portions of the project are in ALUCP Zone B2, which may require a dedication of avigation easement, and Zone C, which limits high-rise office buildings to no more than four stories**.**

The proposed project site is relatively flat and lacks significant topographical features, ranging in elevation from approximately 440-550 feet above msl throughout the site. Based on historical topographic maps and aerial photographs, the proposed project site has been cultivated for grape vineyards since at least 2003. The site includes outdoor storage of various farm related operational equipment, along with a fenced and secured concrete floor storage shed for additional agricultural related tools and products. Agricultural uses are adjacent north, east, south, and west of the project site.

No native vegetation or natural habitat exists within the proposed project site. The Lerdo Canal trends northwest to southeast though the center of project site, dividing the two phases of the project, but is not included within the project site boundaries. There is also a one-acre freshwater pond located within the proposed project site. However, as discussed in Section 4.4, Biological Resources, the project site does not support riparian habitat.

The proposed project site is located within the Tulare Lake Bed Watershed (Hydrologic Unit Code 18030012) within a Federal Emergency Management Agency (FEMA) Flood Zone "X," as designated by the Flood Insurance Rate Map (FIRM) (06029C1825F) as issued by FEMA. Zone "X" denotes an area outside the 500-year flood. Areas designated Zone "X" have less than 0.2 percent chance to flood annually (FEMA) 2008).

The project site can be accessed from Saco Road, Burbank Street and Imperial Avenue. Surrounding roads are mostly dirt roads used for access to agricultural use areas. All surrounding properties are used for agriculture or are vacant and undeveloped.

The project area is served by the Kern County Sheriff's Department for law enforcement and public safety services (Kern County Sheriff's Office, 1350 Norris Road), Kern County Fire Department for fire protection services (Fire Station #62, 1652 Sunnyside Court), and Kern County Medical Emergency Services for medical care and emergency services. The Kern County Sheriff's Office is located approximately 4.5 miles southeast of the proposed project site. The nearest fire station to the proposed project site is located approximately 3.5 miles southeast of the proposed project site. The nearest hospital is the Dignity Health-Memorial Hospital Bakersfield located approximately 8.6 miles southeast of the project site. The closest schools to the project site are Norris Middle School two miles south and Norris Elementary School is 2.6 miles southwest. The nearest sensitive receptors to the project site is a residence on the south side of SR 99, approximately 350 feet west of the project site boundary.

Surrounding Land Uses

All surrounding properties are used for agriculture. The nearest cluster of residential development is located in the City of Shafter, approximately one mile southwest of the proposed project site. Land uses, map designations, and zoning classifications for the proposed project site and surrounding areas are described in **Table 1-2**, *Existing Land Use and Zoning Summary*.

Table 1-2: Existing Land Use and Zoning Summary

Location	Existing Land Use	Jurisdiction	Zoning	Map Code Designation
Project Site Phase 1	Agriculture	Kern County	Exclusive Agriculture (A)	Intensive Agriculture (R-IA)
Phase 2	Agriculture	Kern County	Exclusive Agriculture (A)	Intensive Agriculture (R-IA) Intensive Agriculture (8.1)
North	Agriculture	Kern County	Exclusive Agriculture (A)	Intensive Agriculture (8.1)
East	Agriculture, vacant, residential, industrial	Kern County	Exclusive Agriculture (A)	Intensive Agriculture (8.1) Intensive Agriculture (R-IA)
South	Agriculture, industrial	Kern County	Exclusive Agriculture (A) Medium Industrial, Precise Development Combining (M-2 PD)	Service Industrial (SI) Heavy Industrial (H1)
South	Agriculture, Industrial	City of Shafter	General Commercial (GC)	Incorporated Cities (1.2)
West	Agriculture, residential	City of Shafter	Exclusive Agriculture (A) Industrial (I) General Commercial (GC) Specific Plan Residential (SP)	Incorporated Cities (1.2)

Applicant Submitted Project Objectives

CEQA Guidelines Section 15124(b) requires a project description include a clearly written statement of objectives. The statement of objectives should include the underlying purpose of the project and may discuss the project benefits. The following are the applicant submitted project objectives for the proposed project:

- Reduce the current unemployment rate in Kern County of by increasing the amount of square footage for new businesses by over 8 million square feet and increase job opportunities. Distribution and fulfillment centers maintain a high rate of employment. The project would provide from 5,000 to 6,000 full time equivalents upon full buildout of both Phases 1 and 2, thereby stimulating local employment in the warehouse distribution industry.
- Support local budgets by replacing lost tax revenue from closed traditional brick and mortar retail locations with new tax revenues generated by industrial buildings.
- Meet the continued and expanding demand of the global e-commerce fulfillment services market that depend on warehousing and shipping capabilities to get products transported in the shortest amount of time.
- Generate tax revenue and boost the allocation of resources to improve infrastructure, utilities and public services throughout the county.

Proposed Project Characteristics

The project proponent intends to obtain the approvals necessary to enable construction of a warehouse/distribution center on the project site. Based on the proposed Precise Development Plan [refer to **Figure 1-6,** *Proposed Precise Development Plan (Phase 1)* through **Figure 1-8,** *Proposed Precise Development Plan (Phase 2)*], the proposed project as currently designed includes the construction of approximately 8,907,446 square-feet of industrial use space, comprised of 24 buildings on 739 acres of existing vineyard and vacant land that would support mixed-use office and warehouse operations, in addition to associated driveways, parking areas, truck courts, landscaping, and retention basins to control surface drainage. The project would consist of twenty-four buildable future parcels with proposed office and warehouse uses with drainage basins on each. Up to 25 percent, approximately 2,226,862 square-feet, would include refrigerated warehouse space. Each of the development components of the proposed warehouse buildings are summarized in **Table 1-1,** *Project Components*, and the proposed project components are discussed in further detail in Chapter 3, *Project Description*.

Proposed Actions and Approvals

Development of the proposed project requires several approvals and Kern County, as lead agency for the proposed project, has primary discretionary authority over the primary project proposal. To implement this proposed project, the project proponent would need to obtain, at a minimum, the permit approvals listed below. Additionally, the EIR, once certified, will be used to satisfy the CEQA requirements for the following approvals:

Kern County

- Consideration and Certification of the Final EIR
- Adoption of 15091 Findings of Fact and 15093 Statement of Overriding Considerations
- Adoption of Mitigation Monitoring and Reporting Program
- Approval and adoption of the proposed Malibu Vineyards Industrial Parkway Specific Plan, including proposed text and land use designations
- Amendment of the KCGP to change land use designation
- Amendment of the MBGP to change land use designation
- Zone Change Case (ZCC) for the proposed site, Maps 80 and 81
- Approval of Master Precise Development Plan
- Kern County Public Works Department - Construction, grading, and building permits
- Kern County Environmental Health Services Division – water well permits, if required
- Kern County Fire Department – Fire Safety Plan
- Right-of-way Encroachment Permits
- Kern County Certificates of Occupancy
- Kern County LAFCO – Annexation of the project site into the OMWC jurisdiction

Other Responsible Agency Entitlements

Federal

- U.S. Fish and Wildlife Service (USFWS): Section 10 Incidental Take Permit and Habitat Conservation Plan (if required)

State

- California Department of Fish and Wildlife (CDFW): Incidental Take Permit pursuant to the California Endangered Species Acts and other authorities (if required)
- California Department of Transportation (Caltrans), District 6: Right-of-Way Encroachment Permit (if required)
- State Water Resources Control Board (SWRCB):
  - Waste Discharge Requirements, if necessary
  - National Pollutant Discharge Elimination System Construction General Permit
  - General Construction Stormwater Permit
  - Preparation of a Storm Water Pollution Prevention Plan
- State Water Resources Control Board of Drinking Water: Water System Permit, if necessary

- California Public Utilities Commission: Any project elements to be constructed by regulated public utilities

Local

- Kern County Local Agencies Formation Commission: Annexation of 739 acres, inclusive of the project site, into OMWC's service area.
- Oildale Mutual Water Company: Annexation of 739 acres, inclusive of the project site, into OMWC's service area and approval of a Water Supply Assessment
- San Joaquin Valley Air Pollution Control District: Authority to Construct, Fugitive Dust Control Plan, Permit to Operate, Indirect Source Review, any other permits as necessary

The preceding are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other additional permits or approvals from responsible agencies may be required for the proposed project.

1.5 Environmental Impacts

Section 15128 of the *CEQA Guidelines* requires that an EIR contain a statement briefly indicating the reasons why any new and possibly significant effects of a project were determined not to be significant and were, therefore, not discussed in detail in the EIR. Kern County has engaged the public to participate in the scoping of the environmental document. The contents of this EIR were established based on a Notice of Preparation/Initial Study (NOP/IS) prepared in accordance with the *CEQA Guidelines*, as well as public and agency input that was received during the scoping process. The comments on the NOP/IS are found in Appendix A of this EIR. Those specific issues that are found to have no impact or less-than-significant impacts during preparation of the NOP/IS do not need to be addressed further in this EIR. Based on the findings of the NOP/IS and the results of scoping, a determination was made that this EIR must contain a comprehensive analysis of all environmental issues identified in Appendix G of the *CEQA Guidelines* except Mineral Resources.

Impacts Not Further Considered in this Draft EIR

As discussed in the NOP/IS included as Appendix A of this EIR, the proposed project was determined to have no impact with regard to Mineral Resources.

Mineral Resources

The project site was classified as a California Surface Mining and Reclamation Act (SMARA) study area in 1988 (DOC 2018). However, the project site is not within a mineral recovery area or a designated mineral and petroleum resource site established by the Kern County General Plan. The project site is not located within an area zoned NR (Natural Resources) or a Tier 1 Oil and Gas Conformity Tier. The closest area with a NR zoning is approximately 8,437 feet to the northeast and the closest Tier 1 Oil and Gas Conformity Tier is located 9,618 feet to the northeast. The closest active well is 3,650 feet south of the project site in

the city of Shafter (CalGEM 2018). Additionally, according to the Kern GIS online resource Attribute Preview, the project site does not contain any parcels with mineral value. Further, the project site is not located near any wells or mineral extraction sites according to the Geologic Energy Management Division (CalGEM) well finder map (CalGEM 2018). Construction and operation of the proposed project would not interfere with mineral extraction and processing. No impact to mineral resources is expected to occur and no additional impacts will be addressed in this EIR.

Impacts of the Proposed Project

Based on the findings of the NOP/IS, a determination was made that an EIR was required to address potentially significant environmental effects on the following resources:

- Aesthetics;
- Agriculture and Forest Resources;
- Air Quality;
- Biological Resources;
- Cultural Resources;
- Energy;
- Geology and Soils;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Public Services;
- Recreation;
- Transportation and Traffic;
- Tribal Cultural Resources;
- Utilities and Service Systems, and,
- Wildfire

Less-than-Significant Impacts (Including Significant Impacts that can be Mitigated, Avoided, or Substantially Lessened)

Table 1-3*, Summary of Proposed Project Impacts that are Less than Significant or Less than Significant with Mitigation*, presents those impacts of the proposed project that were determined to be less than significant, or less than significant with the implementation of mitigation measures. Less than significant cumulative impacts are also included in this table. Sections 4.1 through 4.19 of this EIR present detailed analysis of these impacts and describe the means by which the mitigation measures listed in **Table 1-3** would reduce impacts to a less-than-significant level.

Table 1-3: Summary of Proposed Project Impacts that are Less than Significant or Less than Significant with Mitigation

Impact	Mitigation Measures
Biological Resources (Project and Cumulative)	MM 4.1-1, MM 4.1-4 and MM 4.4-1 through MM 4.4-5
Cultural Resources (Project and Cumulative)	MM 4.5-1 through 4.5-4
Energy (Project and Cumulative)	MM 4.3-3, MM 4.6-1, MM 4.6-2, and MM 4.8-1
Geology and Soils (Project and Cumulative)	MM 4.7-1 through MM 4.7-6, MM 4.10-1 and MM 4.10-2

Impact	Mitigation Measures
Greenhouse Gas Emissions (Project)	MM 4.3-1, 4.3-3, 4.3-4, 4.8-1 and 4.8-2
Hazards and Hazardous Materials (Project and Cumulative)	MM 4.9-1 through MM 4.9-15
Hydrology and Water Quality (Project)	MM 4.9-1, MM 4.9-3, MM 4.10-1 through MM 4.10-3, and 4.18-2
Land Use and Planning (Project and Cumulative)	MM 4.11-1 through MM 4.11-4
Noise (Project)	MM 4.11-3, MM 4.11-4, and MM 4.12-1 through MM 4.12-4
Public Services (Project and Cumulative)	MM 4.9-13, MM 4.14-1 and 4.14-2
Recreation (Project and Cumulative)	None required
Tribal and Cultural Resources (Project and Cumulative)	MM 4.5-1 through MM 4.5-4
Utilities and Service Systems (Project)	MM 4.10-2 and MM 4.10-3, and MM 4.18-1 through MM 4.18-6
Wildfire (Project and Cumulative)	MM 4.9-13, MM 4.10-1 and MM 4.10-2

Project-Level Significant and Unavoidable Impacts

Section 15126.2(b) of the *CEQA Guidelines* requires that an EIR describe any significant impacts, including those that can be mitigated but not reduced to less-than-significant levels. Potential environmental effects of the proposed project and proposed mitigation measures are discussed in detail in Chapter 4, *Environmental Analysis*, of this EIR.

Table 1-4, *Summary of Proposed Project Impacts that are Significant and Unavoidable*, presents those impacts of the proposed project that are significant and unavoidable even with the implementation of mitigation measures. As previously stated, Chapter 4 of this EIR presents detailed analysis of these impacts and describes the means by which the mitigation measures listed in **Table 1-4** would reduce the severity of proposed project-related impacts to the extent feasible.

Table 1-4: Summary of Proposed Project Impacts that are Significant and Unavoidable

Impact	Mitigation Measures
Aesthetics (Project and Cumulative)	MM 4.1-1 through MM 4.1-4
Agriculture and Forest Resources (Project and Cumulative)	MM 4.2-1 through MM 4.2-5
Air Quality (Project and Cumulative)	MM 4.3-1 through MM 4.3-10
Greenhouse Gas Emissions (Cumulative)	MM 4.3-1, MM 4.3-3, MM 4.3-4, and MM 4.8-1, and 4.8-2
Hydrology and Water Quality (Cumulative)	MM 4.9-1, MM 4.9-3, and MM 4.10-1 through MM 4.10-3
Noise (Cumulative)	MM 4.11-3, MM 4.11-4, and MM 4.12-1 through MM 4.12-4
Population and Housing (Project and Cumulative)	No feasible mitigation measures
Transportation and Traffic (Project and Cumulative)	MM 4.16-1 through MM 4.16-12
Utilities and Service Systems (Cumulative)	MM 4.10-2 and MM 4.10-3, and MM 4.18-1 through MM 4.18-6

As discussed in Chapter 4, *Environmental Analysis*, the Aesthetic Impact Assessment prepared for the proposed project indicates that the project would introduce industrial features where they do not currently dominate the primarily agricultural landscape, resulting in potentially significant aesthetics impacts. Mitigation Measures MM 4.1-1 through MM 4.1-4 would reduce visual impacts associated with the proposed project by requiring the color treatment of buildings best blend in with the natural landscape, implementing be visual screens for mechanical equipment on rooftops, and implementation a landscaping plan. However, even with implementation of the proposed mitigation measures, the proposed project-would still have a significant impact on existing visual quality. As a result, this impact is considered significant and unavoidable.

The Agriculture and Forestry Impact Assessment indicates that the proposed project would result in the loss of approximately 739 acres of land currently used for agricultural uses. Mitigation Measure MM 4.2-5 would require the establishment of an agricultural easement or purchase of credits from an agricultural farmland mitigation bank at a one-to-one (1:1) ratio. However, such a loss in the context of the Kern County General Plan and Metropolitan Bakersfield General Plan is significant and unavoidable.

The Air Quality Impact Assessment prepared for the proposed project indicates that the project would result in potential cumulative impacts to air quality could occur from construction and operation of the proposed project in combination with regional growth projections in the same air basin. Even with implementation of the proposed mitigation measures, proposed project-generated emissions could still exceed SJVAPCD's significance thresholds. As a result, this impact is considered significant and unavoidable.

The Population and Housing Impact Assessment indicates that the project would remove an "obstacle to population growth" by developing an industrial park with warehousing and distribution facilities and providing jobs, indirectly inducing population growth in the proposed project area. Therefore, impacts associated with population growth and housing resulting from operation of the proposed project are considered significant and unavoidable.

The Transportation and Traffic Impact Assessment indicated that the addition of project traffic to the existing and future street system results in LOS deficiencies at several locations due to traffic associated with regional growth and development. Intersection and roadway improvements, along with mitigation measures would improve LOS deficiencies. However, the Traffic Study concluded that the 7th Standard Road/Merle Haggard corridor is anticipated to operate below Kern County General Plan LOS standards in the future even with full standard widening and roadway improvements. As a result, the proposed project impacts would be significant and unavoidable.

Significant Cumulative Impacts

According to Section 15355 of the *CEQA Guidelines*, the term cumulative impacts "refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Individual effects that may contribute to a cumulative impact may be from a single project or a number of separate projects. Individually, the impacts of a project may be relatively minor, but when considered along with impacts of other closely related or nearby projects, including newly proposed projects, the effects could be cumulatively significant. This EIR has considered the potential cumulative effects of the proposed project along with other current and reasonably foreseeable projects. Impacts for the following have been found to be cumulatively considerable:

- Aesthetics
- Agricultural and Forestry;
- Air Quality;
- Greenhouse Gases;
- Hydrology and Water Quality
- Noise;
- Population and Housing;
- Transportation and Traffic; and,
- Utilities and Service Systems

As discussed in Chapter 4, *Environmental Analysis*, although cumulative aesthetic impacts can be minimized through use of lighting, building design, and other measures, the significant cumulative impact cannot be fully mitigated. The cumulative conversion of agricultural and open space views in the proposed project region to urban, industrial, and manufacturing land uses and the associated increase in nighttime light and glare and subsequent sky glow from planned future projects is a significant cumulative impact.

Due to other factors that influence the feasibility of ongoing agricultural operations in Kern County, such as commodity pricing in the global market, water pricing and availability, there may be a cumulative significant loss in agricultural resources in Kern County. While the proposed project would not cause additional conversion of agricultural land, the loss is considered significant and unavoidable with all feasible and reasonable mitigation considered.

The construction and long-term operation of the proposed project would result in increased emissions that would exceed project-level significance thresholds. In accordance with SJVAPCD-recommended guidance, projects that exceed applicable project-level CEQA significance thresholds would also be considered to have a potentially significant cumulative impact to regional air quality. Including this project, a total of 28 projects are located within a six-mile radius of the project site. The proposed project would result in increased emissions of localized pollutants, including emissions of fugitive dust, PM10, DPM, and CO. For this reason, cumulative localized air quality impacts associated with short-term construction and long-term operational activities would be considered potentially significant.

Additionally, the proposed project would result in a significant increase in GHG emissions that could conflict with applicable plans, policy, or regulations adopted for the purpose of reducing the emissions of GHGs. This impact is considered cumulatively considerable and significant and unavoidable.

Implementation of the proposed project has the potential to contribute to cumulative impacts associated with the substantial depletion of groundwater supplies within the Kern County Subbasin. Although the Water Supply Assessment found that adequate water supplies are available to meet the demands of the proposed project and proposed project implementation would not cause undesirable results within the KGA GSA or Cawelo GSA Plan Areas due to groundwater pumping, groundwater pumping from other projects in the Subbasin have the potential to create significant and unavoidable impacts.

Construction activities associated with other projects in proximity to the proposed project site could occur at the same time as the proposed project. Although these projects would also be subject to Kern County noise standards and similar mitigation measures, when considered with the other past, present, and reasonably foreseeable future projects, the proposed project could potentially cumulatively considerably contribute to noise impacts in the vicinity of the proposed project.

Cumulative projects within a one- and six-mile radius of the proposed project site include residential, commercial and industrial uses which would also directly induce population growth through the development of new housing and, based on their proposed locations, are expected to require the extension of utilities that could indirectly induce population growth. Therefore, the proposed project's cumulative contribution to impacts associated with population and housing are considered significant and unavoidable with no feasible mitigation measures.

A Traffic Impact Study has been prepared for the proposed project to assess potential impacts on the circulation network. The proposed project is expected to have significant impacts associated with transportation and traffic. The proposed project has the potential to conflict with level of service (LOS) standards and travel demand measures associated long-term operational traffic. Appropriate mitigation measures are included in the EIR; however, the impact would still be considered significant and unavoidable.

The Kern County Subbasin is currently over drafted and the District's GSP has been deemed inadequate along with the other Kern subbasin plans where the other similar known and unknown projects could occur, the cumulative impacts of any use of groundwater in the area are considered significant and unavoidable after all feasible and reasonable mitigation. Therefore, cumulative impact related to water use would be significant and unavoidable.

Irreversible Impacts

Section 15126.2(c) of the *CEQA Guidelines* defines an irreversible impact as an impact that uses nonrenewable resources during the initial and continued phases of the proposed project. Irreversible impacts can also result from damage caused by environmental accidents associated with the proposed project. Irretrievable commitments of resources should be evaluated to ensure that such consumption is justified.

Implementation of the proposed project would irretrievably commit energy to the operation of the project as proposed. Renewable, nonrenewable, and limited resources that would likely be consumed as a result of proposed project implementation would include, but are not limited to, water, oil, diesel, and gasoline. However, assuming that those commitments occur in accordance with the adopted goals, policies, and implementation measures of the *Kern County General Plan* (KCGP), as a matter of public policy, those commitments have been determined to be acceptable. The KCGP ensures that any irreversible environmental changes associated with those commitments will be minimized. Irreversible impacts associated with the proposed project are discussed in detail in Chapter 5, *Consequences of Project Implementation*, of this EIR.

Growth Inducement

The KCGP recognizes that certain forms of growth are beneficial, both economically and socially. Section 15126.2(d) of the *CEQA Guidelines* provides the following guidance on growth-inducing impacts:

> *A project is identified as growth-inducing if it "would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment."*

Evaluation of the growth-inducing impacts of the proposed project is based on a qualitative analysis of the direct impacts associated with construction and operation of the proposed project and the indirect impacts that could result from the proposed project. This evaluation of potential growth-inducing impacts addresses whether the proposed project would directly or indirectly:

- foster economic, population, or housing growth;
- remove obstacles to growth;
- increase population growth that would tax community service facilities; or,
- encourage or facilitate other activities that cause significant environmental impacts.

Section 15126.2(d) of the *CEQA Guidelines* states specifically, "It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment." In other words, growth inducement is not to be considered adverse *per se*; impacts on resources resulting from growth may be too far removed from the actions of the agency to require mitigation. The goal of the EIR in this regard, therefore, is one of disclosure.

As discussed in Chapter 5, *Consequences of Project Implementation*, of this EIR, the proposed project would create temporary and permanent jobs. The number of onsite workers would likely range between a few dozen workers to over a hundred. During the operational phase, it is expected that the proposed project would employ approximately 5,000 to 6,000 permanent jobs. This need for employees would induce population growth in the proposed project area. The proposed project could potentially require the development of new housing to accommodate an increase in population and potentially induce substantial population growth. By developing an industrial park with warehousing and distribution facilities, the proposed project would remove an "obstacle to population growth" and indirectly induce population growth and construction of additional housing in the project area by providing jobs.

1.6 Alternatives to the Proposed Project

The purpose of the alternatives analysis in an EIR is to describe a reasonable range of alternatives that could feasibly attain the objectives of the proposed project but lessen or avoid some of the potential environmental impacts. *CEQA Guidelines* Section 15126.6(f)(1) states that alternatives and their mitigation measures must be feasible with regards to economic, environmental, social, technological, and legal factors in order to be considered. The range of alternatives generally includes proposed project alternatives that offer substantial environmental advantages over the proposed project and which may be feasibly accomplished. Alternatives considered for the proposed project are described in Chapter 6, *Alternatives*, and summarized below.

Alternatives Eliminated from Further Consideration

Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (*CEQA Guidelines* Section 15126.6(c)). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not need to be considered (*CEQA Guidelines* Section 15126(f)(2)). Kern County considered several alternatives to reduce impacts to aesthetics (project and cumulative), agriculture and forestry resources (project and cumulative), air quality (project and cumulative), greenhouse gas emissions (cumulative only), hydrology and water quality (cumulative), noise (cumulative), population and housing (project and cumulative), and transportation (cumulative). Per CEQA, the lead agency may make an initial determination as to which alternatives are feasible and warrant further consideration, and which are infeasible.

The following alternatives were initially considered but were eliminated from further consideration in this EIR because they do not meet project objectives or were infeasible.

The Infill Alternative was considered and rejected, due to there being no suitable infill sites for the size of the land area located in Kern County for the proposed project, and impacts would potentially be more significant.

The Transit-Oriented Alternative was considered and rejected, due to there being no suitable transit-oriented sites within Kern County for the proposed project.

Alternatives Analyzed in this EIR

The following alternatives have been evaluated for their feasibility and their ability to achieve the proposed project objectives while avoiding, reducing, or minimizing the significant impacts identified for the proposed project. Kern County considered several alternatives to reduce impacts to aesthetics (project and cumulative), agriculture and forestry resources (project and cumulative), air quality (project and cumulative), greenhouse gas emissions (cumulative only), noise (cumulative), population and housing (project and cumulative), transportation (cumulative), and utilities and service systems (cumulative).

The following alternatives (with the exception of the No Project Alternative) would be capable of meeting the proposed project objectives to varying degrees. The degree to which these alternatives reduce the significant impacts identified for the proposed project is discussed below. All subject areas for which significant impacts were identified are analyzed for each alternative, although at a more general level than in Chapter 4, *Environmental Analysis*, as provided by CEQA.

- No Project Alternative
- Reduced Size
- Alternative Location – Eastern Kern County

Table 1-5, *Summary of Development Alternatives*, provides a summary of the relative impacts and feasibility of each alternative and **Table 1-6**, *Comparison of Alternatives*, provides a summary side-by-side comparison of the potential impacts of the alternatives and the proposed project.

Alternative 1: No Project Alternative

The *CEQA Guidelines* require EIRs to include a No Project Alternative for the purpose of allowingdecision makers to compare the effects of approving the proposed project versus a No Project Alternative. Accordingly, Alternative 1, the No Project Alternative, assumes that the development of 8,907,446 square-feet of industrial land uses to support a new Specific Plan creating an industrial park of distribution and fulfillment centers, compromised of 24 buildings, and other project components would not occur. The No Project Alternative would not require approval of Precise Development Plans, or the adoption of the Malibu Vineyards Industrial Parkway Specific Plan for construction and operation of the proposedproject and associated facilities. Amendments to the Kern County General Plan and Metropolitan Bakersfield General Plan land use maps and zone changes would also not be required. The No Project Alternative would maintain the current land usedesignations, zoning classifications, and existing land uses, which consist mostly of agricultural uses. The proposed project would not be developed and the site would remain under its currently agriculturally cultivated conditions or, under water limitations implemented by the Sustainable Groundwater Act (SGMA), become fallow and revert to natural habitat. No physical changes would be made to the project site.

Alternative 2: Reduced Size

Alternative 2, the Reduced Size Alternative, would eliminate Phase 1 of the proposed project. 534,-acres comprising 14 buildings totaling 7,242,106 square feet of industrial use space would not be developed compared to the proposed project. Alternative 2 would instead develop 1,665,340 square-foot of industrial uses compromised of 10 distribution and warehousing buildings on 205 acres. The remaining 534 acres would remain cultivated for agricultural uses. Alternative 2 would not be subject to the Metropolitan Bakersfield General Plan and only be subject to the Kern County General Plan and the Kern County Zoning Ordinance. As such, Alternative 2 would require adoption of a new Specific Plan, an amendment to the Kern County General Plan Land Use, Open Space and Conservation Element, a change in zone classification, approval of Precise Development Plan No. 75, Map 81 and adoption of the Malibu Vineyards Industrial Parkway Specific Plan. Alternative 3: Alternative Location

Alternative project sites are typically evaluated in CEQA documentation to avoid, reduce, or eliminate significant and unavoidable impacts associated with the proposed project by considering the proposed development in an entirely different location. To be considered, an alternative site must have the capability of fulfilling all or most of the objectives of the proposed project, and thus must be large enough to support a similar facility and have similar ease of access to transportation corridors. However, an alternative site may not meet the basic objectives of the proposed project, as listed in Section 6.2, *Proponent Submitted Project Objectives,* and likewise may not avoid or substantially reduce the environmental impacts of the proposed project.

Alternative 3: Alternative Site Location – Eastern Kern County

Alternative 3, the Alternative Site Location – Eastern Kern County, proposes the same project development and operation of a 8,907,446 square-foot industrial use space comprised of 24 buildings, but in a different area of Kern County, specifically eastern Kern County in the adopted Mojave Specific Plan. (Mojave Specific Plan 2003). The Mojave Specific Plan and Final Environmental Impact Report (2003) encompasses approximately 31,000 acres in eastern Kern County, including the unincorporated community of Mojave, and functions as the transportation and aviation hub of eastern Kern County. The intention of this project alternative is to find a project site adjacent to major freeway access, non-agriculture land use and reduce required travel distances for distribution trucks and related impacts to aesthetics, agricultural and forestry, air quality, GHG, and traffic associated with the proposed project. Impacts to water supply usage would be reduced to less than significant because the Mojave Specific Plan water basin is not subject to any adjudication or Groundwater Management Sustainability Act (GSMA). This alternative would be located in the Mojave Desert, rather than the San Joaquin Valley. The Specific Plan area has direct access off State Route 58 (SR 58) which connects in to the Riverside – San Bernadino and Ontario Metropolitan transportation corridors and connects to State Highway 14 (Antelope Valley Freeway) with direct access to Southern California Interstate 5 into the City of Los Angeles and San Diego. The East Kern Air Pollution Control District which covers the area is in attainment for emissions, the SJVAPCD is not. Alternative 3 would develop the same land area and all of the project components. Approval of Alternative 3 would be required to comply with the Mojave Specific Plan and entitlements for the project would be dependent on the site selected within the planning area. As a Specific Plan with an existing Final Environmental Impact Report, CEQA streamlining is available.

Table 1-5: Summary of Development Alternatives

Alternative	Description	Basis for Selection and Summary of Analysis
Proposed Project	Construct and operate approximately 8,907,446square-feet of industrial use space with warehousing and distribution facilities, comprised of 24 buildings on 739 acres of existing land. Approval of a new Specific Plan, amendment to the Kern County General Plan, amendment to the Metropolitan Bakersfield General Plan, zone classification change, and Precise Development Plan would be required.	• N/A
Alternative 1: No Project Alternative	No development would occur on the project site. The project site would remain unchanged.	• Required by CEQA • Avoids need for adoption of Specific Plan, GPAs, ZCC, and PD Plan • Avoids all significant andunavoidable impacts • Less impact in all remainingenvironmental issue areas • Does not meet any of the projectobjectives
Alternative 2: Reduced Size	Project site would be developed with a footprint of 205-acres comprised of 10 buildings, totaling 1,665,340 square feet of industrial use space with warehousing and distribution facilities. By removing a total of 534 acres, 7,242,106 square feet, impacts associated with aesthetics, agriculture, air quality, and greenhouse gas emissions would be reduced, but these impacts would not be reduced to a less than significant impact level. Significant and unavoidable impacts to noise and population and housing would be reduced to a less than significant level under Alternative 2, because construction impacts associated with noise would occur over a small area and within a much smaller construction period and impacts associated with growth inducement would also be lessened. Although impacts would be reduced to its drastically reduced size, this alternative would not meet the project's objectives to the extent that the proposed project will. This alternative would provide fewer employment opportunities, less tax revenue, and would not support local budgets to the extent of the proposed project. Additionally, it would not meet the demand of the global e-commerce fulfilment services market.	• Avoids need for GPA to Metropolitan Bakersfield General Plan. • Similar significant and unavoidableimpacts to noise, population and housing • Reduced significant and unavoidableimpact to air quality, aesthetics agriculture, and biological resources, and greenhouse gas emissions • Similar impacts in all remainingenvironmental issue areas • Meets project objectives to lesser extent than the proposed project
Alternative 3: Alternative Location- Eastern Kern County	Construction and operation of the project to a site in the adopted Mojave Specific Plan. The project would operate at the same capacity as intended. Required entitlements for the Alternative Site would be dependent on the site selected. Under Alternative 3, the severity of impacts related to aesthetics would be reduced to a less than significant level. As there is no active agricultural land use in the Mojave Specific Plan, the impacts would not be applicable. In addition, the severity of impacts related, air quality and greenhouse gas emissions would be reduced, but they would remain significant and unavoidable. This alternative would be located near SR 58, a major highway and transportation corridor, and State Highway 14 and due to the unchanged characteristics and size of the project, would meet the project's objectives.	• Similar significant and unavoidable impacts to noise, population and housing. • Reduced significant and unavoidable impacts to agriculture, air quality, and greenhouse gas emissions. • Reduced impacts to aesthetics and water supply to a less than significant level. • No impacts to agricultural or forestry land use. • Similar impacts in all remaining environmental issue areas. • Meets all project objectives

Table 1-6: Comparison of Alternatives

Environmental Resource	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Reduced Size	Alternative 3: Alternative Location- Eastern Kern County
Aesthetics	Significant and unavoidable impact (project and cumulative)	Less (NI)	Similar (SU)	Less (SU)
Agriculture and Forestry Resources	Significant and unavoidable impact (project and cumulative)	Less (NI)	Similar (SU)	Less (NI)
Air Quality	Significant and unavoidable impact (project and cumulative)	Less (NI)	Less (SU)	Less (SU)
Biological Resources	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Cultural Resources	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Geology and Soils	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Greenhouse Gas Emissions	Significant and unavoidable impact (cumulative only)	Less (NI)	Less (SU)	Less (SU)
Hazards and Hazardous Materials	Less than significant with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Hydrology and Water Quality	Significant and unavoidable impact (cumulative only)	Similar (SU)	Similar (SU)	Less (LTS)
Land Use and Planning	Less than significant with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Noise	Significant and unavoidable impact (cumulative only)	Less (NI)	Similar (SU)	Similar (SU)
Population and Housing	Significant and unavoidable impact (project and cumulative)	Less (NI)	Similar (SU)	Similar (SU)
Public Services	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Recreation	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Traffic and Transportation	Significant and unavoidable impact (project and cumulative)	Less (NI)	Similar (SU)	Similar (SU)

Environmental Resource	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Reduced Size	Alternative 3: Alternative Location- Eastern Kern County
Tribal Cultural Resources	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Utilities and Service Systems	Significant and unavoidable impact (cumulative only)	Less (NI)	Similar (SU)	Less (LTS)
Wildfire	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Meet Project Objective?	All	None	Most	All
Reduce Significant and Unavoidable Impacts?	N/A	All	Partially	Most
NI = No Impact LTS = Less Than Significant SU = Significant and Unavoidable				

Environmentally Superior Alternative

As presented in the comparative analysis above, and as shown in **Table 1-6**, *Comparison of Alternatives*, there are a number of factors in selecting the environmentally superior alternative. An EIR must identify the environmentally superior alternative to the project. Alternative 1, the No Project Alternative, would be environmentally superior to the proposed project on the basis of its minimization or avoidance of physical environmental impacts. However, *CEQA Guidelines* Section 15126.6(e)(2) states:

> *The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.*

Because the No Project Alternative cannot be the Environmentally Superior Alternative under CEQA, the Environmentally Superior Alternative is considered to be Alternative 3: Alternative Location – Eastern Kern County. This alternative would avoid one significant impact associated with the proposed project, specifically for agricultural and forestry resources. However, this alternative would not avoid the other significant impacts of many cumulative impacts. This alternative would result in less impacts to aesthetics, agricultural and forestry resources, air quality, greenhouse gas emissions, hydrology and water quality, and utilities and service systems.

1.7 Areas of Controversy

Written agency and public comments received during the public review period for the NOP/IS are included in Appendix A. Although not controversial, key issues were identified during scoping as necessitating further description or evaluation. Those issues are discussed as they relate to the various environmental topics in Chapter 4, *Environmental Analysis*.

- Impacts related to agriculture
- Impacts related to air quality
- Impacts related to biological resources
- Impacts related to greenhouse gas (GHG) emissions
- Impacts related to hazards (airport)
- Impacts related to public services (fire)
- Impacts related to traffic
- Impacts related to utilities

1.8 Issues to be Resolved

Section 15123(b)(3) of the *CEQA Guidelines* requires that an EIR include issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects. The issues to be resolved regarding the proposed project include the following determinations by Kern County:

- Determine whether the EIR adequately describes the environmental impacts of the proposed project;
- Choose among alternatives;
- Determine whether the recommended mitigation measures should be adopted or modified; and,
- Determine whether additional mitigation measures need to be applied to the proposed project.

1.9 Summary of Environmental Impacts and Mitigation

Section 15123 of the *CEQA Guidelines* requires that an EIR contain a brief summary of the proposed actions and its consequences. **Table 1-7**, *Summary of Impacts, Mitigation Measures, and Level of Impacts after Mitigation*, below summarizes all of the identified environmental impacts, their level of significance before mitigation, proposed mitigation measures to reduce significance levels, and their level of significance after implementation of proposed mitigation measures, as identified and analyzed in Chapter 4, *Environmental Analysis*, of this EIR. Refer to the appropriate EIR section for additional information.

Table 1-7: Summary of Impacts, Mitigation Measures, and Level of Impacts after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Aesthetics			
Impact 4.1-1: The Project Would Substantially Degrade the Existing Visual Character or Quality of the Site and its Surroundings.	Significant and Unavoidable	**MM 4.1-1.** Prior to the issuance of building permits, the project proponent/operator shall submit a proposed color scheme and treatment plan, for review and approval by the Kern County Planning and Natural Resources Department, that will cause all project facilities, including warehouses, office buildings, or other on-site buildings, to blend in with the colors found in the surrounding natural landscape. All color treatments shall result in mated or non-glossy/non-reflective finishes. **MM 4.1-2.** Prior to the issuance of building permits, site plans submitted for commercial buildings located within 1,000 feet of the SR 99 corridor shall include rooftop screening features, such as a parapet or other screening material, be installed to create a visual screen for rooftop mechanical equipment. **MM 4.1-3.** Prior to the issuance of building permits for any facilities on the project site, the project applicant shall submit, to the Kern County Planning and Natural Resources Department, a landscape plan that complies with the Kern County Zoning Ordinance Requirements Chapter 19.86 - Landscaping. The plan shall include: a. Preparation by a licensed Landscape Architect and approval by the Kern County Planning and Natural Resources Department Director prior to buffer planting. b. California native, drought-tolerant plants. c. An irrigation plan as required under the Kern County Zoning Ordinance 19.86.070. d. Should perimeter fencing be proposed, fencing materials shall be constructed of any materials commonly used in the construction of fences and walls such as wood, stone, rock, tubular steel, wrought iron, or brick, or other durable materials. Masonry block walls shall be decorative and not bare masonry blocks. Decorative materials can include a façade, colored masonry blocks, or other materials. Fencing proposed around sumps may be chain-link with view obscuring slats. e. A 20-foot-wide perimeter buffer along any visible boundary from the SR 99 frontage consisting of live ground cover, shrubs, or grass, and: 1. One tree having a minimum planting height of six feet for every 50 lineal feet of buffer. 2. Evergreen shrubs which reach a minimum height of four to six feet. 3. Live ground cover consisting of low-height plants, or shrubs, or grass shall be planted in the portion of the landscaped area not occupied by trees or evergreen shrubs.	Significant and unavoidable

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		4. Bare gravel, rock, bark or other similar materials may be used, but are not a substitute for ground cover plantings, and shall be limited to no more than 25 percent of the required landscape area. 5. Landscaping shall be installed prior to final occupancy.	
Impact 4.1-2: The Project Would Create a New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area.	Potentially significant	Implement of Mitigation Measure **MM 4.1-1** **MM 4.1-4.** Prior to issuance of building permits, the project proponent shall demonstrate to Kern County Planning and Natural Resources Staff, through the submittal of a lighting plan, that the project site will continuously comply with the applicable provisions of the Outdoor Lighting - Dark Skies Ordinance (Chapter 19.81 of the Kern County Zoning Ordinance) and shall be designed to provide the minimum illumination needed to achieve safety and security objectives. All lighting shall be directed downward and shielded to focus illumination on the desired areas only and avoid light trespass into adjacent properties and roadways. Lenses and bulbs shall not extend below the shields.	Less than significant with mitigation
Cumulative Aesthetic Impacts.	Potentially significant	Implement Mitigation Measures MM 4.1-1 through 4.1-4.	Significant and Unavoidable
Agriculture and Forestry Resources			
Impact 4.2-1: 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 nonagricultural use.	Significant and Unavoidable	**MM 4.2-1**. Prior to the issuance of building permits, a site plan shall be submitted to the Kern County Planning and Natural Resources Department showing a minimum 100-foot building setback from the property line of adjacent property (defined as property that shares a property line) zoned A (Exclusive Agriculture) to eliminate interference with current or future agricultural operations. Project design features such as roads, berms, required landscaping, and parking lots are permitted within the required setback area. **MM 4.2-2**. Prior to issuance of building permits, the project proponent shall ensure that the following note appears on all site plans associated with the project. The project proponent shall also require a form with the same note be signed by all future occupants of the facility and be provided to the County. *"The County of Kern encourages operation of properly conducted businesses in agriculture, oil, mining, manufacturing, and other nonresidential operations within the County. If the property you are purchasing or leasing is located near these businesses, you may be subject to inconveniences or discomforts arising from such operations to the extent allowed by law. This notice does not waive your legal rights."* **MM 4.2-3**. Prior to the issuance of building permits, a summary report shall be submitted to the Kern County Planning and Natural Resources Department describing how the project is designed to reduce conflicts to the extent feasible	Significant and Unavoidable

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		between the project's operation and the continued use of adjacent properties zoned A (Exclusive Agriculture). Design considerations shall include, but not be exclusive to: windows that open and ventilation systems placed so as to not bring in air adjacent to active agricultural operations; project egress and ingress not be in conflict with agricultural operations or access; sufficient on-site parking to discourage parking on or adjacent to agricultural lands; prohibition of such off-site parking; provisions for physical buffers or zones between the project and agricultural zoned properties that reduce conflicts between agricultural uses and the project. **MM 4.2-4**. The project proponent/operator shall continuously comply with the following: a. The construction contractor or project personnel shall use herbicides that are approved for use in California, and are appropriate for application adjacent to natural vegetation areas and agricultural use. Personnel applying herbicides shall have all appropriate State and local herbicide applicator licenses and comply with all State and local regulations regarding herbicide use. b. Herbicides shall be mixed and applied in conformance with the manufacturer's directions. c. The herbicide applicator shall be equipped with splash protection clothing and gear, chemical resistant gloves, chemical spill/splash wash supplies, and material safety data sheets for all hazardous materials to be used. d. To minimize harm to wildlife, vegetation, and water bodies, herbicides shall not be applied directly to wildlife. e. Products identified as non-toxic to birds and small mammals shall be used if nests or dens are observed. f. Herbicides shall not be applied if it is raining at the site, rain is imminent, or the target area has puddles or standing water. g. Herbicides shall not be applied when wind velocity exceeds 10 miles per hour. If spray is observed to be drifting to a non-target location, spraying shall be discontinued until conditions causing the drift have abated. h. A written record of all herbicide applications on the site, including dates and amounts, shall be maintained and provided to the Kern County Planning and Natural Resources Department, if requested. **MM 4.2-5**. Prior to issuance of a grading or building permit, whichever occurs first, the project proponent shall provide written evidence of completion of one (1) or more of the following measures to mitigate the loss of 739 acres of agricultural land before conversion, at a one-to-one (1:1) ratio: a. Funding and/or purchase of agricultural conservation easements (will be managed and maintained by an appropriate entity); and/or b. Purchase of credits from an established agricultural farmland mitigation bank.	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		Mitigation land shall meet the definition of prime farmland or farmland of statewide importance established by the State Department of Conservation. Completion of the selected measure(s), shall be on qualifying agricultural land in perpetuity within the San Joaquin Valley Counties (San Joaquin, Stanislaus, Merced, Fresno, Madera, Kings, Tulare, Kern).	
Impact 4.2-2: The Project Would Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract.	Potentially significant	Implement Mitigation Measures 4.2-1 through MM 4.2-5.	Less than significant with mitigation
Impact 4.2-3: The Project Would 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 Forestland to Non-Forest Use.	Potentially significant	Implement Mitigation Measures 4.2-1 through MM 4.2-5.	Less than significant with mitigation
Cumulative Impacts to Agricultural and Forest Resources.	Potentially significant	Implement Mitigation Measures 4.2-1 through MM 4.2-5.	Significant and unavoidable
Air Quality			
Impact 4.3-1: The Project Would Obstruct Implementation of the Applicable Air Quality Plan.	Potentially significant	**MM 4.3-1**. The project shall continuously comply with the following: Construction and operation of the proposed project shall be conducted in compliance with applicable rules and regulations set forth by the San Joaquin Valley Air Pollution Control District. Dust control measures outlined below shall be implemented where they are applicable and feasible. The list shall not be considered all-inclusive, and any other measures to reduce fugitive dust emissions not listed shall be encouraged. a. Land Preparation, Excavation and/or Demolition. The following dust control measures shall be implemented: 1. All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall take place a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations. 2. All clearing, grading, earthmoving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (averaged over one hour), if disturbed material is easily windblow, or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property. 3. All fine material transported off-site shall be either sufficiently watered or securely covered to prevent excessive dust.	Less than significant with mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		4. Areas disturbed by clearing, earthmoving, or excavation activities shall be minimized at all times. 5. Stockpiles of dirt or other fine loose material shall be stabilized by watering or other appropriate method to prevent windblown fugitive dust. 6. Where acceptable to the Kern County Fire Department, weed control shall be accomplished by mowing instead of disking, thereby leaving the ground undisturbed with a mulch covering. b. Site Construction. After clearing, grading, earthmoving and/or excavating is completed within any portion of the project site, the following dust control practices shall be implemented: 1. Once initial leveling has ceased, all temporarily open and inactive soil areas within the construction site shall be (1) seeded and watered until plant growth is evident, (2) treated with a dust palliative, or (3) watered twice daily until soil has sufficiently crusted to prevent fugitive dust emissions. 2. Dependent on specific site conditions (season and wind conditions), revegetation shall occur in open areas. 3. All active disturbed soil areas shall be sufficiently watered at least twice daily or have dust palliatives applied to prevent excessive dust. c. Vehicular Activities. During all phases of construction, the following vehicular control measures shall be implemented: 1. Onsite vehicle speed shall be limited to 15 miles per hour. 2. All areas with vehicle traffic shall be paved, treated with dust palliatives or watered a minimum of twice daily. 3. Streets adjacent to the project site shall be kept clean, and project-related accumulated silt shall be removed. 4. Access to the project site shall be by means of an apron into the project site from adjoining surfaced roadways. The apron shall be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of vehicles, a grizzly, wheel washer, or other such device shall be used on the road exiting the project site, immediately prior to the pavement, in order to remove most of the soil material from vehicle tires. **MM 4.3-2.** Prior to issuance of grading or building permits, the project proponent shall prepare a comprehensive Fugitive Dust Control Plan for review and approval by the SJVAPCD and submitted to the Kern County Planning and Natural Resources Department. The Plan shall take into consideration grading and construction schedule, seasonal winds, site-specific wind patterns and conditions to ensure adequate measures are implemented to manage fugitive dust. The Dust Control Plan shall include:	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		a. Name(s), address(es), and phone number(s) of person(s) responsible for the preparation, submission, and implementation of the plan. b. Description and location of operation(s). c. Listing of all fugitive dust emissions sources included in the operation. d. The following dust control measures shall be implemented: 1. Identify a comprehensive grading schedule for the entire project site. When feasible, grading activities shall be phased and minimized to those areas necessary for project access and installation of project features. 2. All on-site unpaved roads and off-site unpaved access roads shall be stabilized using water or chemical soil stabilizers that can be determined to be as efficient as or more efficient for fugitive dust control than California Air Resources Board approved soil stabilizers, and that shall not increase any other environmental impacts including loss of vegetation. 3. All material excavated or graded will be watered to prevent excessive dust. Watering will occur as needed with complete coverage of disturbed areas. The excavated soil piles will be watered as needed to limit dust emissions to less than 20 percent opacity or covered with temporary coverings. 4. Construction activities that occur on unpaved surfaces will be discontinued during windy conditions when winds exceed 25 miles per hour and those activities cause visible dust plumes that exceed the SJVAPCD 20 percent opacity standard. 5. Track-out debris onto public paved roads shall not extend 50 feet or more from an active operation and track-out shall be removed or isolated such as behind a locked gate at the conclusion of each workday, except on agricultural fields where speeds are limited to 15 mph. 6. All hauling materials should be moist while being loaded into dump trucks. 7. All haul trucks hauling soil, sand, and other loose materials on public roads shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions). 8. Soil loads should be kept below six inches or the freeboard of the truck. 9. Drop heights when loaders dump soil into trucks shall not exceed five feet above the truck. 10. Gate seals should be tight on dump trucks. 11. Traffic speeds on unpaved roads shall be limited to 15 miles per hour. 12. All grading activities shall be suspended when visible dust emissions exceed 20 percent. 13. Other fugitive dust control measures as necessary to comply with SJVAPCD Rules and Regulations.	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		MM 4.3-3. The project proponent shall continuously comply with the following: The project proponent and/or its contractors shall implement the following measures during construction of the project to control emissions from the on-site equipment: a. All equipment shall be maintained in accordance with the manufacturer's specifications. b. Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for extended periods of time. c. Construction equipment shall not operate longer than eight cumulative hours per day. d. Electric equipment shall be used whenever possible in lieu of diesel- or gasoline-powered equipment. e. All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NOx emissions. f. On-road and off-road diesel equipment shall use diesel particulate filters (or the equivalent) if permitted under manufacturer's guidelines. g. Tier 3 engines shall be used on all equipment when available.. **MM 4.3-4.** Prior to issuance of any grading or construction permits, the Owner/Operator shall enter into a Developer Mitigation Agreement (DMA)/Voluntary Emissions Reduction Agreement (VERA) with the SJVAPCD. The DMA/VERA is to fully mitigate construction and operations criteria air emissions of project implementation for project vehicle and other mobile source emissions. The Owner/Operator shall pay fees to fully mitigate project emissions of NOx (oxides of nitrogen), ROG (reactive organic gases), PM_{10} (particulate matter of 10 microns or less in diameter), and PM2.5 (particulate matter of 2.5 microns or less in diameter) (collectively referred to as "designated criteria emissions") to avoid any net increase in these pollutants. The air quality mitigation fee shall be paid prior to the approval of any construction or grading approval.	
Impact 4.3-2: The Project Would Result In A Cumulatively Considerable Net Increase Of Any Criteria Pollutant For Which The Project Region Is In Nonattainment Under An Applicable Federal Or State Ambient Air Quality Standard.	Potentially significant	Implement Mitigation Measures MM 4.3-1 through 4.3-4.	Significant and unavoidable

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.3-3: Construction and Operation of the Project Would Expose Sensitive Receptors to Substantial Pollutant Concentrations.	Less than Significant	Implement Mitigation Measures MM 4.3-1 through 4.3-4 and the following measures: **MM 4.3-5.** To minimize personnel and public exposure to potential Valley Fever–containing dust on and off site, the following control measures shall be implemented during project construction: a. Equipment, vehicles, and other items shall be thoroughly cleaned of dust before they are moved off-site to other work locations. b. Wherever possible, grading and trenching work shall be phased so that earth-moving equipment is working well ahead or down-wind of workers on the ground. c. The area immediately behind grading or trenching equipment shall be sprayed with water before ground workers move into the area. b. In the event that a water truck runs out of water before dust is sufficiently dampened, ground workers being exposed to dust are to leave the area until a full truck resumes water spraying. c. To the greatest extent feasible, heavy-duty earth-moving vehicles shall be closed-cab and equipped with a high efficiency particulate air a HEPA-filtered air system. d. Workers shall receive training in procedures to minimize activities that may result in the release of airborne Coccidioides immitis spores and recognize the symptoms of Valley Fever and shall be instructed to promptly report suspected symptoms of work-related Valley Fever to a supervisor. Evidence of training shall be provided to the Kern County Planning and Natural Resources Department within 5 days of the training session. e. A Valley Fever informational handout shall be provided to all on-site construction personnel and surrounding residents within three miles of the project site. The handout shall, at a minimum, provide information regarding the symptoms, health effects, preventative measures, and treatment of Valley Fever. No less than 30 days prior to any work commencing, this handout shall be mailed to all existing residences within three miles of the project boundaries. Additional information and handouts can be obtained by contacting the Kern County Public Health Services Department. f. On-site personnel shall be trained on the proper use of personal protective equipment, including respiratory equipment. National Institute for Occupational Safety and Health (NIOSH)-approved respirators shall be provided to on-site personnel, upon request. When exposure to dust is unavoidable, affected workers shall be provided appropriate NIOSH - approved respiratory protection. If respiratory protection is deemed necessary, employers must develop and implement a respiratory protection program in	Less than significant with mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		accordance with the California Occupational Safety and Health Administration's Respiratory Protection standard (8 CCR 5144). **MM 4.3-6**.Prior to the issuance of grading permits, a onetime fee shall be paid to the Kern County Public Health Services Department in the amount of $3,200 for the continuing education program for bringing awareness of Valley Fever. **MM 4.3-7.** Prior to the issuance of grading or building permits, a COVID Health and Safety Plan shall be prepared in accordance with the California Department of Public Health Guidance. A copy of the COVID Health and Safety Plan shall be submitted to the Kern County Planning and Natural Resources Department for review and approval. **MM 4.3-8.** Prior to commencement of any on-site construction activities (i.e., fence construction, mobilization of construction equipment, initial grading), the project proponent shall provide written notice to the public through mailing a notice to all parcels within 1,000 feet of the project site, no sooner than 15 days prior to construction activities. The notices shall include the construction schedule, a telephone number and email address where complaints and questions can be registered. Additionally, a minimum of one sign, legible at a distance of 50 feet, shall also be posted at the construction sites or adjacent to the nearest public access to the main construction entrances throughout construction activities which include the construction schedule (updated as needed) and a telephone number where complaints can be registered. Documentation that the public notice has been sent and the sign has been posted shall be provided to the Kern County Planning and Natural Resources Department. **MM 4.3-9.** Prior to the issuance of any grading or building permit, the project proponent shall establish a "construction coordinator" and submit written documentation which includes their phone number, email address and mailing address. The construction coordinator shall be responsible for the following: a. Responding to any local complaints about construction activities. The construction coordinator shall determine the cause of the construction complaint and shall be required to implement reasonable measures such that the complaint is resolved. b. Ensuring all appropriate construction notices have been made available to the public and that all appropriate construction signs have been installed. c. Maintaining an ongoing up-to-date log of all construction related complaints (i.e., blowing dust, inability to access parcels, etc.) during project construction activities. The log shall include the nature of the complaint and the measures that were undertaken to address the concerns. Upon request, the construction coordinator shall provide the log to the Planning and Natural Resources Department no later than three business days from request.	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		MM 4.3-10. All required landscaping along major and arterial roadways will be designed with native drought-resistant species (plants, trees, and bushes) to reduce demand for gas-powered landscape maintenance equipment.	
Impact 4.3-4: The Project Would Result In Other Emissions (Such As Those Leading To Odors) Adversely Affecting A Substantial Number Of People.	Less than significant	Mitigation measures are not required.	Less than significant
Cumulative Impacts to Air Quality.	Potentially significant	Implement Mitigation Measures MM 4.3-1 through 4.3-10.	Significant and unavoidable
Biological Resources			
Impact 4.4-1: The Project Would 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 Wildlife or U.S. Fish and Wildlife Service.	Less than significant	Implement Mitigation Measures MM 4.1-1, MM 4.1-4, and the following measures: **MM 4.4-1.** Prior to the issuance of grading or building permits, the project operator shall retain a Lead Biologist(s) who meets the qualifications of an Authorized Biologist as defined by California Department of Fish and Wildlife (CDFW) Service to oversee compliance with protection measures for all listed and other special-status species that may be affected by the construction and operation of the project. The resume and contact information for the Lead Biologist(s) shall be provided in writing to the Planning and Natural Resources Department. The following measures pertain to the Lead Biologist(s): a. The Lead Biologist(s), or their designee, shall be on the project site during all construction activities which include, but are not limited to, installation of perimeter fencing, clearing of vegetation, grading activities, and facility construction. b. The Lead Biologist(s) or their designee shall have the right to halt all activities that are in violation of the special-status species protection measures, as well as any regulatory permits from the U.S. Fish and Wildlife Service and/or the California Department of Fish and Wildlife, if applicable. Work shall proceed only after hazards to special-status species are removed and the species is no longer at risk. **MM 4.4-2:** Prior to the issuance of grading or building permits, the Lead Biologist shall develop a Worker Environmental Awareness Training Program containing life history and identification information of special-status wildlife and plant species with potential to occur on site. The Worker Environmental Awareness Training Program shall review responsibilities for all on-site personnel including trash control, checking under and around vehicles and heavy equipment before starting, scanning for wildlife resources, contacting the Lead Biologist in the unanticipated instance of	Less than significant with mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		encountering special status wildlife species, and prohibition of pets and firearms. All on-site personnel shall be required to attend a worker environmental training. A sticker shall be placed on hard hats, indicating that the worker has completed the Worker Environmental Awareness Training. Copies of all prepared materials including, but not limited to, PowerPoint presentations, videos, information handouts and signed acknowledgement from each worker who has attended the required training shall be provided to the Planning and Natural Resources Department. **MM 4.4-3:** During construction of the project site, the project proponent and/or contractor(s) shall implement the following general avoidance and protective measures: a. Immediately prior to conducting vegetation clearing or similar activities, the Lead Biologist or their designee shall perform a pre-construction visual survey of the area to ensure that no special-status species are present. Daily reports of these inspections shall be retained by the Lead Biologist and provided to the Kern County Planning and Natural Resources Department, U.S. Fish and Wildlife Service, or California Department Fish and Wildlife upon request. b. Within the vicinity of any construction activities, sensitive biological resources (i.e., special-status species, jurisdictional drainages, nesting birds, etc.) shall be delineated with stakes and/or flagging. c. All construction activities shall be confined within the project construction area, which may include temporary access roads, haul roads, and staging areas specifically designated and marked for these purposes. At no time shall equipment or personnel be allowed to adversely affect areas outside the project site. d. Any spoils shall be stockpiled in disturbed areas that lack native vegetation to the maximum extent practicable. Spoils that have been stockpiled and inactive for more than 24 hours shall be inspected by a qualified biologist for signs of special-status wildlife before moving or disturbing. e. To prevent inadvertent entrapment of San Joaquin kit foxes, American badgers, or other animals during construction, all excavated steep-walled holes or trenches more than two (2) feet deep shall be covered with plywood or similar materials at the close of each working day. If holes or trenches cannot be covered, one or more escape ramps constructed of earthen fill or wooden planks, no less than 12 inches wide and secured at the top, shall be placed a minimum of every 100 feet within the open trench. Covered and non-covered holes or trenches shall be thoroughly inspected for trapped animals by a qualified biologist at the beginning and end of each working day. Immediately before such holes or trenches are filled, they shall again be thoroughly inspected by trained Staff approved by the Lead Biologist. If any trapped animals are observed, escape ramps or structures shall be installed	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		immediately to allow for their escape. If a listed species is trapped, the Lead Biologist shall immediately confer with the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife. f. All construction pipes, culverts, or similar structures with a diameter of four (4) inches or greater that are stored at the site for more than 24 hours and without endcaps shall be thoroughly inspected by a qualified biologist prior to being moved or capped. If a listed wildlife species is discovered inside a pipe, that section of pipe shall not be moved until a qualified biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated in conformance with appropriate wildlife agency guidelines. g. No construction vehicle or equipment parked on the project site shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of listed wildlife species. If present, the animal shall be left to move on its own. h. A speed limit of 15 miles per hour shall be enforced within the limits of the project site. If night work occurs on the project site, the speed limit will be 10 miles per hour. i. Fueling of construction equipment shall take place within existing roads or disturbed areas. No refueling within or adjacent to drainages (within 150 feet) shall be permitted. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary. j. Trash and food items shall be contained in closed containers to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs. k. Workers shall be prohibited from bringing pets and firearms to the project site and from feeding wildlife. l. Intentional killing or collection of any listed plant or wildlife species shall be prohibited. m. Herbicides that may be used as vegetation control measures in project areas shall be applied in accordance with Mitigation Measure MM 4.2-4. All uses of such herbicidal compounds shall observe label and other restrictions mandated by the U.S Protection Agency, California Department of Food and Agriculture, and state/federal legislation as well as additional project related restrictions deemed necessary by the U.S. Fish and Wildlife Service or California Department of Fish and Wildlife. **MM 4.4-4:** No more than (30) days prior to the issuance of any grading or building permits or the start of ground disturbance, a qualified biologist knowledgeable in the identification of all special-status wildlife species shall conduct a pre-construction survey of areas proposed for disturbance within the project site and 500-foot buffer	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		(where legally accessible) to determine if any special-status species are present. If, as a result of this pre-construction survey it is determined that special-status wildlife species are present, the project proponent shall confer with the U.S. Fish and Wildlife Service or California Department of Fish and Wildlife, as required by applicable law, for proper avoidance measures or the need for take authorization through the acquisition of an incidental take permit, pursuant to Fish and Game Code section 2081 subdivision (d). **MM 4.4 5:** No more than thirty (30) days prior to the start of ground disturbance activities or issuance of any grading or building permits, a qualified biologist knowledgeable on the identification of rare plant species shall conduct a pre-construction plant survey of areas of proposed disturbance within the project site and 100-foot buffer (where legally accessible) to determine if any special-status plant species are present. If special-status plants are identified on-site, their locations shall be mapped and the project proponent shall confer with CDFW or USFWS as required by applicable law to facilitate salvage or seed collection.	
Impact 4.4-2: The Project Would 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 Wildlife or U.S. Fish and Wildlife Service.	Less than significant	Mitigation measures are not required.	Less than significant
Impact 4.4-3: The Project Would Have a Substantial Adverse Effect on State or Federally Protected Wetlands (Including, but not Limited to, Marsh, Vernal Pool, Coastal, Etc.) Through Direct Removal, Filling, Hydrological Interruption, or Other Means.	Less than significant	Mitigation measures are not required.	Less than significant
Impact 4.4-4: The Project Would 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.	Less than significant	Mitigation measures are not required.	Less than significant
Impact 4.4-5: The Project Would Conflict with any Local Policies or Ordinances Protecting Biological Resources, Such as a Tree Preservation Policy or Ordinance.	Less than significant	Mitigation measures are not required.	Less than significant

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.4-6: The Project Would Conflict With the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan.	Less than significant	Mitigation measures are not required.	Less than significant
Cumulative Impacts to Biological Resources.	Less than significant	Implement Mitigation Measures MM 4.1-1, MM 4.1-4 and MM 4.4-1 through MM 4.4-5.	Less than significant
Cultural Resources			
Impact 4.5-1: The Project Would Cause a Substantial Adverse Change in the Significance of a Historical Resource Pursuant CEQA Guidelines Section 15064.5.	Potentially significant	**MM 4.5-1.** Prior to ground disturbance or the issuance of grading or building permits, the project proponent shall retain a qualified Lead Archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior 2011), to carry out all mitigation measures related to archaeological during ground-disturbing activities. The contact information for this Lead Archaeologist shall be provided to the Kern County Planning and Natural Resources Department prior to the commencement of any construction activities on-site. Further, the Lead Archaeologist shall be responsible for ensuring the following employee training provisions are implemented during implementation of the project: a. Prior to commencement of any ground disturbing activities, the Lead Archaeologist shall prepare Cultural Resources Sensitivity Training materials, including a Cultural Resources Sensitivity Training Guide, to be used in an orientation program given to all personnel working on the project. The training guide may be presented in video form. A copy of the proposed training materials, including the Cultural Resources Sensitivity Training Guide, shall be provided to the Planning and Natural Resources Department prior to the issuance of any grading or building permit. b. The project proponent/operator shall ensure all new employees or onsite workers who have not participated in earlier Cultural Resources Sensitivity Trainings shall meet provisions specified above. c. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the Lead Archaeologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources. d. A copy of the Cultural Resources Sensitivity Training Guide/Materials shall be kept on-site and available for all personnel to review and be familiar with	Less than significant with mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		as necessary. It is the responsibility of the Lead Archaeologist to ensure all employees receive appropriate training before commencing work on-site. **MM 4.5-2.** During implementation of the project, in the event that archaeological materials are encountered during the course of grading or construction, the project contractor shall cease any ground-disturbing activities within 50 feet of the find. The area of the discovery shall be marked off by temporary fencing that encloses a 50-foot radius from the location of the discovery. Signs shall be posted that establish it as an Environmentally Sensitive Area, and all entrance into the area shall be avoided until the discovery is assessed by the Lead Archaeologist. The Lead Archaeologist, in consultation with any appropriate Native American tribes, shall evaluate the significance of the resources and recommend appropriate treatment measures. If further treatment of the discovery is necessary, the Environmentally Sensitive Area shall remain in place until all work is completed. Per California Environmental Quality Act (CEQA) Guidelines Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means to avoid impacts to significant historical resources.	
Impact 4.5-2: The Project Would Cause a Substantial Adverse Change in the Significance of an Archaeological Resource Pursuant to CEQA Guidelines Section 15064.5.	Potentially significant	Implement Mitigation Measures MM 4.5-1 and MM 4.5-2, and the following measures: **MM 4.5-3.** During implementation of the project, the services of an Archaeological Monitor, working under the supervision of the Lead Archaeologist, shall be retained by the project proponent/operator to monitor, on a full-time basis, during initial ground-disturbing activities associated with project-related construction activities, as follows: a. During implementation of the project, Archaeological monitoring shall be conducted for all initial excavation or ground-disturbing activities. b. The Lead Archaeologist shall be provided all project documentation related to cultural resources within the project site prior to commencement of ground disturbance activities. Should the services of any additional individuals be retained subsequent to commencement of ground disturbing activities, such individuals shall be provided all proposed project documentation related to cultural resources within the project area, prior to beginning work. Documentation shall include but not be limited to previous cultural studies, surveys, maps, drawings, etc. Any modifications or updates to project documentation, including construction plans and schedules, shall immediately be provided to the Lead Archaeologist and Archaeological Monitor.	Less than significant with mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.5-3. The Project Would Disturb Human Remains, Including Those Interred Outside of Formal Cemeteries.	Potentially significant	**MM 4.5-4.** If human remains are uncovered during project construction, the project proponent shall immediately halt work within 100 feet of the find, contact the Kern County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.4 (e) of the *California Environmental Quality Act Guidelines*. If the County Coroner determines that the remains are Native American, the coroner shall contact the Native American Heritage Commission, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by Assembly Bill 2641). The Native American Heritage Commission shall designate a Most Likely Descendent for the remains per Public Resources Code 5097.98. Per Public Resources Code 5097.98, and in accordance with generally accepted cultural or archeological standards or practices, the landowner shall ensure that the immediate vicinity of the Native American human remains is not damaged or disturbed by further development activity until the landowner has conferred with the most likely descendent regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. If the remains are determined to be neither of forensic value to the Coroner, nor of Native American origin, provisions of the California Health and Safety Code (7100 et. seq.) directing identification of the next-of-kin will apply.	Less than significant with mitigation
Cumulative Impacts to Cultural Resources.	Potentially significant	Implement Mitigation Measures MM 4.5-1 through 4.5-4.	Less than significant with mitigation
Energy			
Impact 4.6-1: The Project would result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation.		Implement Mitigation Measures MM 4.3-3, and the following measures: **MM 4.6-1:** Prior to the issuance of grading or building permits, the project proponent shall provide a report and summary of all energy efficient building design standards incorporated into the project design and operations to reduce the level of energy consumption of the project. The following measures shall be included in the project design, as applicable: a. Within one year of the first day of project operations, solar photovoltaics mounted on proposed structure's roofs to provide a portion of the future electrical demand and offset emissions from fossil fuel fired power plants; b. Incorporated green building measures that contribute to reducing energy use by at least 10 percent and up to 25 percent less than Title 24 requirements; c. Provide solar water heating for non-industrial water heating; d. If needed, in addition to roof mounted solar, provide ground mounted solar photovoltaics arrays to provide a portion of the estimated electrical demand for	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		the project; e. Commercial buildings shall be designed to meet LEED certification standards; f. Roofs on all buildings shall be of a light color to reduce heat generation; g. Portions of parking lots (drive aisles) may be paved with concrete versus asphalt, based on structural determinations, to reduce initial solar reflectance; h. Within two years of the first day of project operations, up to 20 percent of employee parking stalls shall be covered. If feasible for electrical demand, the parking stall roofs shall contain solar photovoltaics; i. LED lighting fixtures shall be used on all indoor and exterior site lighting; j. LED lighting fixtures shall be used on all public streets and site lighting; k. Electric forklifts and other material handling vehicles to reduce usage of fossil fuels shall be implemented, based on feasibility of operations; l. Consult with Kern County Public Works Department and Golden Empire Transit (GET) on feasible design circulation features for transit related public street improvements adjacent to the project; m. Provide bicycle friendly features, such as onsite bike lanes, bike racks, and bike lockers, to reduce vehicle miles traveled and to encourage non-vehicular transportation; n. Where feasible, design operations to incorporate the usage of high efficiency electric motors for industrial uses. **MM 4.6-2**: Prior to the issuance of grading or building permits, the project proponent shall provide evidence that the project is designed to include the green building measures specified as mandatory in the application checklists contained in the current California Green Building Standards. In addition to the number of electric vehicle capable spaces provided with electric vehicle supply equipment required by the current California Green Building Standards, the project shall provide an additional two percent of electrical vehicle capable spaces with electrical vehicle supply equipment.	
Impact 4.6-2: The Project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than significant	Implement Mitigation Measure **MM 4.8-1** as provided in Section 4.8, *Greenhouse Gas Emissions*, of this EIR.	Less than significant
Cumulative Impacts to Energy.	Less than significant	Implement Mitigation Measures MM 4.3-3, MM 4.6-1, MM 4.6-2, and MM 4.8-1.	Less than significant

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Geology and Soils			
Impact 4.7-1: The Project Would Directly or Indirectly Cause Potential Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving 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.	Less than significant	Mitigation measures are not required.	Less than significant
Impact 4.7-2: The Project Would Directly Or Indirectly Cause Potential Substantial Adverse Effects, Including The Risk Of Loss, Injury, Or Death Involving: Strong Seismic Ground Shaking Or Liquefaction.	Potentially significant	**MM 4.7-1**. Building locations shall be stabilized against the occurrence of liquefaction by dynamic compaction, or other accepted soil stabilization method approved by the County Building official. Implement Mitigation Measures MM 4.10-1 and MM 4.10-2, described in *Hydrology and Water Quality*. **MM 4.7-2**. Prior to the issuance of building or grading permits, the project proponent shall submit to the Kern County Public Works Department, for review and approval, a final engineering design specific geotechnical study in accordance with all applicable ordinances of the Kern County Building Code (Chapter 17.08) and the California Building Code. The final study shall include recommended construction procedures regarding existing soils.	Less than significant with mitigation
Impact 4.7-3: The Project Would Result in Substantial Soil Erosion or the Loss of Topsoil.	Potentially significant	Implement Mitigation Measures MM 4.10-1, MM4.10-2 and the following measure: **MM 4.7-3.** The project proponent shall prepare a Soil Erosion and Sedimentation Control Plan to mitigate potential loss of soil and erosion. The plan shall be prepared by a California-registered licensed civil engineer or other authorized professional and submitted for review and approval by the Kern County Public Works Department. The Soil Erosion and Sedimentation Control Plan shall include, but is not limited to, the following: a. Best Management Practices to minimize soil erosion consistent with Kern County grading requirements and the California Regional Water Quality Control Board requirements pertaining to the preparation and approval of a Stormwater Pollution Prevention Plan (Best Management Practices recommended by the Kern County Public Works Department shall be reviewed for applicability); b. Sediment collection facilities as may be required by the Kern County Public Works Department; and c. Provisions to comply with local and State codes relating to drainage and runoff, including use of pervious pavements, and/or other methods to the	Less than significant with mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		extent feasible, to increase stormwater infiltration and reduce runoff onto agricultural lands.	
Impact 4.7-4: The Project Would 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.	Potentially significant	Implement Mitigation Measures MM 4.7-1 through MM 4.7-3.	Less than significant with mitigation
Impact 4.7-5: The Project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.	Less than significant	Implement Mitigation Measures MM 4.7-1 through MM 4.7-3.	Less than significant
Impact 4.7-6: The Project Would Directly Or Indirectly Destroy A Unique Paleontological Resource Or Site Or Unique Geologic Feature.	Potentially significant	**MM 4.7-4**. Prior to the issuance of grading or building permits, the project proponent shall retain a qualified paleontologist, defined as a paleontologist meeting the Society for Vertebrate Paleontology's Professional Standards (SVP 2010), to carry out all mitigation measures related to paleontological resources. The qualified paleontologist and lead archaeologist may be the same individual. a. Prior to the start of any ground disturbing activities, the qualified paleontologist shall prepare a Paleontological Resources Awareness Training program for all construction personnel working on the project. A Paleontological Resources Awareness Training Guide approved by the qualified paleontologist shall be provided to all personnel. A copy of the Paleontological Resources Awareness Training Guide shall be submitted to the Kern County Planning and Natural Resources Department. The training guide may be presented in video form. b. Paleontological Resources Awareness Training may be conducted in conjunction with other awareness training requirements. c. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of paleontological resources. d. The project operator shall ensure all new employees who have not participated in earlier Paleontological Resources Sensitivity Trainings shall meet the provisions specified above.	Less than significant with mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		e. The Paleontological Resources Awareness Training Guides shall be kept on-site and available for all personnel to review and be familiar with as necessary. **MM 4.7-5**. A qualified paleontologist or designated monitor shall be onsite initially to spot-check excavations below a depth of one-foot below the ground surface in a given area. If it is determined that sediments consist of older alluvium, then full-time paleontological monitoring shall ensue. If sediments are determined to consist of Holocene Quaternary Alluvium, paleontological monitoring shall be suspended until an excavation depth of five feet below the ground surface is reached in the area. a. The duration and timing of monitoring shall be determined by the qualified paleontologist in consultation with the Kern County Planning and Natural Resources Department and shall be based on a review of geologic maps and grading plans. 1. During the course of monitoring, if the paleontologist can demonstrate based on observations of subsurface conditions that the level of monitoring should be reduced, the paleontologist, in consultation with the Kern County Planning and Natural Resources Department, may adjust the level of monitoring to circumstances, as warranted. b. Paleontological monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The qualified paleontologist shall have authority to temporarily divert excavation operations away from exposed fossils to collect associated data and recover the fossil specimens if deemed necessary. c. Following the completion of construction, the paleontologist shall prepare a report documenting the absence or discovery of fossil resources onsite. If fossils are found, the report shall summarize the results of the inspection program, identify those fossils encountered, recovery and curation efforts, and the methods used in these efforts, as well as describe the fossils collected and their significance. A copy of the report shall be provided to the Kern County Planning and Natural Resources Department and to an appropriate repository such as the Natural History Museum of Los Angeles County. **MM 4.7-6**. If a paleontological resource is found, the project contractor shall cease ground-disturbing activities within 50 feet of the find. The qualified paleontologist shall evaluate the significance of the resources and recommend appropriate treatment measures. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any fossils encountered and recovered shall be catalogued and donated to a public, non-profit institution with a research interest in the materials. Accompanying notes, maps, and photographs shall also be filed at the repository.	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Cumulative Impacts to Geology and Soil Resources.	Less than significant	Implement Mitigation Measures MM 4.7-1 through MM 4.7-6, MM 4.10-1 and MM 4.10-2.	Less than significant
Greenhouse Gases			
Impact 4.8-1: The Proposed Project Would Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment.	Less than significant	In addition to Mitigation Measures MM 4.3-1, MM 4.3-3, and MM 4.3-4, the following measures shall be implemented. **MM 4.8-1**. Prior to the issuance of grading or building permits, the project proponent shall submit a focused Greenhouse Gas report that identifies the measures (regulatory or applicant implemented) for a target reduction of 29 percent of operational emissions of the project's mobile CO2e emissions as quantified in this EIR. The focused air analysis shall be submitted to the San Joaquin Valley Air Pollution Control District for review and comment regarding the methodology used to quantify the reductions. Any mitigation program for the reduction of greenhouse gases adopted by Kern County that can be implemented for the specific project site and that provides equal or more effective mitigation than this mitigation measure, may be utilized as a replacement for the requirements of this mitigation measure. **MM 4.8-2** a. Prior to issuance of occupancy permits, the project developer shall disclose to all tenants/business entities that only electric-powered off-road equipment (e.g. forklifts, indoor material handling equipment, etc.) shall be utilized on-site for daily warehouse and business operations. The limitation on using only electric-powered off-road equipment shall be included in all leasing/sale agreements. b. Prior to issuance of grading or building permits, the project construction's General Contractor shall target a construction waste diversion rate of 80 percent. A monthly construction report shall be provided to the County documenting total waste generated, types of waste streams, and total waste recycled. c. During operation and to the extent feasible for safe warehouse operations, automatic light switches shall be incorporated into the project. d. During operation, any equipment containing greater than five pounds of refrigerant, procured or installed, shall be tagged so that project applicant and tenant can identify and verify all installed equipment.	Less than significant

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.8-2: The Proposed Project Would Conflict with an Applicable Plan, Policy or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases.	Less than significant	Implement Mitigation Measures MM 4.3-1, MM 4.3-3, MM 4.3-4, MM 4.8-1 and MM 4.8-2.	Less than significant
Cumulative Impacts to Greenhouse Gases.	Potentially significant	Implement Mitigation Measures MM 4.3-1, MM 4.3-3, MM 4.3-4, MM 4.8-1 and MM 4.8-2.	Significant and unavoidable
Hazards and Hazardous Materials			
Impact 4.9-1: The Project Would Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials.	Less than significant	**MM 4.9-1.** Prior to the issuance of grading or building permits related to facilities requiring a Spill Prevention Control and Countermeasures Response Plan, the project proponent shall prepare and submit a Spill Prevention Control and Countermeasures Response Plan to the Kern County Public Health Services Department. Environmental Health Division, and the California Department of Water Resources, for review and approval by those agencies. The project proponent shall ensure the project is implemented in compliance with the approved Spill Prevention Control and Countermeasures Response Plan. **MM 4.9-2.** Prior to the issuance of building permits, the project proponent shall ensure any hazardous materials be stored properly and Material Safety Data Sheets shall be on site. Hazardous waste shall be managed properly. Training shall be provided to all personnel involved in handling of any hazardous materials or waste. **MM 4.9-3.** Prior to the issuance of grading or building permits, and during the life of the project, the project operator shall prepare and maintain a Hazardous Materials Business Plan (HMBP), as applicable, pursuant to Article 1 and Article 2 of California Health and Safety Code 6.95 and in accordance with Kern County Ordinance Code 8.04.030, by submitting all the required information to the California Environmental Reporting System (CERS) at http://cers.calepa.ca.gov/ for review and approval. The HMBP shall: a. Delineate hazardous material and hazardous waste storage areas. b. Describe proper handling, storage, transport, and disposal techniques. c. Describe methods to be used to avoid spills and minimize impacts in the event of a spill. d. Describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction. e. Establish public and agency notification procedures for spills and other emergencies including fires. f. Describe federal, state, or local agency coordination, as applicable, and clean-up efforts that would occur in the event of an accidental release. g. Include procedures to avoid or minimize dust from existing residual pesticides and herbicides that may be present on the site.	Less than significant

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		The project proponent shall ensure that all contractors working on the project are familiar with the facility's HMBP as well as ensure that one copy is available at the project site at all times. In addition, a copy of the approved HMBP from CERS shall be submitted to the Kern County Planning and Natural Resources Department for inclusion in the projects permanent record.	
Impact 4.9-2: The Project Would 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.	Less than significant	In addition to Mitigation Measures MM 4.2-4, and 4.9-1 through 4.9-3, the following measures shall be implemented. **MM 4.9-4.** The project proponent shall continuously comply with the following: If suspect materials or wastes of unknown origin are discovered during construction on the project site, which is thought to include hazardous waste materials the following shall occur: a. All work shall immediately stop in the vicinity of the suspected contaminant; b. Project Construction Manager shall be notified; c. Area(s) shall be secured as directed by the Project Construction Manager; d. Notification shall be made to the Kern County Public Health Services Department, Environmental Health Division for consultation, assessment, and appropriate actions; and, e. Copies of all notifications and correspondence shall be submitted to the Kern County Planning and Natural Resources Department. **MM 4.9-5.** Prior to issuance of grading permits, a qualified hazardous materials specialist shall inspect each power pole on-site with a transformer. Those containing polychlorinated biphenyls shall be removed by the hazardous specialist and disposed of at an appropriate hazardous materials disposal site to the satisfaction of Department of Toxic Substances Control. The hazardous materials specialist shall provide a short report to the Kern County Planning and Natural Resources Department and the Kern County Environmental Health Services Division/Hazardous Materials Section for review and approval. Prior to construction, Pacific Gas and Electric Company (PG&E) shall be contacted regarding the disposition of pole-mounted transformers. In the event of a future release or leak of insulating fluids from any of the pole-mounted transformers, PG&E shall be contacted for their removal or replacement. **MM 4.9-6.** Prior to the issuance of grading or building permits, the following note shall appear on all final maps and grading plans: "If during grading or construction, any plugged and abandoned or unrecorded wells are uncovered or damaged, the Department of Oil, Gas and Geothermal Resources will be contacted to inspect and approve any remediation required.	Less than significant

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		MM 4.9-7. Prior to the issuance of grading permits, the Underground Service Alert One-call center shall be contacted at (800) 227-2600. The proposed excavation area shall be delineated with white marking paint or with other suitable markers such as flags or stakes at least two days prior to commencing any excavation work. A "Dig Alert" ticket number would be issued at the time Underground Service Alert is contacted. Excavating is not permitted without this ticket number and is valid for twenty-eight days. Underground Service Alert would notify its member utilities having underground facilities in the area. Underground Service Alert does not notify nonmember utilities or energy companies, or Caltrans. **MM 4.9-8.** Prior to the issuance grading and building permits, the project proponent shall prepare notification requirements should the rupturing of a pipeline occur during excavation and construction activities, the Kern County Fire Department and Pacific Gas and Electric Company should be contacted immediately. Natural gas transmission pipeline rupture most often indicates an emergency situation and 9-1-1 should be dialed. If an emergency is not indicated, the Kern County Fire Department Meadows Field Station 62, located at 1652 Sunnyside Court, should be contacted at (661) 393-9311. Or at the non- Emergency telephone number (661) 324-6551. The project proponent shall follow all safety and cleanup regulations. **MM 4.9-9.** Prior to the issuance of grading or building permits, on-site water wells not to be used for irrigation or industrial purposes shall be destroyed in accordance with California Well Standards as governed by the California Department of Water Resources and permit requirements of the Kern County Environmental Health Services Division. **MM 4.9-10.** Prior to the issuance of grading permits, the Project Applicant shall obtain a qualified specialist to conduct limited soil sampling for Total Petroleum Hydrocarbons, organic pesticides, and arsenic. Remedial activities, if necessary, may be required prior to development. In addition, if soil is to be excavated and exported as part of development activities, then the presence of pesticides and/or metals may result in the soil being considered a regulated or hazardous waste and the soil may need to be properly characterized and disposed of at an appropriate receiving facility. **MM 4.9-11.** Prior to the issuance grading and building permits, the project proponent shall prepare notification requirements should asbestos containing materials be identified during construction (particularly in the concrete irrigation (transite) pipe located on-site). The San Joaquin Valley Air Pollution Control District shall be contacted for removal and disposal procedures. These procedures shall be followed in order to eliminate asbestos exposure to construction workers and surrounding workers and residents.	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.9-3: The Project Would Be Located Within an Adopted Kern County Airport Land Use Compatibility Plan Resulting in a Safety Hazard for People Residing or Working in the Project Area.	Less than significant	In addition to Mitigation Measure MM 4.11-2, the following measure shall be implemented. **MM 4.9-12.** Prior to issuance of building and grading permits for portions of the project that meet the Federal Aviation Administration's noticing requirements, the project proponent/operator shall comply with the following: a. Submit Form 7460-1 (Notification of Proposed Construction or Alteration) to the Federal Aviation Administration, in the form and manner prescribed in Code of Federal Regulation 77.17. b. Obtain a Federal Aviation Administration issued "Determination of No Hazard to Air Navigation" or make the Federal Aviation Administration's recommended changes to the project. c. Provide documentation to the Kern County Planning and Natural Resources Department demonstrating the project would comply with the Kern County Zoning Ordinance Figure 19.08.160 that all project components in the flight area would create no significant military mission impact and a copy of the site plan has been provided to the appropriate military authority responsible for operations in the flight area. d. Provide documentation to the Kern County Planning and Natural Resources Department demonstrating that a copy of the final site plan has been provided to the operators of Meadows Field Airport.	Less than significant
Impact 4.9-4: The Project Would Impair Implementation of, or Physically Interfere With, an Adopted Emergency Response Plan or Emergency Evacuation Plan	Potentially significant	Implement Mitigation Measure MM 4.16-1, and the following mitigation measure: **MM 4.9-13.** Prior to the issuance of grading or building permits, the project proponent shall develop and implement a Fire Safety Plan for use during construction and operation. The project proponent shall submit the plan, along with maps of the project site and access roads, to the Kern County Fire Department for review and approval. The Fire Safety Plan shall contain notification procedures and emergency fire precautions, including the following: a. All internal combustion engines, both stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order. b. Light trucks and cars with factory-installed (type) mufflers shall be used only on roads where the roadway is cleared of vegetation. These vehicle types shall maintain their factory-installed (type) mufflers in good condition. c. Fire rules shall be posted on the project bulletin board at the contractor's field office and in areas visible to employees. d. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials. e. Personnel shall be trained in the practices of the fire safety plan relevant to their duties. Construction and maintenance personnel shall be trained and	Less than significant with mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		equipped to extinguish small fires to prevent them from growing into more serious threats. f. The project proponent shall make an effort to restrict the use of chainsaws, chippers, vegetation masticators, grinders, drill rigs, tractors, torches, and explosives to periods outside of the official fire season. When the above tools are used, water tanks equipped with hoses, fire rakes, and axes shall be easily accessible to personnel.	
Impact 4.9-5: The project would generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste.	Potentially significant	**MM 4.9-14. Trash Abatement.** Prior to issuance of grading or building permits, a long-term trash abatement program shall be established for construction, operations and maintenance. Trash and food items shall be contained in closed containers and removed daily. **MM 4.9-15.** Prior to the issuance of grading or building permits, the project proponent shall prepare a Vector Control Plan and submit it to the Kern County Environmental Health Services Department and Kern Mosquito Abatement District for review and approval. The Plan shall include best management practices such as: good housekeeping measures to minimize harborage for vectors. Further controls may include the use of traps or other abatement controls, and/or the use of a licensed pest management service if needed.	Less than significant
Cumulative Impacts to Hazards and/or Hazardous Materials.	Less than significant	Implement Mitigation Measures MM 4.9-1 through MM 4.9-15.	Less than significant
Hydrology and Water Quality			
Impact 4.10-1: The Project Would Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Substantially Degrade Surface or Groundwater Quality.	Potentially significant	Implement Mitigation Measure MM 4.9-3, and the following mitigation measures: **MM 4.10-1.** Prior to issuance of a grading permit, and prior to engagement of decommissioning activities, the project proponent/operator shall submit a Stormwater Pollution Prevention Plan (SWPPP) for review and approval by the Regional Water Quality Control Board. The SWPPP shall be designed to minimize runoff and shall specify best management practices to prevent all construction pollutants from contacting stormwater, with the intent of keeping sediment or any other pollutants from moving off-site and into receiving waters. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Recommended best management practices to be incorporated in the SWPPP may include the following: a. Minimization of vegetation removal. b. Implementing sediment controls, including silt fences as necessary. c. Installation of a stabilized construction entrance/exit and stabilization of disturbed areas.	Less than significant with mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		d. Properly containing and disposing of hazardous materials used for construction on-site. e. Properly covering stockpiled soils to prevent wind erosion. f. Proper protections and containment for fueling and maintenance of equipment and vehicles. g. Appropriate disposal of demolition debris, concrete and soil, and aggressively controlling litter. h. Cleanup of silt and mud on adjacent street due to construction activity. i. Checking all lined and unlined ditches after each rainfall. j. Restoring all erosion control devices to working order to the satisfaction of the Regional Water Quality Control Board after each rainfall runoff. k. Installing additional erosion control measures as may be required due to uncompleted grading operations or unforeseen circumstances which may arise. **MM 4.10-2.** Prior to the issuance of a grading permit, the project proponent/operator shall submit a final hydrologic study and drainage plan for review and approval by the Kern County Public Works Department. The final hydrologic study and drainage plan shall be designed to evaluate and minimize potential increases in runoff from the project site. The final hydrologic study and drainage plan shall include, but not be limited to the following: a. Numerical stormwater model for the project site, which would evaluate existing and proposed (with project) drainage conditions during storm events ranging up to the 10-year event. b. Consideration of the potential for erosion and sedimentation in light of modeled changes in stormwater flow across the project area that would result from project implementation. c. Engineering recommendations to be incorporated into the project and applied within the site boundary. Engineering recommendations will include measures to offset increases in stormwater runoff that would result from the project, as well as implementation of design measures to minimize or manage flow concentration and changes in flow depth or velocity so as to minimize erosion, sedimentation, and flooding on-site or off-site. d. The hydrologic study and drainage plan shall be prepared in accordance with the Kern County Grading Code, Kern County Development Standards, Kern County Hydrology Manual and Kern County Floodplain Ordinance, and approved by the Kern County Public Works Department prior to the issuance of grading permits.	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.10-2: The Project Would Substantially Decrease Groundwater Supplies or Interfere Substantially With Groundwater Recharge Such That the Project may Impede Sustainable Groundwater Management of the Basin.	Less than significant	In addition to mitigation measure 4.18-2, the following measure shall be implemented. **MM 4.10-3.** Prior to the start of any ground-disturbing activities, the project proponent shall provide a water will-serve letter for the project, as approved by Kern County Environmental Health.	Less than significant
Impact 4.10-3: The Project Would Substantially Alter the Existing Drainage Pattern of the Site or Area, Including Through the Alteration of the Course of a Stream or River or Through the Addition of Impervious Surfaces, in a Manner Which Would Result in Substantial Erosion or Siltation On- or Off-Site.	Potentially significant	Implement Mitigation Measure MM 4.10-1 and MM 4.10-2.	Less than significant with mitigation
Impact 4.10-4: The Project Would Substantially Alter the Existing Drainage Pattern of the Sites or Area, Including Through the Alteration of the Course of a Stream or River, or Through the Addition of Impervious Surfaces in a Manner That Could Result in Flooding On-Site or Off-Site.	Less than significant	Implement Mitigation Measure MM 4.10-2.	Less than significant
Impact 4.10-5: The Project Would 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.	Less than significant	Implement Mitigation Measure MM 4.9-1, MM 4.9-3, and MM 4.10-2.	Less than significant
Impact 4.10-6: The Project Would Impede or Redirect Flood Flows.	Less than Significant	Implement Mitigation Measure MM 4.10-2.	Less than significant
Impact 4.10-7: The Project Would, In a Flood Hazard, Tsunami, or Seiche Zones, Risk the Release of Pollutants Due to Project Inundation.	No impact	Mitigation measures are not required.	No impact
Impact 4.10-8: The Project Would Conflict with or Obstruct Implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan.	Less than Significant	Implement Mitigation Measure MM 4.10-3.	Less than Significant
Cumulative Impacts to Hydrology and Water Quality.	Potentially significant	Implement Mitigation Measures MM 4.9-1, MM 4.9-3, and MM 4.10-1 through MM 4.10-3.	Significant and unavoidable

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Land Use and Planning			
Impact 4.11-1: The Project Would Conflict with Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction Over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect.	Less than Significant	Implement Mitigation Measures MM 4.9-12, and the following mitigation measures: **MM 4.11-1**. Prior to the issuance of building permits, the operator shall consult with the Meadows Field Airport to identify the appropriate Frequency Management Office officials to coordinate the use of telemetry to avoid potential frequency conflicts with airport operations. **MM 4.11-2.** Prior to the issuance of building or grading permits, the project operator shall submit to the Kern County Planning and Natural Resources Department an executed avigation easement, approved as to form by County Counsel, for the benefit of the Meadows Field Airport. **MM 4.11-3.** To ensure continued compliance with the criteria within the adopted Kern County Airport Land Use Compatibility Plan, any modification to the Precise Development Plan to include the following uses within the B-2 and/or C Zones of the Meadows Field Airport shall be considered at a noticed public hearing: a. Within the B-2 Zone: 1. Residential subdivisions 2. Intensive retail uses 3. Intensive manufacturing or food processing uses 4. Offices with more than two (2) stories 5. Hotels and motels b. Within C Zone: 1. Large shopping malls 2. Theaters, auditoriums 3. Large sports stadiums 4. High-rise office buildings with more than four (4) stories **MM 4.11-4.** Prior to the issuance of building or grading permits, the project operator shall submit a report to the Kern County Planning and Natural Resources Department demonstrating compliance with the maximum density of people per acre and open land requirements, with respect to the respective zone of the Meadows Field Airport, per the adopted Airport Land Use Compatibility Plan.	Less than significant
Cumulative Impacts to Land Use and Planning.	Less than significant	Mitigation measures are not required.	Less than significant

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Noise			
Impact 4.12-1: The Project Would Generate a Substantial Temporary or Permanent Increase in Ambient Noise Levels in the Vicinity of the Project in Excess of Standards Established in a Local General Plan or Noise Ordinance, or Applicable Standards of Other Agencies.	Less than significant	**MM 4.12-1.** The following measures are required to reduce short- term noise levels associated with project construction: a. Construction activities at the project site shall comply with the hourly restrictions for noise-generating construction activities, as specified in the Kern County Noise Ordinance (Municipal Ordinance Code 8.36.020). Accordingly, construction activities shall be prohibited between the hours of 9:00 p.m. to 6:00 a.m. on weekdays, and between 9:00 p.m. to 8:00 a.m. on weekends. These hourly limitations shall not apply to activities where hourly limitations would result in increased safety risk to workers or the public. b. Equipment staging and laydown areas shall be located at the furthest practical distance from nearby residential land uses. To the extent possible, staging and laydown areas should be located at least 500 feet of existing residential dwellings. c. Where feasible, construction equipment shall be fitted with approved noise-reduction features such as mufflers, baffles and engine shrouds that are no less effective than those originally installed by the manufacturer. d. Haul trucks shall not be allowed to idle for periods greater than five minutes, except as needed to perform a specified function (e.g., concrete mixing). e. On-site vehicle speeds shall be limited to 15 miles per hour, or less (except in cases of emergency). f. Back-up beepers for all construction equipment and vehicles shall be broadband sound alarms or adjusted to the lowest noise levels possible, provided that the Occupational Safety and Health Administration and California Division of Occupational Safety and Health's safety requirements are not violated. On vehicles where back-up beepers are not available, alternative safety measures such as escorts and spotters shall be employed. **MM 4.12-2.** Prior to the issuance of grading permits, a "Noise Disturbance Coordinator" shall be established. The project operator shall continuously comply with the following during construction: a. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. b. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. **MM 4.12-3**. Prior to commencement of any on-site construction activities (i.e., fence construction, mobilization of construction equipment, initial grading, etc.), the project proponent/operator shall provide written notice to the public through mailing a notice, which shall include:	Less than significant

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		a. The mailing notice shall be to all residences within 1,000 feet of the project site, no sooner than 15 days prior to construction activities. The notices shall include: the construction schedule, telephone number and email address where complaints and questions can be registered with the Noise Disturbance Coordinator. b. A minimum of one sign, legible at a distance of 50 feet, shall be posted at the construction site or adjacent to the nearest public access to the main construction entrance throughout construction activities that shall provide the construction schedule (updated as needed) and a telephone number where noise complaints can be registered with the Noise Disturbance Coordinator. c. Documentation that the public notice has been sent and the sign has been posted shall be provided to the Kern County Planning and Natural Resources Department. **MM 4.12-4.** The following notes shall be placed on all grading and building permits issued for the project site: "Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible. During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers. All equipment shall be fitted with factory equipped mufflers, and be in good working condition. Construction contracts shall specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state required noise attenuation devices."	
Impact 4.12-2: The Project Would Expose Persons to or Generate Excessive Ground-Borne Vibration or Ground-Borne Noise Levels.	Less than significant	Mitigation measures are not required.	Less than significant
Impact 4.12-3: The Project Would Result in a Substantial Permanent Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Project..	Less than significant	Mitigation measures are not required.	Less than significant

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.12-4: The Project Would Expose People Residing or Working in the Project Area to Excessive Noise Levels, for a Project Located Within the Kern County Airport Land Use Compatibility Plan	Potentially significant	Implementation of Mitigation Measures MM 4.11-3 and MM 4.11-4	Less than significant with mitigation
Cumulative Noise Impacts.	Potentially significant	Implementation of Mitigation Measures MM 4.11-3, MM 4.11-4, and MM 4.12-1 through MM 4.12-4.	Significant and unavoidable
Population and Housing			
Impact 4.13-1: The Project Would Directly 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.	Significant	No feasible mitigation measures.	Significant and unavoidable
Cumulative Impacts to Population and Housing	Significant	No feasible mitigation measures.	Significant and unavoidable
Public Services			
Impact 4.14-1: The project would result in substantial adverse physical impacts associated with the provision of 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 to other performance objectives for fire protection, law enforcement protection, schools, parks, or other public facilities.	Less than significant	In addition to implementation of MM 4.9-13, the following measure shall be implemented. **MM 4.14-1.** The project proponent/operator shall work with the County to determine how the use of sales and use taxes from construction of the project can be maximized. This process shall include, but is not necessarily limited to, the project proponent/operator obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, and registering this address with the State Board of Equalization. As an alternative to the aforementioned process, the project proponent/operator may make arrangements with Kern County for a guaranteed single payment that is equivalent to the amount of sales and use taxes that would have otherwise been received (less any sales and use taxes actually paid); with the amount of the single payment to be determined via a formula approved by Kern County. The project proponent/operator shall allow the County to use this sales tax information publicly for reporting purposes. **MM 4.14-2:** Prior to the issuance of any building permits on the property, the project operator shall submit a letter detailing the hiring efforts prior to commencement of construction, which encourages all contractors of the project site to hire at least 50 percent of their workers from local Kern County communities. The project operator shall provide the contractors a list of training programs that provide skilled workers	Less than significant with mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		and shall require the contractor to advertise locally for available jobs, notifying the training programs of job availability, all in conjunction with normal hiring practices of the contractor.	
Cumulative Impacts to Public Services.	Less than significant	Implement Mitigation Measures MM 4.9-3, MM 4.14-1 and 4.14-2.	Less than significant with mitigation
Recreation			
Impact 4.15-1: The Project Would 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.	Less than significant	Mitigation measures are not required.	Less than significant
Impact 4.15-2: The Project Would Include Recreational Facilities or Require the Construction Or Expansion of Recreational Facilities That Might Have An Adverse Physical Effect on The Environment.	Less than significant	Mitigation measures are not required.	Less than significant
Cumulative Impacts to Recreation.	Less than significant	Mitigation measures are not required.	Less than significant
Transportation and Traffic			
Impact 4.16-1: The Project Would Conflict with A Plan, Ordinance, Or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle, and Pedestrian Facilities.	Potentially significant	**MM 4.16-1**. Prior to the issuance of any building permit within Metropolitan Bakersfield, the project proponent shall pay the required Transportation Traffic Impact fees. **MM 4.16-2**. Prior to the issuance of the first grading or building permit, whichever comes first, the project proponent shall provide a Traffic Index analysis, assuming full buildout of the project site for Imperial Avenue from SR 99 to SR 65 and Saco Road from the project frontage to Quinn Road. **MM 4.16-3**. Prior to issuance of the first occupancy permit, the project proponent shall under street improvements plans approved by the Kern County Public Works Department/Development Review, construct the project frontage of Imperial Avenue to a Traffic Index to be determined by Traffic Index analysis performed in Mitigation Measure MM 4.16-2. **MM 4.16-4**. Prior to issuance of the first occupancy permit, the project proponent shall under street improvements plans approved by the Kern County Public Works Department/Development Review, construct Imperial Avenue project frontage from	Significant and Unavoidable

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		Saco Road to Quinn Road to Type A Subdivision Standards, half width Collector Highway, in accordance with the Kern County Development Standards and Land Division Ordinance. These improvements shall include, but not be limited to, curb, gutter, sidewalk, wheelchair ramps, asphalt concrete, and the necessary tie-ins. **MM 4.16-5**. Prior to issuance of the first occupancy permit, the project proponent shall develop street improvements plans, approved by the Kern County Public Works Department/Development Review, and construct Imperial Avenue from Quinn Road to SR 65, with minimum, half width Collector Highway, in accordance with the Kern County Development Standards and Land Division Ordinance. These improvements shall include, but not be limited to, full build out of the intersection of Imperial Avenue at SR 65, asphalt concrete, and the necessary tie-ins. **MM 4.16-6**. Prior to the issuance of the second and/or subsequent grading or building permit for the Phase 1 project area, the project proponent shall prepare a supplemental trip generation and distribution, in accordance with the requirements of the Kern County Public Works Department. The analysis shall identify which of the required off-site traffic improvements and/or payments for proportionate fair share improvements (as identified below) shall be implemented prior to issuance of any final occupancy permit. Estimated payments shown in tables below represent current (2024) costs associated with the fair share percentages. Final costs are subject to change due to the Consumer Price Index (CPI) fluctuations. The Kern County Public Works Department shall be consulted to determine final costs. **MM 4.16-7.** Prior to the issuance of any grading or building permit, whichever comes first, for the Phase 2 project area, the project proponent/operator shall pay the proportionate fair share of improvements (as identified below) not within the Transportation Traffic Impact Fee area. Estimated payments shown in tables below represent current (2024) costs associated with the fair share percentages. Final costs are subject to change due to the Consumer Price Index (CPI) fluctuations. The Kern County Public Works Department shall be consulted to determine final costs.	
Impact 4.16-2: The Project Would Conflict Or Be Inconsistent With CEQA Guidelines Section 15064.3 Subdivision (b).	Less than significant	Mitigation Measures are not required.	Less than significant with mitigation
Impact 4.16-3: The project would substantially increase hazards due to a design feature or incompatible use.	Potentially significant	Implement Mitigation Measure MM 4.16-1 through MM 4.16-7, and the following mitigation measures: **MM 4.16-8.** Prior to issuance of the first occupancy permit, the project proponent shall under street improvements plans approved by the Kern County Public Works Department/Development Review, construct Saco Road from the project frontage to 980+/- feet southeast, minimum, full width Commercial Street (Plate R-13), in accordance with the Kern County Development Standards and Land Division	Less than significant with mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		Ordinance. These improvements shall include, but not be limited to, curb, gutter, sidewalk, asphalt concrete, and the necessary tie-ins. **MM 4.16-9.** Prior to issuance of first occupancy permit, the project proponent shall perform a pavement analysis to identify whether portions of Saco Road and/or Imperial Avenue need an additional asphalt concrete overlay due to the increase in heavy trucks utilizing the roadways as determined by Kern County Public Works. **MM 4.16-10.** Prior to the issuance of any grading or building permit, whichever comes first, the project proponent shall record an irrevocable offer of dedication to the Kern County for the project frontage of Imperial Avenue 45 feet in width per the Kern County Land Division Ordinance and Developments Standards. **MM 4.16-11.** Prior to the issuance of any grading or building permit, whichever comes first, the project proponent shall acquire full 90-foot in width, off-site, right-of-way along Imperial Avenue alignment from the project frontage to SR 65. Maintenance of the required future alignments shall be the responsibility of the project proponent until such time as Kern County requests an irrevocable offer of dedication and roadway improvements are constructed. **MM 4.16-12.** Prior to the issuance of construction or building permits, the project proponent shall: a. Prepare and submit a Construction Traffic Control Plan to Kern County Public Works Department and the California Department of Transportation offices for District 6, as appropriate, for approval. The Construction Traffic Control Plan must be prepared in accordance with both the California Department of Transportation Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following issues: 1. Timing of deliveries of heavy equipment and building materials. To the extent feasible, restrict deliveries and vendor vehicle arrivals and departures during the AM and PM peak periods; 2. Directing construction traffic with a flag person; 3. Placing temporary signing, lighting, and traffic control devices if required, including for pedestrians and bicyclist, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic; 4. Ensuring access for emergency vehicles to the project sites; 5. Temporarily closing travel lanes or delaying traffic during materials delivery or any utility connections;	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		6. Maintaining access to adjacent property; 7. Specifying both construction-related vehicle travel and oversize load haul routes, minimizing construction traffic during the AM and PM peak hour, distributing construction traffic flow across alternative routes to access the project sites, and avoiding residential neighborhoods to the maximum extent feasible; and 8. Consult with the County to develop coordinated plans that would address construction-related vehicle routing and detours adjacent to the construction area for the duration of construction overland with neighboring projects. Key coordination meetings would be held jointly between applicants and contractors of other projects for which the County determines impacts could overlap. b. Obtain all necessary encroachment permits for the work within the road right-of-way or use of oversized/overweight vehicles that will utilize county-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Kern County Planning and Natural Resources Department, the Kern County Public Works Department- Development Review, and CalTrans. c. Enter into a secured agreement with Kern County to ensure that any County roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the state and/or Kern County. d. Submit documentation that identifies the roads to be used during construction. The project proponent shall be responsible for repairing any damage to non-county- maintained roads that may result from construction activities. The project proponent shall submit a preconstruction video log and inspection report regarding roadway conditions for roads used during construction to the Kern County Public Work Department-Development Review and the Kern County Planning and Natural Resources Department. e. Within 30 days of completion of construction, the project proponent shall submit a post-construction video log and inspection report to the County. This information shall be submitted in DVD format. The County, in consultation with the project proponent's engineer, shall determine the extent of remediation required, if any.	

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.16-4: The project would result in inadequate emergency access.	Potentially significant	Implement Mitigation Measure MM 4.16-1 through MM 4.16-7.	Less than significant with mitigation
Cumulative Impacts to Transportation and Traffic.	Potentially significant	In addition to Mitigation Measure MM 4.16-1 through MM 4.16-12.	Significant and unavoidable
Tribal and Cultural Resources			
Impact 4.17-1a: The Project Would Cause A Substantial Adverse Change In The Significance Of A Tribal Cultural Resource, Defined In PRC Section 21074 As Either A Site, Feature, Place, Cultural Landscape That Is Geographically Defined In Terms Of The Size And Scope Of The Landscape, Sacred Place, Or Object With Cultural Value To A California Native American Tribe That Is Listed Or Eligible For Listing In The California Register Of Historic Places, Or In A Local Register Of Historical Resources As Defined In Public Resources Section 5020.1(K).	Potentially significant	Implement Mitigation Measures MM 4.5-1 through MM 4.5-4.	Less than significant with mitigation
Impact 4.17-1b: The Project Would Cause A Substantial Adverse Change In The Significance Of A Tribal Cultural Resource, Defined In PRC Section 21074 As Either A Site, Feature, Place, Cultural Landscape That Is Geographically Defined In Terms Of The Size And Scope Of The Landscape, Sacred Place, Or Object With Cultural Value To A California Native American Tribe That Is A Resource Determined By The Lead Agency, In Its Discretion And Supported By Substantial Evidence, To Be Significant Pursuant To Criteria Set Forth In Subdivision (C) Of PRC Section 5024.1. In Applying The Criteria Set Forth In Subdivision (C) Of PRC Section 5024.1, The Lead Agency Shall Consider The Significance Of The Resource To A California Native American Tribe.	Potentially significant	Implement Mitigation Measures MM 4.5-1 through MM 4.5-4.	Less than significant with mitigation
Cumulative Impacts to Tribal and Cultural Resources.	Less than significant	Implement Mitigation Measures MM 4.5-1 through MM 4.5-4.	Less than significant

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Utilities and Service Systems			
Impact 4.18-1: The Project Would Require or Result In The Relocation Or Construction Of New Or Expanded Water, Wastewater Treatment Or Storm Water Drainage, Electric Power, Natural Gas, Or Telecommunications Facilities, The Construction Or Relocation Of Which Could Cause Significant Environmental Effects.	Less than significant	Implement Mitigation Measures MM 4.10-2 and MM 4.10-3, and the following mitigation measures: **MM 4.18-1:** Prior to issuance of grading and building permits, the project proponent shall coordinate with PG&E staff to determine the specific requirements regarding any potential electric service or facility issues needed to adequately accommodate the proposed project. The project proponent shall comply with and adhere to all requirements identified by PG&E to fully mitigate impacts to electric services and facilities, as needed as Project construction progresses. **MM 4.18-2:** Prior to issuance of grading and building permits the project proponent shall coordinate with SoCal Gas staff to determine the specific requirements regarding any potential natural gas service or facility issues needed to adequately accommodate the proposed project. The project proponent shall comply with and adhere to all requirements identified by SoCal Gas to fully mitigate impacts to natural gas services and facilities, as needed as project construction progresses. **MM 4.18-3:** All facilities of the water system shall be designed and constructed to comply with Kern County Development Standards and approved by the Kern County Public Works Department.	Less than significant
Impact 4.18-2: The Project Would Have Sufficient Water Supplies Available to Serve the Project from Existing Entitlements and Resources or Require New or Expanded Entitlements.	Less than significant	Implement Mitigation Measure MM 4.10-3, and the following mitigation measures: **MM 4.18-4:** Prior to issuance of building permits, the operator shall provide information on any groundwater or reclaimed water that will be used for operational activity. Water meters shall be installed on all facilities. Unmetered water wells cannot be used as a source of groundwater for project operations. Groundwater may only be used for operations from a water well equipped with a water meter. Once operations of the first facility constructed on-site have commenced, the Master Developer or subsequent future landowners shall be required to submit annual reports to the Kern County Planning and Natural Resources Department and the Kern County Environmental Health Services Department detailing the annual water usage on site. A copy shall be sent to all Groundwater Sustainability Agencies and the Kern County Water Agency. The information submitted shall include the following data: a. The source and estimated amount of any groundwater being used in the permit activity. b. Confirmation that any water well used in permit activity is metered. c. The source and estimated amount of any reclaimed water used in the permit activity.	Less than significant

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.18-3: The Project would result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Less than significant	**MM 4.18-5:** Prior to the start of any ground-disturbing activities, the project proponent shall provide a will-serve letter for sewer services for the project, as approved by Kern County Environmental Health.	Less than significant with mitigation
Impact 4.18-4: The Project would generate Solid Waste In Excess Of State Or Local Standards, Or In Excess Of The Capacity Of Local Infrastructure, Or Otherwise Impair The Attainment Of Solid Waste Reduction Goals.	Less than significant	**MM 4.18-6:** During construction and operation, wastes shall be recycled to the extent feasible. Prior to issuance of grading or building permits: a. An onsite Recycling Coordinator shall be designated by the project proponent/operator to facilitate recycling as part of the Trash Abatement Program required per MM 4.9-14. b. The Recycling Coordinator shall facilitate recycling of all construction waste through coordination with contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes. c. The onsite Recycling Coordinator shall also be responsible for ensuring wastes requiring special disposal are handled according to State and County regulations that are in effect at the time of disposal. d. Contact information of the coordinator shall be provided to the Kern County Public Works Department – Waste Management Division prior to issuance of building permits. e. The project proponent/operator shall provide a storage area for recyclable materials within the project area that is clearly identified for recycling. This area shall be maintained on the site during construction and operations. A site plan showing the recycling storage area shall be submitted to the Kern County Planning and Natural Resources Department prior to the issuance of any grading or building permit for the site.	Less than significant with mitigation
Impact 4.18-5: The Project Would Comply With Federal, State, and Local Statutes and Regulations Related to Solid Waste.	Potentially significant	Implement Mitigation Measures MM 4.18-6	Less than significant
Cumulative Impacts to Utilities and Service Systems.	Potentially significant	Implement Mitigation Measures MM 4.10-2 and MM 4.10-3, and MM 4.18-1 through MM 4.18-6.	Significant and unavoidable
Wildfire			
Impact 4.19-1: The Project Would Not Substantially Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan.	Less than significant	Implement Mitigation Measures MM 4.9-13 and MM 4.16-1 through MM 4.16-12.	Less than significant

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.19-2: The Project Would, Due to Slope, Prevailing Winds, And Other Factors, Exacerbate Wildfire Risks, And Thereby Expose Project Occupants To Pollutant Concentrations From A Wildfire Or The Uncontrolled Spread Of A Wildfire.	Less than significant	Implement Mitigation Measure MM 4.9-13	Less than significant
Impact 4.19-3: The Project Would Require the Installation Or Maintenance Of Associated Infrastructure (Such As Roads, Fuel Breaks, Emergency Water Sources, Power Lines, Or Other Utilities) That May Exacerbate Fire Risk Or That May Result In Temporary Or Ongoing Impacts To The Environment.	Less than significant	Implement Mitigation Measure MM 4.9-13	Less than significant
Impact 4.19-4: The project could expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes.	Less than significant	Implement Mitigation Measures MM 4.10-1 and MM 4.10-2	Less than significant
Cumulative Impacts to Wildfire.	Less than significant	Implement Mitigation Measures MM 4.9-13, MM 4.10-1 and MM 4.10-2	Less than significant

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Chapter 2
Introduction

Chapter 2
Introduction

2.1 Intent of the California Environmental Quality Act

The Kern County Planning and Natural Resources Department, as lead agency, has determined that, based upon preliminary analysis included in an Initial Study (included as Appendix A), an Environmental Impact Report (EIR) is the appropriate environmental analysis document pursuant to the California Environmental Quality Act (CEQA) for the proposed Malibu Vineyards Industrial Parkway project (project). The proposed project is located on a total of approximately 739 acres of existing vineyard composed of 21 parcels in unincorporated Kern County.

The proposed project site is located within unincorporated Kern County, north of Imperial Avenue and generally east of State Route 99 (SR 99), with site access from Saco Road and Imperial Avenue. The project site is just east of the city of Shafter, which is on the west side of SR 99, and approximately one mile north of the city of Bakersfield (see **Figure 3-1,** *Project Vicinity Map*, and **Figure 3-2,** *Project Location Map*). The Lerdo Canal trends northwest to southeast through Phase 2 of the project site.

The proposed project would be developed in two phases; Phase 1 includes seven existing parcels on approximately 534 acres, and is located between Burbank Street to the north, and Imperial Avenue to the south, with the western boundary being the Lerdo Canal and frontage road. Phase 1 is in Kern County Zone Map 81, as portions of Sections 29 and 30, Township 28 South, Range 27 East in the Mount Diablo Base & Meridian (MDBM).

Phase 2 includes 14 existing parcels on approximately 205 acres, east of SR 99 and west of the Lerdo Canal. The site is located generally south of Lerdo Highway, and north of Imperial Avenue. Phase 2 is in Zone Maps 80 and 81, as portions of Sections 24 and 25, Township 28 South, Range 26 East, MDBM, and Section 30, Township 28 South, Range 27 East, MDBM.

The proposed project includes applications for a Specific Plan, General Plan Amendments, Zone Changes, and Precise Development Plans to allow for the construction and operation of an industrial park with warehousing and distribution facilities pursuant to Chapters 19.38.020(E)(2) and 19.38.020(E)(3) of the Kern County Zoning Ordinance on proposed M-2 PD (Medium Industrial, Precise Development) zoned parcels. The project would require a Zone Change from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development). The proposed project is described in detail in Chapter 3, *Project Description*.

This EIR has been prepared pursuant to the following:

- CEQA (Public Resources Code, Section 21000 *et seq*.);
- the *CEQA Guidelines* (California Code of Regulations, Title 14, Chapter 3, Section 15000 *et seq*.); and,
- the *Kern County CEQA Implementation Document*.

The overall purpose of the CEQA process is to:

- Ensure that the environment and public health and safety are protected in the face of discretionary projects initiated by public agencies or private concerns;
- Provide for full disclosure of the project's environmental effects to the public, the agency decision-makers who will approve or deny the project, and responsible and trustee agencies charged with managing resources (e.g., wildlife, air quality) that may be affected by the project; and,
- Provide a forum for public participation in the decision-making process with respect to environmental effects.

2.2 Purpose of this Environmental Impact Report

An EIR is a public informational document used in the planning and decision-making process. This project-level EIR will analyze the environmental impacts of the proposed project. The Kern County Planning Commission and Board of Supervisors will consider the information in the EIR, including the public comments and staff responses to those comments, during the public hearing process. The final decision is made by the Board of Supervisors, who may approve, conditionally approve, or deny the proposed project. The purpose of an EIR is to identify:

- The significant potential impacts of the proposed project on the environment and indicate the manner in which those significant impacts can be avoided or mitigated;
- Any unavoidable adverse impacts that cannot be mitigated; and,
- Reasonable and feasible alternatives to the proposed project that would eliminate any significant adverse environmental impacts or reduce the impacts to a less-than-significant level.

An EIR also evaluates growth-inducing impacts; impacts found not to be significant; and significant cumulative impacts of the proposed project when taken into consideration with past, present, and reasonably anticipated future projects.

CEQA requires that an EIR reflect the independent judgment of the lead agency regarding the impacts, the level of significance of the impacts both before and after mitigation, and mitigation measures proposed to reduce the impacts. A Draft EIR is circulated to responsible agencies, trustee agencies with resources affected by the proposed project, interested agencies, and individuals. The purpose of public and agency review of an EIR includes sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting mitigation measures and alternatives capable of avoiding or reducing the significant effects of the proposed project, while still attaining most of the basic objectives of the proposed project.

Reviewers of a Draft EIR are requested to focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the proposed project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate significant environmental effects.

Areas of Controversy

Areas of controversy were identified through written agency and public comments received during the scoping period. Public comments received during the scoping period are provided in Appendix A. In summary, the following issues were identified during scoping and are addressed in the appropriate sections of Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures:*

- Impacts related to agriculture
- Impacts related to air quality
- Impacts related to biological resources
- Impacts related to greenhouse gas (GHG) emissions
- Impacts related to hazards (airport)
- Impacts related to public services (fire)
- Impacts related to traffic
- Impacts related to utilities

Issues to be Resolved

Section 15123(b)(3) of the *CEQA Guidelines* requires that an EIR contain issues to be resolved, which includes the choices among alternatives and whether or how to mitigate significant impacts. Resolving the major issues entails the lead agency addressing the following:

- Determine whether the EIR adequately describes the environmental impacts of the proposed project;
- Choose among alternatives;
- Determine whether the recommended mitigation measures should be adopted or modified; and,
- Determine whether additional mitigation measures need to be applied to the proposed project.

2.3 Terminology

To assist reviewers in understanding this Draft EIR, the following terms are defined by Article 20 of the CEQA Guidelines:

- *Project* means the whole of an action that has the potential for resulting in a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.
- *Environment* refers to the physical conditions that exist in the area that would be affected by a project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved is where significant direct or indirect impacts would occur

as a result of the project. The environment includes both natural and man-made (artificial) conditions.

- *Impacts* analyzed under CEQA must be related to a physical change. Impacts are defined as the following:
  - Direct or primary impacts that would be caused by the project and would occur at the same time and place; or,
  - Indirect or secondary impacts that would be caused by the project and would be later in time or farther removed in distance, but would still be reasonably foreseeable. Indirect or secondary impacts may include growth-inducing impacts and other effects related to induced changes in the pattern of land use; population density or growth rate; and related effects on air and water and other natural systems, including ecosystems.

- *Significant impact on the environment* means a substantial, or potentially substantial, adverse change in any of the physical conditions in the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. An economic or social change by itself is not considered a significant impact on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.
- *Mitigation* consists of measures that avoid or substantially reduce the project's significant environmental impacts by:
  - Avoiding the impact altogether by not taking a certain action or parts of an action;
  - Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
  - Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
  - Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or,
  - Compensating for the impact by replacing or providing substitute resources or environments.

- *Cumulative impacts* are two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. The following statements also apply when considering cumulative impacts:
  - The individual impacts may be changes resulting from a single project or a number of separate projects.
  - The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

This EIR uses a variety of terms to describe the level of significance of adverse impacts. These terms are defined as follows:

- *Less than significant*. An impact that is adverse but does not exceed the defined thresholds of significance. Less than significant impacts do not require mitigation.

- *Significant*. An impact that exceeds the defined thresholds of significance and would or could cause a substantial adverse change in the environment. Mitigation measures are recommended to eliminate the impact or reduce it to a less than significant level.
- *Significant and unavoidable*. An impact that exceeds the defined thresholds of significance and cannot be eliminated or reduced to a less than significant level through the implementation of mitigation measures.

2.4 Decision-Making Process

CEQA requires lead agencies to solicit and consider input from other interested agencies, citizen groups, and individual members of the public. CEQA also requires the proposed project to be monitored after it has been permitted to ensure that mitigation measures are carried out.

CEQA requires the lead agency to provide the public with a full disclosure of the expected environmental consequences of the proposed project and with an opportunity to provide comments. In accordance with CEQA, the following steps constitute the process for public participation in the decision-making process:

- **Notice of Preparation (NOP)/Initial Study (IS).** Kern County prepared and circulated an NOP/IS for 30 days to responsible, trustee, and local agencies for review and comment beginning on August 3, 2022. The NOP/IS and comments received during the circulation of the NOP are included in Appendix A of this EIR. In conjunction with this public notice, a scoping meeting was held by Kern County on August 24, 2022, to provide a forum for public comments on the scope of the EIR.
- **Draft EIR Preparation/Notice of Completion (NOC).** The Draft EIR will be circulated for review and comment to appropriate agencies, additional individuals, and interest groups who have requested to be notified of EIR projects. Per Section 15105 of the *CEQA Guidelines*, Kern County will provide for a 45-day public review period for the Draft EIR. Kern County will subsequently respond to each comment on the Draft EIR received in writing through a Response to Comments chapter in the Final EIR. The Response to Comments will be provided to each agency or person who provided written comments on the EIR a minimum of 10 calendar days before the scheduled Planning Commission hearing for the Final EIR and proposed project.
- **Preparation and Certification of Final EIR.** The Kern County Planning Commission will consider the Final EIR and the proposed project, acting in an advisory capacity to the Kern County Board of Supervisors. Upon receipt of the Planning Commission's recommendation, the Board of Supervisors will also consider the Final EIR, all public comments, and the proposed project and take final action on the proposed project. At least one public hearing will be held by both the Planning Commission and Board of Supervisors to consider the Final EIR, take public testimony, and then approve, conditionally approve, or deny the proposed project.

Notice of Preparation/Initial Study

Pursuant to Section 15082 of the *CEQA Guidelines*, as amended, the Kern County Planning and Natural Resources Department circulated an NOP/IS to the State Clearinghouse, public agencies, special districts,

and members of the public for a public review period beginning August 3, 2022, and ending on September 5, 2022. The NOP/IS was also posted in the Kern County Clerk's office for 30 days and sent to the State Clearinghouse at the Governor's Office of Planning and Research to solicit statewide agency participation in determining the scope of the EIR.

The purpose of the NOP/IS is to formally convey that the Kern County Planning and Natural Resources Department, as the lead agency, solicited input regarding the scope and proposed content of the EIR. The NOP/IS and all comment letters are included in Appendix A of this EIR.

Scoping Meeting

Pursuant to Section 15082 (c)(1) of the *CEQA Guidelines*, for projects of statewide, regional, or area-wide significance, the lead agency is required to conduct at least one scoping meeting. The scoping meeting is for jurisdictional agencies and interested persons or groups to provide comments regarding, but not limited to, the range of actions, alternatives, mitigation measures, and environmental effects to be analyzed. Kern County hosted a scoping meeting at 1:30 p.m. on August 24, 2022, at the Kern County Public Services Building, 2700 "M" Street, Suite 100, Bakersfield, California.

Notice of Preparation/Initial Study and Scoping Meeting Results

Three verbal comments were received at the August 24, 2022, scoping meeting. The NOP/IS and all comments received are included in Appendix A, along with the Summary of Proceedings from the Scoping Meeting.

Notice of Preparation Written Comments

The following specific environmental concerns listed in **Table 2-1**, *Summary of NOP/IS Comments*, were received by Kern County in response to the NOP/IS.

Table 2-1: Summary of NOP/IS Comments

Commenter/Date	Summary of Comment
Scoping Meeting Comments	
Mr. Rob Ball Kern County Council of Governments (August 24, 2022)	The commenter spoke to mention the "Kern Area Regional Goods-Movement Operations (KARGO)" project addressing traffic impacts to the project area and surroundings.
Mr. Steve Esselman City of Shafter (August 24, 2022)	The commenter stated that the City of Shafter was listed as potentially involved with discretionary permits, required CEQA actions, and stated that he did not believe the project would require any actions by the City of Shafter.
Mr. Ralph Velador LiUNA (August 24, 2022)	The commenter spoke of their interest and support of the project.

Commenter/Date	Summary of Comment
State Agencies	
California Department of Conservation (September 1, 2022)	The commenter states all mitigation measures that are potentially feasible should be included in the project's environmental review. A measure brought to the attention of the lead agency should not be left out unless it is infeasible based on its elements. The commenter recommends further discussion of the following issues: • Type, amount, and location of farmland conversion required by the project. • Impacts on any current and future agricultural operations in the vicinity. • Incremental impacts leading to cumulative impacts on agricultural land. • Proposed mitigation measures for all impacted agricultural lands within the proposed project area.
California Department of Transportation (Caltrans) (September 2, 2022)	The commenter provided the following comments to ensure the project remains consistent with the State's mobility goals that support a vibrant economy and sustainable communities: • The location of the proposed future interchange at Burbank Street on the project site does not match the City of Shafter's General Plan. • Caltrans anticipates that project generated vehicle trips will utilize the SR 99/7th Standard Road and SR 99/Lerdo Highway interchanges. • Caltrans requires that a Traffic Impact Study (TIS) Scope of Work be developed and provided to Caltrans for review prior to TIS analysis. • The most current site plan needs to be included in the TIS-Scope of Work and TIS. • Alternative transportation policies should be applied to the project. • Caltrans recommends the project implement "smart growth" principles regarding parking solutions to the project. • Caltrans recommends that the project proponent continues to work with the County to reduce vehicle miles traveled and offer various transportation modes for employees. • Caltrans recommends charging stations be provided. • Caltrans recommends on-site freight parking for trucks.
Kern County	
Kern County Kern County Airports (August 8, 2022)	The commenter states that portions of the project site appear to be in the B2 Zone, C Zone and under the flight pattern for the Meadows Field Airport, and there is a significant risk for development that occur in the B2 Zone. The commenter recommends that all building and lighting plans be presented to the Kern County Department of Airports for review and comment to avoid encroachment on airfield operations or compromising aviation safety. The commenter also recommends the dedication of an avigation easement in order to notify future tenants/owners that they are under the approach path for Meadows Field Airport.

Commenter/Date	Summary of Comment
Kern County Council of Governments (August 24, 2022)	The commenter requests the project set aside the indicated ROW for the major regional transportation facility as identified in the Kern County Circulation Plan and in the Kern COG Kern Area Regional Goods-Movement Operations (KARGO) Phase I project.
Kern County Public Works (August 29, 2022)	The commenter recommends the following conditions be placed on the project: • Prior to issuance of a building or grading permit: All survey monuments shall be tied out by a Licensed Land Surveyor. A corner record for each monument or record of survey shall be submitted to the County Surveyor for review and processing, per Section 8771 of the Professional Land Surveyors' (PLS) Act. • Prior to Final Inspection: All survey monuments that were destroyed during construction shall be re-set or have a suitable witness corner set. A post construction corner record for each monument re-set or a record of survey shall be submitted to the County Surveyor for processing, per Section 8771 of the Professional Land Surveyors' Act. • Upon completion of the Project: All survey monuments shall be accessible by a Licensed Land Surveyor or their representatives, with prior notice, per Section 8774 of the PLS Act and Civil Code 846.5 (a).
Kern County Fire Department (KCFD) Fire Prevention Unit (September 5, 2022)	The commenter states that the proposed project will impact fire service, and the fire stations nearest to the project site are currently impacted by high call volume, leaving a service area gap for the proposed project. The commenter also confirmed a more detailed review and project comments will be conducted when the building permit is pulled, and plans are submitted to KCFD.
Local Agencies	
Sothern California Gas Company (SoCalGas) (August 22, 2022)	The commenter states that the Transmission Department of SoCalGas does not operate any facilities within the proposed improvement area, and that the Distribution Department of SoCalGas may maintain and operate facilities within the project scope. The commenter recommends that the applicant reach out to the Distribution Department of SoCalGas to assure no conflict with the Distribution's pipeline system.
City of Shafter (August 24, 2022)	The commenter states that the project site is outside of both the City limits and Sphere of Influence (SOI) boundary of the City of Shafter, as such, there is no need for a SOI Amendment or Municipal Service Review (MSR) Update. In addition, the commenter also states that the City of Shafter has no intention of annexing the project site into its limits. Commenter states the GPA of the Kern County General Plan is the only applicable GPA to the project.
Cawelo Water District (September 12, 2022)	The commenter expresses concern with the design of the future Burbank Street arterial or future expressway. The proposed route of future Burbank Street or future expressway would cross over Cawelo's main 60' reinforced concrete pipe (RCP) pipeline that is 50 years old and not designed for traffic loads and would restrict Cawelo's facilities. Commenter also states water service for the project would be provided by Oildale Mutual Water Company (OMWC).

Commenter/Date	Summary of Comment
San Joaquin Valley Air Pollution Control District (SJVAPCD) (September 22, 2022)	Commenter provided the following comments regarding the project: • Project Related Emissions: SJVAPCD recommends that a more detailed preliminary review of the project be conducted for the project's construction and operational uses. • Health Risk Screening/Assessment: The project should evaluate the risk associated with the project for sensitive receptors. • Ambient Air Quality Analysis: SJVAPCD recommends consultation with District staff to determine appropriate models to use for analysis. • Voluntary Emission Reduction Agreement (VERA): The district recommends the environmental document includes an assessment of the feasibility of implementing a VERA. • Industrial/Warehouse Emission Reduction Strategies: SJVAPCD recommends the County consider the feasibility of incorporating emission reduction strategies that reduce potential harmful health impacts. • Truck Routing: SJVAPCD recommends the evaluation of heavy heavy-duty (HHD) truck routing patterns for the project, to limit exposure of residential communities. • SJVAPCD recommends the usage of the cleanest available HHD trucks, electric equipment and electric vehicle charges, and a more stringent 3-minute idling restriction to reduce project operational emissions. • SJVAPCD recommends the implementation of urban greening to improve air quality for nearby residential developments.
Interested Parties	
Sierra Club Kern-Kaweah Chapter (September 3, 2022)	The commenter recommended that the EIR for the project should address the following environmental health issues: • Greenhouse Gas Emissions: The EIR should examine and consider a number of possible feasible mitigation measures to reduce the impact of the project on the climate crisis. • Air Pollution: The EIR must evaluate mitigation measures to reduce the impacts of the project on air pollution, and cumulative impacts to air pollution. • Alternatives: The EIR should consider an "infill alternative" or a "transit-oriented alternative." • Farmland Conversion: The commenter recommends that the County require three acres of equally good, equally at-risk farmland be preserved elsewhere for every acre of agricultural land converted to urban use for the project. • Cumulative Impacts: The cumulative impacts of this project, as well as other area projects, and their environmental impacts must be thoroughly addressed. • Growth Inducement: The EIR should fully address the potential for growth inducement. • The EIR must demonstrate the true need for the proposed project. • Biological Resources: The project must mitigate impacts to biological resources. • Traffic, Water: When accessing trip based VMT, the analysis must include the full trip, even if it is beyond the jurisdictional boundary. The EIR must also assure the project has an adequate potable water supply.

Availability of the Draft EIR

This Draft EIR is being distributed directly to agencies, organizations, and interested groups and persons for comment during a 45-day formal review period in accordance with Section 15087 of the *CEQA Guidelines*. This Draft EIR and the full administrative record for the proposed project, including all studies, is available for review during normal business hours Monday through Friday at the Kern County Planning and Natural Resources Department, located at:

Kern County Planning and Natural Resources Department

2700 "M" Street, Suite 100
Bakersfield, CA 93301-2370
Phone: (661) 862-8600, Fax: (661) 862-8601

This Draft EIR is also available on the Kern County Planning and Natural Resources Department website: http://kernplanning.com/planning/environmental-documents.

Additionally, this EIR is available at the following libraries:

Kern County Library/Beale
Local History Room
701 Truxtun Avenue
Bakersfield, CA 93301

2.5 Format and Content

This Draft EIR addresses the potential environmental effects of the proposed project and was prepared following input from the public and responsible and affected agencies, and through the EIR scoping process, as discussed previously. The contents of this Draft EIR were based on the findings in the IS/NOP, and public and agency input. According to the findings of the IS/NOP, a determination was made that an EIR was required to address potentially significant environmental effects on the following:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

With respect to the following resource areas, which were discussed in the NOP/IS, it was determined that no impacts would occur that would require analysis in the EIR:

- Mineral Resources

Additionally, no comments were received during circulation of the NOP/IS indicating that additional impacts would need to be addressed. No further discussion of this topic is warranted. For a complete analysis of this impact, please refer to Appendix A of this EIR.

Required EIR Content and Organization

This EIR includes all of the sections required by CEQA. **Table 2-2,** *Required EIR Contents*, contains a list of sections required under CEQA, along with a reference to the chapter in which they can be found in this EIR document.

Table 2-2: Required EIR Contents

Requirement (CEQA Guidelines Section)	Location in the EIR
Table of Contents (Section 15122)	Table of Contents
Executive Summary (Section 15123)	Chapter 1
Project Description (Section 15124)	Chapter 3
Environmental Setting (Section 15125)	Chapter 4, Sections 4.1 – 4.19
Environmental Impacts (Section 15126)	Chapter 4, Sections 4.1 – 4.19
Mitigation Measures (Section 15126.4)	Chapter 4, Sections 4.1 – 4.19
Cumulative Impacts (Section 15130)	Chapter 4, Sections 4.1 – 4.19
Growth-inducing Impacts (Section 15126.2.e)	Chapter 5
Significant Irreversible Changes (Section 15127)	Chapter 5
Unavoidable Significant Environmental Impacts (Section 15126.2.c)	Chapter 5
Alternatives to the Project (Section 15126.6)	Chapter 6
Response to Comments (Section 15132)	Chapter 7
Organizations and Persons Consulted	Chapter 8
List of Preparers (Section 15129)	Chapter 9
References (Section 15148)	Chapter 10

The content and organization of this Draft EIR are designed to meet the requirements of CEQA and the *CEQA Guidelines*, as well as to present issues, analysis, mitigation, and other information in a logical and understandable way. This EIR is organized into the following sections:

- Chapter 1, *Executive Summary*, provides a summary of the project description and a summary of the environmental impacts and mitigation measures.
- Chapter 2, *Introduction*, provides CEQA compliance information, an overview of the decision-making process, organization of the EIR, and a responsible and trustee agency list.

- Chapter 3, *Project Description*, provides a description of the location, characteristics, and objectives of the proposed project, and the relationship of the proposed project to other plans and policies associated with the proposed project.
- Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, contains a detailed environmental analysis of the existing physical conditions, project impacts, mitigation measures, and cumulative impacts.
- Chapter 5, *Consequences of Project Implementation*, presents an analysis of the proposed project's cumulative and growth-inducing impacts and other CEQA requirements, including significant and unavoidable impacts and irreversible commitment of resources.
- Chapter 6, *Alternatives*, describes a reasonable range of alternatives to the proposed project that could reduce the significant environmental effects that cannot be avoided.
- Chapter 7, *Responses to Comments*, is reserved for responses to comments received on the Draft EIR.
- Chapter 8, *Organizations and Persons Consulted*, lists the organizations and persons contacted during preparation of this EIR.
- Chapter 9, *List of Preparers*, identifies persons involved in the preparation of the EIR.
- Chapter 10, *Bibliography*, identifies reference sources for the EIR.
- *Appendices* provide information and technical studies that support the environmental analysis contained within the EIR.

The analysis of each environmental category in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, is organized as follows:

- "Introduction" provides a brief overview on the purpose of the section being analyzed with regards to the proposed project.
- "Environmental Setting" describes the physical conditions that exist at this time and that may influence or affect the topic being analyzed.
- "Regulatory Setting" provides federal and State laws, the Kern County General Plan (KCGP), other proposed project-related General and Specific Plan goals, policies, and implementation measures that apply to the topic being analyzed.
- "Impacts and Mitigation Measures" discusses the impacts of the proposed project in each category, presents the determination of the level of significance, and provides a discussion of feasible mitigation measures to reduce any impacts.
- "Cumulative Setting, Impacts, and Mitigation Measures" provides a discussion of the cumulative geographic area for each resource section, and analysis of whether the proposed project would contribute to a significant cumulative impact, and if so, identifies cumulative mitigation measures.

2.6 Responsible and Trustee Agencies

Projects or actions undertaken by the lead agency, in this case the Kern County Planning and Natural Resources Department, may require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Other such agencies are referred to as "responsible agencies" and "trustee agencies." Pursuant to Sections 15381 and 15386 of the *CEQA Guidelines*, as amended, responsible agencies and trustee agencies are defined as follows:

- A "responsible agency" is a public agency that proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term "responsible agency" includes all public agencies, other than the lead agency, that have discretionary approval power over the project (Section 15381).
- A "trustee agency" is a State agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California (Section 15386).

The various public, private, and political agencies and jurisdictions with a particular interest in the proposed project may include, but are not limited to, the following:

Federal Agencies

- United States Fish and Wildlife Service (USFWS)
- United States Environmental Protection Agency (USEPA)
- United States Army Corps of Engineers

State Agencies

- Regional Water Quality Control Board (RWQCB)
- Governor's Office of Planning and Research (OPR)
- California Department of Fish and Wildlife (CDFW)
- California Department of Transportation (Caltrans), District 6
- California Air Resources Board (CARB)
- California Native American Heritage Commission (NAHC)

Local Agencies

- San Joaquin Valley Air Pollution Control District (SJVAPCD)
- Kern Council of Governments (KCOG)

Kern County

- Planning and Natural Resources Department
- Public Health Services Department, Environmental Health Division
- Public Works Department
- Fire Department
- Sheriff's Department
- Superintendent of Schools

Other additional permits or approvals may be required for the proposed project.

2.7 Incorporation by Reference

In accordance with Section 15150 of the *CEQA Guidelines*, the following documents are hereby incorporated by reference into this Draft EIR and are available for public review at the Kern County Planning and Natural Resources Department. A brief synopsis of the scope and content of these documents is provided below.

Kern County General Plan

The KCGP is a policy document with land use designations and related information designed to give long-range guidance to those Kern County officials making decisions affecting the growth and resources of the unincorporated Kern County jurisdiction, excluding the metropolitan Bakersfield planning area. This document, adopted on June 14, 2004, and last amended on September 22, 2009, helps ensure that day-to-day decisions conform to the long-range program designed to protect and further the public interest as related to Kern County's growth, development, and mitigation of environmental impacts. The KCGP also serves as a guide to the private sector of the economy in relating its development initiatives to the public plans, objectives, and policies of Kern County. The KCGP is available at the following link: https://kernplanning.com/planning/planning-documents/general-plans-elements/

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The Metropolitan Bakersfield General Plan (MBGP) is a policy document with land use designations and related information that are designed to give long-range guidance to those Kern County officials making decisions affecting the growth and resources of the unincorporated Kern County portions of Metropolitan Bakersfield planning area. The MBGP, adopted December 3, 2002, helps to ensure that day-to-day decisions conform to long range policies designed to protect and further the public interest related to the

County's growth and development. The MBGP is available at the following link: https://kernplanning.com/planning/planning-documents/general-plans-elements/

Kern County Zoning Ordinance

According to the Kern County Zoning Ordinance Chapter 19.02.020, Purposes, Title 19 was adopted to promote and protect the public health, safety, and welfare through the orderly regulation of land uses throughout the unincorporated area of Kern County. Further, the purposes of this title are to:

- Provide the economic and social advantages resulting from an orderly planned use of land resources;
- Encourage and guide development consistent with the Kern County General Plan;
- Divide Kern County into zoning districts of a number, size, and location deemed necessary to carry out the purposes of the Kern County General Plan and this title;
- Regulate the size and use of lots, yards, and other open spaces;
- Regulate the use, location, height, bulk, and size of buildings and structures;
- Regulate the intensity of land use;
- Regulate the density of population in residential areas;
- Establish requirements for off-street parking;
- Regulate signs and billboards; and,
- Provide for the enforcement of the regulations of Chapter 19.02.

The Kern County Zoning Ordinance is available at the following link: https://kernplanning.com/planning/planning-documents/zoning-ordinance/

2022 Regional Transportation Plan/Sustainable Communities Strategy

The 2022 Regional Transportation Plan/Sustainable Communities Strategy (2022 RTP/SCS) was prepared by the Kern Council of Governments (COG) and was adopted in 2022. The 2022 RTP/SCS is a 24-year plan that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. It has been developed through a continuing, comprehensive, and cooperative planning process; provides for effective coordination planning processes; and provides for effective coordination between federal, State, regional, and local agencies. The 2022 RTP/SCS is the Sustainable Communities Strategy (SCS) required by California's Sustainable Communities and Climate Protection Act, of Senate Bill (SB) 375. The California Air Resources Board (CARB) set targets for Kern's greenhouse gas (GHG) emission reductions from passenger vehicles and light-duty trucks at 9 percent per capita by 2020 and 15 percent per capita by 2035 as compared

to 2005 (KernCOG 2022). The 2022 RTP/SCS plan is available at the following link: https://www.kerncog.org/wpcontent/uploads/2022/12/2022_RTP.pdf.

Kern County Airport Land Use Compatibility Plan (2008)

The Kern County Airport Land Use Compatibility Plan (ALUCP) was originally adopted in 1996 and has since been amended to comply with Aeronautics Law, Public Utilities Code (Chapter 4, Article 3.5) regarding public airports and surrounding land use planning. As required by said law, proposals for public or private land use developments that occur within defined airport influence areas are subject to compatibility review. The principal airport land use compatibility concerns addressed by the plan are: (1) exposure to aircraft noise; (2) land use safety with respect to both people and property on the ground and the occupants of aircraft; (3) protection of airport air space; and (4) general concerns related to aircraft overflights. The ALUCP is available at the following link: https://psbweb.co.kern.ca.us/planning/pdfs/ALUCP2012.pdf.

2.8 Sources

This EIR is dependent upon information from many sources. Some sources are studies or reports that have been prepared specifically for the proposed project. Other sources provide background information related to one or more issue areas that are discussed in this document. The sources and references used in the preparation of this EIR are listed in Chapter 10, *Bibliography*, and are available for review during normal business hours at the:

Kern County Planning and Natural Resources Department
2700 "M" Street, Suite 100
Bakersfield, California 93301-2370

This EIR is also available on the Kern County Planning and Natural Resources Department website: http://pcd.kerndsa.com/planning/environmental-documents.

Chapter 3

Project Description

Chapter 3
Project Description

3.1 Overview

This Environmental Impact Report (EIR) has been prepared by Kern County, which is the CEQA Lead Agency, to identify and evaluate potential environmental impacts associated with implementation of the proposed Malibu Vineyards Industrial Parkway Project (project) by Malibu Vineyards, LP (project proponent). The project proposes to develop approximately 8,907,446 square feet of industrial use space, comprised of 24 buildings on 739 acres of existing vineyard currently owned by the project proponent. The project proponent has submitted a proposed Precise Development Plan to allow for the construction and operation of an industrial park with warehousing and distribution facilities pursuant to Chapters 19.38.020(E)(2) and 19.38.020(E)(3) of the Kern County Zoning Ordinance on proposed M-2 PD (Medium Industrial, Precise Development) zoned parcels. The project would be developed over two phases.

Implementation of the project as proposed would require adoption of the Malibu Vineyards Industrial Parkway Specific Plan (included as Appendix B). Additionally, the project requires an amendment to the Kern County General Plan (KCGP) Land Use, Open Space and Conservation Element designation from Intensive Agriculture (8.1) to Service Industrial (7.2), an amendment to the Metropolitan Bakersfield General Plan Land Use Element designation from Intensive Agriculture (R-IA) to Service Industrial (SI), and a Zone Change from Exclusive Agriculture (A) to Medium Industrial, Precise Development (M-2 PD). This chapter summarizes the proposed project and the corresponding Malibu Vineyards Industrial Parkway Specific Plan.

3.2 Proposed Project Location

The proposed project site encompasses approximately 739-acres composed of 21 parcels within unincorporated Kern County, north of Imperial Avenue and generally east of State Route 99 (SR 99), with site access from Saco Road and Imperial Avenue. The project site is just east of the City of Shafter, which is on the west side of SR 99, and approximately one mile north of the City of Bakersfield (**Figure 3-1**, *Vicinity Map*, and **Figure 3-2**, *Project Location Map*). The Lerdo Canal trends northwest to southeast though Phase 2 of the project site.

The proposed project would be developed in two Phases; Phase 1 includes seven existing parcels on approximately 534 acres, and is located between Burbank Street to the north, and Imperial Avenue to the south, with the western boundary being the Lerdo Canal and frontage road. Phase 1 is located in Kern County Zone Map 81, as portions of Sections 29 and 30, Township 28 South, Range 27 East in the Mount Diablo Base & Meridian (MDBM).

Phase 2 includes 14 existing parcels on approximately 205 acres, east of SR 99, and west of the Lerdo Canal. The site is located generally south of Lerdo Highway, and north of Imperial Avenue. Phase 2 is in

Zone Maps 80 and 81, as portions of Sections 24 and 25, Township 28 South, Range 26 East, MDBM, and Section 30 Township 28 South, Range 27 East, MDBM.

The current parcels located within the project site are summarized in **Table 3-1: Project Assessor Parcel Numbers (APNs)** and identified in **Figure 3-3,** *Accessor's Parcel Map*. The proposed project would be developed with a warehouse/distribution center. The proposed development includes 24 industrial (warehouse) buildings, associated office space, truck/freight loading docks, parking, and access roads, resulting in the disturbance and permanent conversion of all 739 acres.

Table 3-1: Project Assessor Parcel Numbers (APNs)

Map 81 (Phase 1)			
482-010-01	482-010-03	482-040-01	482-040-03
482-010-02	482-010-11	482-040-02	
Map 80 (Phase 2)			
091-150-03	091-160-03	091-160-16	091-200-07
091-160-01	091-160-09	091-200-04	091-200-14
091-160-02	091-160-13	091-200-05	
Map 81 (Phase 2)			
091-200-13	482-040-04	482-040-05	

3.3 Applicant Submitted Project Objectives

CEQA Guidelines Section 15124(b) requires a project description include a clearly written statement of objectives. The statement of objectives should include the underlying purpose of the project and may discuss the project benefits. The following are the applicant submitted project objectives for the proposed project:

- Reduce the current unemployment rate in Kern County of by increasing the amount of square footage for new businesses by over 8 million square feet and increase job opportunities. Distribution and fulfillment centers maintain a high rate of employment. The project would provide from 5,000 to 6,000 full time equivalents upon full buildout of both Phases 1 and 2, thereby stimulating local employment in the warehouse distribution industry.
- Support local budgets by replacing lost tax revenue from closed traditional brick and mortar retail locations with new tax revenues generated by industrial buildings.
- Meet the continued and expanding demand of the global e-commerce fulfillment services market that depend on warehousing and shipping capabilities to get products transported in the shortest amount of time.
- Generate tax revenue and boost the allocation of resources to improve infrastructure, utilities and public services throughout the county.

Figure 3-1: Vicinity Map

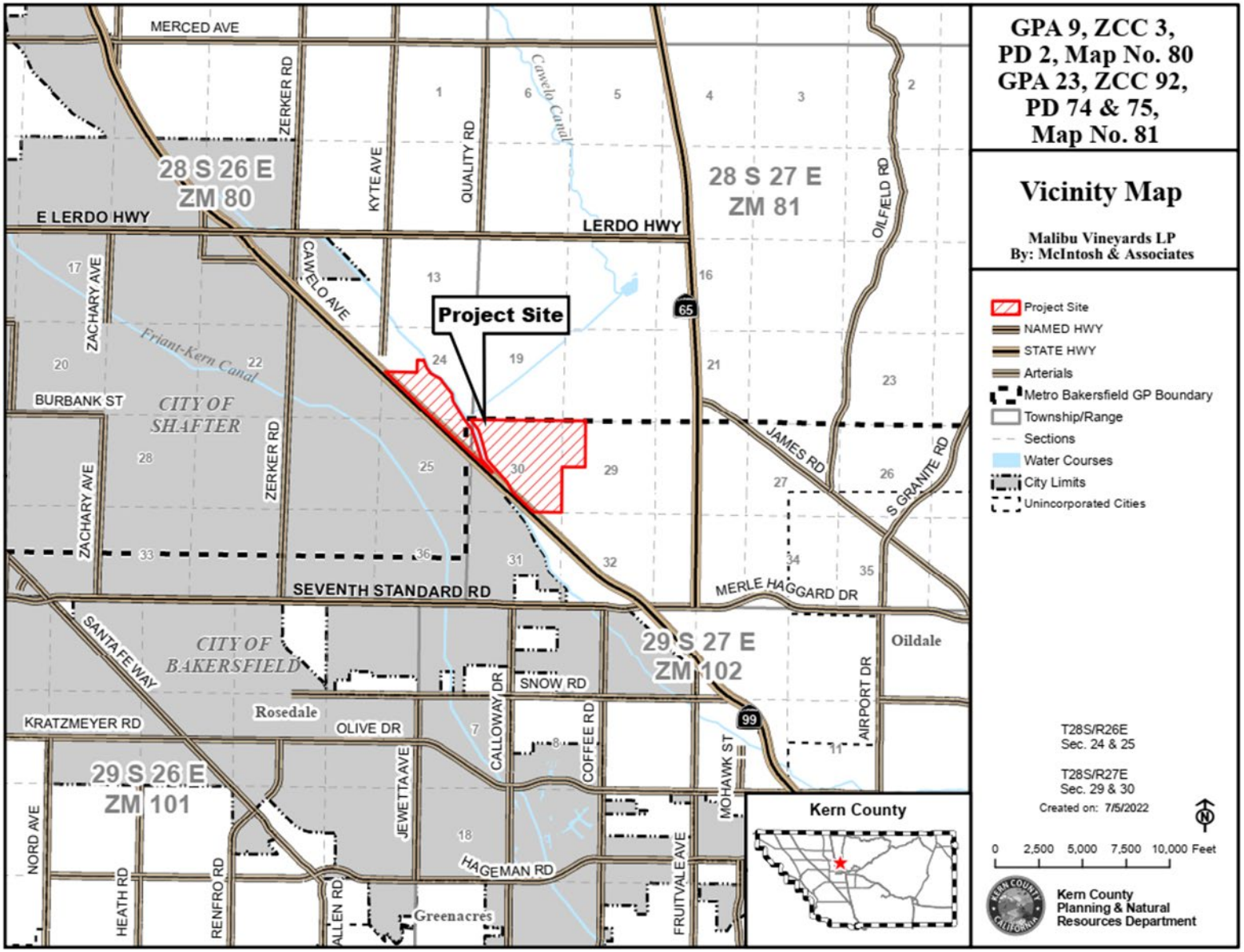


Figure 3-2: Project Location Map

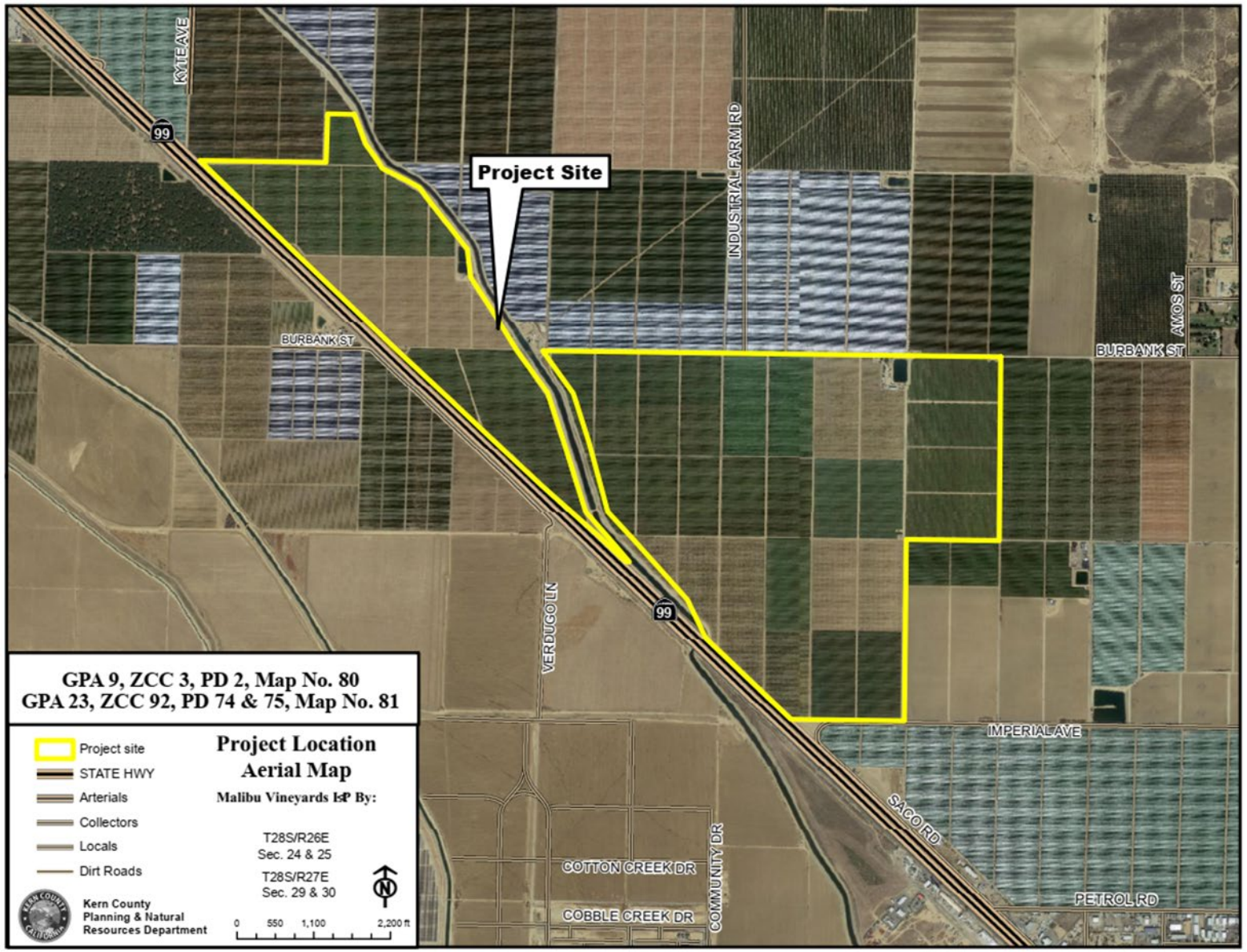
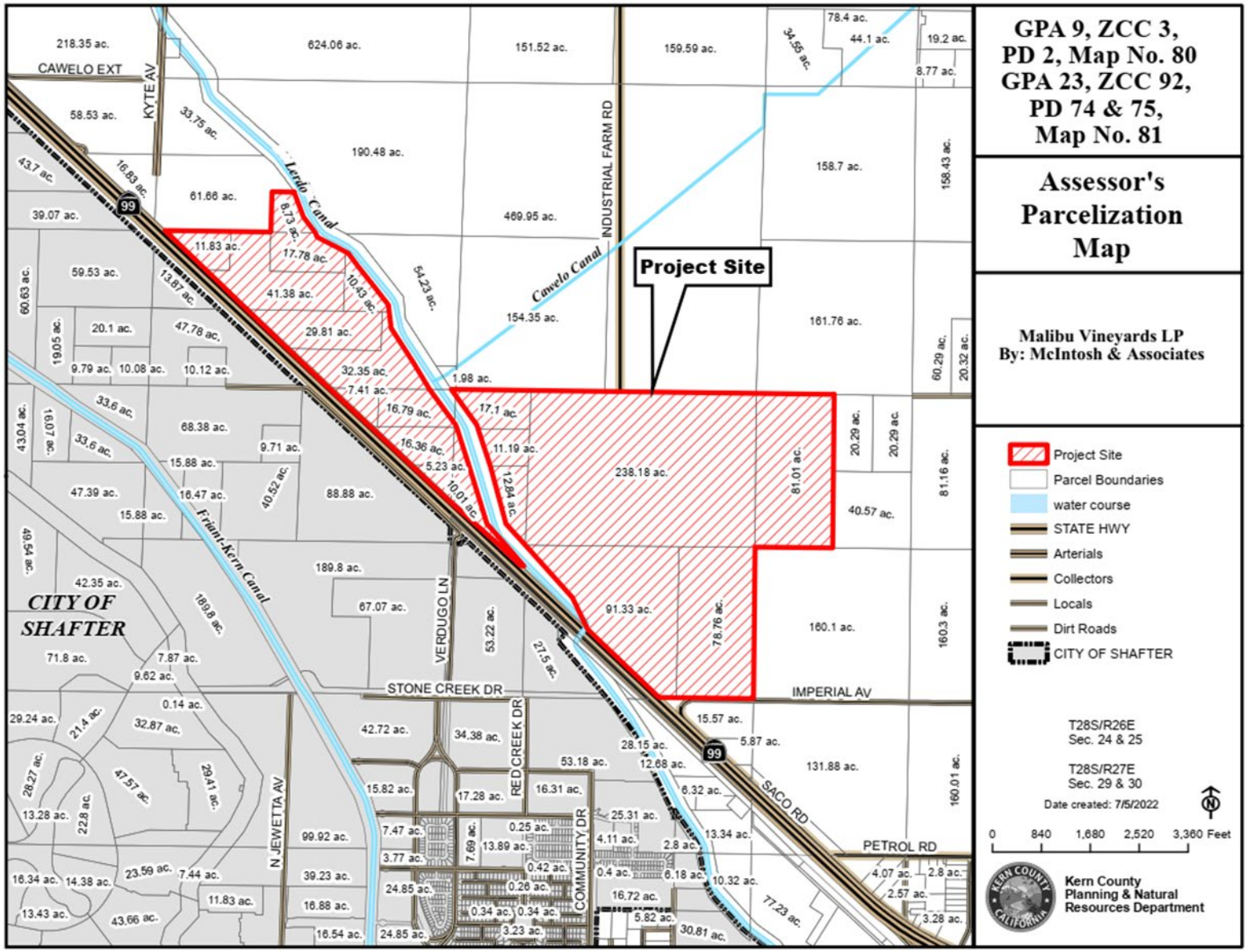


Figure 3-3: Accessor's Parcel Map



3.4 Environmental Setting

Regional Setting

The project site is located on agricultural land within unincorporated Kern County. The parcels are currently owned by Malibu Vineyards, LP, with a portion of the property being utilized for growing table grapes. The Lerdo Canal flows southeast to northwest along the eastern boundary of the Phase 2 portion of the project, and the western boundary of the Phase 1 portion of the project, effectively dividing the two phases of the project. SR 99 is located along the west side of the project site. Surrounding roads are mostly dirt roads used for access to agricultural use areas. The project site can be accessed from Saco Road, Burbank Street and Imperial Avenue.

Kern County is relatively dry, receiving approximately four to six inches of rain annually, with 52 percent of annual rain fall occurring in spring. The project vicinity experiences high temperatures (85 degrees and up) for at least two months out of the year (July and August), with an average temperature of 86 degrees Fahrenheit during these months. The area experiences moderate average temperatures (65 to 85 degrees Fahrenheit) from April to June and September to October, and cooler average temperatures (below 65 degrees Fahrenheit) from November through March. The project site is located in a relatively flat-lying plain at approximately 440 to 550 feet above mean sea level (msl). Within the project limits, heavy road compaction, along the perimeter and throughout the site, is evident.

The project site is located in a historically seismic area. There are no mapped fault zones within the project site (McIntosh & Associates 2020). No known surface or subsurface faults have been mapped transecting any of the properties comprising the proposed project. The nearest fault zone is the Premier Fault Zone located approximately 1.3 miles east of the northeast corner of the project site, on James Road 150 feet east of SR 65. The largest fault in the area, the Kern Front Fault, is located approximately 3.7 miles east of the eastern project boundary. The nearest active major fault is the Helendale-South Lockhart fault, located approximately 9.2 miles northeast of the project site (United States Geological Survey [USGS] 2015). The project site is not included in the Index Maps to Official Earthquake Fault Zones, established by the California Department of Conservation (DOC), Division of Mines and Geology. No known faults cross the proposed project site (refer to **Figure 3-4**, *Fault Map*).

Local Setting and Surrounding Land Uses

The approximately 739-acre project site consists of vineyards and vacant, undeveloped land. The project site is located north of Imperial Avenue and generally east of SR 99, with site access from Saco Road and Imperial Avenue. The Lerdo Canal flows southeast to northwest along the eastern boundary of Phase 2 portion and the western boundary of Phase 1 of the project (refer to **Figure 3-2,** *Project Location Map*). Phase 1 includes seven existing parcels on approximately 534 acres, and is located between Burbank Street to the north, and Imperial Avenue to the south, with the western boundary being the Lerdo Canal and frontage road. Phase 1 is in Kern County Zone Map 81, as portions of Sections 29 and 30, Township 28 South, Range 27 East, MDBM. Phase 2 includes 14 existing parcels on approximately 205 acres, with the western boundary being SR 99, and the eastern boundary being the Lerdo Canal. The site is generally

located south of Lerdo Highway, and north of Imperial Avenue. Phase 2 is in Zone Maps 80 and 81, as portions of Sections 24 and 25, Township 28 South, Range 26 East, MDBM, and Section 30 of Township 28 South, Range 27 East, MDBM. **Figure 3-3**, *Accessor's Parcel Map*, illustrates the existing parcel layout within the project site.

The project site is currently zoned A (Exclusive Agriculture), with a land use designation of 8.1 (Intensive Agriculture) and R-IA (Intensive Agriculture) by the Kern County General and Metropolitan Bakersfield General Plans, respectively (refer to **Table 3-2**, *Existing Land Use and Zoning Summary*, **Figure 3-5** *Existing General Plan Classifications*, and **Figure 3-6**, *Existing Zoning Classifications*. Approximately 739 acres or 100 percent of the project site is designated by DOC as Prime Farmland if water for irrigation is available (DOC 2019) (refer to **Figure 3-7**, *State Farmland Map*). Portions of the project site are within the boundaries of, but excluded from, Agricultural Preserve Number 8 and Number 14 (County of Kern 2021) (refer to **Figure 3-7**, *State Farmland Map*). However, there are no active Williamson Act Land Use Contracts associated with the project site (refer to **Figure 3-8**, *Agricultural Preserve Map*, Figure 3-9, *Williamson Act Land Use Contract Map*).

Southern portions of the project site are within the Airport Land Use Compatibility Plan (ALUCP) for the Meadows Field Airport located approximately 1.5 miles southeast. These portions of the project are in ALUCP Zone B2, which may require a dedication of avigation easement, and Zone C, which limits high-rise office buildings to no more than four stories. See **Figure 3-10**, *Airport Land Use Compatibility Plan Map*.

The project site is relatively flat and lacks significant topographical features, ranging in elevation from approximately 440-550 feet above msl throughout the site. Based on historical topographic maps and aerial photographs, the project site has been cultivated for grape vineyards since at least 2003. The site includes outdoor storage of various farm related operational equipment, along with a fenced and secured concrete floor storage shed for additional agricultural related tools and products. Agricultural uses are adjacent north, east, south, and west of the project site.

No native vegetation or natural habitat exists within the project site and no riparian habitat or surface water resources are located on the site or in the project site.

The project site is located within the Tulare Lake Bed Watershed (Hydrologic Unit Code 18030012) within a Federal Emergency Management Agency (FEMA) Flood Zone "X," as designated by the Flood Insurance Rate Map (FIRM) (06029C1825F) as issued by FEMA (refer to **Figure 3-11**, *Flood Zone Map*). Zone "X" denotes an area outside the 500-year flood (in this case, areas of 0.2 percent annual chance of flood; areas of 1 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1 percent annual chance of flood). (FEMA 2021).

The project site can be accessed from Saco Road, Burbank Street and Imperial Avenue. Surrounding roads are mostly dirt roads used for access to agricultural use areas. All surrounding properties are used for agriculture or are vacant and undeveloped.

The project area is served by the Kern County Sheriff's Department for law enforcement and public safety services (Kern County Sheriff's Office, 1350 Norris Road), Kern County Fire Department for fire protection services (Fire Station #62, 1652 Sunnyside Court), and Kern County Medical Emergency Services for medical care and emergency services. The Kern County Sheriff's Office is located approximately 4.5 miles

southeast of the project site. The nearest fire station to the project site is located approximately 3.5 miles southeast of the project site. The nearest hospital is Dignity Health Memorial Hospital located approximately 8.6 miles southeast of the proposed project site. The closest schools to the project site are Norris Middle School two miles south and Norris Elementary School 2.6 miles southwest. The nearest sensitive receptor to the project site is a residence on the south side of SR 99, approximately 350 feet west of the project site boundary.

Figure 3-4: Fault Map

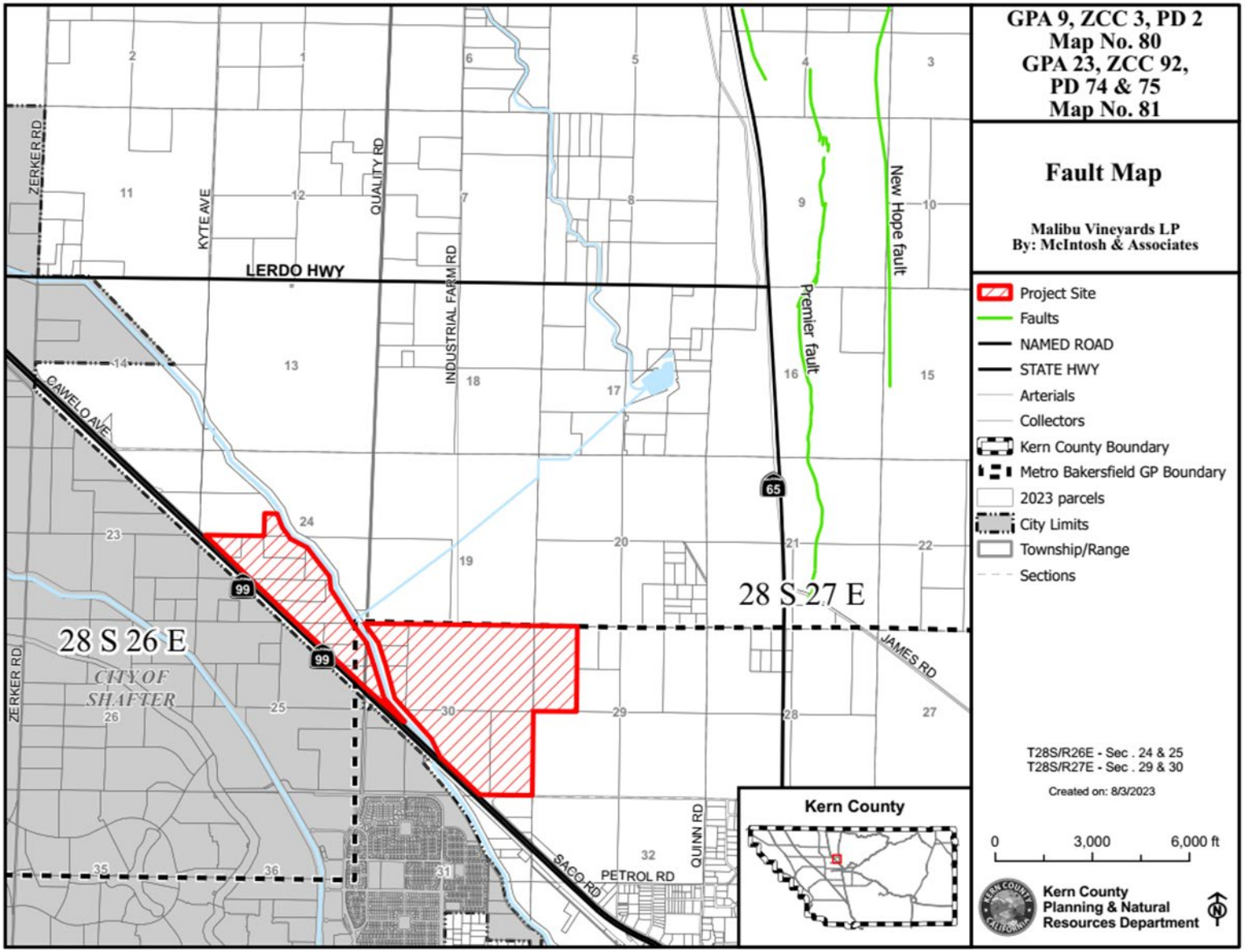


Figure 3-5: Existing General Plan Classifications

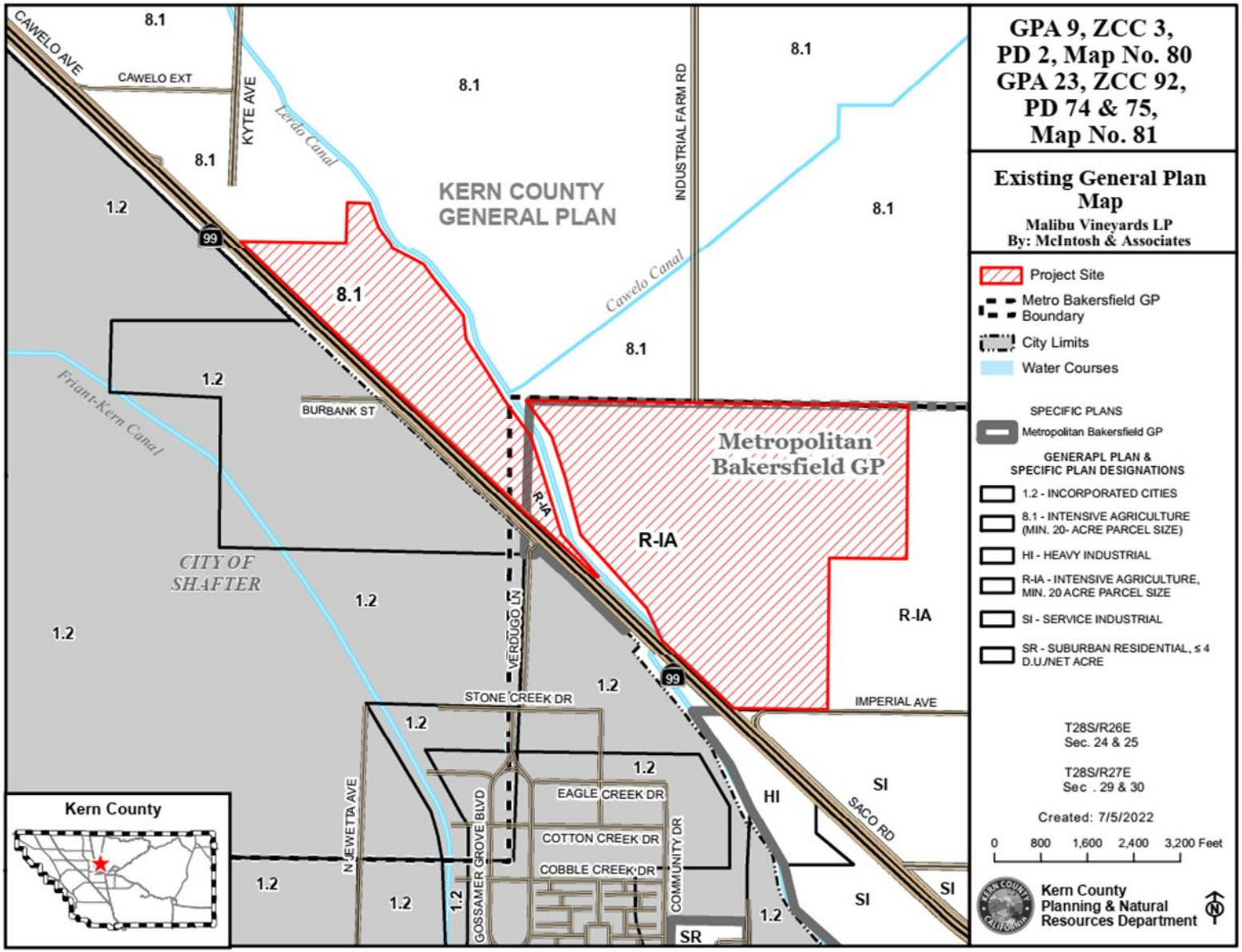


Figure 3-6: Existing Zoning Classifications

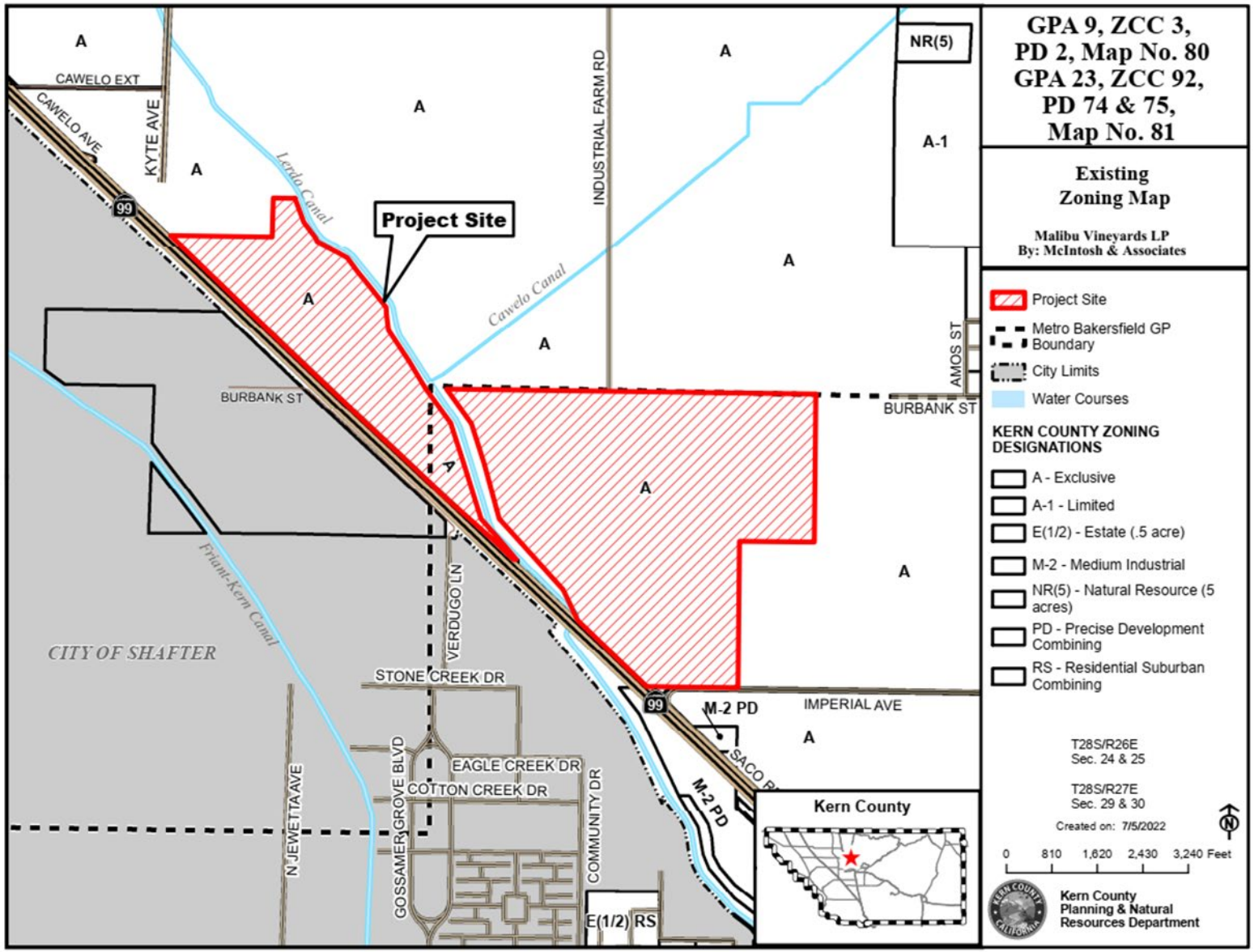


Figure 3-7: State Farmland Map

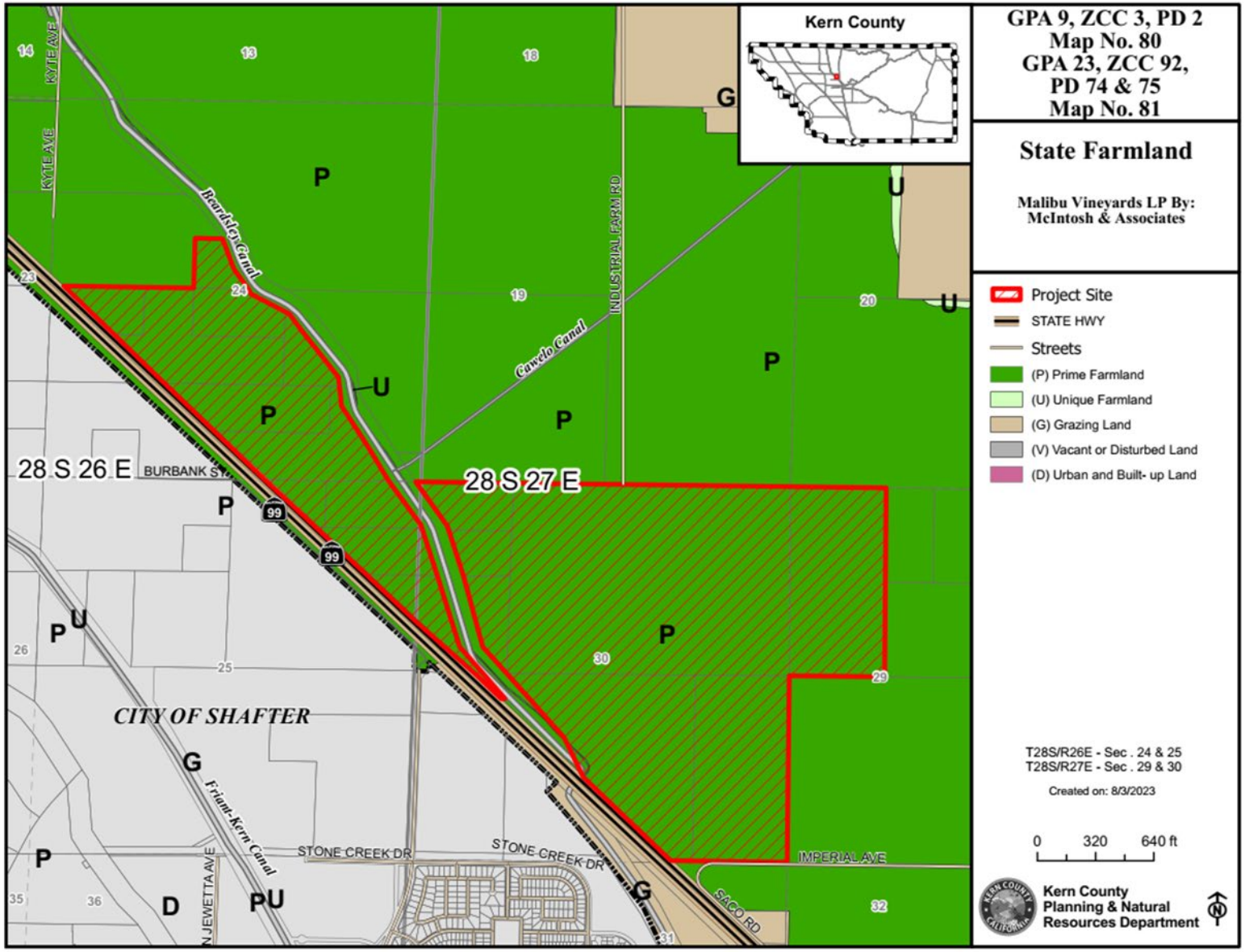


Figure 3-8: Agricultural Preserve Map

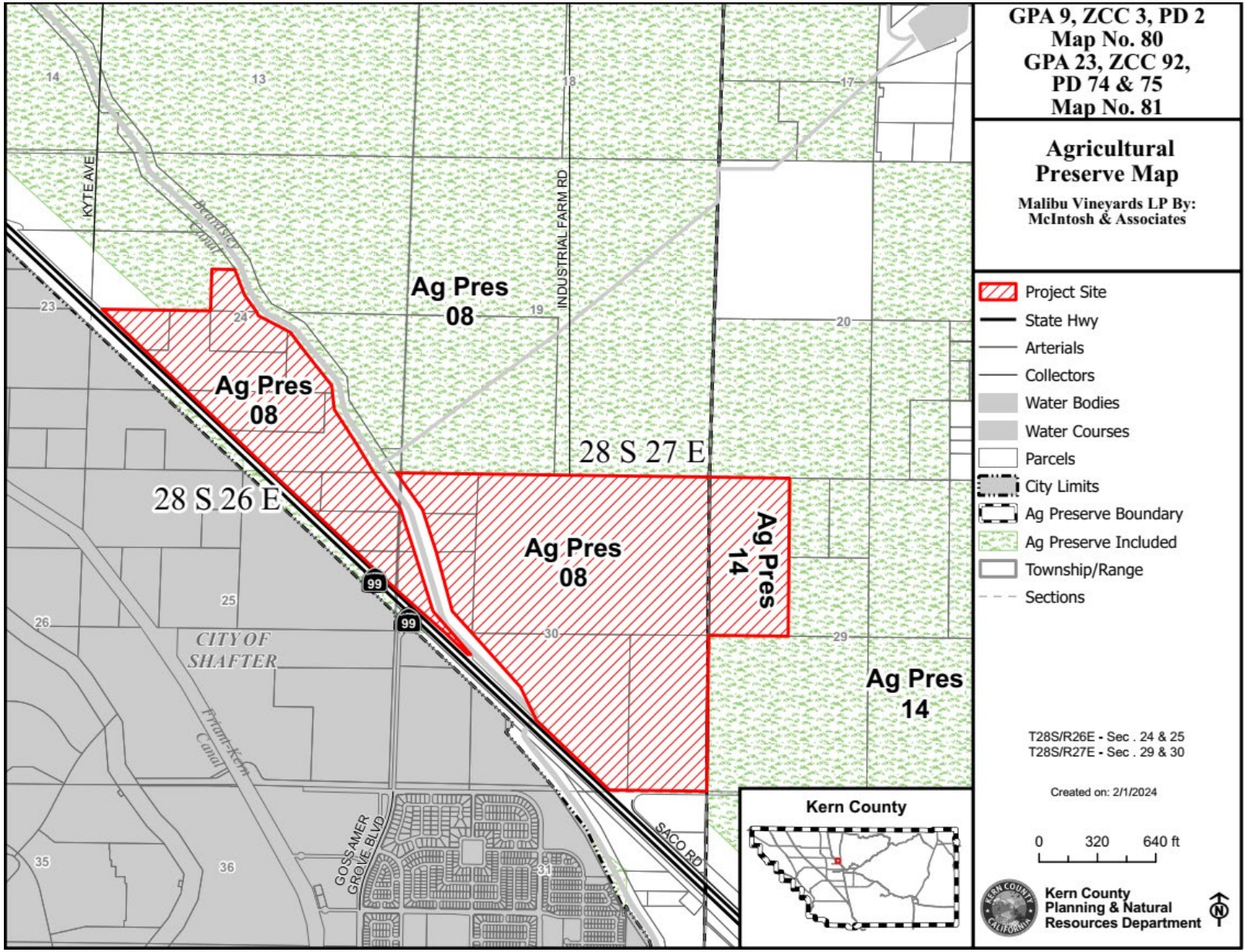


Figure 3-9: Williamson Act Land Use Contract Map

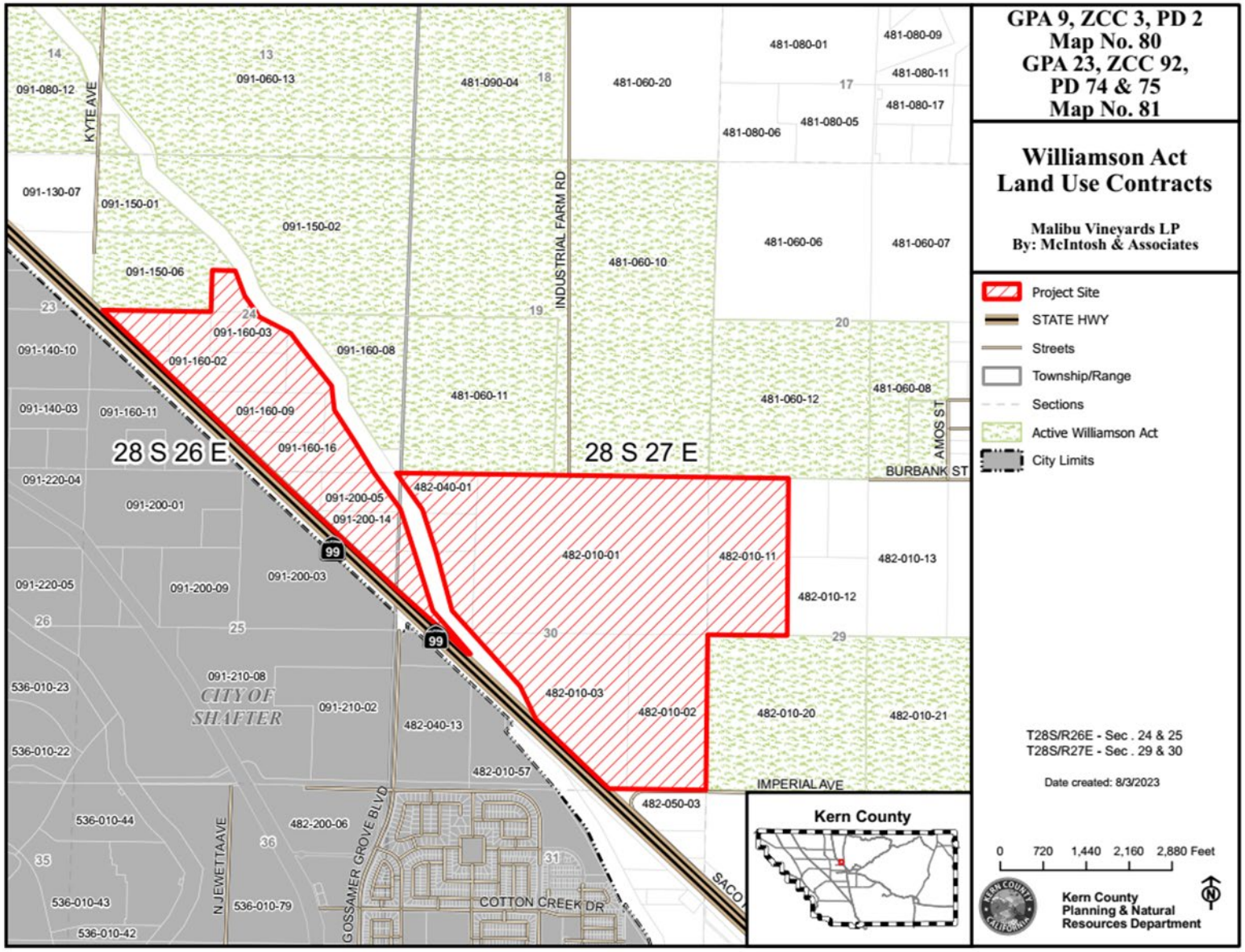


Figure 3-10: Airport Land Use Compatiblity Plan Map

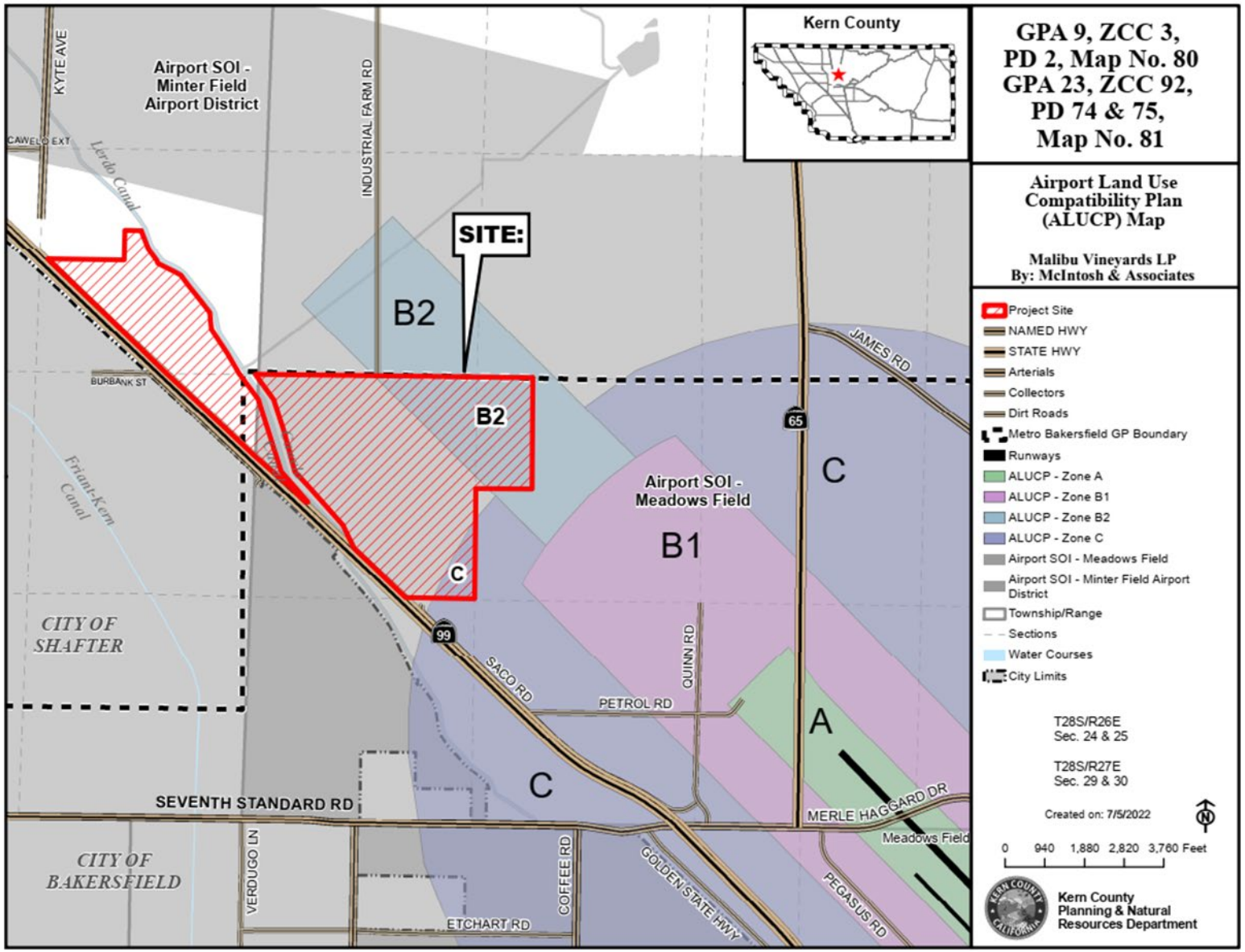
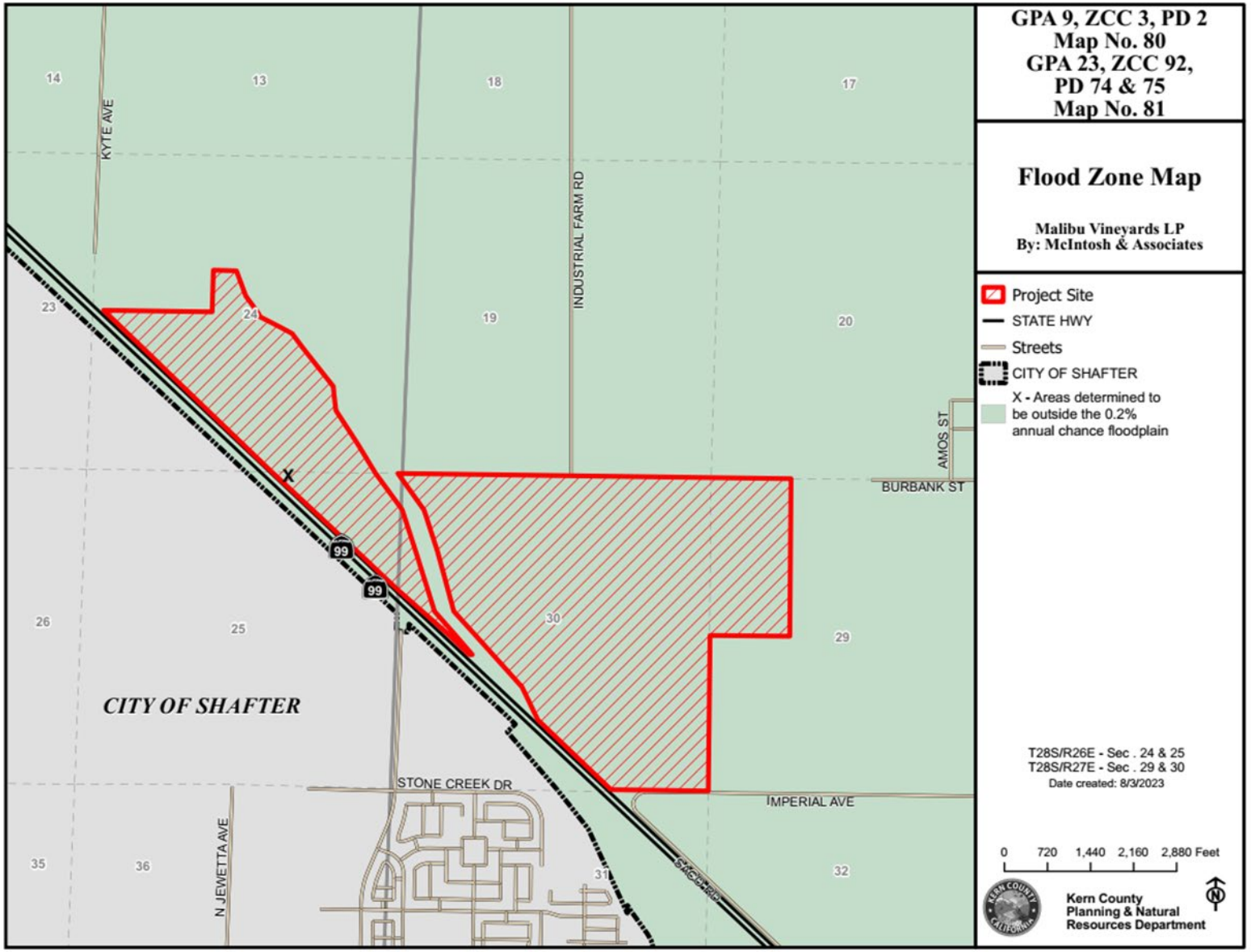


Figure 3-11: Flood Zone Map



3.5 Land Use and Zoning

Approximately 193 acres of the proposed Malibu Vineyards Industrial Parkway Project (approximately 26 percent of the project site) is within the Kern County General Plan (KCGP) and approximately 545 acres (approximately 74 percent of the project site) is within the Metropolitan Bakersfield General Plan (MBGP). The entire project is subject to the provisions of the Kern County Zoning Ordinance**. Table 3-2, *Existing Land Use and Zoning Summary*** identifies the existing land use, the existing general plan land use designation, and the existing zoning for the project site and surrounding areas. Although the proposed project is located within the City of Shafter Sphere of Influence, the City has indicated in a comment letter in response to the Notice of Preparation that the project is not within their jurisdictional authority (Appendix A).

Kern County General Plan

As shown in **Table 3-2**, *Existing Land Use and Zoning Summary* and **Figure 3-5**, *Existing General Plan Classifications*, a portion of the project is designated as Map Code 8.1 (Intensive Agriculture) within the Kern County General Plan. According to the Kern County General Plan, the Intensive Agriculture (minimum 20-acre parcel size) land use designation applies to areas devoted to the production of irrigated crops or having a potential for such use. Typical uses include irrigated cropland; orchards; vineyards; horse ranches; growing nursery stock ornamental flowers and Christmas trees; fish farms; beekeeping; ranch and farm facilities and related uses; one single-family dwelling unit; cattle feed yards; dairies; dry land farming; livestock grazing; water storage; groundwater recharge areas; mineral, aggregate, and petroleum exploration and extraction; hunting clubs; wildlife preserves; farm labor housing; public utility uses; and agricultural industries. The minimum allowable parcel size in the Intensive Agriculture category is 20 acres gross. The project proponent has submitted an application for a General Plan Amendment from 8.1 (Intensive Agriculture) to 7.2 (Service Industrial) to make the proposed use consistent with the Kern County General Plan.

Kern County Metropolitan Bakersfield General Plan (Unincorporated Planning Area)

As shown in **Table 3-2**, *Existing Land Use and Zoning Summary* and **Figure 3-5**, *Existing General Plan Classifications***,** a portion of the project is designated as Map Code R-IA (Intensive Agriculture) within the Kern County Metropolitan Bakersfield General Plan (unincorporated planning area). According to the Kern County Metropolitan Bakersfield General Plan, the Intensive Agriculture land use designation applies to areas devoted to the production of irrigated crops or having a potential for such use. The project proponent has submitted an application for a General Plan Amendment from R-IA (Intensive Agriculture) to SI (Service Industrial) to make the proposed use consistent with the Kern County Metropolitan Bakersfield General Plan.

Kern County Zoning Ordinance

The entire project area is also subject to the provisions of the Kern County Zoning Ordinance. The zoning districts are defined in Title 19 of the Zoning Ordinance of Kern County. As shown in **Table 3-2** and **Figure 3-6**, *Existing Zoning Classifications*, the Kern County Zoning Ordinance classifies the project site as being within the A (Exclusive Agriculture) zone district. The purpose of the A (Exclusive Agriculture) Zone District is to designate areas suitable for agricultural uses and to prevent the encroachment of incompatible uses onto agricultural lands and the premature conversion of such lands to nonagricultural uses. Uses in the A Zone District are limited primarily to agricultural uses and other activities compatible with agricultural uses.

Pursuant to Section 19.38.020(E)(2) and 19.38.020(E)(3) of the Kern County Zoning Ordinance, the construction and operation of an industrial park with warehousing and distribution facilities is permitted in areas zoned for M-2 PD (Medium Industrial, Precise Development Plan) with a Precise Development Plan. The project proponent has submitted an application for a zone change from A to M-2 PD to make the requested use consistent with the Kern County Zoning Ordinance.

Table 3-2: Existing Land Use and Zoning Summary

Location	Existing Land Use	Jurisdiction	Zoning	General Plan Land Use Designation
Project Site Phase 1	Agriculture	Kern County	Exclusive Agriculture (A)	Intensive Agriculture (R-IA)
Phase 2	Agriculture	Kern County	Exclusive Agriculture (A)	Intensive Agriculture (R-IA) Intensive Agriculture (8.1)
North	Agriculture	Kern County	Exclusive Agriculture (A)	Intensive Agriculture (8.1)
East	Agriculture, vacant, residential, industrial	Kern County	Exclusive Agriculture (A)	Intensive Agriculture (8.1) Intensive Agriculture (R-IA)
South	Agriculture, industrial	Kern County	Exclusive Agriculture (A) Medium Industrial, Precise Development Combining (M-2 PD)	Service Industrial (SI) Heavy Industrial (H1)
South	Agriculture, Industrial	City of Shafter	General Commercial (GC)	Incorporated Cities (1.2)
West	Agriculture, residential	City of Shafter	Exclusive Agriculture (A) Industrial (I) General Commercial (GC) Specific Plan Residential (SP)	Incorporated Cities (1.2)

3.6 Project Description

Implementation of the project as proposed would require the adoption of the Malibu Vineyards Industrial Parkway Specific Plan, (included as Appendix B), amendments to the Kern County General Plan and the Kern County Metropolitan Bakersfield General Plan (Unincorporated Planning Area) from the existing agricultural land use designations to industrial, as well as a change in the Kern County Zoning Classification from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development) to facilitate the future construction and operation of a warehouse/distribution center at the proposed project site (refer to

Figure 3-12, ***Proposed General Plan Classifications***, **Figure 3-13** ***Proposed Zoning Classifications***, and **Figure 3-14** ***Proposed Precise Development Plan No. 74, Map 81 (Phase 1)*** through **Figure 3-16**, ***Proposed Precise Development Plan No. 75, Map 80 (Phase 2)*.**

Note that "parcels" shown on **Figure 3-14**, ***Proposed Precise Development Plan No. 74, Map 81 (Phase 1)*** through **Figure 3-16**, ***Proposed Precise Development Plan No. 75, Map 80 (Phase 2),*** do not represent the current parcel boundaries, rather they reflect the proposed future parcel boundaries. When the project site receives entitlements for the proposed industrial warehouse/distribution center, further mapping would be required to reconfigure the site parcels. This subdivision may occur through processing new parcel maps to ensure the future building footprints are not constructed over parcel lines.

The proposed Malibu Vineyards Industrial Parkway Specific Plan includes the following components approximately 8,907,446 square feet of industrial space, comprised of 24 buildings, developed over two phases, over 25 years. Phase 1 would include the development of 14 buildings and Phase 2 would include the development of 10 buildings and the proposed project also includes required infrastructure improvements which include the development of adjacent roads, water, sewer, electric, and gas services.

The Malibu Vineyards Industrial Parkway Project, as proposed, includes the following discretionary actions:

a) Adoption of the Malibu Vineyards Industrial Parkway Specific Plan;

b) Amendment to Kern County General Plan Land Use, Open Space and Conservation Element from Map Code 8.1 (Intensive Agriculture) to Map Code 4.1 (Accepted County Plan Area) for approximately 193 acres; upon approval of the Malibu Vineyards Industrial Parkway Specific Plan, the Map Code 7.2 (Service Industrial) would be established (GPA No. 9, Map No. 80);

c) Amendment to the Kern County Metropolitan Bakersfield General Plan Land Use Element from Map Code R-IA (Intensive Agriculture) to Map Code SI (Service Industrial) for approximately 545 acres; upon approval of the Malibu Vineyards Industrial Parkway Specific Plan, the Map Code SI (Service Industrial) would be established (GPA No. 23, Map No. 81);

d) Change in zone classification from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development) on approximately 739 acres (Zone Change No. 13, Map No. 80; Zone Change No. 92, Map No. 81); and

e) Approval of Precise Development Plans:

    1) Precise Development Plan No. 2, Map 80

    2) Precise Development Plan No. 74, Map 81

    3) Precise Development Plan No. 75, Map 81

Figure 3-12: Proposed General Plan Classifications

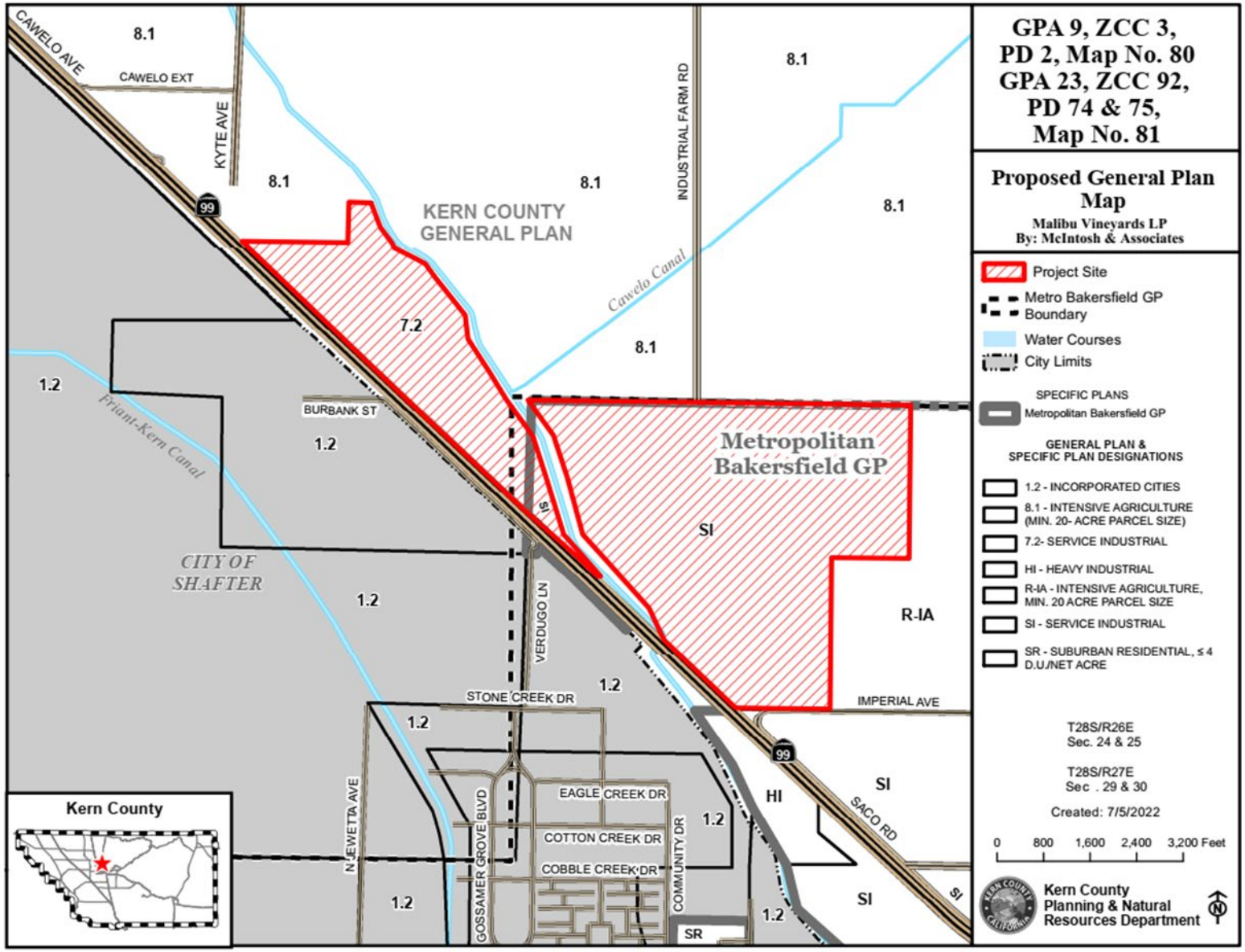
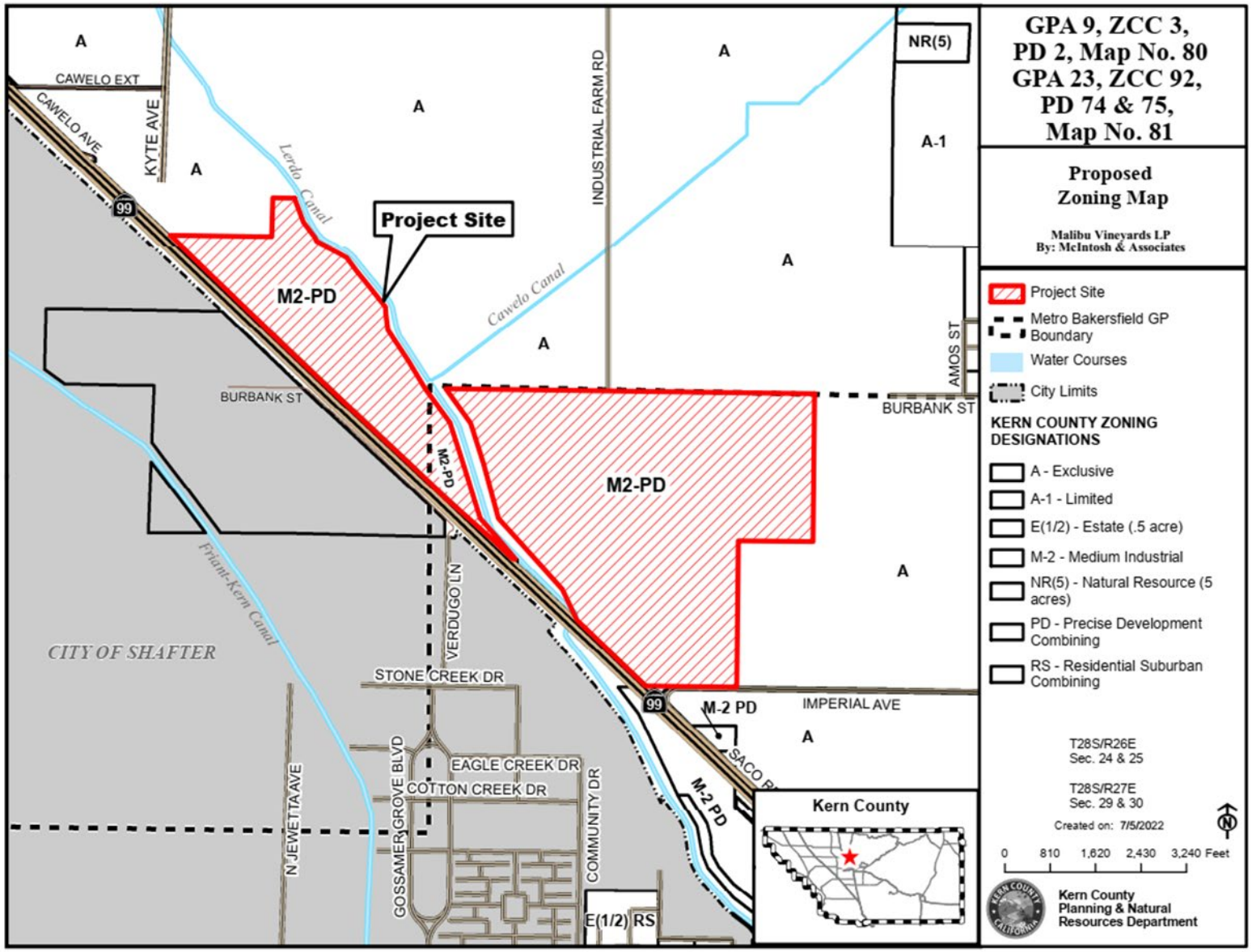


Figure 3-13: Proposed Zoning Classifications



3.7 Project Characteristics

The project proponent intends to obtain the approvals necessary to enable construction of a warehouse/distribution center on the project site. Based on the proposed Precise Development Plan (refer to **Figure 3-14**, ***Proposed Precise Development Plan No. 74, Map 81 (Phase 1)*** through **Figure 3-16**, ***Proposed Precise Development Plan No. 75, Map 80 (Phase 2)*****,** the proposed project as currently designed includes the construction of approximately 8,907,446 square-feet of industrial use space, comprised of 24 buildings on 739 acres of existing vineyard and vacant land that would support mixed-use office and warehouse operations, in addition to associated driveways, parking areas, truck courts, landscaping, and retention basins to control surface drainage. The project would consist of twenty-four buildable future parcels with proposed office and warehouse uses with drainage basins on each. Up to 25 percent, approximately 2,196,684 square-feet, would include refrigerated warehouse space. Each of the development components of the proposed warehouse buildings are summarized in **Table 3-3**, all proposed project components are shown on **Figure 3-14**,***Proposed Precise Development Plan No. 74, Map 81 (Phase 1)*** through **Figure 3-16**,***Proposed Precise Development Plan No. 75, Map 80 (Phase 2)*** and described in detail below.

Table 3-3: Project Components

Future Parcel	Area (sq ft)	Parking Stalls (standard)	Parking Stalls (trucks)
Phase 1			
1	646,800	556	174
2	646,800	556	174
3	771,600	486	424
4	738,000	346	406
5	571,200	276	300
6	248,640	212	162
7	147,000	160	300
8	771,600	416	424
9	771,600	416	424
10	174,720	260	52
11	174,720	270	52
12	231,826	166	100
13	576,000	260	152
14	771,600	416	424
Total	**7,242,106**	**4,796**	**3,568**
Phase 2			
1	150,000	354	90
2	262,500	352	158
3	220,000	273	244
4	100,000	154	54
5	74,725	21	0
6	123,750	192	100
7	231,826	166	92
8	231,826	324	92

Future Parcel	Area (sq ft)	Parking Stalls (standard)	Parking Stalls (trucks)
9	150,000	294	94
10	120,713	27	0
Total	**1,665,340**	**2,130**	**924**

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Figure 3-14A: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

OWNERS:

MALIBU VINEYARDS, LP
9777 WILSHIRE BLVD. STE. 900
BEVERLY HILLS, CA 90212
CONTACT: STEVEN GILFENBAIN
PHONE: (805) 305-0753

PREPARED BY:

McINTOSH & ASSOCIATES
2001 WHEELAN COURT
BAKERSFIELD, CA 93309
CONTACT: SAMUEL WALKER
PHONE: (661) 834-4814

PROJECT STATISTICS:

A.P.N.: 482-010-01, 02, 03, 11
482-040-01, 02, 03

PROJECT ACREAGE: 533.84 GR. AC./501.98 NET AC.

EXISTING ZONING: A (EXCLUSIVE AGRICULTURE)
PROPOSED ZONING: M-2 PD (MEDIUM INDUSTRIAL, PRECISE DEVELOPMENT)

EXISTING GENERAL PLAN DESIGNATION: R-IA (INTENSIVE AGRICULTURE)
PROPOSED GENERAL PLAN DESIGNATION: SI (SERVICE INDUSTRIAL)

EXISTING LAND USE: AGRICULTURE
PROPOSED LAND USE: INDUSTRIAL & COMMERCIAL

FLOOD ZONE: 0.2% ANNUAL CHANCE & ZONE "X"
SEE MAP SHEETS FOR INFORMATION

EARTHQUAKE FAULT ZONE: NONE

WATER: OILDALE MUTUAL WATER COMPANY
SEWER: NORTH OF RIVER SANITARY DISTRICT No. 1
ELECTRIC: P.G.&E.
GAS: SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE: A.T.&T.
CABLE: SPECTRUM

PUBLIC IMPROVEMENTS: TYPE "A"

STORM WATER DRAINAGE: ONSITE RETENTION FOR THE BENEFIT OF ALL PARCELS SHOWN HEREON. BASIN DEPTH TO BE 8' MINIMUM; CALCULATED PER DRAINAGE STUDY. MINIMUM 6' CHAIN LINK FENCE SURROUNDING BASIN WITH ACCESS FOR PRIVATE MAINTENANCE.

GENERAL NOTES:

ALL STREETS SHALL BE PUBLIC.
ALL RETURNS ARE ESTABLISHED WITH A 50' RADII.
ALL CUL-DE-SAC RETURN RADII ARE 25'.
ALL CUL-DE-SACS ARE 75' RADIUS.

SEE SHEET 2 FOR THE MAXIMUM BUILDING AREA SIZE ALLOWED FOR EACH PARCEL WITHIN THE BOUNDARY OF THIS PD PLAN.

NO BUILDING HEIGHT SHALL EXCEED WHAT IS ALLOWED IN THE M-2 PD/SI ZONE.

LANDSCAPE AREAS FOR EACH PARCEL SHALL BE DONE IN ACCORDANCE WITH THE KERN COUNTY ORDINANCE AND AGENCY STANDARDS.

SITE PLAN REVIEW SHALL BE SUBMITTED TO THE KERN COUNTY AIRPORTS DEPARTMENT FOR REVIEW AND COMMENT.

ALL EXISTING BUILDINGS/STRUCTURES WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE DEMOLISHED AND REMOVED.

PARCELS SHOWN HEREON ARE NOT LEGAL PARCELS AS DEFINED BY THE SUBDIVISION MAP ACT.

EXTERIOR BUILDING LIGHTS TO BE L.E.D. DOWN FACING LIGHTS IN ACCORDANCE WITH MUNICIPAL CODE. HEIGHT TO BE DETERMINED AND PROVIDED IN FUTURE LIGHTING PLAN WITH BUILDING PERMIT.

LEGAL DESCRIPTION:

BEING A PORTION OF THE WEST HALF OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 28 SOUTH, RANGE 27 EAST, MOUNT DIABLO MERIDIAN;

THAT PORTION OF THE EAST HALF AND THE EAST HALF OF THE WEST HALF OF SECTION 30, TOWNSHIP 28 SOUTH, RANGE 27 EAST, MOUNT DIABLO MERIDIAN, LYING NORTHEASTERLY OF THE NORTHEASTERLY LINES OF STATE HIGHWAY VI-Ker-99 AND THE LERDO CANAL;

THAT PORTION OF THE WEST HALF OF THE NORTHWEST QUARTER OF SECTION 30, TOWNSHIP 28 SOUTH, RANGE 27 EAST, MOUNT DIABLO MERIDIAN, LYING NORTHEASTERLY OF THE NORTHEASTERLY LINE OF THE LERDO CANAL;

THAT PORTION OF THE WEST HALF OF THE WEST HALF OF SECTION 30, TOWNSHIP 28 SOUTH, RANGE 27 EAST, MOUNT DIABLO MERIDIAN, LYING BETWEEN THE NORTHEASTERLY LINE OF STATE HIGHWAY VI-Ker-99 AND THE SOUTHWESTERLY LINE OF THE LERDO CANAL, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA.

CONTAINING 14 PARCELS
533.84 ACRES GROSS - 501.38 ACRES NET (NO ROADS)

MINOR MODIFICATION TABLE

MOD. NUMBER	DESCRIPTION	DATE

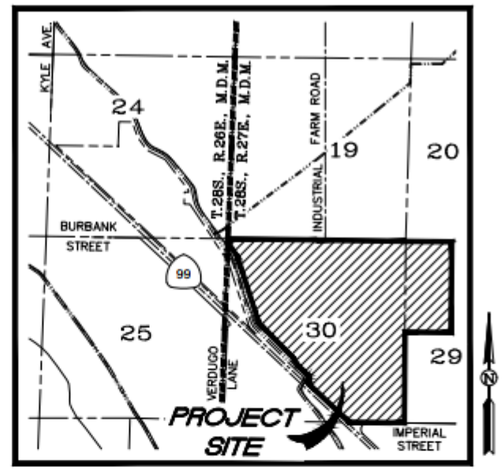
SHEET INDEX:

SHEET No. DESCRIPTION
1. OWNER'S, STATISTICAL INFORMATION, AND NOTES
2. EASEMENT LEGEND & TABLES-PARCEL & BUILDING SUMMARY
3. OVERALL PD PLAN BOUNDARY AND EASEMENTS
4. OVERALL PD PLAN BOUNDARY AND CONCEPTUAL SITE PLAN
5. TYPICAL ROADWAY SECTIONS & RIGHT OF WAY DIMENSIONS
6. CONCEPTUAL SITE PLAN (PARCEL 1 & 2)
7. CONCEPTUAL SITE PLAN (PARCEL 3 & 4)
8. CONCEPTUAL SITE PLAN (PARCEL 5, 10 & 11)
9. CONCEPTUAL SITE PLAN (PARCEL 6, 7 & 12)
10. CONCEPTUAL SITE PLAN (PARCEL 8 & 9)
11. CONCEPTUAL SITE PLAN (PARCEL 13 & 14)

FLOOD ZONE LEGEND:

ZONE X — FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

ZONE X (SHADED AREA) — FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.



VICINITY MAP
NO SCALE

OWNER: DATE:

PLANNING DIRECTOR: DATE:

RECEIPT:

05/20/22
SHEET 1 OF 11

MASTER PD PLAN NO. 74, MAP NO. 81
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SECTIONS 29 AND 30, T.28S., R.27E., M.D.M.

Figure 3-14B: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

MALIBU VINEYARDS - PHASE 1 PARCEL SUMMARY

PARCEL	APN	PROPOSED USE	PARCEL SIZE(Sq. Ft.) NET	PARCEL SIZE (ACRES) NET	BUILDING SIZE (Sq. Ft.)	BUILDING COVERAGE	LANDSCAPE (Sq. Ft.)	LANDSCAPE COVERAGE	PARKING STALLS (STANDARD)	PARKING STALLS (TRUCK)
1	482-010-01 & 482-040-01, 02, 03	M-2 PD / SI	1,956,014	44.90	646,800	33%	611,350	31%	556	174
2	482-010-01	M-2 PD / SI	1,695,429	38.92	646,800	38%	342,487	20%	556	174
3	482-010-01	M-2 PD / SI	2,108,574	48.41	771,600	37%	500,158	24%	486	424
4	482-010-01	M-2 PD / SI	1,979,060	45.43	738,000	37%	464,870	23%	346	406
5	482-010-11	M-2 PD / SI	1,707,533	39.20	571,200	33%	503,896	30%	276	300
6	482-010-01, 03 & 482-040-03	M-2 PD / SI	1,039,531	23.86	248,640	24%	450,917	43%	212	162
7	482-010-01	M-2 PD / SI	619,511	14.22	147,000	24%	229,932	37%	160	300
8	482-010-01, 02, 03	M-2 PD / SI	2,074,348	47.62	771,600	37%	508,028	24%	416	424
9	482-010-01,02	M-2 PD / SI	2,003,797	46.00	771,600	39%	437,477	22%	416	424
10	482-010-11	M-2 PD / SI	734,208	16.86	174,720	24%	288,774	39%	260	52
11	482-010-11	M-2 PD / SI	730,087	16.76	174,720	24%	231,523	32%	270	52
12	482-010-01, 03	M-2 PD / SI	995,599	22.86	231,826	23%	398,050	40%	166	100
13	482-010-02, 03	M-2 PD / SI	1,962,746	45.06	576,000	29%	859,247	44%	260	152
14	482-010-02	M-2 PD / SI	2,233,629	51.28	771,600	35%	612,948	27%	416	424
NET TOTALS (%=AVERAGE):			21,840,066	501.38	7,242,106	33%	6,439,657	29%	4,796	3,568

STREET AREA (Sq. Ft.)	1,414,175
TOTAL SITE AREA (AC)	533.84

BUILDING SUMMARY

BLDG TYPE	SIZE (Sq. Ft.)	PROPOSED USE	Sq.Ft.	PARKING REQUIRED	TOTAL REQUIRED
A	771,600	WAREHOUSE	763,884	262	293
		OFFICE	7,716	31	
B	738,000	WAREHOUSE	730,620	251	281
		OFFICE	7,380	30	
C	646,800	WAREHOUSE	640,332	221	247
		OFFICE	6,468	26	
D	576,000	WAREHOUSE	570,240	197	221
		OFFICE	5,760	24	
E	571,200	WAREHOUSE	565,488	196	219
		OFFICE	5,712	23	
F	248,640	WAREHOUSE	246,154	89	99
		OFFICE	2,486	10	
G	231,826	WAREHOUSE	229,508	84	94
		OFFICE	2,318	10	
H	174,720	WAREHOUSE	172,973	65	72
		OFFICE	1,747	7	
I	147,000	WAREHOUSE	145,530	56	62
		OFFICE	1,470	6	
TOTAL WAREHOUSE				1365	1526
TOTAL OFFICE				161	

EASEMENT LEGEND:

1. AN EASEMENT GRANTED TO THE COUNTY OF KERN AND THE PUBLIC IN GENERAL FOR ROADS AND INCIDENTAL PURPOSES RECORDED DECEMBER 9, 1912 AS MAP OF THE LERDO SUBDIVISION "A", IN THE OFFICE OF THE KERN COUNTY RECORDER.
2. AN EASEMENT GRANTED TO PACIFIC COAST OIL COMPANY FOR PIPELINES & INCIDENTAL PURPOSES RECORDED FEBRUARY 15, 1902, BK. 131, PG. 125 OF DEEDS.
3. AN EASEMENT GRANTED TO TIDEWATER ASSOCIATED OIL COMPANY FOR PIPELINES & INCIDENTAL PURPOSES RECORDED JANUARY 8, 1937 IN BK. 687, PG. 23, O.R.
4. AN EASEMENT GRANTED TO THE COUNTY OF KERN FOR PUBLIC HIGHWAYS & INCIDENTAL PURPOSES RECORDED MAY 19, 1938 IN BK. 796, PG. 265, O.R.
5. AN EASEMENT GRANTED TO LERDO LAND COMPANY FOR PUBLIC ROADS & INCIDENTAL PURPOSES RECORDED AUGUST 10, 1951 IN BK. 1835, PG. 339, O.R.
6. A WAIVER OF DIRECT ACCESS RECORDED AUGUST 10, 1951 IN BK. 1835, PG. 333, O.R.
7. A WAIVER OF DIRECT ACCESS RECORDED AUGUST 21, 1962 IN BK. 3521, PG. 136, O.R.
8. AN EASEMENT GRANTED TO NORTH KERN WATER STORAGE DISTRICT FOR ROADS & INCIDENTAL PURPOSES RECORDED AUGUST 21, 1962 IN BK. 3521, PG. 143, O.R.
9. AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR PUBLIC UTILITIES & INCIDENTAL PURPOSES RECORDED AUGUST 21, 1962 IN BK. 3521, PG. 145, O.R.
10. AN EASEMENT GRANTED TO PACIFIC TELEPHONE & TELEGRAPH COMPANY FOR PUBLIC UTILITIES & INCIDENTAL PURPOSES RECORDED JANUARY 5, 1966 IN BK. 3907, PG. 87, O.R.
11. A WAIVER OF DIRECT ACCESS RECORDED AUGUST 9, 1968 IN BK. 3864, PG. 946, O.R.
12. AN EASEMENT GRANTED TO CAWELO WATER DISTRICT FOR PIPELINES & INCIDENTAL PURPOSES RECORDED AUGUST 15, 1984 IN BK. 5685, PG. 2043, O.R.
13. AN EXCLUSIVE EASEMENT GRANTED TO MARKO ZANINOVICH, INC. FOR UNDERGROUND PIPELINES & INCIDENTAL PURPOSES RECORDED MAY 24, 1985 IN BK. 5763, PG. 942, O.R.
14. AN EASEMENT GRANTED TO CALIFORNIA RESOURCES PRODUCTION CORPORATION FOR PIPELINES & INCIDENTAL PURPOSES RECORDED DECEMBER 23, 2015 AS DOC. NO. 0215179588, O.R.

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 02°10'29" E	107.15'
L2	N 33°38'31" W	510.08'
L3	N 30°28'31" W	249.51'
L4	N 46°41'03" W	354.26'
L5	N 30°28'31" W	56.20'
L6	N 37°39'35" W	37.55'

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	DELTA	RADIAL	RADIAL
C1	167.00'	246.61'	151.99'	84°36'37"	N 52°04'26" W	N 43°18'57" E

05/20/22
SHEET 2 OF 11

MASTER PD PLAN NO. 74, MAP NO. 81
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SECTIONS 29 AND 30, T.28S., R.27E., M.D.M.

Figure 3-14C: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

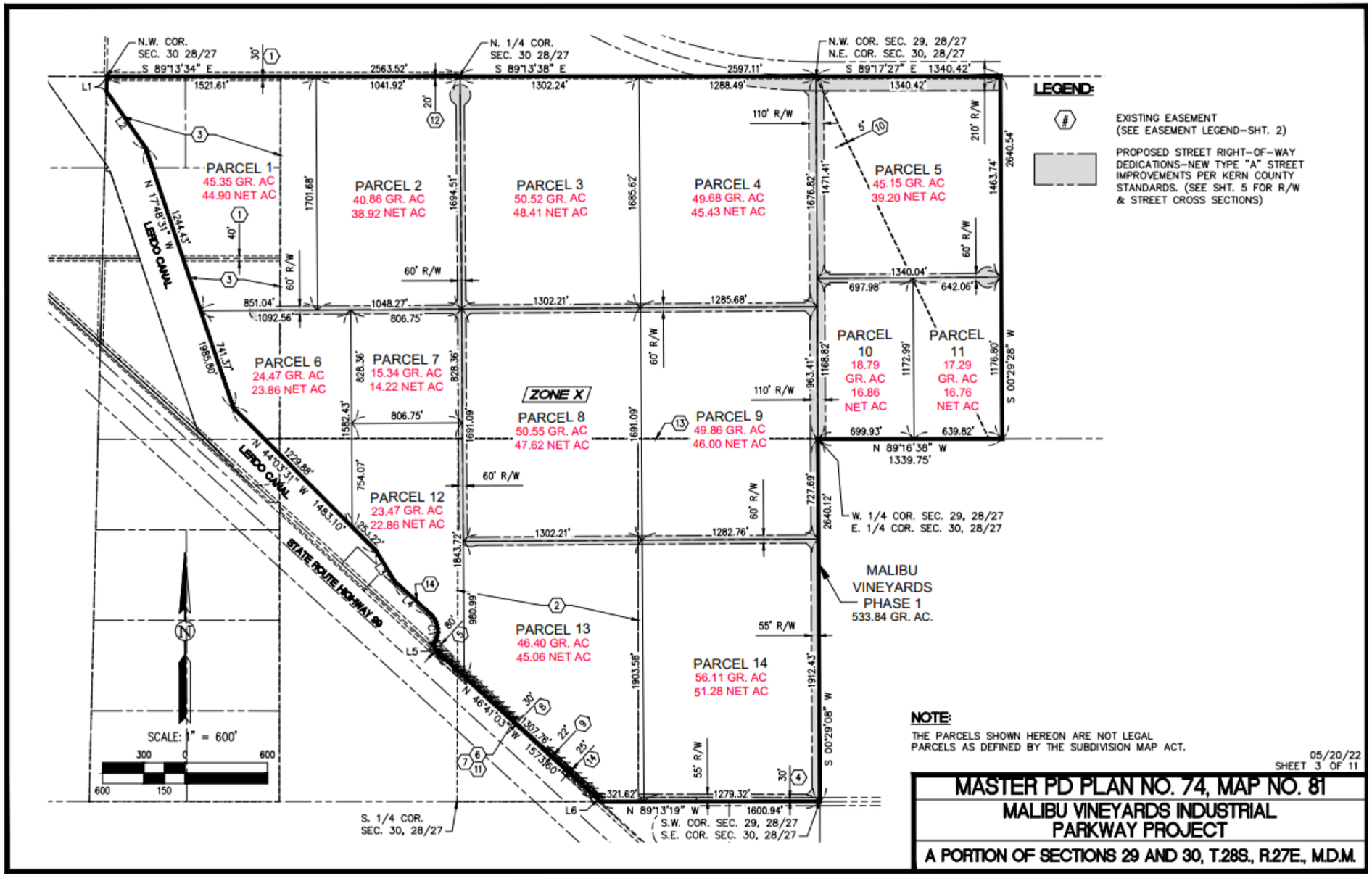


Figure 3-14D: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

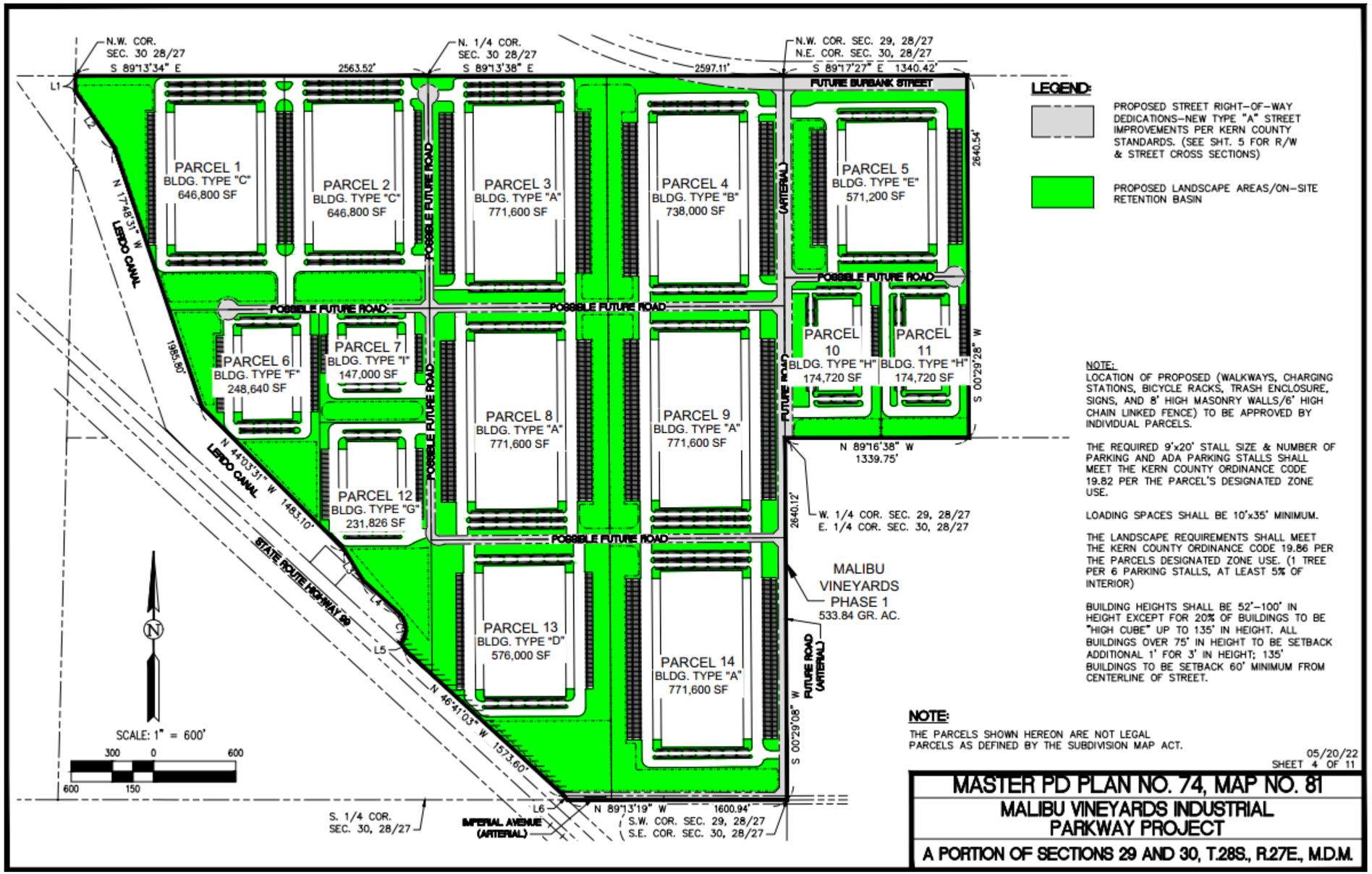


Figure 3-14E: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

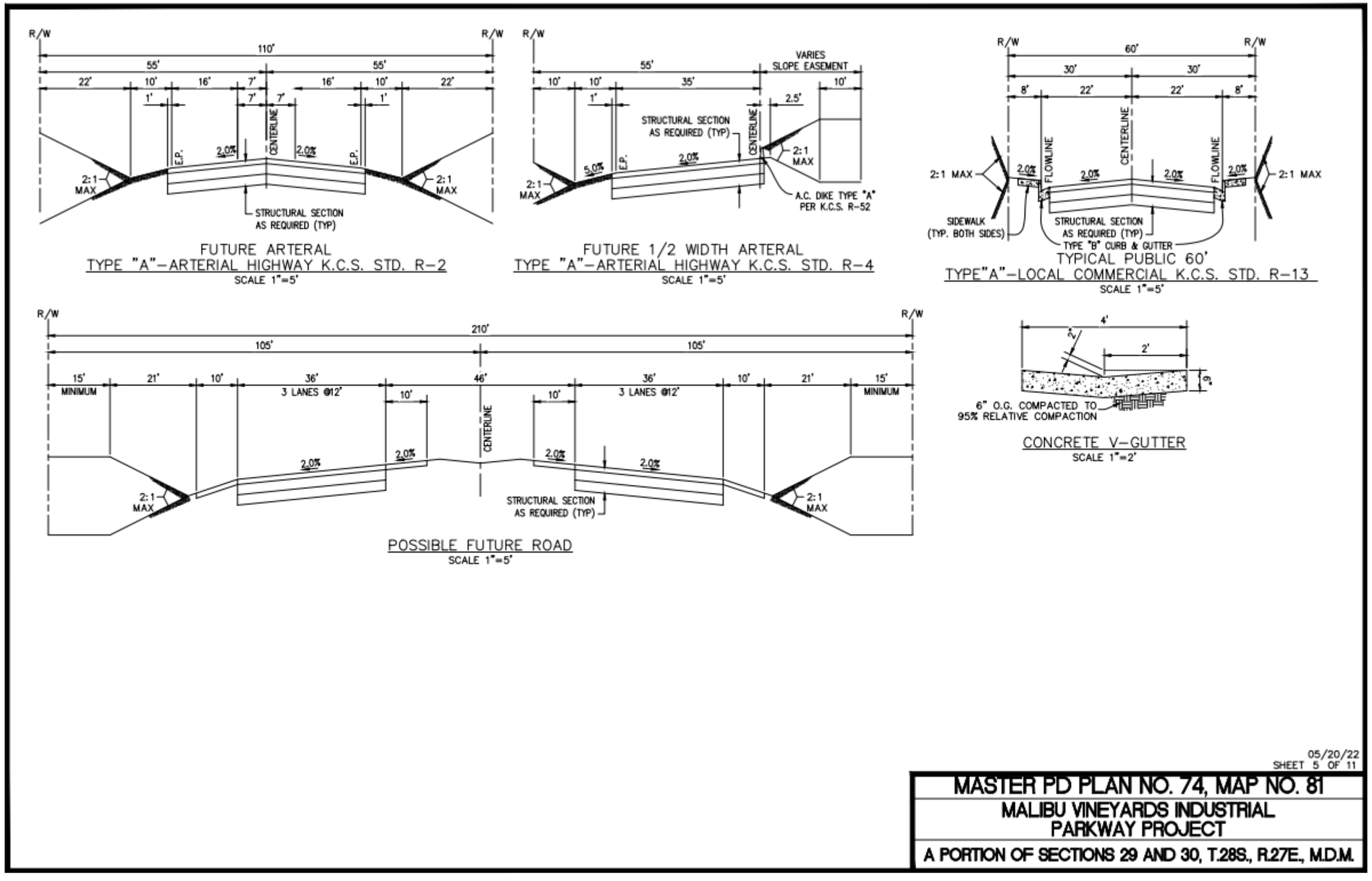


Figure 3-14F: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

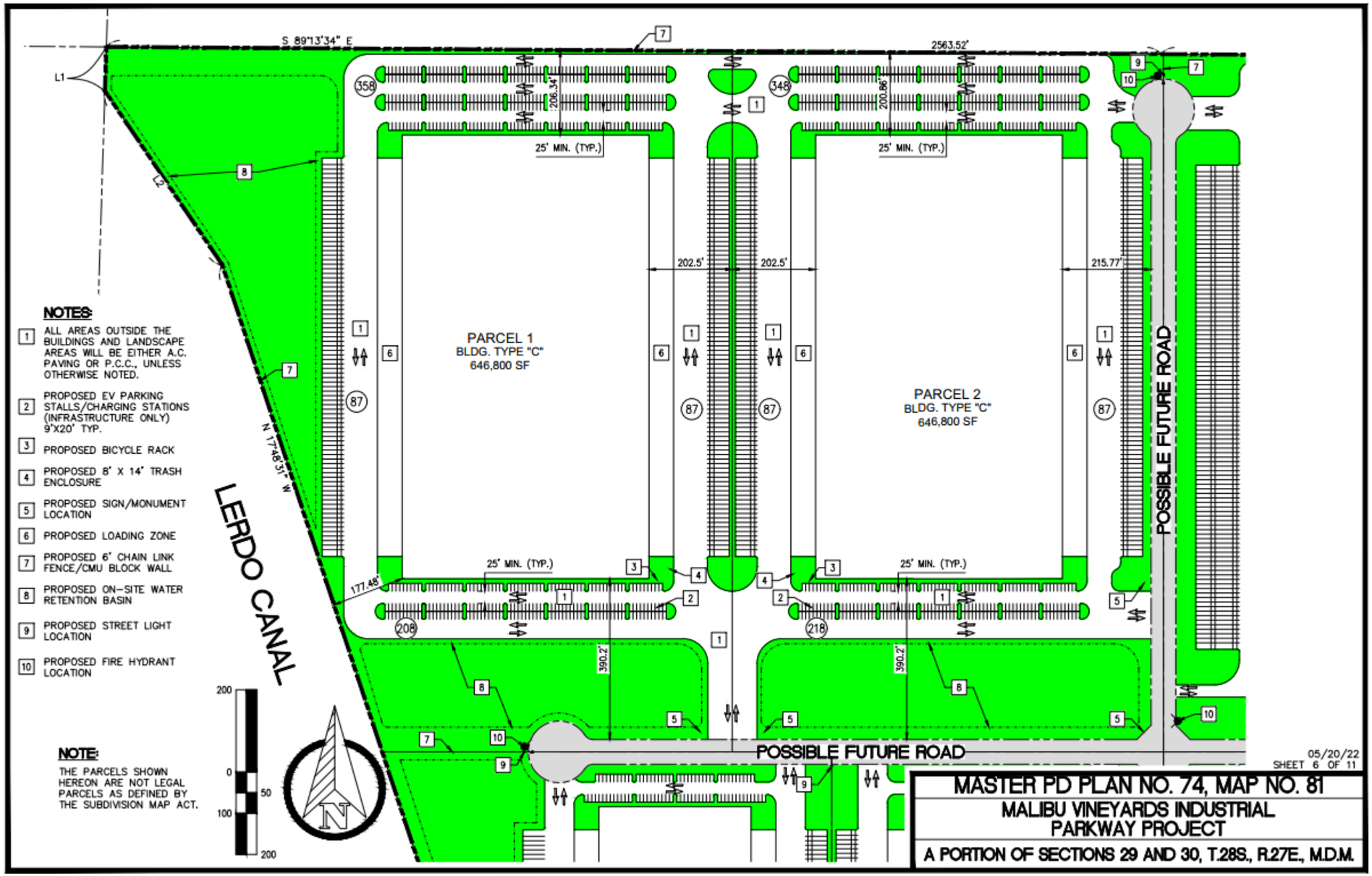


Figure 3-14G: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

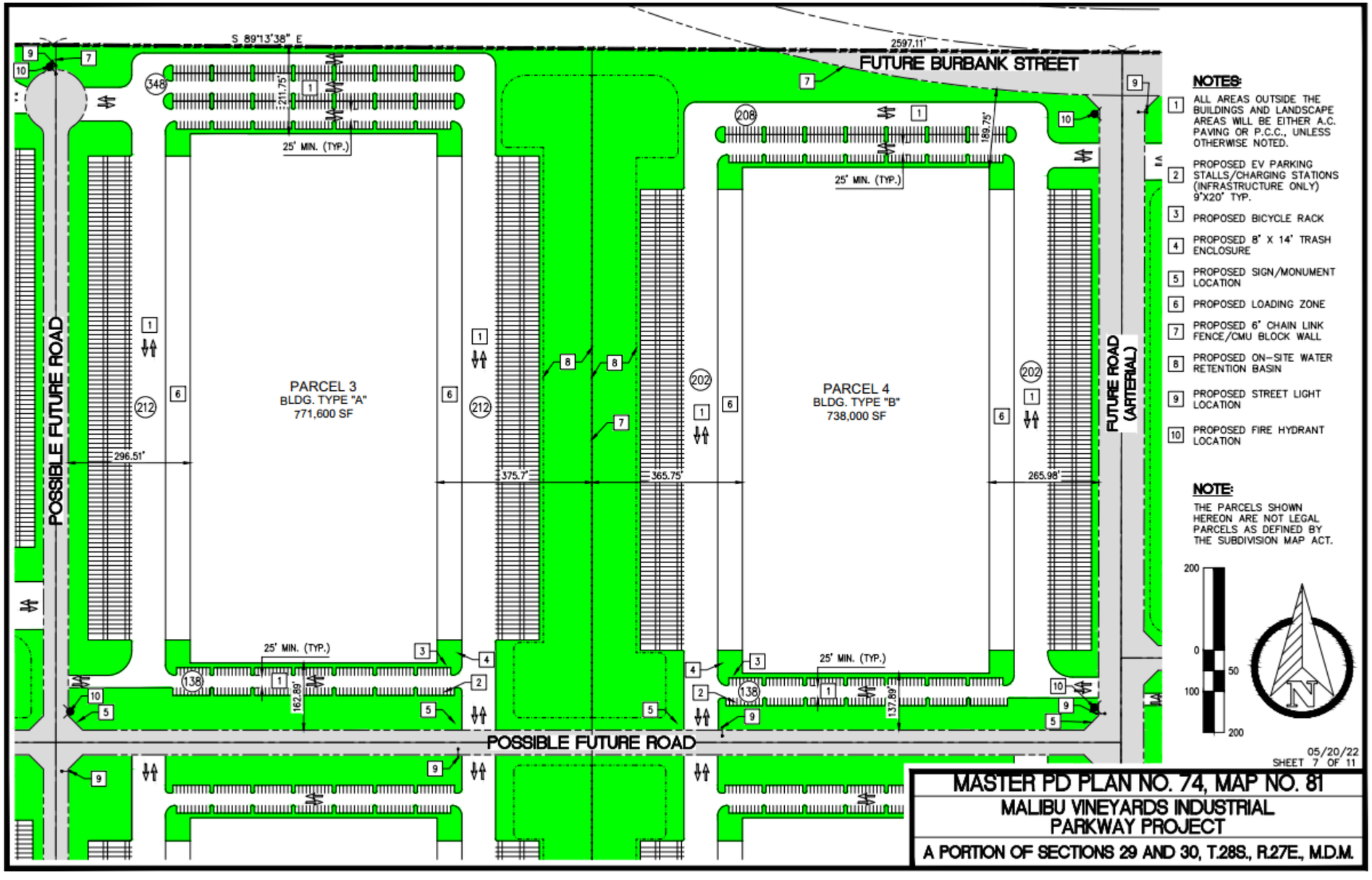


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Figure 3-14H: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

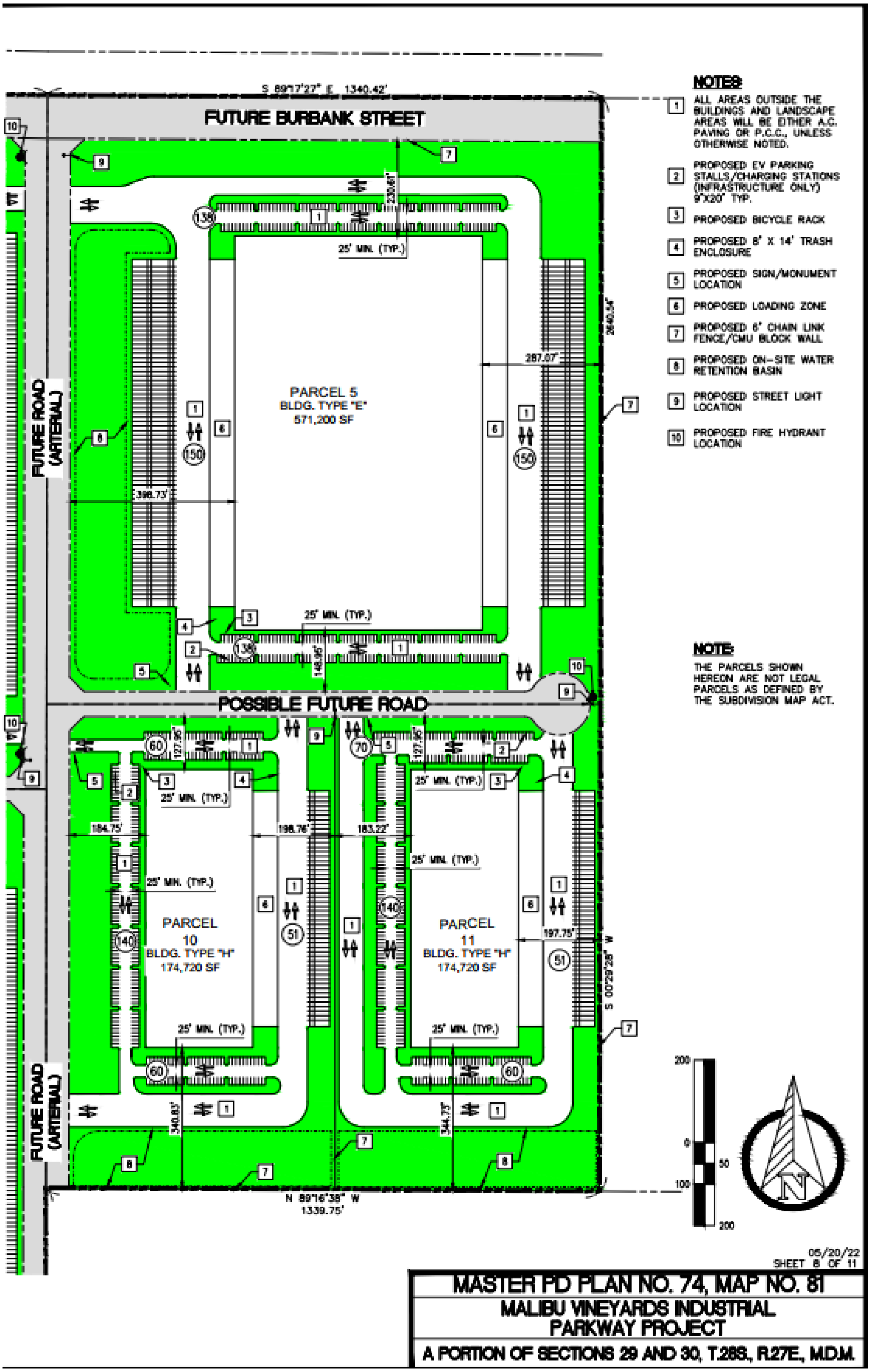


Figure 3-14I: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

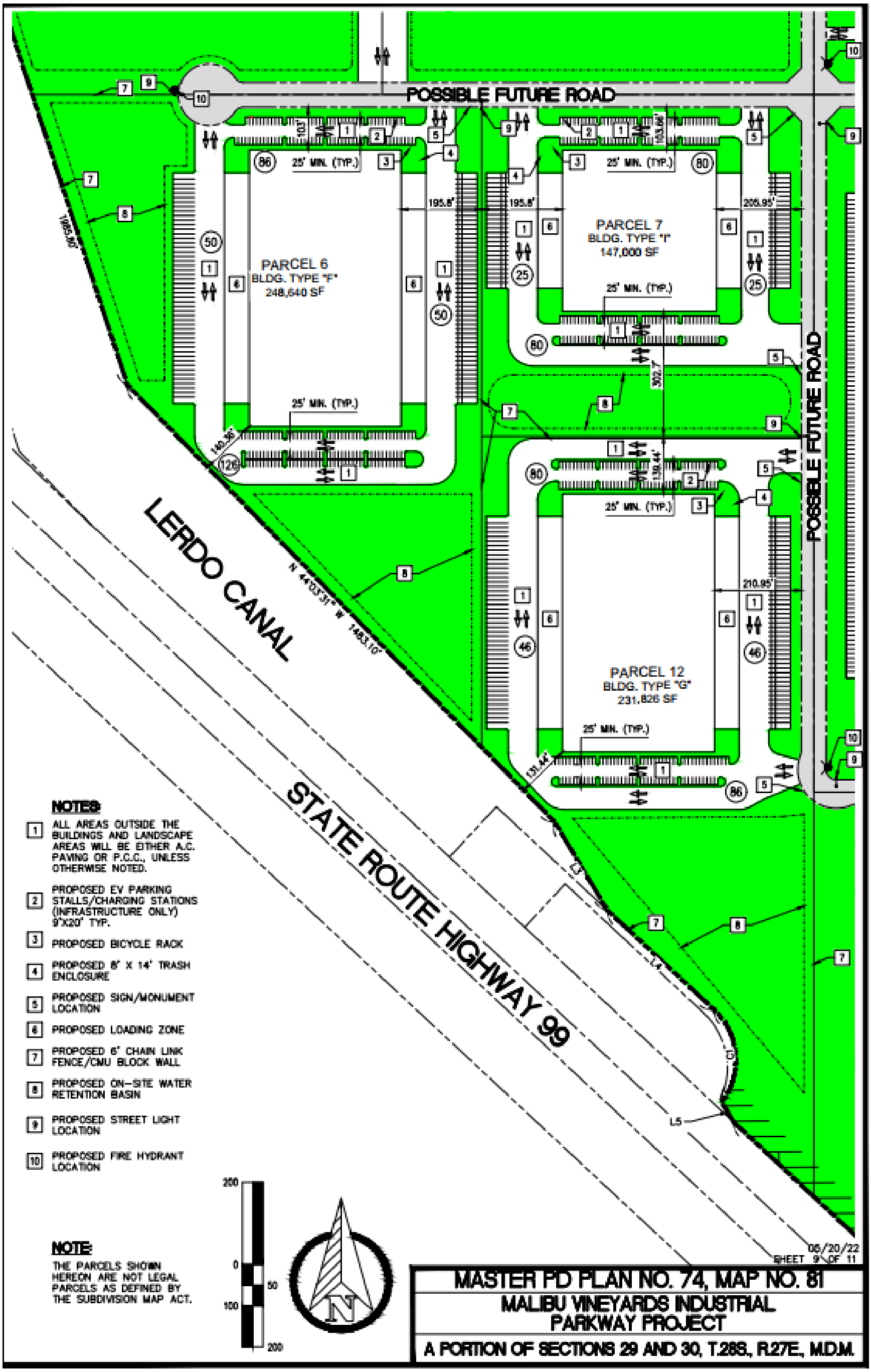


Figure 3-14J: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

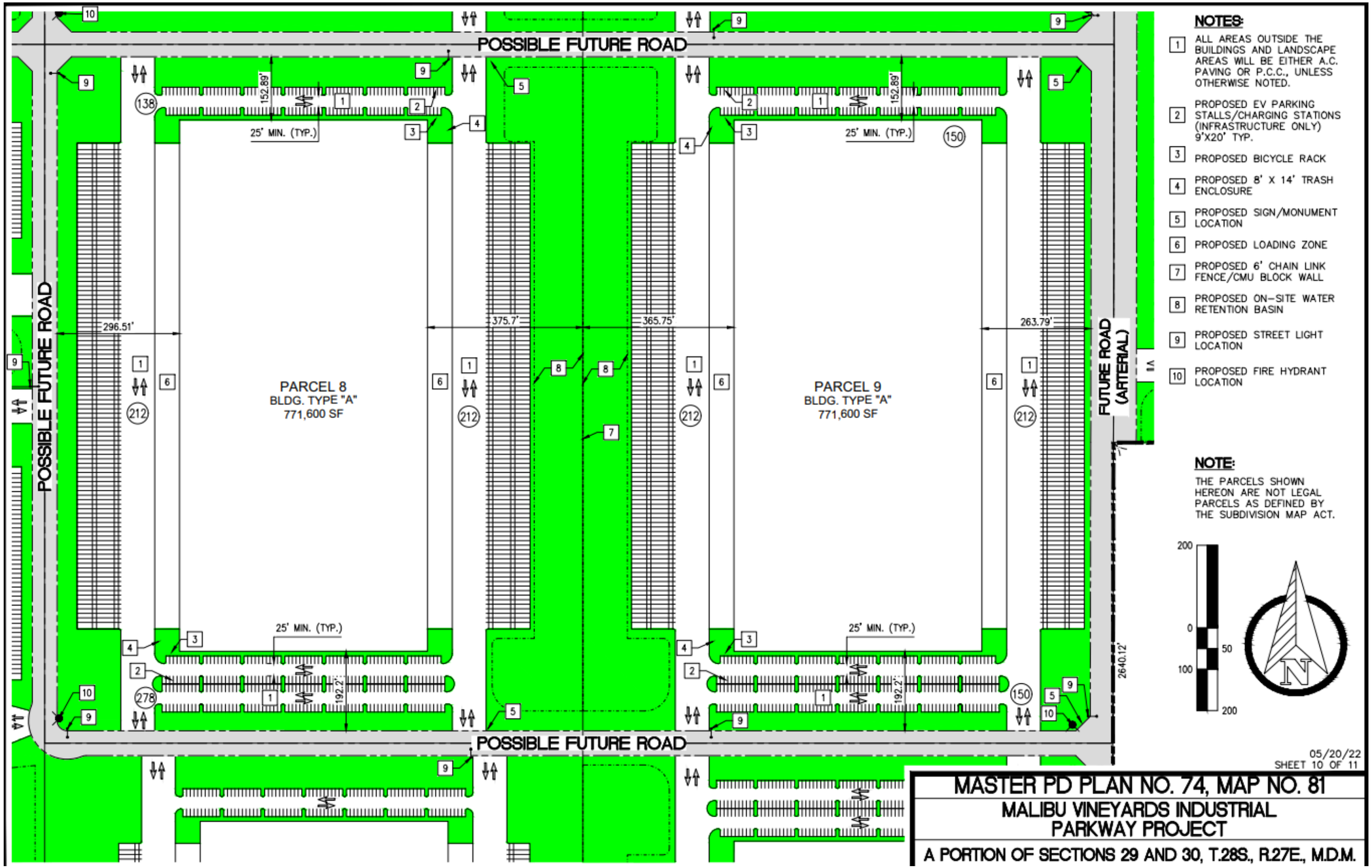


Figure 3-14K: Proposed Precise Development Plan No. 74, Map 81 (Phase 1)

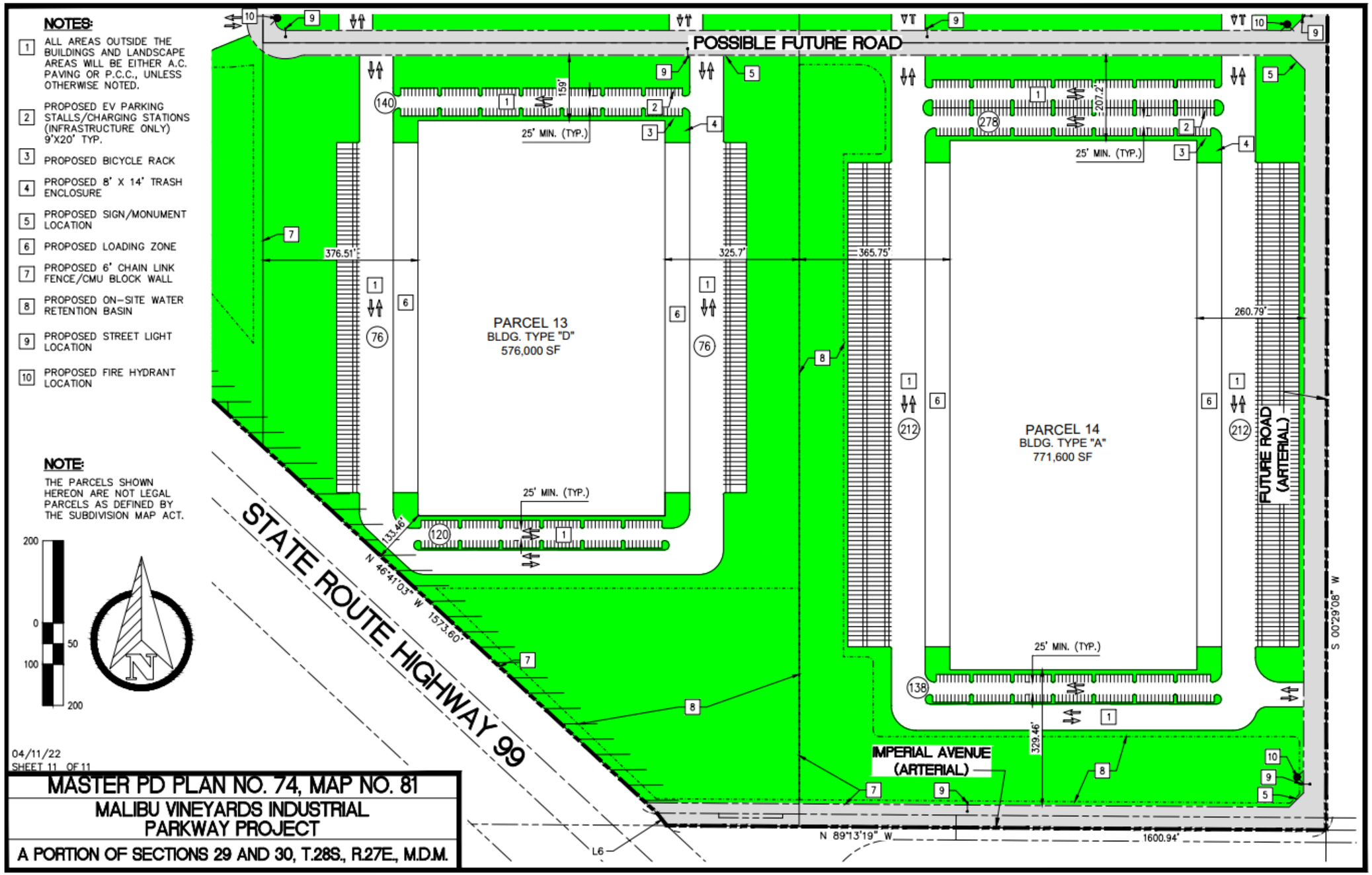


Figure 3-15A: Proposed Precise Development Plan No. 2 Map 80 (Phase 2)

OWNERS:

MALIBU VINEYARDS, LP
9777 WILSHIRE BLVD. STE. 900
BEVERLY HILLS, CA 90212
CONTACT: STEVEN GILFENBAIN
PHONE: (805) 305-0753

PREPARED BY:

McINTOSH & ASSOCIATES
2001 WHEELAN COURT
BAKERSFIELD, CA 93309
CONTACT: SAMUEL WALKER
PHONE: (661) 834-4814

PROJECT STATISTICS:

A.P.N.: 091-150-03, 091-160-01, 02, 03, 09, 13 & 16
091-200-04, 05, 07 & 14

PROJECT ACREAGE: 193.33 GR. AC./167.37 NET AC.

EXISTING ZONING: A (EXCLUSIVE AGRICULTURE)
PROPOSED ZONING: M-2 PD (MEDIUM INDUSTRIAL, PRECISE DEVELOPMENT)

EXISTING GENERAL PLAN DESIGNATION: 8.1 (INTENSIVE AGRICULTURE-MIN. 20 AC.)
PROPOSED GENERAL PLAN DESIGNATION: SI (SERVICE INDUSTRIAL)

EXISTING LAND USE: AGRICULTURE
PROPOSED LAND USE: INDUSTRIAL & COMMERCIAL

FLOOD ZONE: 0.2% ANNUAL CHANCE & ZONE "X"
SEE MAP SHEETS FOR INFORMATION

EARTHQUAKE FAULT ZONE: NONE

WATER: OILDALE MUTUAL WATER COMPANY
SEWER: NORTH OF RIVER SANITARY DISTRICT No. 1
ELECTRIC: P.G.&E.
GAS: SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE: A.T.&T.
CABLE: SPECTRUM

PUBLIC IMPROVEMENTS: TYPE "A"

STORM WATER DRAINAGE: ONSITE RETENTION FOR THE BENEFIT OF ALL PARCELS SHOWN HEREON. BASIN DEPTH TO BE 8' MINIMUM; CALCULATED PER DRAINAGE STUDY. MINIMUM 6' CHAIN LINK FENCE SURROUNDING BASIN WITH ACCESS FOR PRIVATE MAINTENANCE.

GENERAL NOTES:

ALL STREETS SHALL BE PUBLIC.
ALL RETURNS ARE ESTABLISHED WITH A 50' RADII.
ALL CUL-DE-SAC RETURN RADII ARE 25'.
ALL CUL-DE-SACS ARE 75' RADIUS.

SEE SHEET 4 FOR THE MAXIMUM BUILDING AREA SIZE ALLOWED FOR EACH PARCEL WITHIN THE BOUNDARY OF THIS PD PLAN.

NO BUILDING HEIGHT SHALL EXCEED WHAT IS ALLOWED IN THE M-2 PD/7.2 ZONE.

LANDSCAPE AREAS FOR EACH PARCEL SHALL BE DONE IN ACCORDANCE WITH THE KERN COUNTY ORDINANCE AND AGENCY STANDARDS.

SITE PLAN REVIEW SHALL BE SUBMITTED TO THE KERN COUNTY AIRPORTS DEPARTMENT FOR REVIEW AND COMMENT.

ALL EXISTING BUILDINGS/STRUCTURES WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE DEMOLISHED AND REMOVED.

PARCELS SHOWN HEREON ARE NOT LEGAL PARCELS AS DEFINED BY THE SUBDIVISION MAP ACT.

EXTERIOR BUILDING LIGHTS TO BE L.E.D. DOWN FACING LIGHTS IN ACCORDANCE WITH MUNICIPAL CODE. HEIGHT TO BE DETERMINED AND PROVIDED IN FUTURE LIGHTING PLAN WITH BUILDING PERMIT.

LEGAL DESCRIPTION:

BEING A PORTION SOUTH HALF OF SECTION 24, TOWNSHIP 28 SOUTH, RANGE 26 EAST, MOUNT DIABLO MERIDIAN, LYING BETWEEN THE NORTHEASTERLY LINE OF STATE HIGHWAY VI-Ker-99 AND THE SOUTHWESTERLY LINE OF THE LERDO CANAL;

THAT PORTION OF THE SOUTH 712 FEET OF LOT 25 IN SECTION 24, TOWNSHIP 28 SOUTH, RANGE 26 EAST, MOUNT DIABLO MERIDIAN, AS MEASURED FROM THE CENTERLINE OF ROAD 'G' ADJOINING SAID LOT ON THE SOUTH ALL AS SHOWN ON MAP OF THE LERDO SUBDIVISION "A" FILED FOR RECORD IN MAP BOOK 2, PAGE 54, IN THE OFFICE OF THE KERN COUNTY RECORDER;

THAT PORTION OF NORTHEAST QUARTER OF SECTION 25, TOWNSHIP 28 SOUTH , RANGE 26 EAST, MOUNT DIABLO MERIDIAN, LYING BETWEEN THE NORTHEASTERLY LINE OF STATE HIGHWAY VI-Ker-99 AND THE SOUTHWESTERLY LINE OF THE LERDO CANAL;

CONTAINING 10 PARCELS
193.33 ACRES GROSS - 167.37 ACRES NET (NO ROADS)

MINOR MODIFICATION TABLE

MOD. NUMBER	DESCRIPTION	DATE

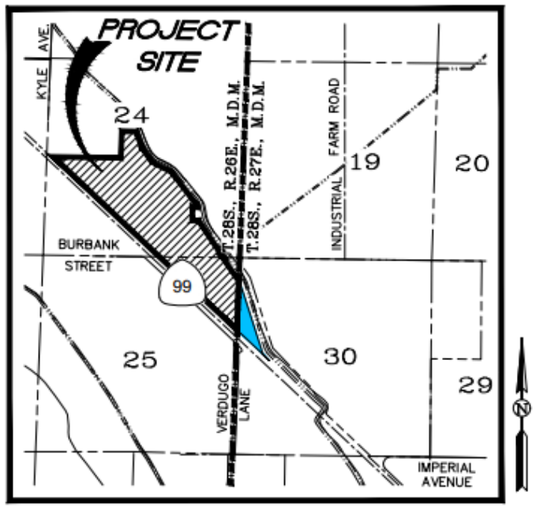
SHEET INDEX:

SHEET No. DESCRIPTION
1. OWNER'S, STATISTICAL INFORMATION, AND NOTES
2. EASEMENT LEGEND & TABLES-PARCEL & BUILDING SUMMARY
3. OVERALL PD PLAN BOUNDARY AND EASEMENTS
4. OVERALL PD PLAN BOUNDARY AND CONCEPTUAL SITE PLAN
5. TYPICAL ROADWAY SECTIONS & RIGHT OF WAY DIMENSIONS
6. CONCEPTUAL SITE PLAN (PARCEL 1 & 2)
7. CONCEPTUAL SITE PLAN (PARCEL 3 & 6)
8. CONCEPTUAL SITE PLAN (PARCEL 4, 5 & 10)
9. CONCEPTUAL SITE PLAN (PARCEL 7, 8 & 9)

FLOOD ZONE LEGEND:

ZONE X — FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

ZONE X (SHADED AREA) — FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.



VICINITY MAP
NO SCALE

OWNER: DATE:

PLANNING DIRECTOR: DATE:

RECEIPT:

05/20/22
SHEET 1 OF 9

MASTER PD PLAN NO. 2, MAP NO. 80
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SEC. 24 and 25, 28/26

Figure 3-15B: Proposed Precise Development Plan No. 2 Map 80 (Phase 2)

MALIBU VINEYARDS - PHASE 2 PARCEL SUMMARY										
PARCEL	APN	PROPOSED USE	SIZE (Sq. Ft.) NET	SIZE (ACRES) NET	BUILDING SIZE (Sq. Ft.)	BUILDING COVERAGE	LANDSCAPE (Sq. Ft.)	LANDSCAPE COVERAGE	PARKING STALLS (STANDARD)	PARKING STALLS (TRUCK)
1	091-160-01, 02, 03	M-2 PD / SI	933,528	21.43	150,000	16%	370,467	40%	354	90
2	091-160-02, 03, 09	M-2 PD / SI	973,004	22.34	262,500	27%	179,103	18%	352	158
3	091-160-02, 03, 09, 13	M-2 PD / SI	1,087,737	24.97	220,000	20%	225,708	21%	273	244
4	091-150-03 & 091-160-03	M-2 PD / SI	380,304	8.73	100,000	26%	63,991	17%	154	54
5	091-150-03 & 091-160-03, 13	M-2 PD / SI	229,790	5.28	74,725	33%	52,824	23%	21	-
6	091-160-02, 09,13, 16	M-2 PD / SI	1,050,254	24.11	123,750	12%	235,569	22%	192	100
7	091-160-09, 16 & 091-200-04, 05	M-2 PD / SI	1,134,380	26.04	231,826	20%	425,064	37%	166	92
8	091-200-04, 05, 14	M-2 PD / SI	940,688	21.60	231,826	25%	278,095	30%	324	92
9	091-200-05, 07, 14	M-2 PD / SI	603,161	13.85	150,000	25%	63,525	11%	294	94
10	091-160- 09, 13, 16, 091-200-05, 14	M-2 PD / SI	416,641	9.56	120,713	29%	75,325	18%	27	-
NET TOTALS (%=AVERAGE):			7,749,486	167.38	1,665,340	21%	1,969,671	25%	2,157	924
STREET AREA (Sq. Ft.)	672,002									
TOTAL SITE AREA (AC)	193.33									

BUILDING SUMMARY					
BLDG TYPE	SIZE (Sq. Ft.)	PROPOSED USE	Sq.Ft.	PARKING REQUIRED	TOTAL REQUIRED
A	262,500	WAREHOUSE	259,875	94	105
		OFFICE	2,625	11	
B	231,826	WAREHOUSE	229,508	84	94
		OFFICE	2,318	10	
C	220,000	WAREHOUSE	217,800	80	89
		OFFICE	2,200	9	
D	150,000	WAREHOUSE	148,500	57	63
		OFFICE	1,500	6	
E	123,750	WAREHOUSE	122,513	48	53
		OFFICE	1,238	5	
F	100,000	WAREHOUSE	99,000	40	44
		OFFICE	1,000	4	
G	74,725	MINI-WAREHOUSE	73,978	32	35
		OFFICE	747	3	
H	120,713	MINI-WAREHOUSE	119,506	47	52
		OFFICE	1,207	5	
TOTAL WAREHOUSE				450	535
TOTAL OFFICE				50	

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S 89°10'37" E	382.88'
L2	S 19°56'59" E	468.29'
L3	S 35°13'59" E	456.78'
L4	S 04°53'59" E	52.93'
L5	N 89°11'59" W	124.00'
L6	S 02°11'59" W	350.00'
L7	S 89°11'59" E	173.10'
L8	N 89°13'33" W	16.06'

EASEMENT LEGEND:

(1) AN EASEMENT GRANTED TO THE COUNTY OF KERN AND THE PUBLIC IN GENERAL FOR ROADS AND INCIDENTAL PURPOSES RECORDED DECEMBER 9, 1912 AS MAP OF THE LERDO SUBDIVISION "A", IN THE OFFICE OF THE KERN COUNTY RECORDER.

(2) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED MARCH 19, 1920 IN BK. 347, PG. 225 OF DEEDS.

(3) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED NOVEMBER 8, 1924 IN BK. 36, PG. 470, O.R.

(4) AN EASEMENT GRANTED TO LERDO MUTUAL WATER COMPANY No. 1 FOR CEMENT PIPELINES AND INCIDENTAL PURPOSES RECORDED APRIL 23, 1925 IN BK. 69, PG. 243, O.R.

(5) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 17, 1928 IN BK. 267, PG. 143, O.R.

(6) AN EASEMENT RESERVED BY LERDO LAND COMPANY AND LERDO MUTUAL WATER COMPANY No. 1 FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 17, 1928 IN BK. 267, PG. 146, O.R.

(7) A WAIVER OF DIRECT ACCESS RECORDED FEBRUARY 17, 1932 IN BK. 430, PG. 15, O.R.

(8) AN EASEMENT GRANTED TO TIDEWATER ASSOCIATED OIL COMPANY FOR PIPELINES & INCIDENTAL PURPOSES RECORDED JANUARY 8, 1937 IN BK. 687, PG. 23, O.R.

(9) A WAIVER OF DIRECT ACCESS RECORDED NOVEMBER 25, 1938 IN BK. 831, PG. 307, O.R.

(10) A WAIVER OF DIRECT ACCESS RECORDED AUGUST 10, 1951 IN BK. 1835, PG. 333, O.R.

(11) AN EASEMENT GRANTED TO THE COUNTY OF KERN FOR ROAD RIGHT-OF-WAY AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 8, 1954 IN BK. 2285, PG. 79, O.R.

(12) A WAIVER OF DIRECT ACCESS RECORDED JUNE 26, 1962 IN BK. 3503, PG. 964, O.R.

(13) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES RECORDED JANUARY 27, 1975 IN BK. 4879, PG. 102, O.R.

(14) AN EASEMENT GRANTED TO CAWELO WATER DISTRICT FOR PIPELINES & INCIDENTAL PURPOSES RECORDED AUGUST 15, 1984 IN BK. 5685, PG. 2043, O.R.

(15) AN EASEMENT GRANTED TO NORTH KERN WATER STORAGE DISTRICT FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED APRIL 22, 1993 IN BK. 6835, PG. 258, O.R.

(16) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR FACILITIES AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 20, 2016 IN DOC. NO. 0216128006, O.R.

(17) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR PUBLIC UTILITIES & INCIDENTAL PURPOSES RECORDED JUNE 26, 1962 IN BK. 3503, PG. 968, O.R.

AN EASEMENT RESERVED BY SOUTHERN PACIFIC RAILROAD COMPANY FOR RAILROAD RIGHT-OF-WAY AND INCIDENTAL PURPOSES RECORDED AUGUST 4, 1883 IN BK. 15, PG. 301 AND BK. 16, PG. 108, BOTH OF DEEDS. (EXACT LOCATION NO ASCERTAINABLE FROM RECORD)

12/20/23
SHEET 2 OF 9

MASTER PD PLAN NO. 2, MAP NO. 80

MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT

A PORTION OF SEC. 24 and 25, 28/26

Figure 3-15C: Proposed Precise Development Plan No. 2 Map 80 (Phase 2)

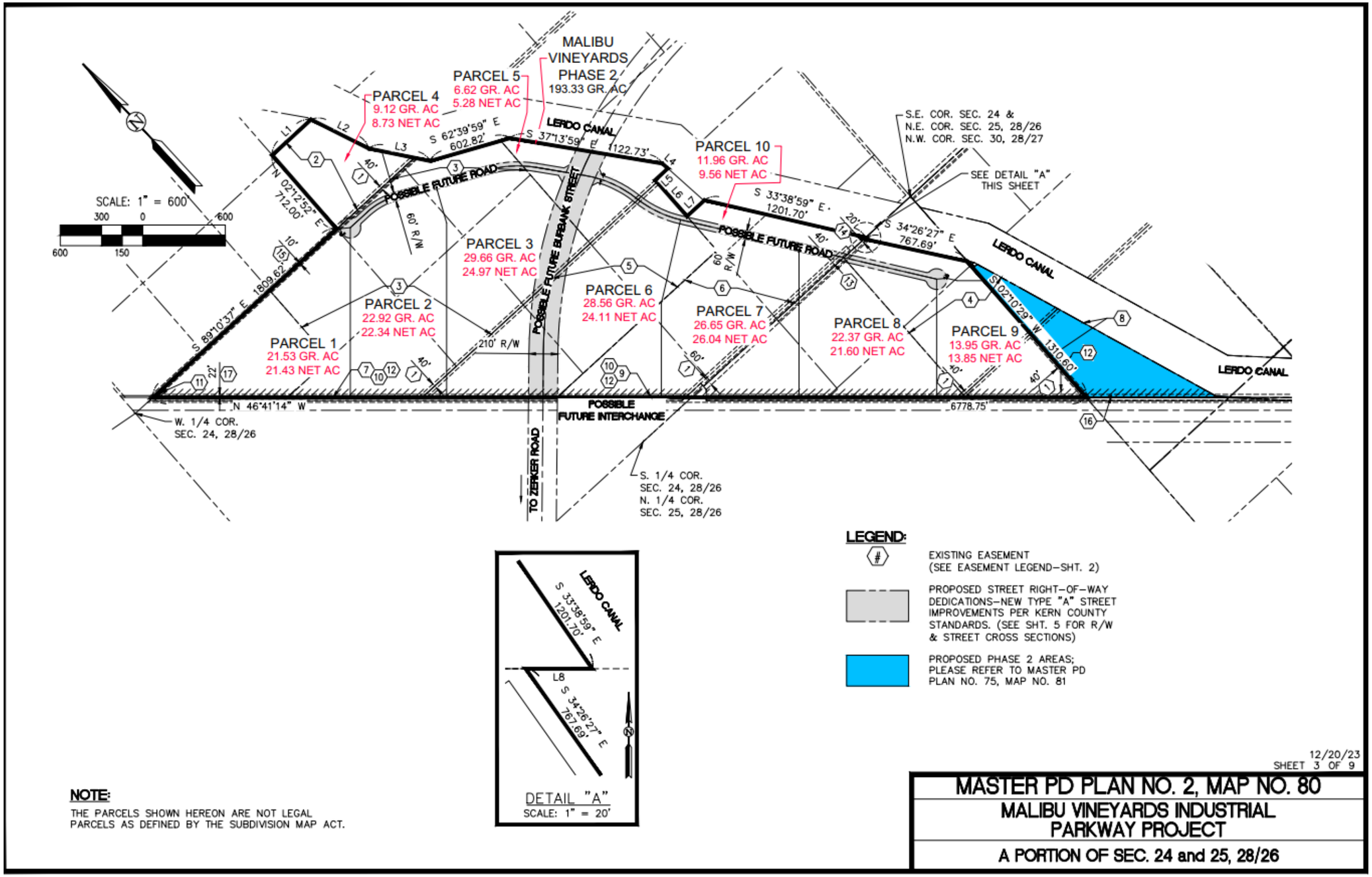


Figure 3-15D Proposed Precise Development Plan No. 2 Map 80 (Phase 2)

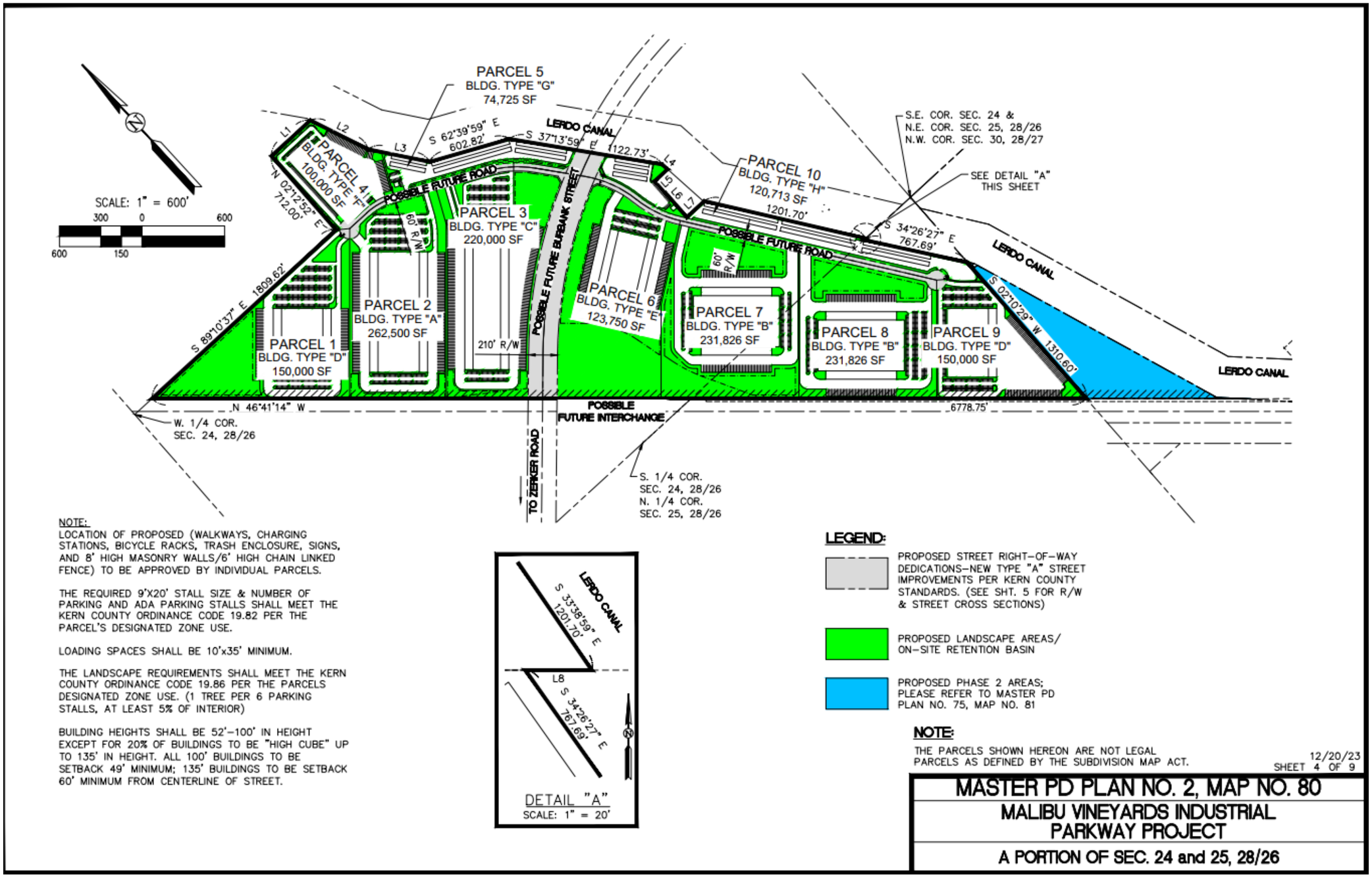


Figure 3-15E: Proposed Precise Development Plan No. 2 Map 80 (Phase 2)

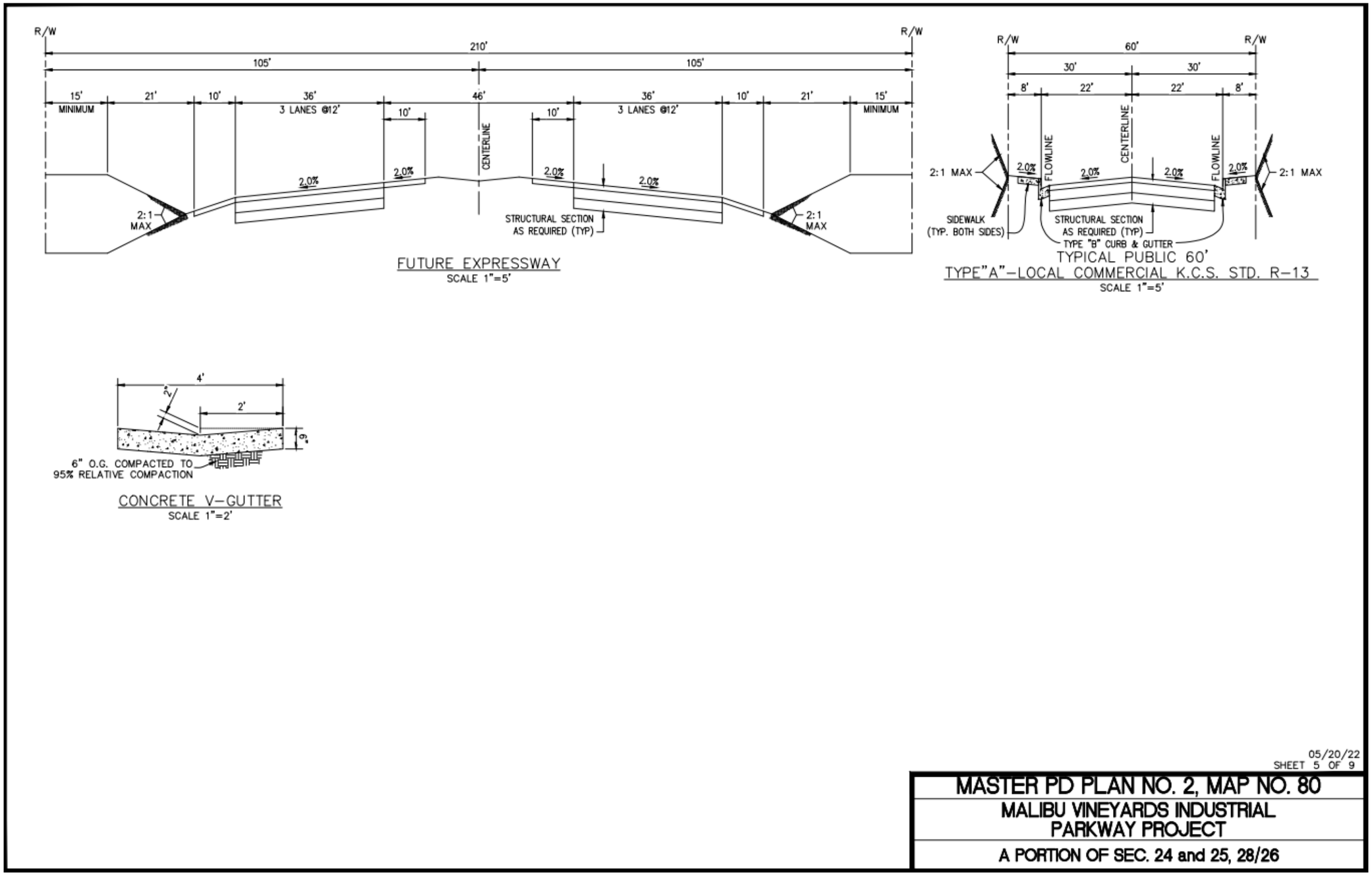


Figure 3-15F: Proposed Precise Development Plan No. 2 Map 80 (Phase 2)

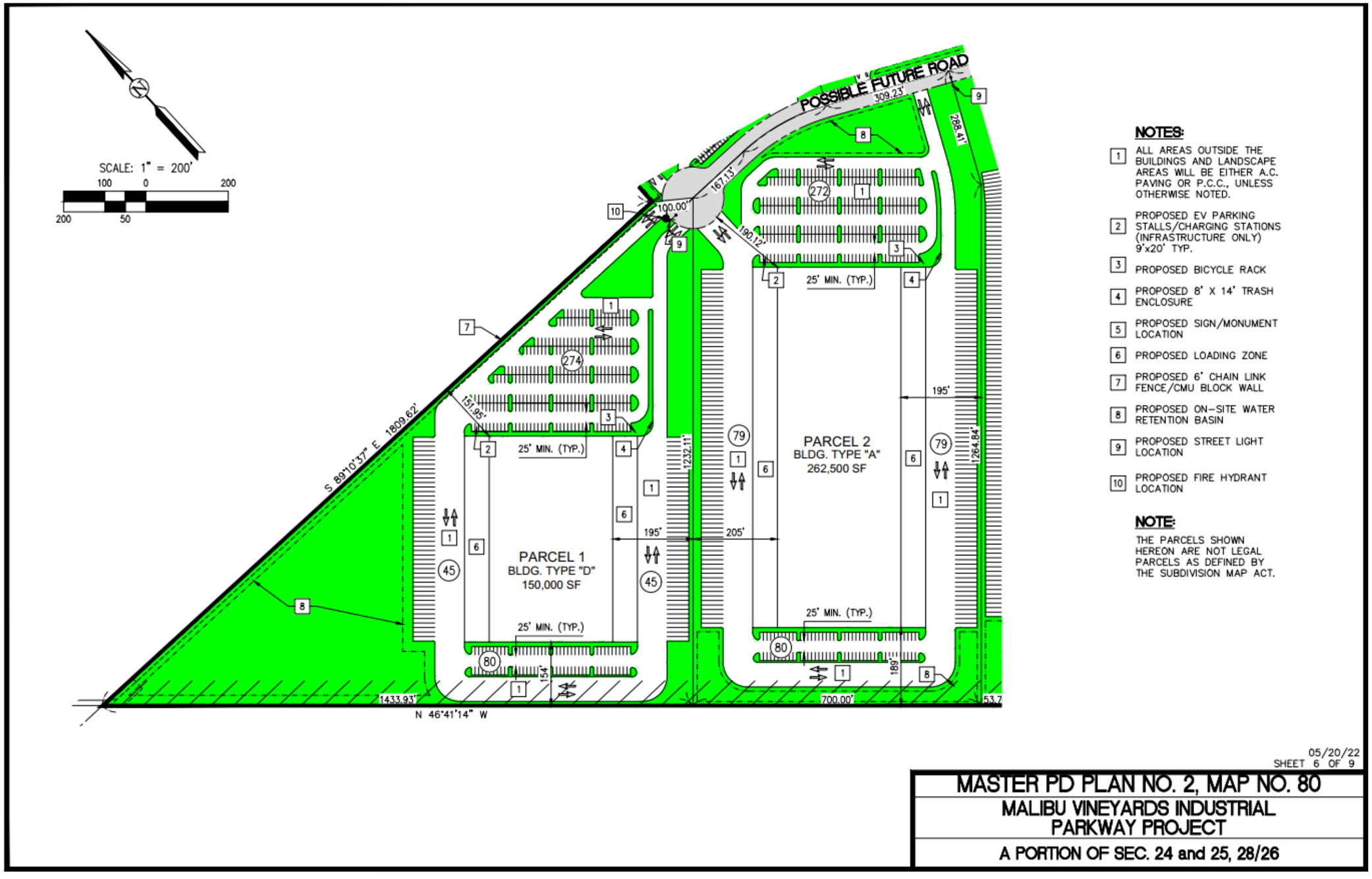


Figure 3-15G: Proposed Precise Development Plan No. 2 Map 80 (Phase 2)

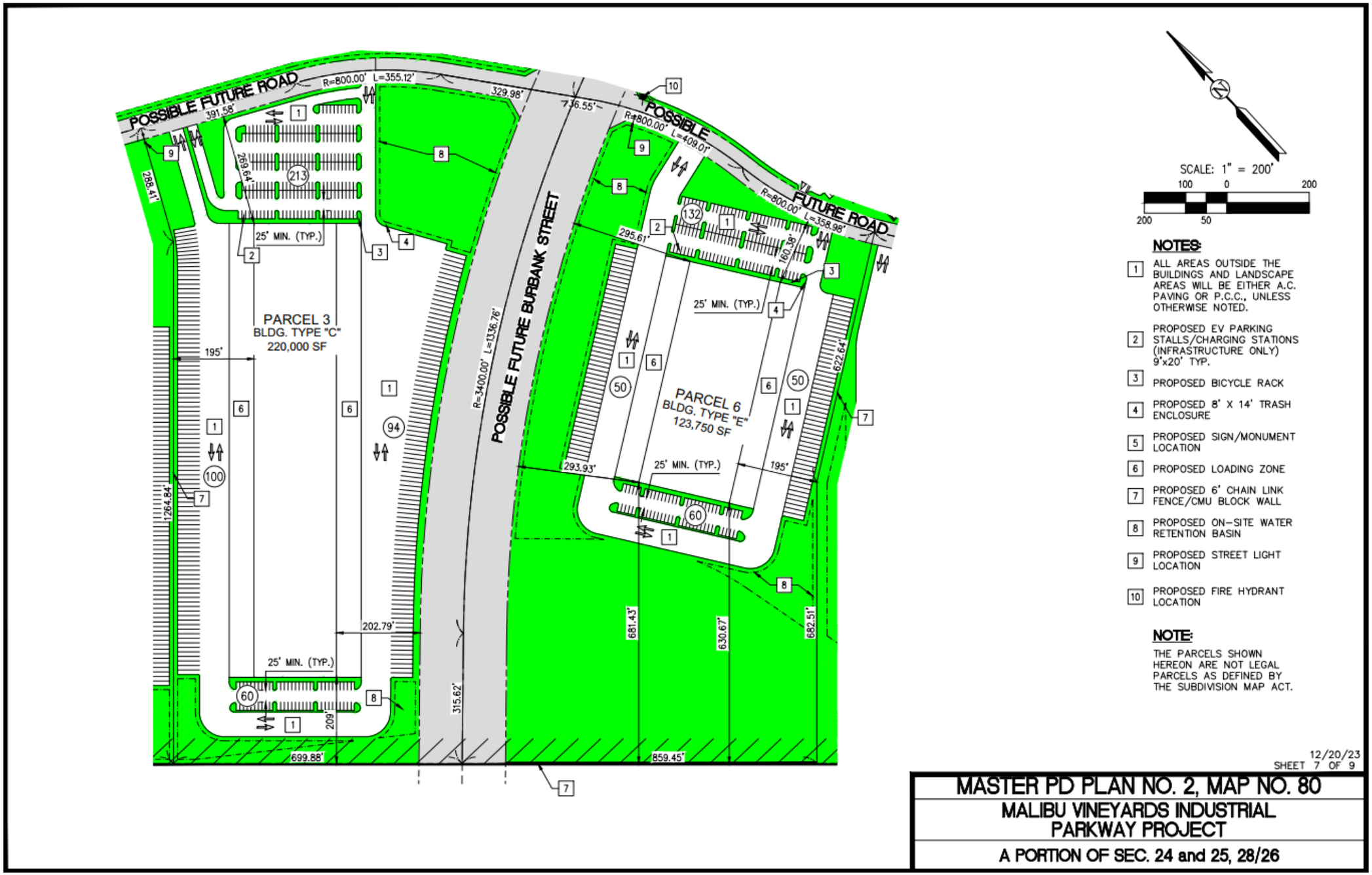


Figure 3-15H: Proposed Precise Development Plan No. 2 Map 80 (Phase 2)

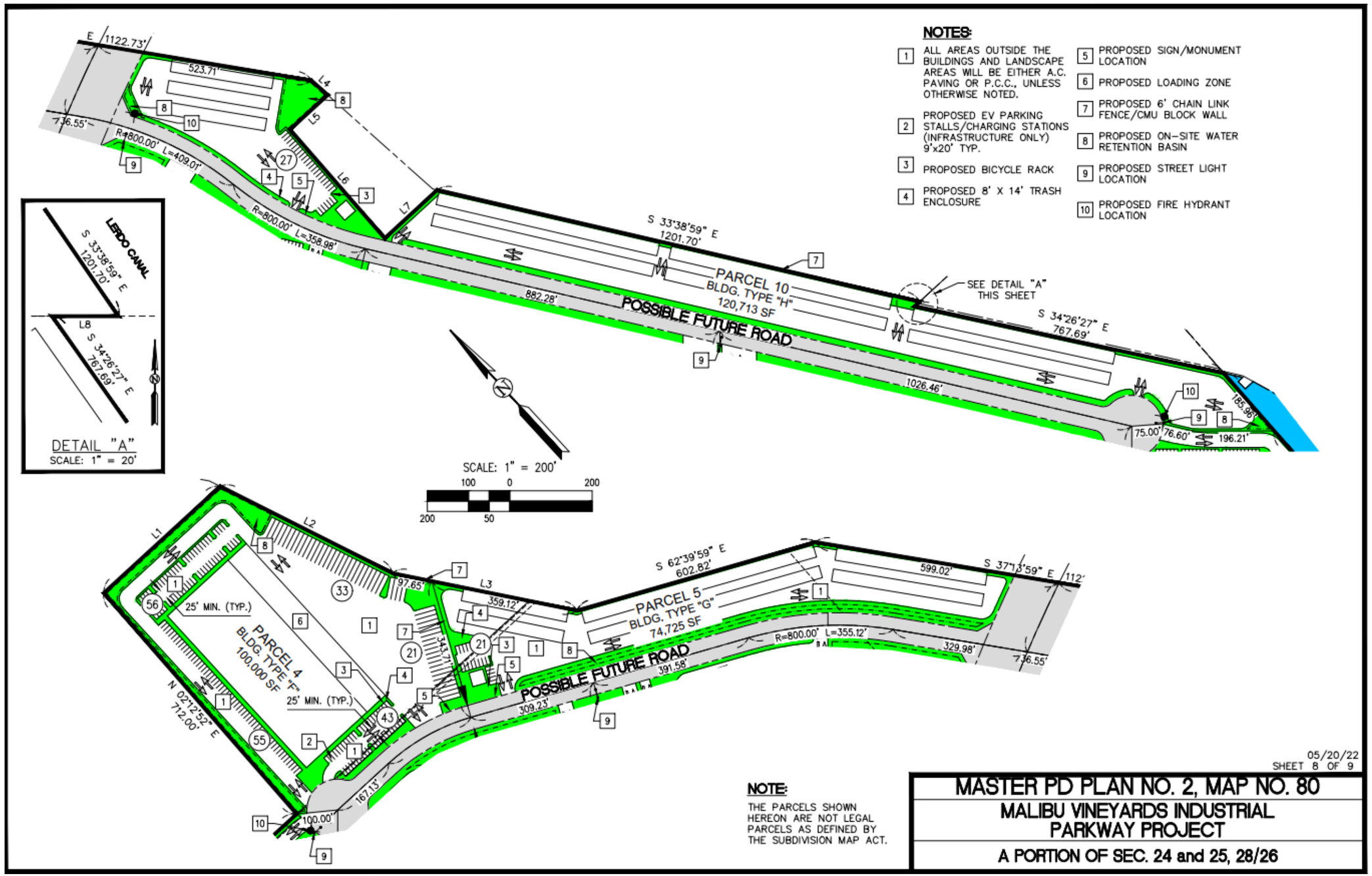


Figure 3-15I: Proposed Precise Development Plan No. 2 Map 80 (Phase 2)

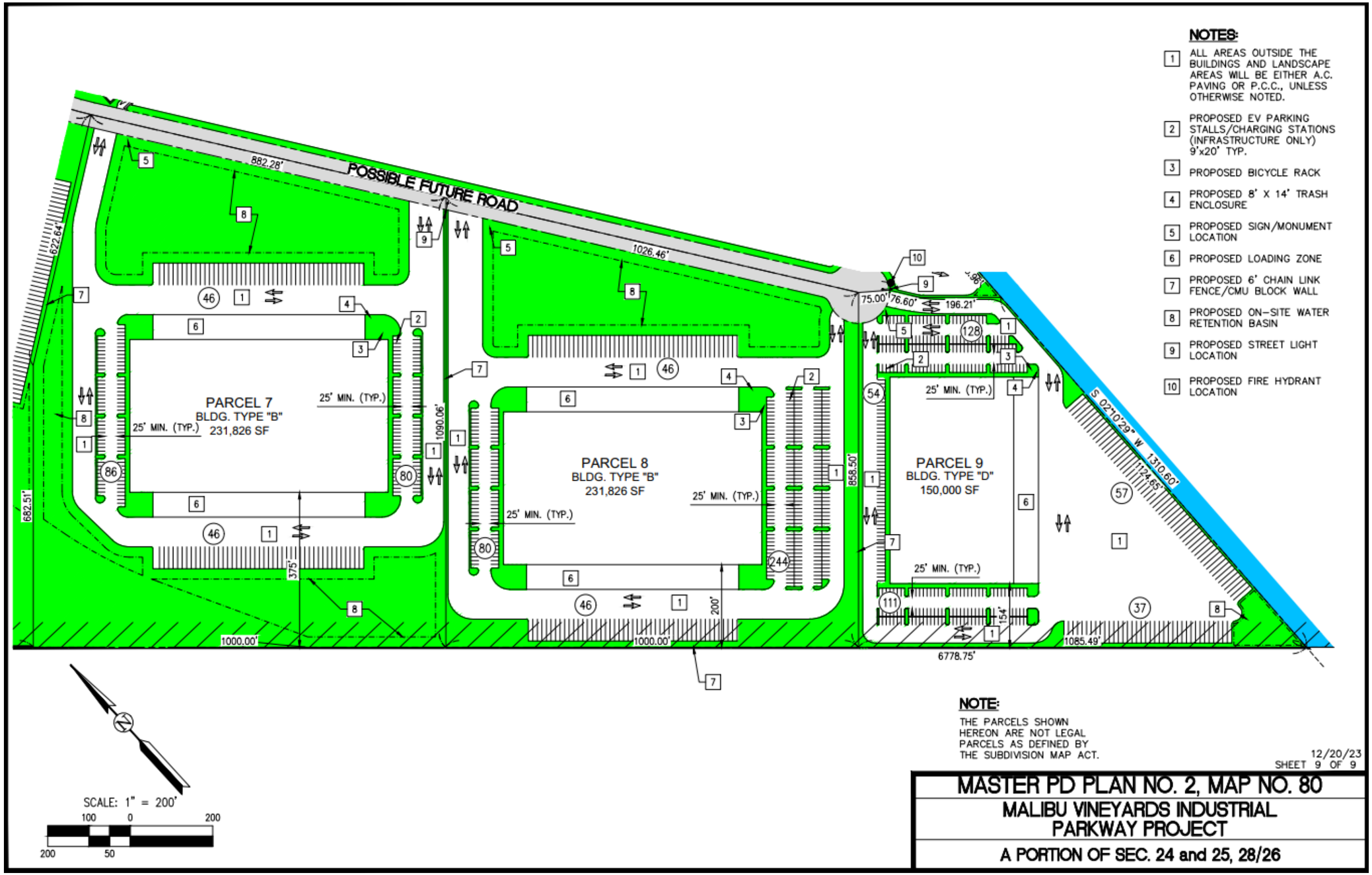


Figure 3-16A: Proposed Precise Development Plan No. 75, Map 81 (Phase 2)

OWNERS:

MALIBU VINEYARDS, LP
9777 WILSHIRE BLVD. STE. 900
BEVERLY HILLS, CA 90212
CONTACT: STEVEN GILFENBAIN
PHONE: (805) 305-0753

PREPARED BY:

McINTOSH & ASSOCIATES
2001 WHEELAN COURT
BAKERSFIELD, CA 93309
CONTACT: SAMUEL WALKER
PHONE: (661) 834-4814

PROJECT STATISTICS:

A.P.N.: 091-200-13 & 482-040-04 & 05

PROJECT ACREAGE: 11.31 GR. AC. & NET AC.

EXISTING & PROPOSED ZONING: M-2 PD (MED. INDUSTRIAL, PRECISE DEVELOPMENT)

EXISTING & PROPOSED GENERAL PLAN DESIGNATION: SI (SERVICE INDUSTRIAL)

EXISTING LAND USE: AGRICULTURE
PROPOSED LAND USE: INDUSTRIAL & COMMERCIAL

FLOOD ZONE: 0.2% ANNUAL CHANCE & ZONE "X" SEE MAP SHEETS FOR INFORMATION

EARTHQUAKE FAULT ZONE: NONE

WATER: OILDALE MUTUAL WATER COMPANY
SEWER: NORTH OF RIVER SANITARY DISTRICT No. 1
ELECTRIC: P.G.&E.
GAS: SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE: A.T.&T.
CABLE: SPECTRUM

PUBLIC IMPROVEMENTS: TYPE "A"

STORM WATER DRAINAGE: ONSITE RETENTION FOR THE BENEFIT OF ALL PARCELS SHOWN HEREON.

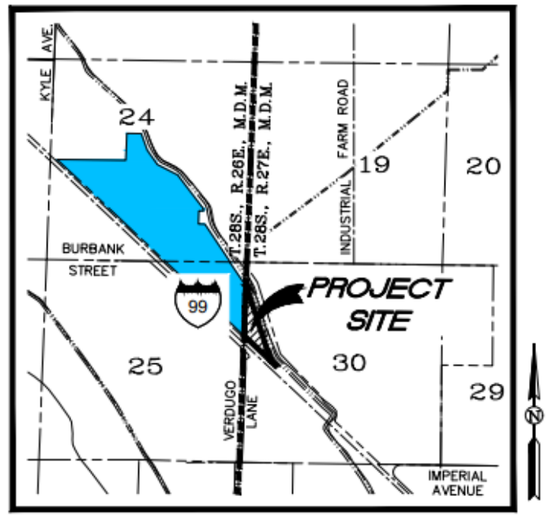
LEGAL DESCRIPTION:

BEING A PORTION OF THE WEST HALF OF THE WEST HALF OF SECTION 30, TOWNSHIP 28 SOUTH, RANGE 27 EAST, MOUNT DIABLO MERIDIAN, LYING BETWEEN THE NORTHEASTERLY LINE OF STATE HIGHWAY VI-Ker-99 AND THE SOUTHWESTERLY LINE OF THE LERDO CANAL, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA.

CONTAINING 1 DRAINAGE SUMP PARCEL
11.31 ACRES GROSS (NO ROADS)

MINOR MODIFICATION TABLE

MOD. NUMBER	DESCRIPTION	DATE



VICINITY MAP
NO SCALE

GENERAL NOTES:

ALL STREETS SHALL BE PUBLIC.
ALL RETURNS ARE ESTABLISHED WITH A 50' RADII.
ALL CUL-DE-SAC RETURN RADII ARE 25'.
ALL CUL-DE-SACS ARE 75' RADIUS.

PLEASE REFER TO MASTER PD PLAN NO. 2, MAP NO. 80 FOR THE MAXIMUM BUILDING AREA SIZE ALLOWED FOR EACH PARCEL WITHIN THE BOUNDARY OF THIS PD PLAN.

NO BUILDING HEIGHT SHALL EXCEED WHAT IS ALLOWED IN THE M-2 PD/7.2 ZONE.

LANDSCAPE AREAS FOR EACH PARCEL SHALL BE DONE IN ACCORDANCE WITH THE KERN COUNTY ORDINANCE AND AGENCY STANDARDS.

SITE PLAN REVIEW SHALL BE SUBMITTED TO THE KERN COUNTY AIRPORTS DEPARTMENT FOR REVIEW AND COMMENT.

ALL EXISTING BUILDINGS/STRUCTURES WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE DEMOLISED AND REMOVED.

PARCELS SHOWN HEREON ARE NOT LEGAL PARCELS AS DEFINED BY THE SUBDIVISION MAP ACT.

SHEET INDEX:

SHEET No. DESCRIPTION
1. OWNER'S, STATISTICAL INFORMATION, AND NOTES
2. EASEMENT LEGEND & DETAILS
3. PD PLAN BOUNDARY AND EASEMENTS
4. PD PLAN BOUNDARY, CONCEPTUAL SITE PLAN AND EASEMENTS

FLOOD ZONE LEGEND:

ZONE X — FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

ZONE X (SHADED AREA) — FLOOD ZONE DESIGNATION PER FIRM MAP No. 06029C1825E, DATED SEPTEMBER 26, 2008. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

OWNER: _____ DATE: _____

PLANNING DIRECTOR: _____ DATE: _____

RECEIPT: _____

06/13/22
SHEET 1 OF 4

MASTER PD PLAN NO. 75, MAP NO. 81
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SEC. 30, 28/27

Figure 3-16B: Proposed Precise Development Plan No. 75, Map 81 (Phase 2)

EASEMENT LEGEND:

(1) AN EASEMENT GRANTED TO THE COUNTY OF KERN AND THE PUBLIC IN GENERAL FOR ROADS AND INCIDENTAL PURPOSES RECORDED DECEMBER 9, 1912 AS MAP OF THE LERDO SUBDIVISION "A", IN THE OFFICE OF THE KERN COUNTY RECORDER.

(2) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED MARCH 19, 1920 IN BK. 347, PG. 225 OF DEEDS.

(3) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED NOVEMBER 8, 1924 IN BK. 36, PG. 470, O.R.

(4) AN EASEMENT GRANTED TO LERDO MUTUAL WATER COMPANY No. 1 FOR CEMENT PIPELINES AND INCIDENTAL PURPOSES RECORDED APRIL 23, 1925 IN BK. 69, PG. 243, O.R.

(5) AN EASEMENT RESERVED BY LERDO LAND COMPANY FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 17, 1928 IN BK. 267, PG. 143, O.R.

(6) AN EASEMENT RESERVED BY LERDO LAND COMPANY AND LERDO MUTUAL WATER COMPANY No. 1 FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 17, 1928 IN BK. 267, PG. 146, O.R.

(7) A WAIVER OF DIRECT ACCESS RECORDED FEBRUARY 17, 1932 IN BK. 430, PG. 15, O.R.

(8) AN EASEMENT GRANTED TO TIDEWATER ASSOCIATED OIL COMPANY FOR PIPELINES & INCIDENTAL PURPOSES RECORDED JANUARY 8, 1937 IN BK. 687, PG. 23, O.R.

(9) A WAIVER OF DIRECT ACCESS RECORDED NOVEMBER 25, 1938 IN BK. 831, PG. 307, O.R.

(10) A WAIVER OF DIRECT ACCESS RECORDED AUGUST 10, 1951 IN BK. 1835, PG. 333, O.R.

(11) AN EASEMENT GRANTED TO THE COUNTY OF KERN FOR ROAD RIGHT-OF-WAY AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 8, 1954 IN BK. 2285, PG. 79, O.R.

(12) A WAIVER OF DIRECT ACCESS RECORDED JUNE 26, 1962 IN BK. 3503, PG. 964, O.R.

(13) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES RECORDED JANUARY 27, 1975 IN BK. 4879, PG. 102, O.R.

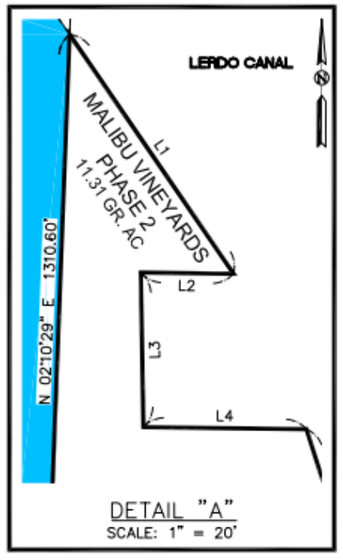
(14) AN EASEMENT GRANTED TO CAWELO WATER DISTRICT FOR PIPELINES & INCIDENTAL PURPOSES RECORDED AUGUST 15, 1984 IN BK. 5685, PG. 2043, O.R.

(15) AN EASEMENT GRANTED TO NORTH KERN WATER STORAGE DISTRICT FOR WATER TRANSPORTATION AND INCIDENTAL PURPOSES RECORDED APRIL 22, 1993 IN BK. 6835, PG. 258, O.R.

(16) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR FACILITIES AND INCIDENTAL PURPOSES RECORDED SEPTEMBER 20, 2016 IN DOC. NO. 0216128006, O.R.

(17) AN EASEMENT GRANTED TO PACIFIC GAS & ELECTRIC COMPANY FOR PUBLIC UTILITIES & INCIDENTAL PURPOSES RECORDED JUNE 26, 1962 IN BK. 3503, PG. 968, O.R.

AN EASEMENT RESERVED BY SOUTHERN PACIFIC RAILROAD COMPANY FOR RAILROAD RIGHT-OF-WAY AND INCIDENTAL PURPOSES RECORDED AUGUST 4, 1883 IN BK. 15, PG. 301 AND BK. 16, PG. 108, BOTH OF DEEDS. (EXACT LOCATION NO ASCERTAINABLE FROM RECORD)



DETAIL "A"
SCALE: 1" = 20'

06/13/22
SHEET 2 OF 4

MASTER PD PLAN NO. 75, MAP NO. 81
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SEC. 30, 28/27

Figure 3-16C: Proposed Precise Development Plan No. 75, Map 81 (Phase 2)

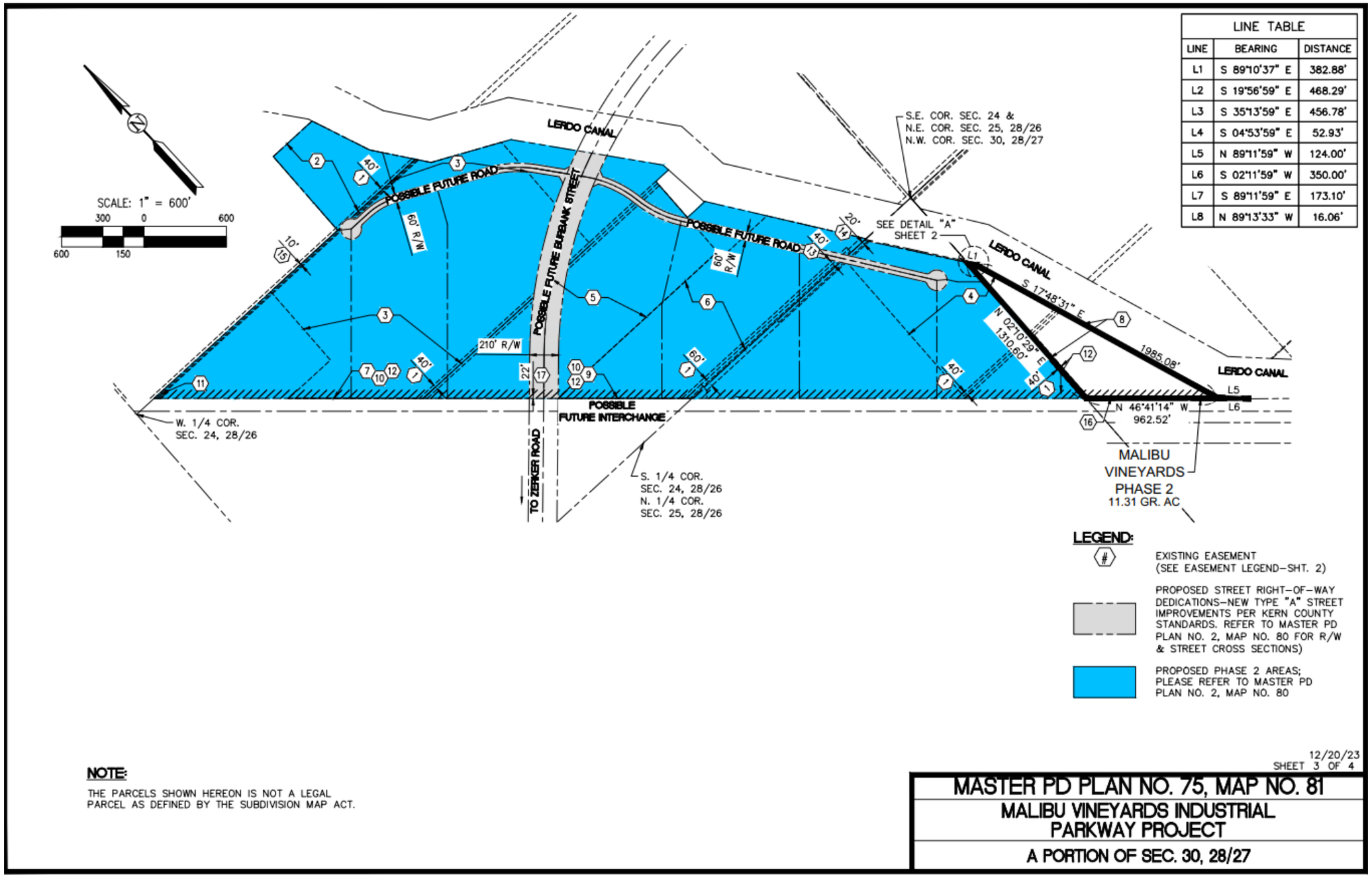
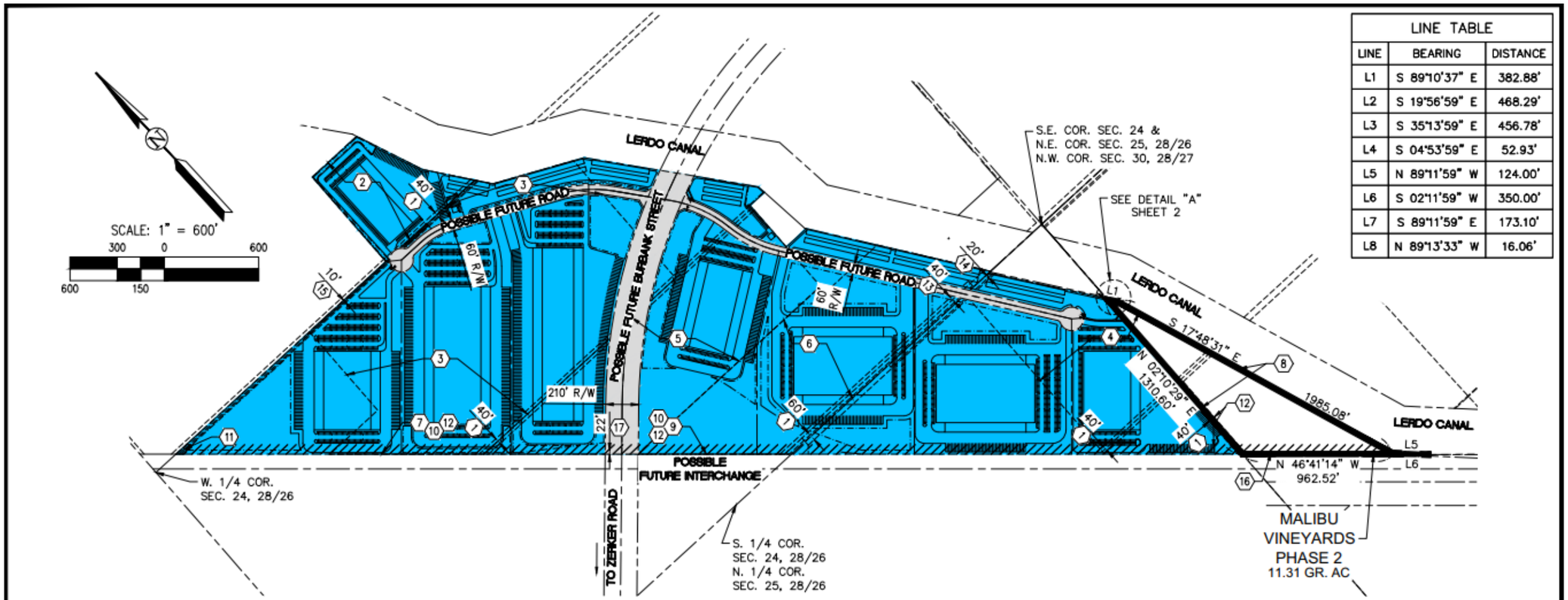


Figure 3-16D: Proposed Precise Development Plan No. 75, Map 81 (Phase 2)



MALIBU VINEYARDS - PHASE 2 PARCEL SUMMARY								
PARCEL	APN	PROPOSED USE	SIZE (Sq. Ft.) NET	SIZE (ACRES) NET	BUILDING SIZE (Sq. Ft.)	BUILDING COVERAGE	PARKING STALLS (STANDARD)	PARKING STALLS (TRUCK)
SUMP	091-200-05, 13 & 482-040-004, 05	DRAINAGE	492,536	11.31	0	0%	0	0
NET TOTALS:			**492,536**	**11.31**	**0**	**0%**	**0**	**0**

LEGEND:

(#) EXISTING EASEMENT (SEE EASEMENT LEGEND–SHT. 2)

PROPOSED STREET RIGHT–OF–WAY DEDICATIONS–NEW TYPE "A" STREET IMPROVEMENTS PER KERN COUNTY STANDARDS. REFER TO MASTER PD PLAN NO. 2, MAP NO. 80 FOR R/W & STREET CROSS SECTIONS)

PROPOSED PHASE 2 AREAS; PLEASE REFER TO MASTER PD PLAN NO. 2, MAP NO. 80

NOTE:

THE PARCELS SHOWN HEREON IS NOT A LEGAL PARCEL AS DEFINED BY THE SUBDIVISION MAP ACT.

12/20/23
SHEET 4 OF 4

MASTER PD PLAN NO. 75, MAP NO. 81
MALIBU VINEYARDS INDUSTRIAL PARKWAY PROJECT
A PORTION OF SEC. 30, 28/27

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Project Components

Phase 1

As shown on **Figure 3-14A**, *Proposed Precise Development Plan No. 74, Map 81 (Phase 1)* through **Figure 3-14K**, *Proposed Precise Development Plan No. 74, Map 81 (Phase 1)***,** Phase 1 involves development of 14 buildings totaling up to 7,242,106 square feet of warehouse and office space on approximately 534 acres, creating 14 parcels with on-site drainage basins. Parking would include 4,796 standard spaces and 3,568 truck parking spaces, for a total of 8,364 spaces.

Phase 2

As shown on **Figure 3-15A**, *Proposed Precise Development Plan No. 2 Map 80 (Phase 2)* through **Figure 3-16D**, *Proposed Precise Development Plan No. 75, Map 81 (Phase 2)*, Phase 2 involves development of ten buildings totaling up to 1,665,340 square feet of warehouse and office space, on approximately 205 acres, creating ten parcels with on-site drainage basins. Parking would include 2,130 standard parking spaces and 924 truck parking spaces, for a total of 3,054 spaces.

Ancillary Components

In addition to the main buildings described above, the remainder of the site would be developed with ancillary proposed project components to support the overall warehouse/distribution center. Each of the ancillary components are discussed below.

Security, Site Access, and Signage

Development within each future parcel of the industrial park would be required to install a six-foot minimum chain link fence and eight-foot masonry walls at locations to be approved by each individual parcel. Site access would be limited to Imperial Avenue for Phase 1 and the future expansion of Burbank Street for Phase 2. All future proposed signs would be required to undergo review by Kern County prior to obtaining building permits.

Lighting

Operation of the proposed project would require outdoor lighting for safety and security. The level and intensity of lighting would be in compliance with the County's *Dark Skies Ordinance* (Chapter 19.81 of the Kern County Zoning Ordinance). Exterior lights would be shielded, and lights would be directed away from any public rights-of-way to reduce light spillover onto adjacent and nearby properties. Light or glare would be minimized and switched lighting would be provided in areas where continuous lighting is not required for normal operation, safety, or security.

On-Site Circulation and Parking

Access to Phase 1 of the project site would include Imperial Avenue, future arterial segment of Burbank Street, and potentially an expressway that would traverse east-west through the northern boundary of

Phase 1. The Phase 2 location is currently isolated between SR 99 and the Lerdo Canal, and would require development of future Burbank Street arterial or future expressway across one or both of these features to facilitate access.

The project would develop roads adjacent to, and through the project site, in accordance with Kern County standards for project access including development of future arterial segment of Burbank Street, local streets, expressway, and interchange. Adjacent roads would be developed to half-width standards and roads through the site would be developed to full width standards. In addition, the project would develop local roads internal to the project to facilitate project access and internal circulation. Local roads would provide access to truck drive aisles and parking areas associated with each future parcel.

Phase 1 of the proposed project includes the construction of 4,796 standard spaces and 3,568 truck parking spaces, For a total of 8,364 spaces. Phase 2 of the proposed project includes the construction of 2,130 standard parking spaces and 924 truck parking spaces, for a total of 3,054 spaces. The proposed parking stalls would provide accessible parking spaces in compliance with the California Building Code standards and electric vehicle capable spaces per the California Green Code standards.

Utilities and Offsite Improvements

The project site is generally lacking in domestic utilities, which would need to be developed in conjunction with the proposed project. See **Figure 3-17,** *Existing and Proposed Offsite Improvements*.

Water service would be provided by Oildale Mutual Water Company (OMWC). Off-site improvements would include extension of OMWC's six inch domestic water line and 12-inch non-potable water line, from approximately one mile west of Quinn Road along Imperial Street, to the southeast corner of the proposed project. The project proponent has prepared a Water Supply Assessment that has been approved by OMWC.

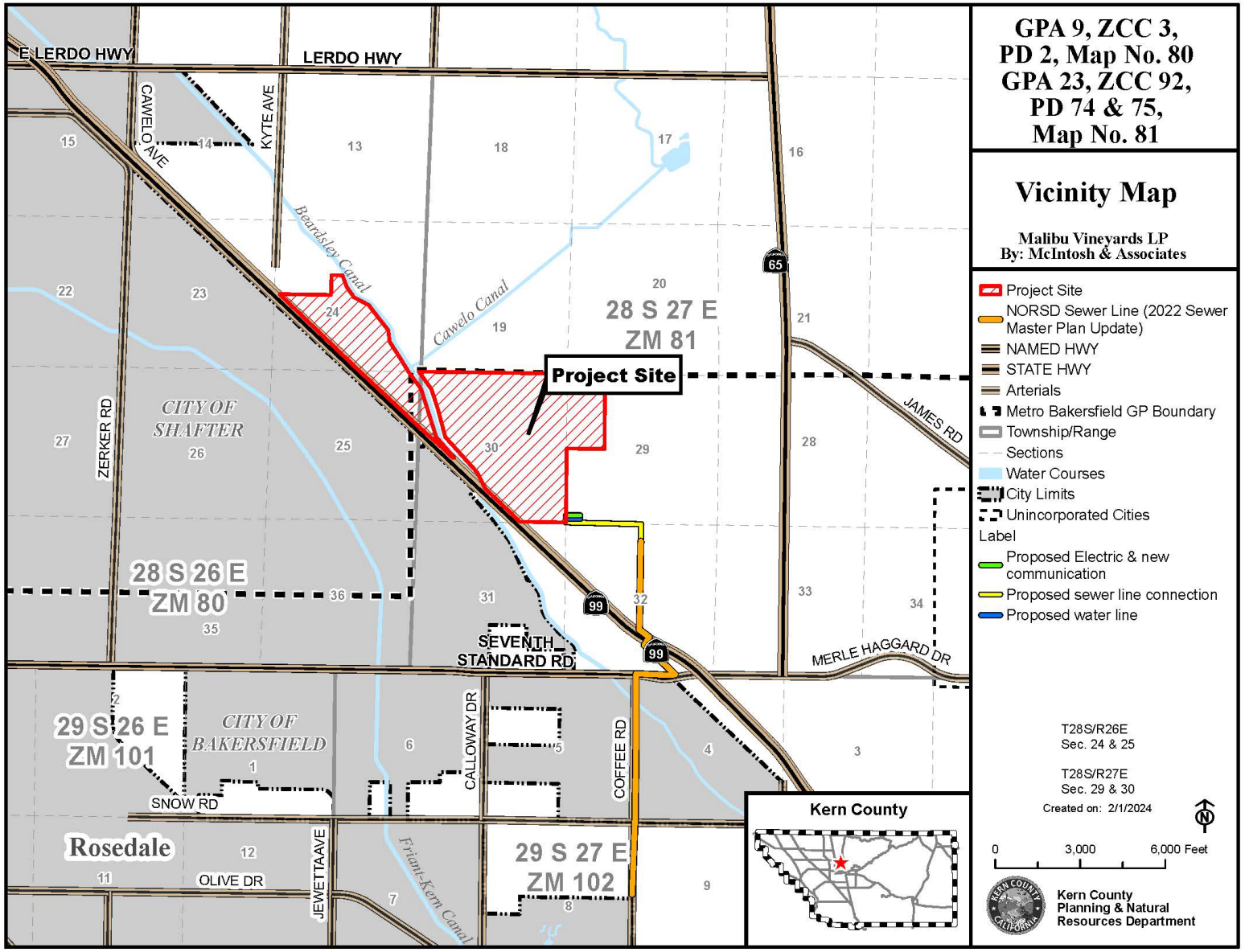
Wastewater collection would be provided by North Of River Sanitary District No. 1. The nearest sewer trunk is a 36-inch line in Norris Road approximately three miles southeast from the project site. A new sewer trunk is currently being installed from the existing 36-inch line to the future intersection of Imperial Street at Endes Street via public right of way along Coffee Road and Seventh Standard Road. In addition, Phase 1 would require the installation of a sewer lift station to reach the new sewer trunk.

Electric services would be provided by Pacific Gas and Electric Company (PG&E). PG&E would construct an electrical substation and distribution system to serve the project site. The site may be developed with solar panels in addition to tiered electric vehicle charging stations.

Gas services would be provided by Southern California Gas Company (SoCal Gas). The nearest natural gas pipeline is a 24-inch high pressure transmission line, operated by SoCal Gas, in Petrol Road, 0.5 mile south of the project. A four-inch gas line lies in the east portion of Quinn Road, south of Lencioni Avenue. The project would include a connection to the existing facilities, a new natural gas pressure reducing station, as well as gas main extension and distribution laterals within the project site.

Telephone services would be provided by AT&T and cable would be provided by Spectrum to the site.

Figure 3-17: Existing and Proposed Offsite Improvements



Stormwater Management

Stormwater would be collected via an on-site drainage system and conveyed to a detention basin to facilitate stormwater infiltration and metered discharge, emulating pre-development conditions. Each future parcel would have its own basin that would be dedicated for stormwater retention; referred to as "on-site retention basin" on **Figure 3-14**, *Proposed Precise Development Plan No. 74, Map 81 (Phase 1)* through **Figure 3-16**, *Proposed Precise Development Plan No. 75, Map 80 (Phase 2)*.

Landscaping

Each future building parcel would feature associated landscaping, generally along road frontages, driveway entries, and parking areas. Landscaping would conform to Kern County standards with five percent minimum landscaping of the entire project site. It is expected that landscaped areas would be installed prior to final occupancy and composed of native, drought-tolerant species that include shrubs and live ground cover. Bare gravel, bark, or other similar materials may be used but are not a substitute for ground cover plantings and shall be limited to no more than 25 percent of the required landscape area.

Construction

A specific construction schedule has not been identified for the project, and the schedule is likely to be driven by market demand. Project construction is anticipated to begin as early as 2025, with initial grading and infrastructure for the development of Phases 1 and 2. Each future parcel has the potential to be individually developed with buildout of Phase 1 anticipated by 2050. Phase 2 is expected to be developed concurrently beginning as early as 2025, with buildout by 2031. The construction dates are estimates and subject to change with market volatility. Construction of the proposed project would include the following activities:

- Site preparation
- Access and internal circulation roads
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Electrical/instrumentation work
- Stormwater management facilities
- Architecture and landscaping

Construction would likely occur during daylight hours, Monday through Friday, between 6:00 a.m. and 5:00 p.m. The proposed project would be constructed by several specialized construction contractors, with construction activities taking place as specified in the County's Code of Ordinances, Chapter 8.36, as required to meet the construction schedule. However, this does not preclude construction activities that are allowable between the hours of 6:00 a.m. and 9:00 p.m. on weekdays and between the hours of 8:00 a.m. and 9:00 p.m. on weekends.

Site Grading and Earthwork

Construction would involve grading and excavation for the building foundations, building construction, architectural coating, and paving activities. All grading work would commence after obtaining a building permit from grading plans that meet all code requirements. The grading plan will indicate cut and fill quantities for the site to be balanced. Site preparation and construction would occur in accordance with all federal, State, and Kern County codes and standards. Noise-generating construction activities would be limited to the construction hours per the Kern County Zoning Ordinance requirements. All stationary equipment and machines with the potential to generate a significant increase in noise or vibration levels would be located away from any noise receptors to the extent feasible. All applicable federal, State, and local requirements and best management practices (BMPs) would be incorporated into the construction activities for the project site.

Water would be required during the construction phase for such activities as dust suppression, soil compaction, and grading activities. Water may also be used at points of ingress/egress to minimize the tracking of dirt off-site onto local roadways from construction vehicles. The water used for construction purposes is expected to be approximately 350,000 gallons over the 25-year buildout and would be pumped from the existing wells located on-site. Purified water would be provided to workers during construction.

On-site restroom facilities for the construction workers would be provided by portable units to be serviced by a licensed provider; no connection to a public sewer system is required for project construction, and therefore, water for such purposes is not required.

Orderly development would commence from the southerly portions of the site to the northerly due to accessibility from existing infrastructure on Imperial Avenue. Improved circulation throughout the site would follow with the installation of local streets and progression of development.

Lighting used on-site during construction would be minimal. Site lighting may include motion sensor lights for security purposes.

Table 3-4: Construction Equipment Schedule

Equipment/Vehicles	Start Date	End Date	No. of Units	Daily Hours
Site Preparation				
Graders	6/2/2025	7/14/2048	1	8
Grading				
Scrapers	7/2/2025	9/17/2048	3	8
Graders	7/2/2025	9/17/2048	2	6
Loaders	7/2/2025	9/17/2048	1	2
Rollers	7/2/2025	9/17/2048	2	4
Trenching (Sewer)				
Trenchers	9/16/2025	3/11/2050	2	2
Other General Equipment	9/16/2025	3/11/2050	1	2
Tractors/Loaders/Backhoes	9/16/2025	3/11/2050	2	2
Trenching (Water)				
Trenchers	9/16/2025	3/11/2050	1	2
Other General Equipment	9/16/2025	3/11/2050	1	2

Equipment/Vehicles	Start Date	End Date	No. of Units	Daily Hours
Tractors/Loaders/Backhoes	9/16/2025	3/11/2050	1	2
Trenching (Storm Drain)				
Trenchers	9/16/2025	3/11/2050	2	2
Other General Equipment	9/16/2025	3/11/2050	1	2
Tractors/Loaders/Backhoes	9/16/2025	3/11/2050	2	2
Trenching (Electric)				
Trenchers	9/16/2025	3/11/2050	2	2
Other General Equipment	9/16/2025	3/11/2050	1	2
Tractors/Loaders/Backhoes	9/16/2025	3/11/2050	2	1
Trenching (Telephone)				
Trenchers	9/16/2025	3/11/2050	2	1
Other General Equipment	9/16/2025	3/11/2050	1	1
Tractors/Loaders/Backhoes	9/16/2025	3/11/2050	2	1
Paving				
Pavers	10/13/2027	4/27/2050	2	6
Paving Equipment	10/13/2027	4/27/2050	1	6
Other General Equipment	10/13/2027	4/27/2050	2	6
Rollers	10/13/2027	4/27/2050	1	6
Building Construction				
Other General Equipment	9/16/2025	10/12/2027	2	8
Cement and Mortar Mixer	4/19/2028	11/6/2028	1	8
Tractors/Loaders/Backhoes	3/1/2030	10/15/2030	2	8
Architectural Coating				
Air Compressors	12/7/2027	6/13/2050	4	6

Operation

As discussed previously, the end user and actual use of the proposed development are unknown at this time. However, for the purposes of impact assessment, operational activities are assumed to be consistent with typical warehouse and distribution facilities. Therefore, operations are expected to include the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) and distribution to retail locations or other warehouses.

Water use for the project is expected to be approximately 591 acre feet per year (AFY). It is expected that the Oildale Mutual Water Company would pump and deliver groundwater from existing allocations for the project site. Projected water demand for Phase 1 would be supplied via agreements secured with Cawelo Water Service District to provide an estimated 485 AFY. Projected water demand of 106 AFY for Phase 2 would be supplied through Kern River Water via North Kern Water Service District pursuant to Amendment 1 of the 1952 Agreement.

Each future tenant in the facility is expected to operate with regular industrial business hours. The proposed project is not located within 500 feet of property developed residentially and zoned for residential use (E, R-1, R-2 and R-3); therefore, the proposed project is not required to comply with the 65 decibel (dB) day-night average sound level (L_{dn}) (24-hour median) noise standards listed in the Kern County Zoning

Ordinance 19.80.030.S.1. The project would comply with the Noise Element of both the Metropolitan Bakersfield General Plan with acceptable noise levels below 75 dB and the Kern County General Plan guidelines below 90 dB(A) federal standards for industrial safety. At buildout, the proposed project is conservatively estimated to have approximately 5,000 to 6,000 employees.

3.8 Entitlements Required

Construction and operation of the project may require several discretionary actions and approvals. These actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other additional permits or approvals from responsible agencies may be required for the proposed project. The anticipated approvals needed for the proposed project include Adoption of a Specific Plan, General Plan Amendments, Zone Changes, and Precise Development Plans. Construction and operation of the proposed project may require additional federal, State, and local entitlements, as well as the discretionary and ministerial actions and approvals listed below.

Kern County

- Consideration and Certification of the Final EIR
- Adoption of 15091 Findings of Fact and 15093 Statement of Overriding Considerations
- Adoption of Mitigation Monitoring and Reporting Program
- Approval and adoption of the proposed Malibu Vineyards Industrial Parkway Specific Plan, including proposed text and land use designations
- Amendment of the KCGP to change land use designation
- Amendment of the MBGP to change land use designation
- Zone Change Case (ZCC) for the proposed site, Maps 80 and 81
- Approval of Master Precise Development Plan
- Kern County Public Works Department - Construction, grading, and building permits
- Kern County Environmental Health Services Division – water well permits, if required
- Kern County Fire Department – Fire Safety Plan
- Right-of-way Encroachment Permits
- Kern County Certificates of Occupancy
- Kern County LAFCO – Annexation of the project site into the OMWC jurisdiction

Other Responsible Agencies

Federal

- **U.S. Fish and Wildlife Service (USFWS):** Section 10 Incidental Take Permit and Habitat Conservation Plan (if required)

State

- **California Department of Fish and Wildlife (CDFW):** Incidental Take Permit pursuant to the California Endangered Species Acts and other authorities (if required)
- California Department of Transportation (Caltrans), District 6: Right-of-Way Encroachment Permit (if required)
- State Water Resources Control Board (SWRCB):
- Waste Discharge Requirements, if necessary
- National Pollutant Discharge Elimination System Construction General Permit
- General Construction Stormwater Permit
- Preparation of a Storm Water Pollution Prevention Plan
- State Water Resources Control Board of Drinking Water: Water System Permit, if necessary
- **California Public Utilities Commission:** Any project elements to be constructed by regulated public utilities

Local

- **Kern County Local Agencies Formation Commission:** Annexation of 739 acres, inclusive of the project site, into OMWC's service area.
- **Oildale Mutual Water Company:** Annexation of 739 acres, inclusive of the project site, into OMWC's service area and approval of a Water Supply Assessment
- **San Joaquin Valley Air Pollution Control District:** Authority to Construct, Fugitive Dust Control Plan, Permit to Operate, Indirect Source Review, any other permits as necessary

3.9 Relationship of the Project to Other Projects

The proposed project is being developed independently of other approved or proposed projects in the County. If approved, the proposed project facilities would be subject to their own use permits and conditions of approval. Kern County understands that the proposed project facilities would be built and operated independently of any other project and, if approved, would not depend on any other project for economic viability. To increase efficiency, reduce costs, and minimize visual and environmental impacts, the proposed project is being located along the transportation corridor of SR 99, to avoid sensitive receptors such as residential dwelling units and to support warehouse distribution with adequate circulation.

3.10 Cumulative Projects

CEQA requires an EIR to evaluate a project's cumulative impacts. Cumulative impacts are the project's impacts combined with the impacts of other related past, present, and reasonably foreseeable future projects. As set forth in the *CEQA Guidelines*, the discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the proposed project alone. As stated in the *California Code of Regulations (CCR)*, Title 14, Section 21083(b), a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable.

According to the *CEQA Guidelines*:

> "Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
>
> a) The individual effects may be changes resulting from a single project or a number of separate projects.
>
> b) The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Section 15355).

In addition, as stated in the *CEQA Guidelines*, it should be noted that:

> "The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable" [CCR, Title 14, Division 6, Chapter 3, Section 15064(h)(4)].

Cumulative impact discussions for each environmental topic area are provided at the end of each technical analysis presented in Chapter 4, under *Impacts and Mitigation Measures*, in this EIR. As previously stated, and as set forth in the *CEQA Guidelines*, related projects consist of "closely related past, present, and reasonable foreseeable probable future projects" that would likely result in similar impacts and are located in the same geographic area.

The project site is located in an agricultural area with limited development in the surrounding vicinity. Local land uses consist primarily agriculture, vacant land, scattered industrial, and commercial development. A residence is located approximately 350 feet southwest of the project site, beyond SR 99. The surrounding terrain has generally flat topography. The proposed project utilized this site due to its central location in the San Joaquin Valley, accessibility to major north-south (I-5 and SR 99) and east-west (SR 46) highways, the presence of nearby commercial and industrial uses, and water affordability.

For each environmental topic area, cumulative effects are assessed in a different way. For example, the San Joaquin Valley Air Pollution Control District (SJVAPCD) requires use of a one-mile radius to identify the cumulative effects of hazardous air pollutant emissions as well as most odor sources. The SJVAPCD also

recommends a one-mile limit for hazardous air pollutants because such emissions primarily affect individuals that reside or work within the immediate vicinity (one mile) of the emissions source. However, the Kern County Planning and Natural Resources Department's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* requires a six-mile radius to assess cumulative impacts because developments in rural areas tend to affect a larger geographical area than developments located in urban areas. Kern County, City of Bakersfield and City of Shafter files were reviewed to determine the number of permitted or planned projects within the six-mile radius.

The cumulative analysis in Chapter 4, *Environmental Analysis*, of this EIR is based on a qualitative cumulative analysis, which includes all of the projects located within a six-mile radius of the project site, as well as growth projections to the Year 2030. Different resource-specific analyses use this six-mile radius unless specific methodology deems other supplemental approaches are appropriate. Projects that are planned but have not been submitted for review by Kern County or the City of Bakersfield are not included in this analysis because insufficient information is available to produce an analysis of cumulative effects.

The Kern County General Plan and Metro Bakersfield General Plan (Unincorporated Planning Area) are the primary guides for land development in the vicinity of the proposed project. The Land Use, Open Space, and Conservation Element of the Kern County General Plan assumes continued growth in commercial and industrial development similar to the current growth rate, and anticipates the future growth rate would parallel the future residential growth rate in the unincorporated areas of the County. The Land Use Element of the Metro Bakersfield General Plan (Unincorporated Planning Area) assumes northeast Bakersfield area will experience significant growth. The proposed project is considered part of this projected growth. Cumulative projects planned within a six-mile radius of the project site, as well as cumulative industrial projects planned within Kern County are identified in **Table 3-5**, *Cumulative Projects List*, and illustrated on **M**ap, These projects were considered when analyzing cumulative conditions and impacts.

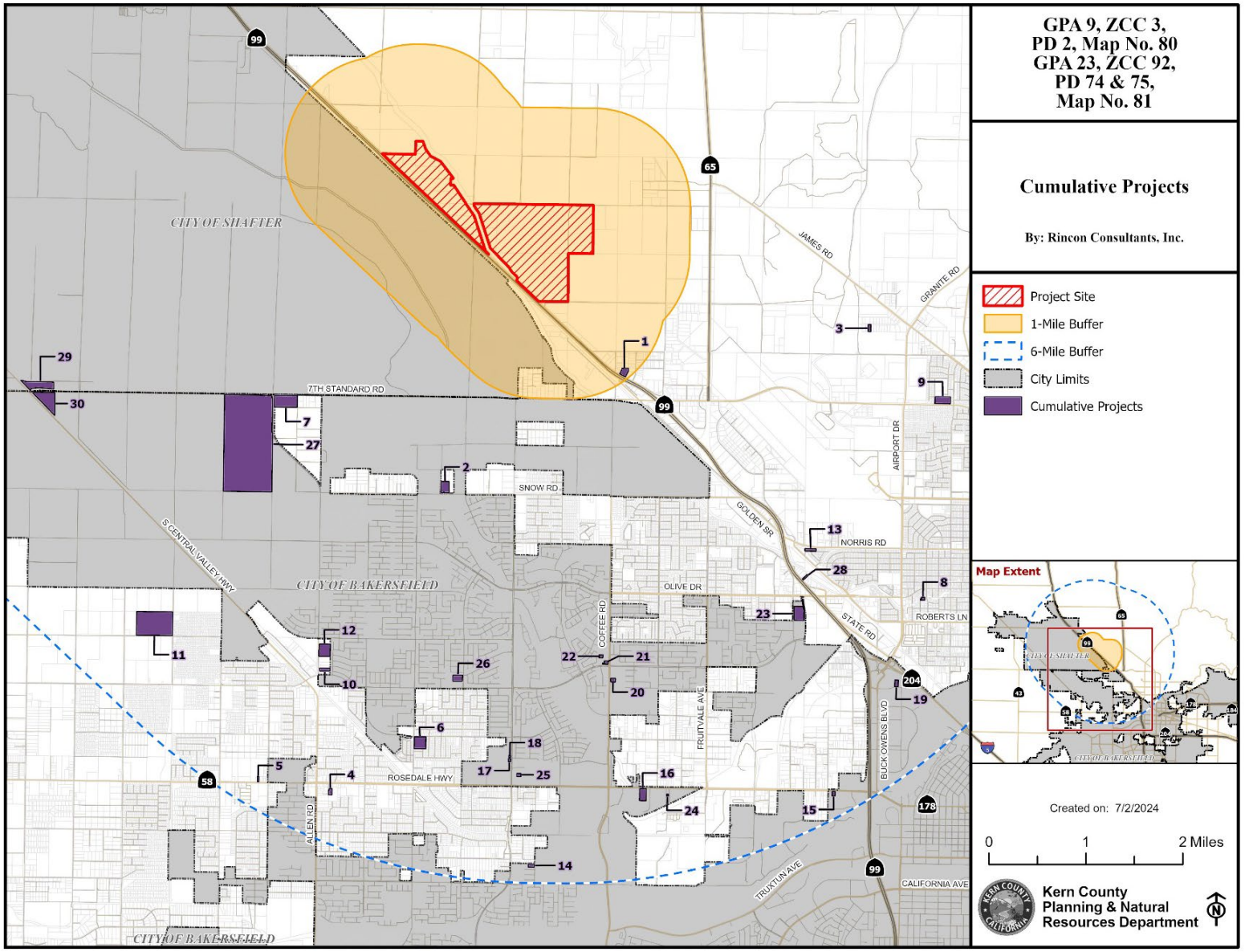
Table 3-5: Cumulative Projects List

Name	Project Location	Request	APN	Zone Map	Section/ Township /Range	Approx. Acreage
Cumulative Projects within a One-Mile Radius						
1. Coastline Equipment	4252 Saco Road	Minor Precise Development Modification	482-090-32	81-32	S.32/T.28S/ R.27E	3.00
Cumulative Projects within a Six-Mile Radius						
2. Rock Harbor Church	7446 Isaak Ln.	Conditional Use Permit to allow church within E 2 ½	492-090-20	102	S.6/T.29S/ R.27E	5.99
3. Hunting Titan, Inc.	1133 Carrier Parkway Ave	Conditional Use Permit for indoor storage of explosives	483-220-28	81-35	S.35/T.28S/ R.27E	1.26
4. Christian Hall	2470 Central Ave	General Plan Amendment and Zone Change from UER and E (5) RS to GC and C-1	496-040-05	101-25	S.25/T.29S/ R.26E	1.34
5. Denise Shepherd	13846 Rosedale Hwy	Zone Change for Office and Storage	464-040-02	101-23	S.23/T.29S/ R.26E	0.46
6. Sam Abed	3212 Jewetta Ave	Conditional Use Permit to allow a place of worship to operate	450-020-01	102-19	S.19/T.29S/ R.27E	9.32
7. Zerker 7, LLC	Corner of Seventh Standard Rd and Zerker Rd	PD plan and ZCC from A to C-2 to allow general commercial development to include, but not limited to, convenience	530-010-06	101	S.2/T.29S/ R.26E	17.98

Name	Project Location	Request	APN	Zone Map	Section/ Township /Range	Approx. Acreage
		store w/ fuel pumps, fast food restaurants, retail stores, etc.				
8. California Veterans Assistance Foundation, Inc.	604 Covey Ave, in Bakersfield (450 feet North)	CUP for Supportive Housing/Veteran's Housing	114-181-10	102-13	S.13/T.29S/ R.27E	0.69
9. North River Municipal Water District	4000 Rio Del Norte St	GPA and ZCC, Leasing of Office Building, change GPA from LMR to OC and zoning from A-1 to CO	483-040-22	81-35	S.35/T.28S/ R.27E	7.00
10. Ian Parks, Ruttgers & Schuler Civil Engineers	East side of Allen Rd approximately 200 feet north of Hageman Rd	GPA and ZCC	527-020-17	101-13	S.13/T.29S/ R.26E	2.06
11. Cornerstone Engineering, Inc.	15318 Noriega Rd	GPA and ZCC for future residential development	463-052-09	101	S.15/T.29S/ R.26E	57.73
12. J & M California Land Company c/o McIntosh & Associates	4840 Allen Rd	GPA, ZCC and PDPlan to expand mini-storage	527-020-31	101-13	S.13/T.29S/ R.26E	4.68
13. Varner Bros., Inc	1700 Lisle St	GPA and ZCC for truck parking	111-191-07	102	S.11/T.29S/ R.27E	1.69
14. Unknown	9301-9315 Thistlewood Ct	Unknown	368-180-01, 368-180-02, 368-180-03, 368-180-04	102-29	S.29/T.29S/ R.27E	1.07
15. Unknown	3925 Rosedale Hwy	Site Plan Review for 4,990 sf retail building	332-240-48	102-26	S.26/T.29S/ R.27E	0.87
16. Unknown	7511 Rosedale Hwy	Site Plan Review for warehouse and office development	368-060-10	102	S.28/T.29S/ R.27E	5.22
17. Unknown	2901 Calloway Dr	Site Plan Review for 971 sf drive-thru coffee shop	450-052-74	102-19	S.19/T.29S/ R.27E	0.39
18. Unknown	3003 Calloway Dr	Unknown	450-230-20	102-19	S.19/T.29S/ R.27E	0.26
19. Unknown	3220 Rio Mirada Dr	Site Plan Review for construction of a Construct 6.450 sf office/warehouse	116-110-29	102-14	S.14/T.29S/ R.27E	1.54
20. Unknown	4420 Coffee Rd	Site Plan Review for an 1,811 sf addition (coffee shop with drive-thru)	507-060-17	102-16	S.16/T.29S/ R.27E	1.15
21. Unknown	4601 Coffee Rd and Hageman Rd	Site Plan Review for the addition of a new pad for a 1,906 sf dive-thru restaurant in a retail center	494-870-06	102	S.17/T.29S/ R.27E	0.89
22. Unknown	4733 Centennial Plaza Way	Site Plan Review for a 8,492 sf office building	494-870-10	102	S.17/T.29S/ R.27E	0.74

Name	Project Location	Request	APN	Zone Map	Section/ Township /Range	Approx. Acreage
23. Unknown	5512 Knudsen Dr	Site Plan Review for a 39,648 sf medical outpatient facility	365-020-28	102-15	S.15/T.29S/ R.27E	10.11
24. Unknown	2420 Wedding Ln	CUP Permit for expansion of existing legal non-conforming use for a mobile park home	368-050-07	102-28	S.28/T.29S/ R.27E	0.20
25. Unknown	9600 Retail Dr	CUP to allow operation of a cocktail bar	451-140-41	102	S.20/T.29S/ R.27E	0.80
26. Unknown	4301 Verdugo Ln	CUP to allow a 200-unit apartment complex in C-1 zone	526-570-01	102	S.18/T.29S/ R.27E	3.88
27. Unknown	7th Standard Rd & Zerker Rd	Unknown	530-010-01	101	S.2/T.29S/ R.26E	317.26
28. Russel Romandia	5950 State Rd	ZCC from Highway Commercial to Light Industrial for industrial-retail operations	364-212-07	102-10	S.10/T.29S/ R.27E	0.60
29. Bakersfield 239 Industrial Project	Merle Haggard Dr. between Airport Dr. and Landings Way	PD Plan, GPA, and ZCC for industrial warehouse	Multiple	81-35	S.35/T.28S/ R.27E	115
30. IPG Industrial Project	Boughton Dr. and Airport Dr.	PD Plan for industrial warehouse	492-010-13 492-010-17	102	S.2/T.29S/ R.27E	49.05
31. Conditional Use Permit 24-140	6000 E. Lerdo Highway	Expansion of existing gas station to truck stop	091-020-01	80	S.10/T28.S/ R.26E	2.2
32. Tract 7388 – Phase 2	Gossamer Grove Specific Plan Area	Final Map for 13 SFR Units	Multiple	Unknown	Unknown	2.2
33. Tract 7244 – Phase 1	Marcona Preserve Specific Plan Area	Development Agreement, Improvement Agreement, CFD Annexation, Final Map for development of 188 SFR Units	Multiple	Unknown	Unknown	60.3
34. Tract 7422	Gossamer Grove Specific Plan Area	Tentative Map for 1,251 SFR Units	Multiple	Unknown	Unknown	352.0
35. Tract 7447	Gossamer Grove Specific Plan Area	Tentative Map for 147 SFR Lots	Multiple	Unknown	Unknown	32.2
36. Specific Plan Amendment 23-09	Mission Lakes Specific Plan Area	Revisions to SP to reconfigure lots and recreation areas and to make changes to setback	Multiple	Unknown	Unknown	1,356.8
37. Wonderful Industrial Park Expansion	NE corner of 7th Standard Road/Santa Fe Way	Expansion of Development of industrial and logistical center	Multiple	80	Multiple Section T.28S/R.26 E	1,800
38. Rosedale Ranch Trade and Transportati on Park	SE corner of 7th Standard Road/Santa Fe Way; north of Olive Drive	Development of industrial and logistical center	Multiple	101	Multiple Sections T.29S/R.26 E	1,600

Figure 3-18: Cumulative Projects Map



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Chapter 4

Environmental Setting, Impacts, and Mitigation Measures

Chapter 4

Environmental Setting, Impacts, and Mitigation Measures

4.1 Introduction

This chapter is devoted to resource topics. Impacts on a resource are evaluated for the project site in each section of this chapter. For each resource, a description of the environmental setting, including relevant data, is presented. The impacts of the project on the resource are evaluated in terms of significance, and mitigation measures are identified. As lead agency, Kern County is responsible for determining what mitigation measures are appropriate and feasible. Resource sections include:

- Section 4.1 – Aesthetics
- Section 4.2 – Agriculture and Forestry Resources
- Section 4.3 – Air Quality
- Section 4.4 – Biological Resources
- Section 4.5 – Cultural Resources
- Section 4.6 – Energy
- Section 4.7 – Geology and Soils
- Section 4.8 – Greenhouse Gas Emissions
- Section 4.9 – Hazards and Hazardous Materials
- Section 4.10 – Hydrology and Water Quality
- Section 4.11 – Land Use and Planning
- Section 4.12 – Noise
- Section 4.13 – Population and Housing
- Section 4.14 – Public Services
- Section 4.15 – Recreation
- Section 4.16 – Transportation and Traffic
- Section 4.17 – Tribal Cultural Resources
- Section 4.18 – Utilities and Service Systems
- Section 4.19 – Wildfire

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Section 4.1

Aesthetics

Section 4.1
Aesthetics

4.1.1 Introduction

This section of the EIR discusses impacts associated with the potential for the project to degrade the existing visual character or quality of the project site and its surroundings through changes in the existing landscape. Potential effects are evaluated relative to important visual features (e.g., scenic highways, scenic features) of the existing visual landscape and its users. Degradation of the visual character of a site is addressed through a qualitative evaluation of the changes to the aesthetic characteristics of the existing environment, and the project-related modifications that would alter the visual setting. The terms and concepts in the discussion below are used to describe and assess the aesthetic setting and impacts from the project.

Visual Concepts and Terminology

When viewing the same landscape, people may have different responses to that landscape and any proposed visual changes based upon their values, familiarity, concern, or expectations for that landscape and its scenic quality. Because each person's attachment to and value for a particular landscape is unique, visual changes to that landscape inherently affect viewers differently. Nonetheless, generalizations can be made about viewer sensitivity to scenic quality and visual changes.

The following terms and concepts are used in the discussion below to describe and assess the aesthetic setting and impacts from the proposed project.

Key Observation Point (KOP) – These are viewpoints from which project impacts are assessed. They typically include a series of points on a travel route or at a sensitive use area, such as a residence, where the view of a project would be most revealing.

Scenic vista – An area identified or known for high scenic quality. Scenic vistas may be designated by a federal, State, or local agency. Scenic vistas can also include an area that is designated, contains posted signage, and accessible to the public for the express purposes of viewing and sightseeing.

Scenic highway – Any stretch of public roadway that is designated as a scenic corridor by a federal, State, or local agency.

Sensitive receptors *or* sensitive viewpoints – Viewer responses to visual settings are inferred from a variety of factors, including distance and viewing angle, type of viewers, number of viewers, duration of view, and viewer activities. The viewer type and associated viewer sensitivity are distinguished among project viewers in recreational, residential, commercial, military, and industrial areas. Viewer activities can range from a circumstance that encourages a viewer to observe the surroundings more closely (such as recreational activities), to discouraging close observation (such as commuting in heavy traffic). Residential viewers typically have extended viewing periods and are generally considered to have high visual sensitivity. For this reason, residential views are typically considered sensitive. Viewers from public parks, recreational trails, and/or culturally important sites also have high visual sensitivities; therefore, such

locations are considered sensitive viewpoints. Viewers in commercial, military, and industrial areas are not typically focused on the views and the areas do not promote enjoyment of views; therefore, viewers in these locations are assumed to have low sensitivity.

Viewing Distance Zones – The landscape is subdivided into three distance zones based on relative visibility from travel routes or observation points. The three zones are: foreground, middle-ground, and background. The foreground zone includes areas less than 0.25 mile away, the middle-ground zone includes areas 0.25 mile to 3 miles away, and the background zone includes areas beyond 3 miles.

Viewshed – The viewshed for a project is defined as the surrounding geographic area from which the project is likely to be seen, based on topography, atmospheric conditions, land use patterns, and roadway orientations. "Project viewshed" is used to describe the area surrounding a project site where a person standing on the ground or driving a vehicle can view the project site.

Visual sensitivity – The overall measure of an existing landscape's susceptibility to adverse visual changes.

Recreational users (e.g., hikers, equestrians, tourists, and people driving) are expected to be highly concerned with the character of scenery and landscape. People who commute daily through the same landscape generally have a moderate concern for scenery, while people who work at or commute through industrial sites generally have a lower concern for scenic quality or changes to existing landscape character.

The visual sensitivity of a landscape is affected by the viewing distances at which it is seen. The visual sensitivity of a landscape is also affected by the travel speed at which a person is viewing the landscape (high speeds on a highway, low speeds on a hiking trail, or stationary at a residence).

The same feature of a project can be perceived differently by people depending on the distance between the observer and the viewed object. When a viewer is closer to a viewed object in the landscape, more detail can be seen, and there is greater potential influence of the object on visual quality because of its form or scale (relative size of the object in relation to the viewer). When the same viewed object is viewed at background distances, details may be imperceptible but overall forms of terrain and vegetation are evident, and the horizon and skyline are dominant. In the middle ground, some detail is evident in the foreground and landscape elements are seen in context with landforms and vegetation patterns in the background. The same levels of sensitivity apply in this case as with close-up and farther away views; views from cars at high speeds would be less sensitive to changes than views at low speeds because more details can be drawn from the landscape at lower speeds.

4.1.2 Environmental Setting

Regional Character

Kern County's geography is diverse, with mountainous areas, agricultural lands, and desert areas. Kern County consists of three general areas or regions – Valley Region, Mountain Region, and Desert Region. The County encompasses more than five million acres within these diverse geographic regions. The project site is located in the Kern County region of the San Joaquin Valley in California.

Land uses in the project vicinity are primarily dominated by agriculture and undeveloped land, with low-density residential, industrial, commercial, and other uses. The Lerdo Canal flows southeast to northwest along the eastern boundary of Phase 2 and the western boundary of Phase 1 of the project (refer to **Figure 4.1-1,** *Project Location Map*). The nearest cluster of residential development is located 0.2 mile southwest of the project site beyond SR 99 and the Lerdo Canal. There are no designated State scenic highways or potentially eligible highways in the vicinity of the proposed project site. There are very few light sources in the region due to a lack of concentrated development.

Local Character

The proposed project site is located in a relatively flat area of the County that is dominated by vacant land and agriculture (refer to **Figure 4.1-1,** *Project Location Map*). The proposed project site is located north of Imperial Avenue and generally east of SR 99, with site access from Saco Road and Imperial Avenue. The proposed project site is relatively flat and lacks significant topographical features, ranging in elevation from approximately 440-550 feet above mean sea level (msl) throughout the site. Based on historical topographic maps and aerial photographs, the proposed project site has been cultivated for grape vineyards since at least 2003. The site includes outdoor storage of various farm related operational equipment, along with a fenced and secured concrete floor storage shed for additional agricultural related tools and products. Agricultural uses are adjacent north, east, south, and west of the project site. As described in more detail in Section 4.4, *Biological Resources*, of this EIR, the proposed project site is entirely composed of ruderal (disturbed) land. No native vegetation or natural habitat exists within the proposed project site and no riparian habitat or surface water resources are located on the site or in the immediate vicinity of the proposed project site.

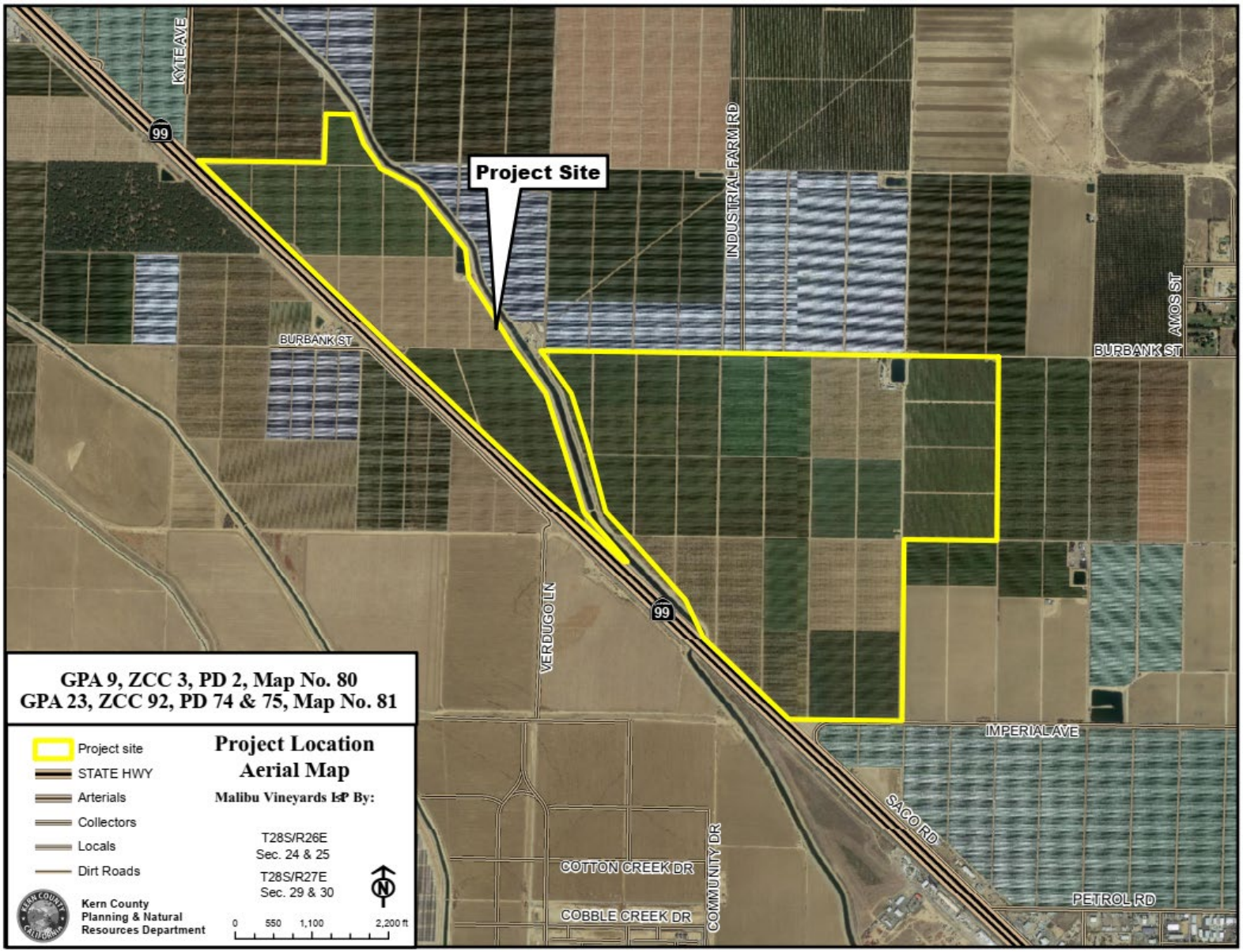
Scenic Highways

According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System, there are no Designated State Scenic Highways within Kern County (see Section 4.1.3, *Regulatory Setting*, below for more information on the State Scenic Highway Mapping System). There are three Eligible Scenic Highways in Kern County, all of which are located in the desert portion of eastern Kern County (Caltrans 2023). Route 1, which begins north of Mojave and continues to the Inyo County Line, consists of State Route (SR) 14 and State Highway 395. Route 2 consists of SR 58 between Mojave and Boron. Route 3 consists of 5 miles of SR 41 in northwest Kern County. The project site would not be visible from any of these routes. In addition to the State Scenic Highway Mapping System, the Kern County General Plan Circulation Element designates scenic routes and defines a scenic route as any freeway, highway, road, or other public right-of-way, which traverses an area of exceptional scenic quality and must be officially set as a Scenic Route by the Kern County Board of Supervisors or the State of California.

Lighting Environment

The project site does not currently contain any lighting and none of the dirt roads bordering or traversing the project site include street lighting. As the area immediately surrounding the project site is predominantly agricultural land, vehicles on SR 99 and other roads are the largest existing source of nighttime lighting and glare on the project site.

Figure 4.1-1: Project Location Map



4.1.3 Regulatory Setting

Federal

National Scenic Byways Program

The National Scenic Byways (NSB) Program is part of the United States Department of Transportation, Federal Highway Administration (FHWA). The NSB Program was established under the Intermodal Surface Transportation Efficiency Act of 1991 and was reauthorized in 1998 under the Transportation Equity Act for the 21st Century. Under the program, the United States Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities.

State

California Scenic Highway Program

The California Department of Transportation (Caltrans) manages the California Scenic Highway Program, which was created in 1963 by the California legislature to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The program includes a list of highways that are eligible for designation as scenic highways or that have been designated as such. A highway may be designated as scenic based on certain criteria, including how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the traveler's enjoyment of the view. State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263.

Local

As discussed in the Chapter 3, *Project Description*, the proposed project contains approximately 194 acres (approximately 26 percent of the project site) within the Kern County General Plan (KCGP) and approximately 545 acres (approximately 74 percent of the project site) within the Metropolitan Bakersfield General Plan (MBGP). The entire project is subject to the provisions of the Kern County Zoning Ordinance.

Kern County General Plan (KCGP)

The Land Use, Open Space, and Conservation Element of the KCGP evaluates the visual and aesthetic setting of Kern County and assesses the potential for visual impacts. According to this element, the site is not identified as a significant scenic resource.

The Kern County General Plan Circulation Element also provides a discussion regarding Scenic Routes. A Scenic Route is defined in the Kern County General Plan as any freeway, highway, road, or other public right-of-way which traverses an area of exceptional scenic quality. A roadway can only be designated as a scenic route by direct action of the Kern County Board of Supervisors or the State of California. A route may not be selected as scenic until a visual assessment of the route has been conducted to determine if the

route meets the current scenic highway criteria as mentioned above and to what extent development has encroached on the scenic views. The County also has to prepare and adopt a plan and program for the protection and enhancement of adjacent roadside viewshed land. As such, goals, policies and implementation measures regarding Scenic Routes in the Circulation Element are focused on the need for the County to further develop their Scenic Route program and measures to protect scenic resources, which are not applicable to the proposed project.

The KCGP provides goals and policies for the design features of development projects in order to reduce impacts of such projects. The policies and implementation measures in the KCGP for aesthetic resources applicable to the project are provided below. The KCGP contains additional policies, goals, and implementation measures that are more general in nature and are not specific to development such as the proposed project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1: Land Use, Open Space, and Conservation Element

1.10.7 Light and Glare

Policies

Policy 47: Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas.

Policy 48: Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.

Implementation Measure

Measure AA: The County shall utilize CEQA Guidelines and the provisions of the Zoning Ordinance to minimize the impacts of light and glare on adjacent properties and in rural undeveloped areas.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The MBGP provides goals and policies for the design features of development within its plan area. According to the MBGP, the site is not identified as a significant scenic resource. The MBGP policies related to aesthetic resources that are applicable to the proposed project are provided below. The MBGP contains additional policies, goals, and implementation measures that are more general in nature and are not specific to development such as the proposed project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the MBGP are incorporated by reference.

Policies

LU Policy 35: Encourage upgrading of visual character of heavy manufacturing industrial areas through the use of landscaping or screening of visually unattractive buildings and storage areas.

LU Policy 36: Require that industrial use provide design features, such as screen walls, landscaping and height, setbacks and lighting restrictions between the boundaries of adjacent residential

land use designation so as to reduce impacts on residence due to light, noise sound and vibration.

LU Policy 37: Street frontage along all new industrial developments shall be landscaped.

Kern County Zoning Ordinance

Chapter 19.74, Scenic Corridor (SC) Combining District

Chapter 19.74 of the Zoning Ordinance establishes a Scenic Corridor (SC) Combining District. This zoning district is intended to protect areas with unique visual and scenic resources from intrusion by excessive or inappropriate forms of signage by requiring additional review by Kern County Planning and Natural Resources Department. The proposed project site is not located in a designated Scenic Corridor.

Chapter 19.81, Dark Skies Ordinance (Outdoor Lighting)

In November 2011, Kern County approved a Dark Skies Ordinance. The purpose of this ordinance is to maintain the existing character of Kern County by requiring a minimal approach to outdoor lighting, recognizing that excessive illumination can create a glow that may obscure the night sky and excessive illumination, or glare may constitute a nuisance. The ordinance provides requirements for outdoor lighting within specified unincorporated areas of Kern County in order to accomplish the following objectives.

Objectives

Objective 1: Encourage a safe, secure, and less light-oriented night-time environment for residents, businesses and visitors.

Objective 2: Promote a reduction in unnecessary light intensity and glare, and to reduce light spillover onto adjacent properties.

Objective 3: Protect the ability to view the night sky by restricting unnecessary upward projections of light.

Objective 4: Promote a reduction in the generation of greenhouse gases by reducing wasted electricity that can result from excessive or unwanted outdoor lighting.

Kern County Development Standards

The Kern County Development Standards have specific regulations pertaining to lighting standards. Lighting must be designed so that light is reflected away from surrounding land uses so as not to affect or interfere with vehicular traffic, pedestrians, or adjacent properties.

4.1.4 Impacts and Mitigation Measures

This section describes the impact analysis relating to aesthetics for the proposed project. It describes the methods used to determine the impacts of the proposed project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, where applicable.

Methodology

In general, the potential aesthetic, light, and glare impacts associated with projects are evaluated on a qualitative basis. This visual impact assessment is being utilized to identify and assess any potential long-term adverse visual impacts on aesthetics and visual resources that might result from implementation of the proposed project. This assessment is based on the approved visual assessment practices employed by the Bureau of Land Management (BLM 1986), the U.S. Forest Service (USFS 1995), and other federal regulatory agencies. This method includes:

- Defining the proposed project and its visual setting by assessing the project proponent's submitted project application materials, including plans and descriptions, and reviewing Google Earth Pro aerial photographs and street-level photography, Kern County Geographic Information System (GIS) topographic and land use data, and U.S. Geological Survey (USGS) topographic data;
- Conducting a field visit of the project site and vicinity in May of 2021 to document the following:
    - Project site's visual characteristics;
    - Project vicinity's visual characteristics;
    - Establish a visual characteristic baseline;
    - Location of visual (sensitive) receptors in the vicinity;
- Establishing nine Key Observation Points (KOPs) within the vicinity from which to evaluate potential visual impacts resulting from implementation of the proposed project;
- Preparing visual simulations of post-development views from the KOPs;
- Assessing the proposed project's impacts to sensitive views in comparison to their baseline visual quality and character and visual simulation; and,
- Proposing methods to mitigate any potentially significant visual impacts identified.

The evaluation of proposed project impacts is based on professional judgment, analysis of applicable Kern County General Plan and Metropolitan Bakersfield General Plan goals and policies, and the significance criteria established by the California Environmental Quality Act (CEQA).

Visual Simulations and Viewpoints

In order to assess potential aesthetic impacts associated with the project, visual simulations were prepared by VisionScape Imagery (See **Figure 4.1-3** through **Figure 4.1-6**) to provide a comparison of pre- and post-

project conditions, as well as context for qualitative descriptions of the aesthetic changes that would result from the proposed project. Photographs were taken during a site visit in May of 2021.

Selection of Key Observation Points (KOPs)

Visual simulations from nine Key Observation Points (KOPs), labeled alphabetically (Viewpoint A-I), were created for the project site, see **Figure 4.1-2**, *Visual Simulation Locations*. Locations identified in red are ground level simulations and those in blue are aerial (drone) simulations. The locations of the nine viewpoints were selected to create post-development views of the project site for the following reasons:

- These viewpoints represent views residents in nearby residential areas would experience of the proposed project.
- These viewpoints represent views motorists on local roads would experience of the proposed project.
- These viewpoints were selected as they could represent other sensitive receptors throughout the proposed project's vicinity.

The nine KOPs were selected to represent views that would be experienced from sensitive viewpoints. KOPs are single viewpoints that appropriately reflect the impact implementation of the project would have on one or more sensitive receptors. Sensitive receptors near the project site fall into the following categories: motorists, employees, and residents. KOPs were identified based on review of available land use data, preliminary viewshed analysis, and a review of aerial maps.

The process of identifying KOPs focused on selecting viewpoints that could be used to accurately represent views from a broader range of viewpoints, particularly viewpoints from area sensitive receptors. Sensitive receptors near the project site include motorists and viewers of the project site from residences located 0.2 miles (at the closest point) southwest of the project site beyond SR 99 and Lerdo Canal.

Familiarity with the view also influences how much attention is spent on the visual environment. Regular motorists may be highly familiar with the view and sometimes pay less attention; however, these motorists tend to be much more sensitive to changes in that view. People who are less familiar with the view may spend more time looking at the surrounding land, but would not notice changes in the view.

The project site is located in an agricultural area. As described above, the nearest cluster of residential development is located 0.2 mile southwest of the project site beyond SR 99 and Lerdo Canal. Due to the lack of elevation, the residents to the southwest would have a direct view of the project site. Residents with direct views of the project site from their homes would tend to be the most sensitive to changes in the view. These residents tend to have much more familiarity with the existing viewshed and a heightened sensitivity to any visual changes within the landscape. Employees of the surrounding agricultural facilities also would be able to see the project site, but are less likely to be sensitive to the aesthetic change given that they are in the area to work.

Simulation Preparation

Visual simulations of the project from the identified KOPs were prepared to provide a comparison of pre- and post-project conditions as well as context for qualitative description of the aesthetic changes that would

result from the project. Photographs were taken during a site visit in May of 2021 and simulations were prepared by VisionScape Imagery using the assumptions and methodologies listed below in **Table 4.1-1:** *Visual Simulation Methodology and Assumptions*.

Table 4.1-1: Visual Simulation Methodology and Assumptions

Photography from Key Observation Points	• Photos were taken on a sunny day with wispy light clouds 5/26/21 • Ground Level Views: Canon EOS 6D Mark II - 35 to 52 mm zoom • Aerial Views: DJI Mavic Pro 2 Drone - 28mm
Visual simulation assumptions	Site was built based on site plan CAD files provided. Architecture followed the CAD foot prints and the look was based on photos provided.
Methods	Following the data gathering phase, the process begins with a determination of proposed camera locations and/or station points. Upon review and approval of camera locations, VisionScape coordinates the site photography and schedules the initial site visit with County staff and/or project planner. This includes identification of reference points with GPS coordinates and specific fields of vision for each view. Concurrently, the modeling team develops an exact computer model of the proposed industrial project to illustrate elevations. Existing and surrounding contextual elements such as streets and terrain (where applicable) were used as a reference. Upon completion of the 3D modeling phase, realistic materials, maps, and textures are then applied. The next phase is assembly, during which the modeling is inserted into photographs taken during the field study using a full frame camera and camera match technology. 3D pads and boundary outlines are used to situate the modules to the proposed positions as shown on the CAD file provided. During this process, a computer model camera is aligned with the on-site photography to depict the project setting within each view. Lastly, final modifications are made to ensure the appearance of the simulation accuracy is consistent and is representative of the project design. GPS and Camera Match Technology includes the use of a "Full Frame" digital camera with built in GPS for documenting coordinates at requested station points.
Source: VisionScape Imagery (See **Figure 4.1-3** through **Figure 4.1-6**)	

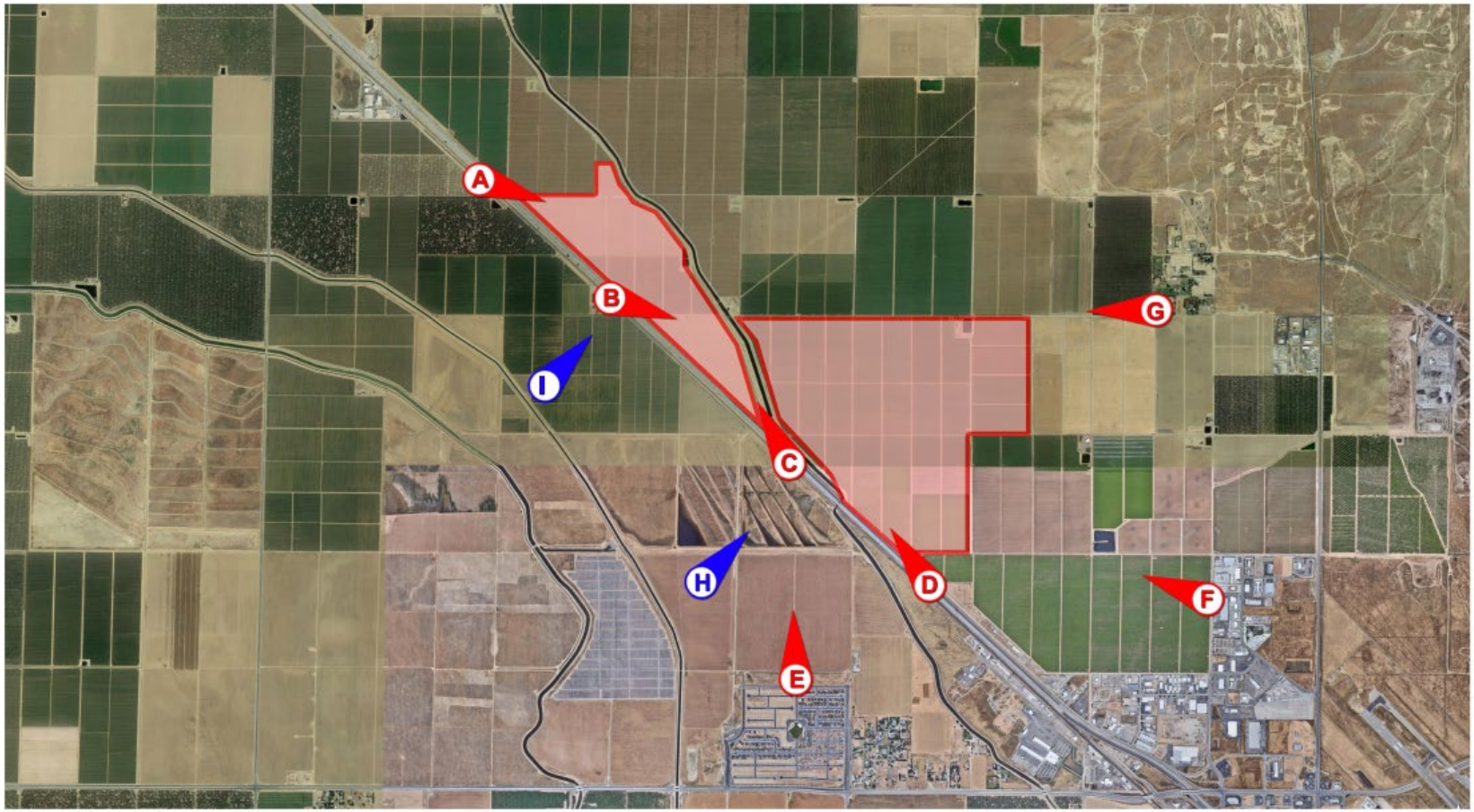
A comparison of existing views from the KOPs with visual simulations depicting visible project features, aided in determining project-related impacts. The simulations are representative of the existing landscape setting contained within the project site, as well as an illustration of how the project may look from the identified KOPs at full buildout. Modular warehouse structures are visually similar regardless of the manufacturer. Therefore, the warehouse buildings shown in the visual simulations are not necessarily identical to those that would be developed on-site, but are similar enough to evaluate project impacts to aesthetics.

Viewpoints Selected for Analysis

Of the nine viewpoint visual simulations prepared, four viewpoints A, B, C, and D were selected for further analysis in this section. All visual simulations can be viewed in **Figure 4.1-3**, through **Figure 4.1-6.** As described in Section 4.1.2, *Environmental Setting* above, the proposed project site is located in an agricultural area. Sensitive receptors near the project site fall into two categories—motorists and residents. Out of the nine KOPs, viewpoints A, B, C, and D have been selected as they best represent views seen by motorists and residents (sensitive receptors) near the project area. As the project site is bordered by SR 99 with predominantly undeveloped agricultural land to the north and east, the project site would likely be most visible from SR 99 and residential areas to the south.

Notably, since the creation of the visual simulations in 2021, a residential area has been developed approximately 0.2 miles (at the closest point) southwest of the project site beyond SR 99 and Lerdo Canal. This residential development is currently the closest to the project site. Viewpoints C or D are approximately located at the closest point between the project and the new residential development.

Figure 4.1-2: Visual Simulation Locations



Malibu Vineyards

Key Map

VisionScape IMAGERY
visionscapeimagery.com
Toll Free 888.356.3668

Rating Visual Quality

"Visual quality" is a measure of a landscape or view's visual appeal. While there are a number of standardized methods for rating visual quality, the "Scenic Quality Rating Criteria" method utilized by BLM is believed to be the most comprehensive as it allows the various landscape elements that comprise visual quality to be easily quantified.

According to this method, visual quality is rated according to the presence and characteristics of seven key components of the landscape. These components include landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications, further described below.

1. The ***landform*** component of the visual quality rating criteria takes into account the fact that topography becomes more interesting visually as it gets steeper or more massive, or more severely or universally sculptured. Outstanding landforms may be monumental (as found in Yosemite Valley), or they may be exceedingly artistic and subtle (such as certain badlands, pinnacles, arches, and other extraordinary formations).
2. The ***vegetation*** component of the rating criteria gives primary consideration to the variety of patterns, forms, and textures created by plant life. Short-lived displays are given consideration when they are known to be recurring or spectacular. Consideration is also given to smaller scale vegetation features that add striking and intriguing detail elements to the landscape (e.g., gnarled or wind beaten trees, Joshua trees, etc.).
3. The ***water*** component of the rating criteria recognizes that visual quality is largely tied to the presence of water in scenery, as it is that ingredient which adds movement or serenity to a scene. The degree to which water dominates the scene is the primary consideration in selecting the rating score for the water component.
4. The ***color*** component of the visual quality rating criteria considers the overall color(s) of the basic components of the landscape (e.g., soil, rock, vegetation, etc.). Key factors that are used when rating the color of scenery are variety, contrast, and harmony.
5. The ***adjacent scenery*** component of the rating criteria takes into account the degree to which scenery outside the view being rated enhances the overall impression of the scenery under evaluation. The distance of influence for adjacent scenery normally ranges from 0–5 miles, depending upon the characteristics of the topography, the vegetation cover, and other such factors. This factor is generally applied to views that would normally rate very low in score, but the influence of the adjacent high visual quality would enhance the visual quality and raise the score.
6. The ***scarcity*** component of the visual quality rating criteria provides an opportunity to give added importance to one or all of the scenic features that appear to be relatively unique or rare within a region. There may also be cases where a separate evaluation of each of the key factors does not give a true picture of the overall scenic quality of an area. Often, it is a number of not so spectacular elements in the proper combination that produces the most pleasing and memorable scenery – the scarcity factor can be used to recognize this type of area and give it the added emphasis it should have.

7. The ***cultural modifications*** component of the visual quality rating criteria takes into account any man-made modifications to the landform, water, vegetation, and/or the addition of man-made structures. Depending on their character, these cultural modifications may detract from the scenery in the form of a negative intrusion, or they may complement and improve the scenic quality of a view.

Based on the above criteria, views are rated numerically and a total score of visual quality can be tabulated. Based on the BLM's rating system, there are a total of 35 points possible. Views that score a total of 19 points or more are typically considered very high in visual quality. Views that score a total of 15 to 19 points are typically considered to have a high level of visual quality. Views that score a total of 12 to 15 points are typically considered to have an above average level of visual quality. Finally, views that score a total of 11 points or less are typically considered to have average visual quality. See **Table 4.1-2**, *Visual Quality Rating System*, for the point values associated with the various criteria.

Table 4.1-2: Visual Quality Rating System

Key Factors	Rating Criteria and Score		
Landform	**5 Points:** High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops, or severe surface variation or highly eroded formations including major badlands or dune systems; or detail features dominant and exceptionally striking and intriguing such as glaciers.	**3 Points:** Steep canyons, mesas, buttes, cinder cones, and drumlins; or interesting erosional patterns or variety in size and shape of landforms; or detail features which are interesting though not dominant or exceptional.	**1 Point:** Low rolling hills, foothills, or flat valley bottoms; or few or no interesting landscape features.
Vegetation	**5 Points:** A variety of vegetative types as expressed in interesting forms, textures, and patterns.	**3 Points:** Some variety of vegetation, but only one or two major types.	**1 Point:** Little or no variety or contrast in vegetation.
Water	**5 Points:** Clear and clean appearing, still, or cascading white water, any of which are a dominant factor in the landscape.	**3 Points:** Flowing, or still, but not dominant in the landscape.	**0 Points:** Absent, or present but not noticeable.
Color	**5 Points:** Rich color combinations, variety or vivid color; or pleasing contrasts in the soil, rock, vegetation, water or snow fields.	**3 Points:** Some intensity or variety in colors and contrast of the soil, rock, and vegetation, but not a dominant scenic element.	**1 Point:** Subtle color variations, contrast, or interest; generally mute tones.
Influence of Adjacent Scenery	**5 Points:** Adjacent scenery greatly enhances visual quality.	**3 Points:** Adjacent scenery moderately enhances overall visual quality.	**0 Point:** Adjacent scenery has little or no influence on overall visual quality.
Scarcity	**5 Points:** One of a kind; or unusually memorable, or very rare within region. Consistent chance for exceptional wildlife or wildflower viewing, etc.	**3 Points:** Distinctive, though somewhat similar to others within the region.	**1 Point:** Interesting within its setting but fairly common within the region.
Cultural Modifications	**2 Points:** Modifications add favorably to visual variety while promoting visual harmony.	**0 Points:** Modifications add little or no visual variety to the area and introducing no discordant elements.	**-4 Points:** Modifications add variety but are very discordant and promote strong disharmony.
	Total Score for All Categories: Out of 35		

Source: *BLM Manual H-8410-1 – Visual Resources Inventory* (BLM 1986).

An important premise of this evaluation method is that views with the most variety and most harmonious composition have the greatest scenic value. Another important concept is that man-made features within a landscape do not necessarily detract from the scenic value. In fact, certain man-made features that complement the natural landscape may actually enhance the visual quality. In making this determination, it is therefore important to assess proposed project effects relative to the "visual character" of the proposed project setting. Visual character is qualitatively defined by four primary components: form, line, color, and texture.

Projects that create a high level of contrast to the existing visual character of a project setting are more likely to generate adverse visual impacts due to visual incompatibility. Conversely, projects that create a low level of contrast to the existing visual character are less likely to generate adverse visual impacts due to inherent visual compatibility. On this basis, project modifications are quantified and evaluated for impact assessment purposes.

By comparing the difference in visual quality ratings from the baseline ("before" condition) to post-project ("after" condition) visual conditions, the severity of project related visual impacts can be quantified. However, in some cases, visual changes caused by projects may actually have a beneficial visual effect and may enhance scenic quality. The following designations are used to rank the significance of project impacts according to the pre- and post-project differences in numerical visual quality scores:

- **Potentially Significant Impact:** Any impact that could potentially lower the visual quality of an identified sensitive viewpoint by two points, or more, and for which no feasible or effective mitigation can be identified.
- **Less than Significant Impact with Mitigation Incorporated:** Any impact that could potentially lower the visual quality of an identified sensitive viewpoint by two points or more but can be reduced to less than two points with mitigation incorporated. Therefore, specific mitigation measures are provided to reduce the impact to a less than significant level.
- **Less than Significant Impact:** Any impact that could potentially lower the visual quality of an identified sensitive viewpoint by one point or less. In visual impact analysis, a less than significant impact usually occurs when a project's visual modifications can be seen but do not dominate, contrast with, or strongly degrade a sensitive viewpoint.
- **No Impact:** The project would not have an impact from an identified sensitive viewpoint. In visual impact analysis, there is no impact if the project's potential visual modifications cannot be seen from an identified sensitive viewpoint.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the *CEQA Guidelines*, to determine if a project could potentially have a significant adverse effect on aesthetic resources if it would:

a. Have a substantial adverse effect on a scenic vista;

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

c. Substantially degrade the existing visual character or quality of the site and its surroundings; or,

d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

The lead agency determined in the Notice of Preparation/Initial Study (NOP/IS) (see Appendix A) that the following environmental issue areas would result in no impacts or less than significant impacts and were therefore scoped out of requiring further review in this EIR:

- Have a substantial adverse effect on a scenic vista; and
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Please refer to Appendix A of this EIR for a copy of the NOP/IS and additional information regarding these issue areas.

Project Impacts

Impact 4.1-1: The Project Would Substantially Degrade the Existing Visual Character or Quality of the Site and its Surroundings.

The proposed project entails the development of approximately 8,907,446 square-feet of industrial use space, comprised of 24 buildings on 739 acres of which a portion is existing vineyard and the majority is vacant land. SR 99 is located along the west side of the proposed project site. Surrounding roads are predominantly dirt roads used for accessing agricultural uses. Implementation of the proposed project would result in temporary (construction) and permanent (operational) changes to the existing visual character and quality of the proposed project site and its surroundings. During construction, views of the project site would consist of ground disturbance and associated construction equipment and materials.

In order to determine whether the proposed project would substantially degrade the existing visual quality of the site, this analysis compares the existing visual setting with simulated portrayals of the post-project visual conditions. As described above under *Methodology*, four viewpoints (A, B, C, and D) have been selected for analysis as they represent potential views seen by sensitive receptors. The following is an analysis of viewpoints A, B, C and D using the BLM rating system provided above in **Table 4.1-3,** *Visual Quality Rating System.*

Viewpoint A

Viewpoint A is located at the northwest corner of Phase 2 and looks southeast onto the project site, which is currently undeveloped agricultural land (see **Figure 4.1-3,** *Viewpoint A*). Viewpoint A offers views that a motorist might see as they approach, traveling south bound on SR 99.

The existing project site is relatively flat, provides little variety or contrast in vegetation, contains no visible water as the Lerdo Canal is not visible from SR 99, displays subtle color variations, and adjacent scenery has little or no influence on overall visual quality of the site. Additionally, as the region and sounding area contain agriculture land the project site is not visually distinctive nor does it contain existing modifications.

Based on the BLM rating system, Viewpoint A would have a final score of 4 under exiting conditions and a score of 8 under project conditions, as shown in **Table 4.1-3***, Visual Quality Rating Analysis: Viewpoint A***.**

Table 4.1-3: Visual Quality Rating Analysis: Viewpoint A

	Pre-Development Condition	Project Condition	Change
Landform Explanation	Broad and flat terrain with SR 99 in the foreground, low-lying agriculture in the middle ground and distant mountain views in the background.	Under project conditions flat topography of the area would not be noticeably modified. Distant mountain views would be partially obstructed.	
Detail	Under project conditions the flat topography of the area would not be noticeably modified. Mountain views would be partially obstructed; however, mountains would still be visible under project conditions from the viewpoint. Impacts would be less than significant.		
Score	**1**	**1**	**0**
Vegetation Explanation	The project area offers no contrasting vegetation and low-lying agriculture in the middle ground is the only vegetation visible.	Under project conditions, planned frontage landscaping and remaining low-lying agriculture would be visible.	
Detail	The project currently contains low-lying agriculture which offers no contrasting vegetation. The project would remove low-lying agriculture and add frontage landscaping. Impacts would be less than significant.		
Score	**1**	**1**	**0**
Water Explanation	Lerdo Canal is on the site; however, it is not visible from SR 99.	No visible water.	
Detail	Water features would not be visible in pre- or post-development views. No impacts to water features would occur.		
Score	**0**	**0**	**0**
Color Explanation	The project area is dominated by shades of brown, gray and green from agriculture, SR 99 and bare ground.	The project would introduce shares of gray from proposed structures and shades of green from planned frontage landscaping.	
Detail	Shades of brown, gray and green would be visible in pre- or post-development views. Changes to the horizon views would be minimal.		
Score	**1**	**1**	**0**
Influence of Adjacent Scenery Explanation	Adjacent scenery has similar visual elements as the project site.	The project would not affect the visual elements of any of the adjacent scenery.	
Detail	The project would not modify, substantially obstruct, or interrupt views of adjacent scenery. Less than-significant impacts to views of adjacent scenery would result.		
Score	**0**	**0**	**0**
Scarcity Explanation	The existing view is common within the region.	The project would not disrupt overall views within the region.	
Detail	Existing views are typical of the area. Visible features are not particularly unique or unusual. Alteration of the would not result in visually significant impacts to view scarcity.		
Score	**1**	**1**	**0**

Cultural Modifications	The existing cultural modifications include SR 99, agriculture use and overhead powerlines.	The project would add 24 buildings to the project site, which would add variety; however, when compared to existing conditions would promote disharmony.	
Detail	Existing cultural modifications add little or no visual variety to the area and introduce no discordant elements. Existing features are compatible with rural elements in the surrounding area. The project would add 24 buildings to the project site, which would add variety; however, when compared to existing conditions would promote disharmony. Therefore, due to the scale of project elements impacts would be potentially significant.		
Score	**0**	**-4**	**-4**
Total (35 possible)	**4**	**0**	**-4**
Source: BLM Manual H-8410-1 – Visual Resources Inventory (BLM 1986).			

Views that score a total of 11 points or less are typically considered to have average visual quality. Implementation of the proposed project would result in a decline (4 points on the BLM scale) in the Cultural modifications category as the project would entail the development of 24 buildings. As discussed above, any impact that could potentially lower the visual quality of an identified viewpoint by two points or more before mitigation would be considered a potentially significant impact. Therefore, based on the BLM rating system, implementation of the proposed project would have a potentially significant impact on the visual character of the project site. See summary below for a discussion of mitigation measures.

Viewpoint B

Viewpoint B is located on SR 99 and looks southeast on Phase 2 of the project, which is currently undeveloped agricultural land (see **Figure 4.1-4,** *Viewpoint B*). Viewpoint B offers views that a motorist might see traveling south on SR 99 adjacent to the project site.

The existing project site is relatively flat, provides little variety or contrast in vegetation, contains no visible water as the Lerdo Canal is not visible from SR 99, displays subtle color variations, and adjacent scenery has little or no influence on overall visual quality of the site. Additionally, as the region and sounding area contain agriculture land the project site is not visually distinctive nor does it contain existing modifications. Based on the BLM rating system, Viewpoint B would have a final score of 4 under exiting conditions and a score of 8 under project conditions as shown in **Table 4.1-4***, Visual Quality Rating Analysis: Viewpoint B*.

Table 4.1-4: Visual Quality Rating Analysis: Viewpoint B

	Pre-Development Condition	Project Condition	Change
Landform Explanation	Broad and flat terrain with SR 99 in the foreground, low-lying agriculture in the middle ground and distant mountain views in the background.	Under project conditions flat topography of the area would not be noticeably modified. Distant mountain views would be obstructed.	
Detail	Under project conditions the flat topography of the area would not be noticeably modified. Mountain views would be obstructed; however, due to distance, mountain views are not particularly dominant. Impacts would be less than significant.		
Score	**1**	**1**	**0**

	Pre-Development Condition	Project Condition	Change
Vegetation Explanation	The project area offers no contrasting vegetation and low-lying agriculture in the middle ground is the only vegetation visible.	Under project conditions, planned frontage landscaping would be visible.	
Detail	The project currently contains low-lying agriculture, which offers no contrasting vegetation. The project would remove low-lying agriculture and add frontage landscaping. Impacts would be less than significant.		
Score	**1**	**1**	**0**
Water Explanation	Lerdo Canal is on the site; however, it is not visible from SR 99.	No visible water.	
Detail	Water features would not be visible in pre- or post-development views. No impacts to water features would occur.		
Score	**0**	**0**	**0**
Color Explanation	The project area is dominated by shades of brown, gray and green from agriculture, SR 99 and bare ground.	The project would introduce shades of gray from proposed structures and shades of green from planned frontage landscaping.	
Detail	**Shades of brown, gray and green would be visible in pre- or post-development views. Changes to the horizon views would be minimal.**		
Score	**1**	**1**	**0**
Influence of Adjacent Scenery Explanation	Adjacent scenery has similar visual elements as the project site.	The project would not affect the visual elements of any of the adjacent scenery.	
Detail	The project would not modify, substantially obstruct, or interrupt views of adjacent scenery. Less than significant impacts to views of adjacent scenery would result.		
Score	**0**	**0**	**0**
Scarcity Explanation	The existing view is common within the region.	The project would not disrupt overall views within the region.	
Detail	Existing views are typical of the area. Visible features are not particularly unique or unusual. Alteration of the would not result in visually significant impacts to view scarcity.		
Score	**1**	**1**	**0**
Cultural Modifications	The existing cultural modifications include SR 99, agriculture use and overhead powerlines.	The project would add 24 buildings to the project site, which would be prominent from viewpoint B. The buildings would add variety, but also would promote disharmony with surrounding views.	
Detail	Existing cultural modifications add little or no visual variety to the area and introduce no discordant elements. Existing features are compatible with rural elements in the surrounding area. The project would add 24 buildings to the project site, which would add variety; however, when compared to existing conditions would promote disharmony. Therefore, due to the scale of project elements, impacts would be potentially significant.		
Score	**0**	**4**	**-4**
Total (35 possible)	**4**	**0**	**-4**
Source: BLM Manual H-8410-1 – Visual Resources Inventory (BLM 1986).			

Views that score a total of 11 points or less are typically considered to have average visual quality. Implementation of the proposed project would result in a decline (4 points on the BLM scale) in the Cultural modifications category as the project would entail the development of 24 buildings, which are partiality prominent in viewpoint B due to distance. As discussed above, any impact that could potentially lower the visual quality of an identified viewpoint by two points or more before mitigation would be considered a potentially significant impact. Therefore, based on the BLM rating system, implementation of the proposed project would have a potentially significant impact on the visual character of the project site. See summary below for a discussion of mitigation measures.

Viewpoint C

Viewpoint C is located on SR 99 and looks northwest on Phase 2 of the project, which is currently undeveloped agricultural land (see **Figure 4.1-5***, Viewpoint C*). Viewpoint C offers the best representation of what someone might see from the nearest residential area, which is approximately located 0.2 miles southwest of the project site beyond SR 99 and Lerdo Canal.

The existing project site is relatively flat, provides little variety or contrast in vegetation, contains no visible water, as the Lerdo Canal is not visible from SR 99, displays subtle color variations, and adjacent scenery has little or no influence on overall visual quality of the site. Additionally, as the region and sounding area contain agriculture land the project site is not visually distinctive nor does it contain existing modifications. Based on the BLM rating system, Viewpoint C would have a final score of 4 under exiting conditions and a score of 8 under project conditions as shown in **Table 4.1-5***, Visual Quality Rating Analysis: Viewpoint C*.

Table 4.1-5: Visual Quality Rating Analysis: Viewpoint C

	Pre-Development Condition	Project Condition	Change
Landform Explanation	Broad and flat terrain with SR 99, overhead powerlines and grasses in the foreground, and low-lying agriculture in the middle ground.	Under project conditions flat topography of the area would not be noticeably modified.	
Detail	Under project conditions the flat topography of the area would not be noticeably modified. Impacts would be less than significant.		
Score	**1**	**1**	**0**
Vegetation Explanation	The project area offers no contrasting vegetation and low-lying agriculture in the middle ground is the only vegetation visible.	Under project conditions, planned frontage landscaping would be visible.	
Detail	The project currently contains low-lying agriculture, which offers no contrasting vegetation. The project would remove low-lying agriculture and add frontage landscaping. Impacts would be less than significant.		
Score	**1**	**1**	**0**
Water Explanation	Lerdo Canal is on the site; however, it is not visible from SR 99.	No visible water.	
Detail	Water features would not be visible in pre- or post-development views. No impacts to water features would occur.		
Score	**0**	**0**	**0**

	Pre-Development Condition	Project Condition	Change
Color Explanation	The project area is dominated by shades of brown, gray and green from agriculture, SR 99 and bare ground.	The project would introduce shades of gray from proposed structures and shades of green from planned frontage landscaping.	
Detail	Shades of brown, gray and green would be visible in pre- or post-development views. Changes to the horizon views would be minimal.		
Score	**1**	**1**	**0**
Influence of Adjacent Scenery Explanation	Adjacent scenery has similar visual elements as the project site.	The project would not affect the visual elements of any of the adjacent scenery.	
Detail	The project would not modify, substantially obstruct, or interrupt views of adjacent scenery. Less than significant impacts to views of adjacent scenery would result.		
Score	**0**	**0**	**0**
Scarcity Explanation	The existing view is common within the region.	The project would not disrupt overall views within the region.	
Detail	Existing views are typical of the area. Visible features are not particularly unique or unusual. Alteration of the would not result in visually significant impacts to view scarcity.		
Score	**1**	**1**	**0**
Cultural Modifications	The existing cultural modifications include SR 99, agriculture use and overhead powerlines.	The project would add 24 buildings to the project site, which would be prominent from viewpoint C. The buildings would add variety but also would promote disharmony with surrounding views.	
Detail	Existing cultural modifications add little or no visual variety to the area and introduce no discordant elements. Existing features are compatible with rural elements in the surrounding area. The project would add 24 buildings to the project site, which would add variety; however, when compared to existing conditions would promote disharmony. Therefore, due to the scale of project elements, impacts would be potentially significant.		
Score	**0**	**-4**	**-4**
Total (35 possible)	**4**	**0**	**-4**
Source: BLM Manual H-8410-1 – Visual Resources Inventory (BLM 1986).			

Views that score a total of 11 points or less are typically considered to have average visual quality. Implementation of the proposed project would result in a decline (4 points on the BLM scale) in the Cultural modifications category as the project would entail the development of 24 buildings. As discussed above, any impact that could potentially lower the visual quality of an identified viewpoint by two points or more before mitigation would be considered a potentially significant impact. Therefore, based on the BLM rating system, implementation of the proposed project would have a potentially significant impact on the visual character of the project site. See summary below for a discussion of mitigation measures.

Viewpoint D

Viewpoint D is located on SR 99 to the south of Phase 1 and looks northwest on Phase 2, which is currently undeveloped agricultural land (see **Figure 4.1-6***, Viewpoint D*). Viewpoint D offers views that a motorist might see traveling north on SR 99.

Similar to the other viewpoints, the existing project site is relatively flat, provides little variety or contrast in vegetation as land is being used for agriculture, contains no visible water, as the Lerdo Canal is not visible from SR 99, displays subtle color variations, and adjacent scenery has little or no influence on overall visual quality of the site. Additionally, as the region and sounding area contain agriculture land, the project site is not visually distinctive, nor does it contain existing modifications. Based on the BLM rating system, Viewpoint D would have a final score of 4 under exiting conditions and a score of 0 under project conditions shown in **Table 4.1-6***, Visual Quality Rating Analysis: Viewpoint D*.

Table 4.1-6: Visual Quality Rating Analysis: Viewpoint D

	Pre-Development Condition	Project Condition	Change
Landform Explanation	Broad and flat terrain with SR 99, overhead powerlines and grasses in the foreground, and low-lying agriculture in the middle ground.	Under project conditions flat topography of the area would not be noticeably modified.	
Detail	Under project conditions the flat topography of the area would not be noticeably modified. Impacts would be less than significant.		
Score	**1**	**1**	**0**
Vegetation Explanation	The project area offers no contrasting vegetation and low-lying agriculture in the middle ground is the only vegetation visible.	Under project conditions, planned frontage landscaping and remaining low-lying agriculture would be visible.	
Detail	The project currently contains low-lying agriculture, which offers no contrasting vegetation. The project would remove low-lying agriculture and add frontage landscaping. Impacts would be less than significant.		
Score	**1**	**1**	**0**
Water Explanation	Lerdo Canal is on the site; however, it is not visible from SR 99.	No visible water.	
Detail	Water features would not be visible in pre- or post-development views. No impacts to water features would occur.		
Score	**0**	**0**	**0**
Color Explanation	The project area is dominated by shades of brown, gray and green from agriculture, SR 99 and bare ground.	The project would introduce shades of gray from proposed structures and shades of green from planned frontage landscaping.	
Detail	Shades of brown, gray and green would be visible in pre- or post-development views. Changes to the horizon views would be minimal.		
Score	**1**	**1**	**0**
Influence of Adjacent Scenery Explanation	Adjacent scenery has similar visual elements as the project site.	The project would not affect the visual elements of any of the adjacent scenery.	
Detail	The project would not modify, substantially obstruct, or interrupt views of adjacent scenery. Less than significant impacts to views of adjacent scenery would result.		
Score	**0**	**0**	**0**

	Pre-Development Condition	Project Condition	Change
Scarcity Explanation	The existing view is common within the region.	The project would not disrupt overall views within the region.	
Detail	Existing views are typical of the area. Visible features are not particularly unique or unusual. Alteration of the would not result in visually significant impacts to view scarcity.		
Score	**1**	**1**	**0**
Cultural Modifications	The existing cultural modifications include SR 99, agriculture use and overhead powerlines.	The project would add 24 buildings to the project site, which would be prominent from viewpoint D. The buildings would add variety, but also would promote disharmony with surrounding views.	
Detail	Existing cultural modifications add little or no visual variety to the area and introduce no discordant elements. Existing features are compatible with rural elements in the surrounding area. The project would add 24 buildings to the project site, which would add variety; however, when compared to existing conditions would promote disharmony. Therefore, due to the scale of project elements, impacts would be potentially significant.		
Score	**0**	**-4**	**-4**
Total (35 possible)	**4**	**0**	**-4**
Source: BLM Manual H-8410-1 – Visual Resources Inventory (BLM 1986).			

Views that score a total of 11 points or less are typically considered to have average visual quality. Implementation of the proposed project would result in a decline (4 points on the BLM scale) in the Cultural modifications category as the project would entail the development of 24 buildings. As discussed above, any impact that could potentially lower the visual quality of an identified viewpoint by two points or more before mitigation would be considered a potentially significant impact. Therefore, based on the BLM rating system, implementation of the proposed project would have a potentially significant impact on the visual character of the project site. See summary below for a discussion of mitigation measures.

Figure 4.1-3: Viewpoint A

Existing View

Proposed View

Figure 4.1-4: Viewpoint B

Existing View

Proposed View

Figure 4.1-5: Viewpoint C

Existing View

Proposed View

Figure 4.1-6: Viewpoint D

Existing View

Proposed View

Summary

Based on the quantitative analysis of visual quality completed for viewpoints A, B, C, and D, as shown in **Table 4.1-3** through **Table 4.1-6**, the existing project site would be considered to have an "average" visual quality using the BLM rating methodology. The proposed project as currently designed includes the construction of approximately 8,907,446 square feet of industrial use space, comprised of 24 buildings on 739 acres of existing vineyard that would support mixed-use office and warehouse operations, in addition to associated driveways, parking areas, truck courts, landscaping, and detention basins to control surface drainage. Accordingly, the project would introduce industrial features where they do not currently dominate the primarily agricultural landscape, resulting in potentially significant aesthetics impacts.

Mitigation Measures **MM 4.1-1** through **MM 4.1-3** would reduce visual impacts associated with the proposed project by requiring the color treatment of buildings best blend in with the natural landscape, implementing be visual screens for mechanical equipment on rooftops, and implementation a landscaping plan.

Mitigation Measures

MM 4.1-1: Prior to the issuance of building permits, the project proponent/operator shall submit a proposed color scheme and treatment plan, for review and approval by the Kern County Planning and Natural Resources Department, that will cause all project facilities, including warehouses, office buildings, or other on-site buildings, to blend in with the colors found in the surrounding natural landscape. All color treatments shall result in mated or non-glossy/non-reflective finishes.

MM 4.1-2: Prior to the issuance of building permits, site plans submitted for commercial buildings located within 1,000 feet of the SR 99 corridor shall include rooftop screening features, such as a parapet or other screening material, be installed to create a visual screen for rooftop mechanical equipment.

MM 4.1-3: Prior to the issuance of building permits for any facilities on the project site, theproject applicant shall submit, to the Kern County Planning and Natural Resources Department, a landscape plan that complies with the Kern County Zoning Ordinance Requirements Chapter 19.86 - Landscaping. The plan shall include:

a. Preparation by a licensed Landscape Architect and approval by the Kern County Planning and Natural Resources Department Director prior to buffer planting.

b. California native, drought-tolerant plants.

c. An irrigation plan as required under the Kern County Zoning Ordinance 19.86.070.

d. Should perimeter fencing be proposed, fencing materials shall be constructed of any materials commonly used in the construction of fences and walls such as wood, stone, rock, tubular steel, wrought iron, or brick, or other durable materials. Masonry block walls shall be decorative and not bare masonry blocks. Decorative materials can

include a façade, colored masonry blocks, or other materials. Fencing proposed around sumps may be chain-link with view obscuring slats.

e. A 20-foot-wide perimeter buffer along any visible boundary from the SR 99 frontage consisting of live ground cover, shrubs, or grass, and:

   1. One tree having a minimum planting height of six feet for every 50 lineal feet of buffer.
   2. Evergreen shrubs which reach a minimum height of four to six feet.
   3. Live ground cover consisting of low-height plants, or shrubs, or grass shall be planted in the portion of the landscaped area not occupied by trees or evergreen shrubs.
   4. Bare gravel, rock, bark or other similar materials may be used, but are not a substitute for ground cover plantings, and shall be limited to no more than 25 percent of the required landscape area.
   5. Landscaping shall be installed prior to final occupancy.

Level of Significance after Mitigation

Impacts would remain significant and unavoidable after implementation of Mitigation Measures **MM 4.1-1** through **MM 4.1-3**.

Impact 4.1-2: The Project Would Create a New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area.

The proposed project site presently contains no sources of light or glare, and sources of illumination in the immediate surrounding area are limited in number and intensity. The proposed project would result in a new, permanent source of substantial light and potential glare on and from the site that has the potential to spill off site.

Glare on- and off-site would be increased by the anticipated increase in truck traffic both during construction and operation of the project. Additionally, development of large windows or use of reflective materials may create a new source of glare affecting viewers on public roadways.

During constitution, light related impacts could occur related to possible limited night construction. As indicated in Chapter 3, *Project Description*, the use and tenants of the proposed warehouse and distribution facilities are unknown at this time. Therefore, operations are expected to include the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) and distribution to retail locations or other warehouses. Each future tenant in the facility is expected to operate with regular industrial business hours. Regardless, operation of the proposed project would require outdoor lighting for safety and security. This lighting has the potential to create light spillage and glare impacts in the vicinity of the proposed project site. The relatively flat topography and lack of intervening vegetation and structures would contribute to this effect.

The level and intensity of lighting would be in compliance with the County's *Dark Skies Ordinance* (Chapter 19.81 of the Kern County Zoning Ordinance). Exterior lights would be shielded, and lights would

be directed away from any public rights-of-way to reduce light spillover onto adjacent and nearby properties. Light or glare would be minimized and switched lighting would be provided in areas where continuous lighting is not required for normal operation, safety, or security. Mitigation Measure **MM 4.1-1** would require the approval of the Kern County Planning and Natural Resources Department on the proposed color scheme and a non-glossy or non-reflective treatment plan and Mitigation Measure **MM 4.1-4** would require the submission of a lighting plan to Kern County to demonstrate that the project site will continuously comply with the applicable provisions of the Outdoor Lighting - Dark Skies Ordinance.

Mitigation Measures

Implementation of Mitigation Measure **MM 4.1-1**, described above, would be required.

MM 4.1-4: Prior to issuance of building permits, the project proponent shall demonstrate to Kern County Planning and Natural Resources Staff, through the submittal of a lighting plan, that the project site will continuously comply with the applicable provisions of the Outdoor Lighting - Dark Skies Ordinance (Chapter 19.81 of the Kern County Zoning Ordinance) and shall be designed to provide the minimum illumination needed to achieve safety and security objectives. All lighting shall be directed downward and shielded to focus illumination on the desired areas only and avoid light trespass into adjacent properties and roadways. Lenses and bulbs shall not extend belowthe shields.

Level of Significance after Mitigation

Impacts would be less than significant with implementation of Mitigation Measure **MM 4.1-1** and **MM 4.1-4**.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The cumulative setting for the aesthetic, light, and glare impacts includes build-out of the KCGP and MBGP. Implementation of the project as proposed would require adoption of a Specific Plan, General Plan Amendments, Zone Changes, and Precise Development Plans. As discussed in Section 3.10, *Cumulative Projects*, of this EIR, cumulative projects within a 6-mile radius of the proposed project site include agricultural, residential, commercial, and industrial uses. These uses, in combination with other foreseeable projects in the County, have the potential to create a cumulative impact to visual resources and light/glare.

Past and future urban, industrial, and manufacturing development has changed, and will continue to alter, the visual character along roadway corridors in Kern County. Generally speaking, these changes involve the replacement of undeveloped, vacant lands with new urban, industrial, and manufacturing land uses, thus altering and limiting the views of undeveloped land available to motorists along these roadways and residents living in the area. This trend will continue as future development projects are constructed in the region and in the County as a whole, consistent with growth planned in the KCGP and MBGP areas.

From a cumulative standpoint, substantial changes in visual conditions will continue as agricultural lands and open space are replaced by new development. Increased urban, industrial, and manufacturing development will also lead to increased nighttime light and glare and subsequent sky glow in the region and more limited views of the night sky.

Although these cumulative impacts can be minimized to a degree through use of outdoor lighting that limits glare, appropriate building design, and other measures, the significant cumulative impact cannot be fully mitigated. The cumulative conversion of agricultural and open space views in the proposed project region to urban, industrial, and manufacturing land uses and the associated increase in nighttime light and glare and subsequent sky glow from planned future projects is a significant cumulative impact. The proposed project's incremental contribution to these impacts is cumulatively considerable, and the proposed project's cumulative impact is therefore considered potentially significant.

Mitigation Measures

Implement Mitigation Measures **MM 4.1-1** through **MM 4.1-4**.

Level of Significance after Mitigation

Cumulative impacts would be significant and unavoidable after implementation of Mitigation Measures **MM 4.1-1** through **MM 4.1-4**.

Section 4.2

Agriculture and Forestry Resources

Section 4.2

Agriculture and Forestry Resources

4.2.1 Introduction

This section of the Environmental Impact Report (EIR) describes the affected environment and regulatory settings for agriculture and forestry resources for the proposed project. It also describes the impacts on agriculture and forestry resources that would result from the implementation of the proposed project, and includes mitigation measures that would reduce these impacts, where applicable. This section is based, in part, on information provided in the *2022 Annual Agricultural Crop Report* prepared by the Department of Agriculture and Measurement Standards and the California Important Farmland Map maintained by the Department of Conservation.

The Initial Study found that the project will not conflict with any forest land, timberland, or timberland zoned Timberland Production because no lands affected by the proposed project are zoned or used as forest land, timberland, or timberland production. For this reason, the project would not result in the loss of forest land or conversion of forest land to non-forest use. Additionally, the project site is not under a Williamson Act Land Use Contract, and therefore would not result in the cancellation of an open space or agricultural contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract.

4.2.2 Environmental Setting

Regional Setting

Kern County covers 8,161 square miles (2,223,019 acres) including, according to the most recent Census of Agriculture data compiled by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), 1,691 farms comprising 3,922,523 acres with an average farm size of 1,419 acres (USDA 2024). The *2022 Annual Agricultural Crop* report documented that Kern County's gross value of all agricultural commodities is $7,724,166,300, which represents a decrease of over seven percent from the 2021 agricultural commodities value ($8,341,294,840). The top five commodities for Kern County in 2022 were grapes, citrus, almonds, pistachios, and milk, which make up more than $5 billon (66 percent) of the gross value.

Kern County has a growing population and like many agriculture-based jurisdictions, must balance urbanization and the loss of farmland. As shown in **Table 4.2-1**, *Agriculture Land Use Designation Conversion in 2022*, the 2022 approved general plan amendment re-designated 31.31 acres of agriculturally designated lands for non-agricultural uses. These amendments resulted in a total net conversion of 31.31 acres within unincorporated Kern County (Kern County General Plan and Housing Element Annual Progress Report, April 2022).

Data from the USDA indicates that the total number of farms in the County decreased by two percent from 2012 to 2017 and the actual acreage in farming production increased by four percent of total producing farmland (USDA 2024). In addition, as shown in **Table 4.2-2**, *Farmland Conversion in Kern County*, the California Department of Conservation (DOC) Division of Land Resource Protection (DLRP) found that between the years of 2018 and 2020, 5,312 acres (net change) of land previously categorized as Important Farmland (Prime Farmland, Farmland of Statewide Importance and Unique Farmland) was converted to other land use categories (DLRP 2023).

Table 4.2-1: Agriculture Land Use Designation Conversion in 2022

Project/Applicant	Case Number	Document	From Map Code	To Map Code	Acreage Converted
Kern County Planning and Natural Resources Department	GPA 6, Map 17-15	KCGP	8.2	5.5	-0.92
Kern County Planning and Natural Resources Department	GPA 24, ZCC 83, Map 124	Metropolitan Bakersfield General Plan	R-IA	HR	-10.00
Andy and Judy Dahl	SPA 16, ZCC 72, Ag Pres Excl, Map 165	Greater Tehachapi Specific and Community Plan	8.1/2.7	5.7/2.7	-20.39
Total Acreage Converted (net)					**-31.31**

Source: Kern County General Plan and Housing Element Annual Progress Report, 2022
Notes:
Kern County General Plan
8.2 – Resource Reserve (Min. 20- or 80-acre parcel size)
5.5 – Residential, Maximum 1 unit/net acre
Metropolitan Bakersfield General Plan
R-IA – Intensive Agriculture, areas devoted to the production of irrigated crops, or having the potential for such use.
HR – High Density Residential, applies to large multiple-family structures, such as apartments, apartment hotels, and condominiums.
Greater Tehachapi Specific and Community Plan
8.1/2.7 – Intensive Agricultural/Liquefaction Risk
5.7/2.7 – Residential, Minimum 5 gross acres/unit/Liquefaction Risk

Table 4.2-2: Farmland Conversion in Kern County

Land Use Category	Total Acres in 2018	Total Acres in 2020	Net Acres Changed
Prime Farmland	573,935	567,066	-6,869
Farmland of Statewide Importance	208,323	207,938	-385
Unique Farmland	91,768	93,710	1,942
Farmland of Local Importance	0	0	0
IMPORTANT FARMLAND SUBTOTAL	**874,027**	**868,714**	**-5,313**
Grazing Land	1,854,639	1,857,259	2,620
AGRICULTURAL LAND SUBTOTAL	**2,728,666**	**2,725,973**	**-2,693**
Urban and Built-up Land	165,085	170,341	5,256
Other Land	2,321,524	2,318,957	-2,567
Water Area	9,038	9,042	4
TOTAL AREA INVENTORIED	**5,224,313**	**5,224,313**	**0**

Source: DLRP 2023.

According to Kern Economic Development Corporation (KEDC) and the California Department of Finance (DOF), it is estimated that Kern County's total population will grow from January's 2023 of population of 907,476 to 1,127,871 by 2040. (KEDC, 2023; California Department of Finance [DOF] 2023). The anticipated growth in population will most likely decrease the amount of agricultural land in Kern County even further. However, it is important to note the conversion of agricultural land is affected by numerous factors other than population growth and urban development. Actual production is dependent on commodity prices, water prices and supply, labor, the proximity of processing and distribution facilities, and pest management. Factors such as weather, trade agreements, and labor disputes can also affect decisions regarding what crops are grown and which lands go in and out of production. Most conversion of Prime or Farmland of Statewide Importance agricultural lands is occurring within the planned development footprint of Metropolitan Bakersfield (Department of Conservation [DOC] 2024). Very little conversion of the most productive agricultural lands has occurred in the outlying areas of the County. According to the California DOC, between 2018 and 2020, 6,869 acres of Prime Farmland and 385 acres of Farmland of Statewide Importance across the County were converted to nonagricultural uses and 1,942 acres of nonagricultural land were converted to Unique Farmland (DOC 2020).

Local Setting

Land uses in the region include a mix of agricultural to the north, east, and south and SR 99 to the west. The project site is located on agricultural land within unincorporated Kern County. A portion of the proposed project site is currently being utilized for growing table grapes. A review of historic aerial maps indicates the site has been used for grape vineyards since at least 2003. The site includes outdoor storage of various farm related operational equipment, along with a fenced and secured concrete floor storage shed for pesticides. Agricultural uses are adjacent north of the project site.

Zoning and Land Use Designation

The project is located solely within the jurisdiction of Kern County, in two Zone Maps (Zone Map 80 and Zone Map 81). There are no Williamson Act Contracts associated with the project site. The project site is zoned Exclusive Agriculture (A). The purpose of the Exclusive Agriculture (A) District is to designate areas suitable for agricultural uses and to prevent the encroachment of incompatible uses onto agricultural lands and the premature conversion of such lands to nonagricultural uses. Uses in the A District are limited primarily to agricultural uses and other activities compatible with agricultural uses. A portion of the project site is within the Kern County General Plan, designated as Map Code 8.1 (Intensive Agriculture), and a portion of the project site is within the Metropolitan Bakersfield General Plan, designated R-IA (Intensive Agriculture). **Figure 4.2-1**, *Existing Zoning,* below shows the existing zoning classifications and **Figure 4.2-2**, *Existing General Plan,* below shows the existing general plan designations for the project site.

Figure 4.2-1: Existing Zoning Classifications

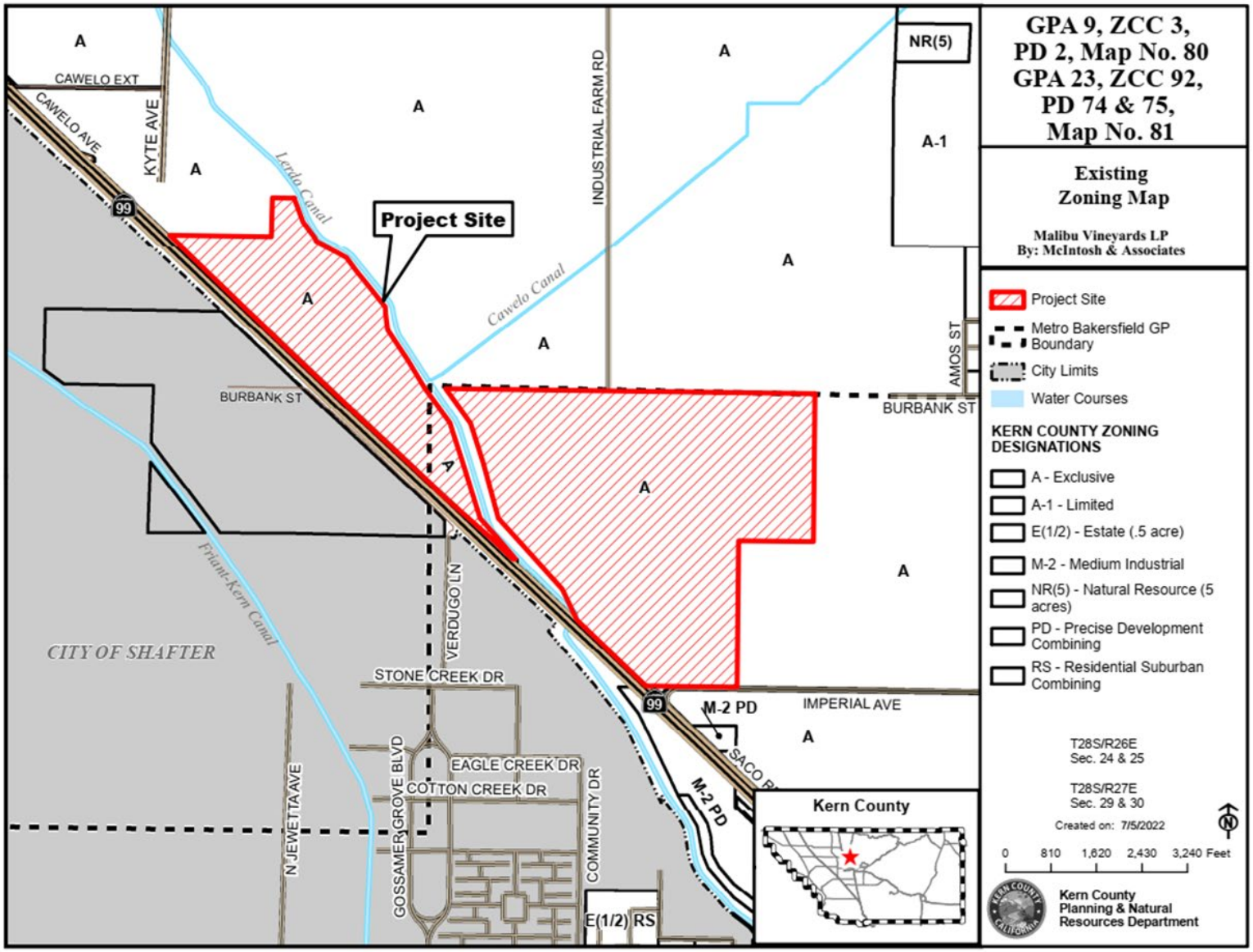
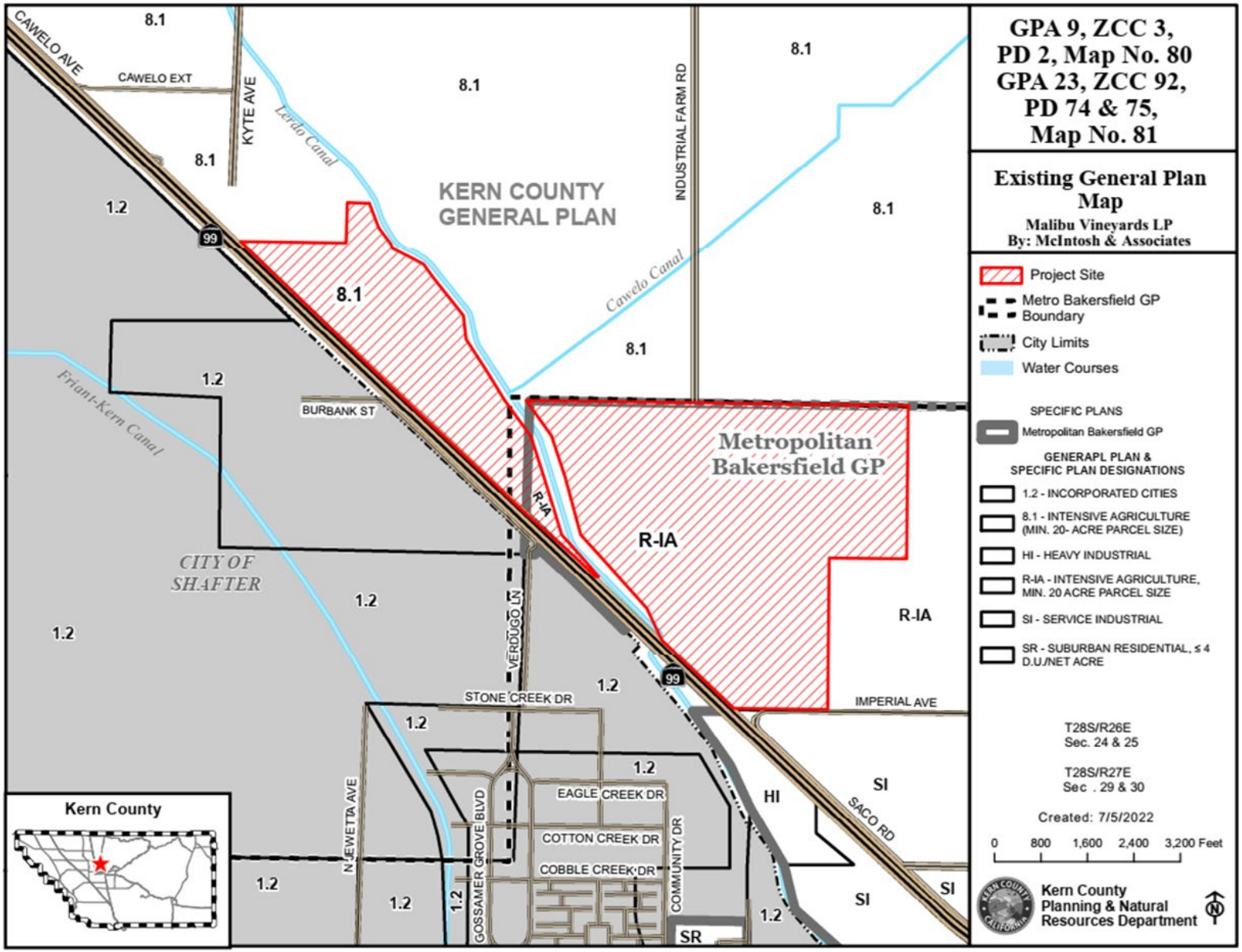


Figure 4.2-2: Existing General Plan Designations



Soils

The soil types present within the proposed project site have been analyzed in the Soil Survey of Kern County, California, Northwestern Part, Custom Soil Report (NRCS 2020). Soil types listed as being present within the proposed project site include: (138) Delano sandy loam, (145) Driver coarse sandy loam, (146ne) Delano sandy loam, (174) Kimberlina fine sandy loam, and (184) Lewkalb sandy loam. Each of these soil types are described further in Section 4.6, *Geology and Soils*.

California Department of Conservation (DOC) Classification

Based on the Important Farmland Map for Kern County (DOC 2022) and the Soil Survey information, the entire proposed project site is designated as Prime Farmland and is surrounded by land designated Prime Farmland and Grazing Land (refer to **Figure 4.2-3**, *Farmland Map*). A Department of Conservation mapping update shows the project site being designated as Prime Farmland.

Williamson Act and Agricultural Preserve

The proposed project site is not currently, nor has it previously been, under Williamson Act contract. Lands to the north and east of the proposed project site are currently enrolled in a Williamson Act Land Use Contract with Kern County (refer to **Figure 4.2-4**, *Williamson Act Land Use Contract*).

Agricultural Production

Historically, most of the site has been used as agricultural land as far back as 1937. Currently, a portion of the proposed project site is being utilized for growing table grapes.

Agricultural Investments

Agricultural operations that include improvements such as barns, storage systems, fruit trees, drainage, or irrigation systems, are more likely to be able to support agriculture in the long term because the need for capital investment is lower than on sites without these improvements. Based on field surveys and use of aerial photos, the site includes filtration systems and reservoirs, as well as drip or fan systems, outdoor storage of various farm related operational equipment, along with a fenced and secured concrete floor storage shed for additional agricultural related tools and products. There are no other agricultural improvements such as barns or fruit trees located on the proposed project site and, based on review of historical photos, none have been present on the proposed project site since at least 1937.

Figure 4.2-3: Farmland Map

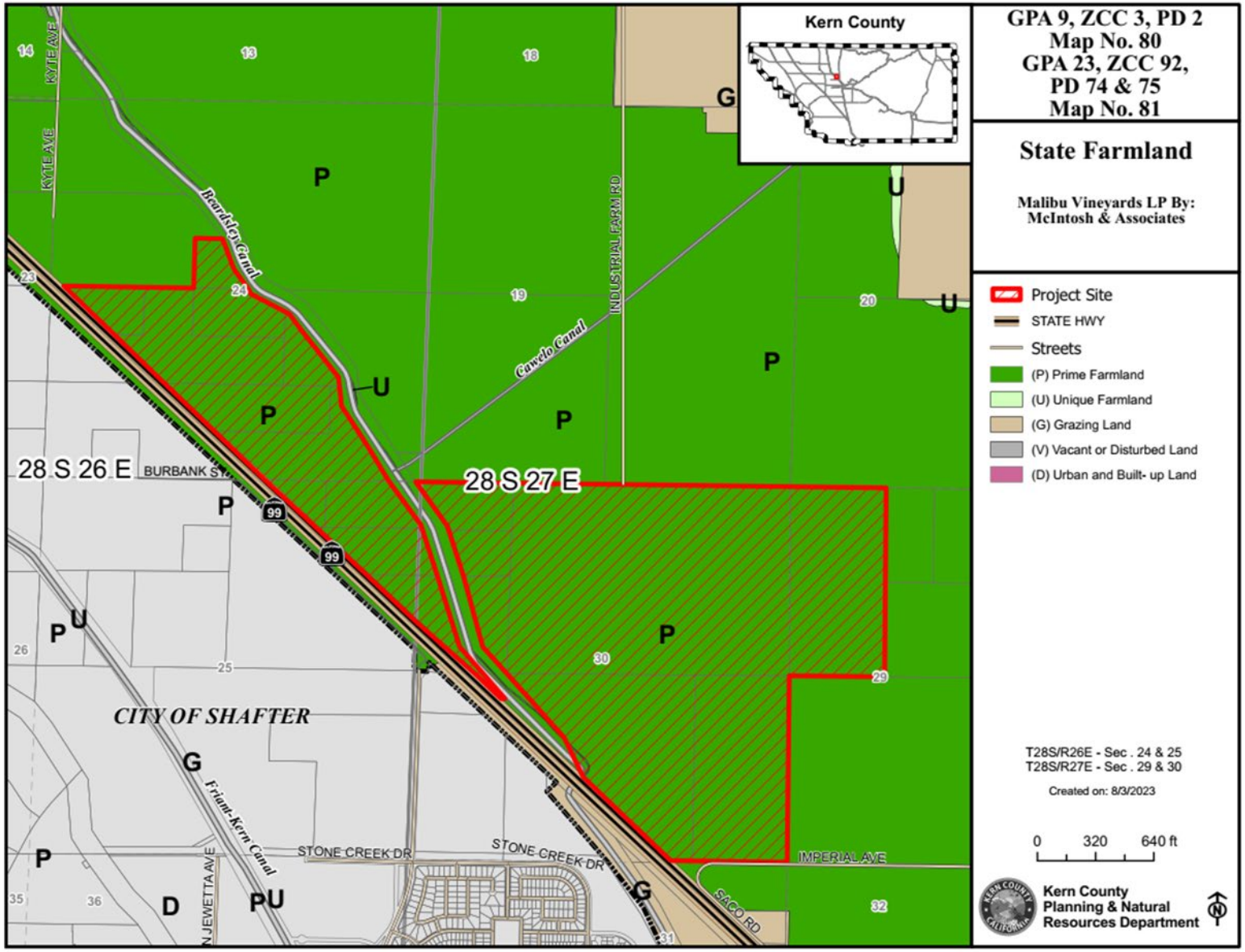
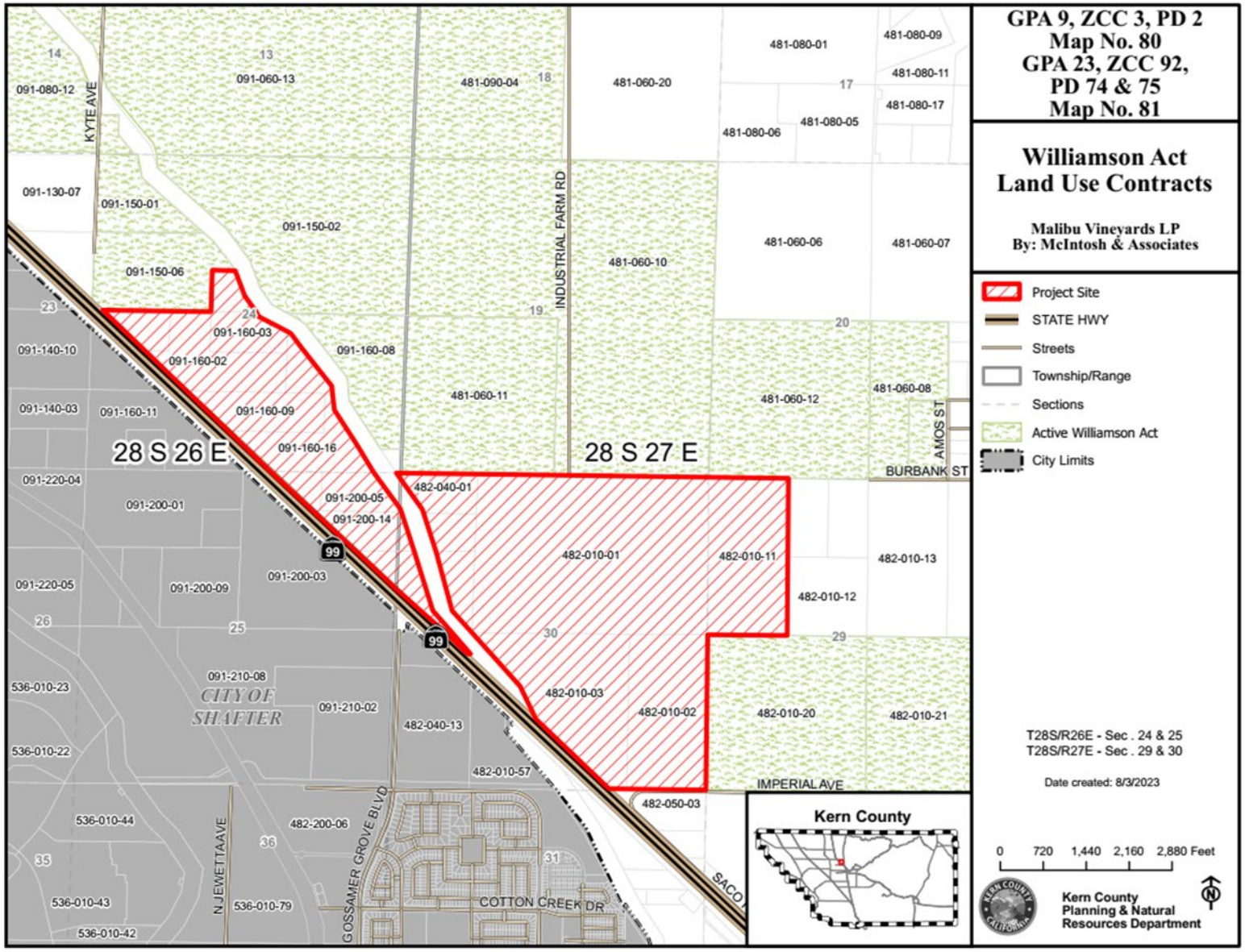


Figure 4.2-4: Williamson Act Land Use Contract



4.2.3 Regulatory Setting

Federal

Farmland Protection Policy Act (7 United States Code [USC] Section 4201)

The purpose of the Farmland Protection Policy Act (FPPA) is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. It directs federal programs to be compatible with State and local policies for the protection of farmlands. Under the FPPA, the term "farmland" includes Prime Farmland, Unique Farmland, and Farmland of Statewide or Local Importance. Farmland that is subject to FPPA requirements does not have to be currently used as cropland. It can be forestland, pastureland, or other land, but not urban and built-up land or water. FPPA assures that, to the extent possible, federal programs are administered to be compatible with State and local units of government, and private programs and policies to protect farmland.

In 1981, Congress passed the Agriculture and Food Act (Public Law 97-98) which included the FPPA – Subtitle I of Title XV, Section 1539-1549. The final rules and regulations were published in the Federal Register on June 17, 1994. Federal agencies are required to develop and review their policies and procedures related to implementing the FPPA every two years.

The FPPA does not authorize the federal government to regulate the use of private or nonfederal land or, in any way, affect the property rights of owners. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency.

State

California Department of Conservation (DOC), Division of Land Resources Protection

The DOC applies the NRCS soil classifications to identify agricultural lands. These agricultural designations are used in planning for the present and future of California's agricultural land resources. The DOC uses a minimum mapping unit of 10 acres; parcels that are smaller than 10 acres are absorbed into the surrounding classifications.

The list below describes the categories mapped by the DOC through the FMMP. Collectively, lands classified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are referred to as "farmland."

Prime Farmland. Farmland that has the ideal combination of physical and chemical features. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields and long-term agricultural production. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Farmland of Statewide Importance. Farmland that is similar to Prime Farmland but with minor shortcomings, such as greater slopes or lower moisture content. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Unique Farmland. Land with lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include land that supports non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been used for crops at some time during the four years prior to the mapping date.

Farmland of Local Importance. Land that is important to the local agricultural economy, as determined by each County's board of supervisors and a local advisory committee.

Grazing Land. Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups with an interest in grazing activities. The minimum mapping unit for Grazing Land is 40 acres.

Urban and Built-Up Land. Land that is developed with structures that have been built to a density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land supports residential, industrial, commercial, institutional, and public administrative uses; railroad and other transportation yards; cemeteries; airports; golf courses; sanitary landfills; sewage treatment facilities; water control structures; and other developed uses.

Other Land. Land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Undeveloped and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act (California Government Code Section 51200–51297.4), is applicable to specific parcels within the State of California. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses in return for reduced property tax assessments. Private land within locally designated agricultural preserve areas is eligible for enrollment under a Williamson Act contract. The Williamson Act program is administered by the DOC, in conjunction with local governments that administer the individual contract arrangements with landowners. Participation in the Williamson Act program is dependent on County adoption and implementation of the program and is voluntary for landowners (DOC 2023).

Under the Williamson Act, a landowner commits the parcel to a 10-year period, during which time no conversion out of agricultural use is permitted. In return, the land is taxed at a rate based on the actual use (i.e., agricultural production), as opposed to its unrestricted market value. Each year the contract automatically renews unless a notice of nonrenewal or cancellation is filed. However, the application to cancel must be consistent with the criteria of the affected county or city. Nonrenewal or contract cancellation does not change a property's zoning. Participation in the Williamson Act program, which is

voluntary for landowners, is dependent on a County's willingness to adopt and implement the program. The Williamson Act states that a board or council will, by resolution, adopt rules governing the administration of agricultural preserves. The rules of each agricultural preserve specify the allowed uses. Generally, any commercial agricultural use would be permitted within any agricultural preserve. In addition, local governments may identify compatible uses allowed under a permit (DOC 2023).

California Government Code Section 51238 states that, unless otherwise decided by a local board or council, the erection, construction, alteration, or maintenance of electric and communication facilities, as well as other facilities, are determined to be compatible uses within any agricultural preserve. In addition, Section 51238 states that the board of supervisors may impose conditions on lands or land uses to be placed within preserves to permit and encourage compatible uses, in conformity with Section 51238.1. Furthermore, under California Government Code Section 51238.1, a board or council may allow any use that without conditions or mitigations would otherwise be considered incompatible. However, this may occur only if that use meets the following conditions:

- The use would not significantly compromise the long-term agricultural capability of the subject contracted parcel or parcels on other contracted lands in agricultural preserves;
- The use would not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping; and
- The use would not result in the significant removal of adjacent contracted land from agricultural or open-space use.

Farmland Security Zone Act

The Farmland Security Zone Act is similar to the Williamson Act and was passed by the California State Legislature in 1999 to ensure that long-term farmland preservation is part of public policy in the State. Farmland Security Zone Act contracts are sometimes referred to as "Super Williamson Act Contracts." Under the provisions of this act, a landowner already under a Williamson Act contract can apply for Farmland Security Zone status by entering into a contract with the County. Farmland Security Zone classification automatically renews each year for an additional 20 years. In return for a further 35 percent reduction in the taxable value of land and growing improvements (in addition to Williamson Act tax benefits), the owner of the property agrees not to develop the property into nonagricultural uses.

Public Resources Code Section 21060.1

Public Resources Code (PRC) Section 21060.1 uses the FMMP to define agricultural land for the purposes of assessing environmental impacts. The FMMP was established in 1982 to assess the location, quality, and quantity of agricultural lands and analyze the conversion of such lands. The FMMP provides analysis pertaining to agricultural land use changes throughout California.

Local

Kern County General Plan (KCGP)

The *Kern County General Plan* (KCGP) states that agriculture is vital to the future of Kern County and sets goals to protect important agricultural lands for future use and prevent the conversion of prime agricultural lands to other uses (e.g., industrial or residential). The KCGP includes four designations for agricultural land:

- **8.1 Intensive Agriculture (minimum parcel size 20 acres gross):** devoted to the production of irrigated crops or having potential for such use;
- **8.2 Resource Reserve (minimum parcel size is 20 acres gross, except to a Williamson Act contract/Farmland Security Zone contract, in which case the minimum parcel size shall be 80 acres gross):** devoted to areas of mixed natural resource characteristics including rangeland, woodland, and wildlife habitat which occur in an established County water district;
- **8.3 Extensive Agriculture (minimum parcel size 20 acres gross, except lands subject to a Williamson Act contract/Farmland Security Zone contract, in which case the minimum parcel size shall be 80 acres gross):** lands devoted to uses involving large amounts of land with relatively low value-per-acre yields such as livestock grazing, dry-land farming, and woodlands; and,
- **8.5 Resource Management (minimum parcel size 20 acres gross, except lands subject to a Williamson Act contract/Farmland Security Zone contract, in which case the minimum parcel size shall be 80 acres gross):** Lands consisting primarily of open space containing important resource values, such as wildlife habitat, scenic values, or watershed recharge areas. These areas may be characterized by physical constraints, or may constitute an important watershed recharge area or wildlife habitat or may have value as a buffer between resource areas and urban areas. Other land with the resource attribute are undeveloped, non-urban areas that do not warrant additional planning within the foreseeable future because of current population (or anticipated increase), marginal physical development, or no subdivision activity.

  Additionally, the designation of 8.5 (Resource Management) can be used for agricultural uses such as dry land farming and ranch facilities.

The policies, goals, and implementation measures in the KCGP for agricultural resources applicable to the proposed project are provided below. The KCGP contains additional policies, goals, and implementation measures that are more general in nature and not specific to development such as the proposed project. Therefore, they are not listed below, but as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

1.9 Resource

Goals

Goal 1: To contain new development within an area large enough to meet generous projections of foreseeable need, but in locations which will not impair the economic strength derived from the petroleum, agriculture, rangeland, or mineral resources, or diminish the other amenities which exist in the County.

Goal 2: Protect areas of important mineral, petroleum, and agricultural resource potential for future use.

Goal 3: Ensure the development of resource areas minimize effects on neighboring resource lands.

Goal 5: Conserve prime agriculture lands from premature conversion.

Policies

Policy 1: Appropriate resource uses of all types will be encouraged as desirable and consistent interim uses in undeveloped portions of the County regardless of general plan designation.

Policy 7: Areas designated for agricultural use, which include Class I and II and other enhanced agricultural soils with surface delivery water systems, should be protected from incompatible residential, commercial, and industrial subdivision and development activities.

Policy 12: Areas identified by the Natural Resources Conservation Service (NRCS) (formerly Soil Conservation Service) as having high range-site value should be conserved for Extensive Agriculture uses or as Resource Reserve, if located within a County water district.

Implementation Measure

Measure F: Prime agricultural lands, according to the Kern County Interim-Important Farmland 2000 map produced by the Department of Conservation, which have Class I or II soils and a surface delivery water system shall be conserved through the use of agricultural zoning with minimum parcel size provisions.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The City of Bakersfield, in collaboration with Kern County, prepared the Metropolitan Bakersfield General Plan (MBGP). This document establishes policies to provide decision-makers with long-range guidance affecting the future character of the Bakersfield planning area. The MBGP also acts to clarify and articulate the relationship and intentions of local government to the rights and expectations of the general public, property owners and prospective investors. Through the Plan, the City and County can inform these groups of its goals, policies and development standards, thereby communicating what must be done to meet the objectives of the MBGP.

The MBGP provides for the continuation of historical growth patterns in the metropolitan Bakersfield region by allowing for the greatest growth potential in this area. The Metropolitan Bakersfield General Plan includes two designations for agricultural land:

- R-IA: Intensive Agriculture, minimum 20-acre parcel size
- R-EA: Extensive Agriculture, minimum 80-acre parcel size for lands under "Williamson Act" contract; 20-acre minimum, lands not under contract

The MBGP policies and goals related to agricultural resources that are applicable to the proposed project are provided below.

Land Use Element

LU Goal 3: Accommodate new development which is compatible with and complements existing land uses.

LU Policy 80: Assure that General Plan Amendment proposals for the conversion of designated agricultural lands to urban development occur in an orderly and logical manner giving full consideration to the effect on existing agricultural areas (see Chapter V, Conservation/Soils and Agriculture Policies 3 and 14).

Conservation Element - Soils and Agriculture Section

Goal 1: Provide for the planned management, conservation, and wise utilization of agricultural land in the planning area.

Goal 2 Promote soil conservation and minimize development of prime agricultural land as defined by the following criteria:

- Capability Class I and/or II irrigated soils
- 80-100 Storie Index rating
- Gross crop return of $200 or more per acre per year
- Annual carrying capacity of one animal unit per acre per year

Policy 2 Review projects that propose subdividing or urbanizing prime agricultural land to ascertain how continued commercial agricultural production in the project vicinity will be affected.

Policy 14: When considering proposals to convert designated agricultural lands to nonagricultural use, the decision-making body of the City and County shall evaluate the following factors to determine the appropriateness of the proposal:

- Soil quality
- Availability of irrigation water
- Proximity to non-agricultural uses

- Proximity to intensive parcelization
- Effect on properties subject to "Williamson Act" land use contracts
- Ability to be provided with urban services (sewer, water, roads, etc.)
- Ability to affect the application of agricultural chemicals on nearby agricultural properties
- Ability to create a precedent-setting situation that leads to the premature conversion of prime agricultural lands
- Demonstrated project need
- Necessity of buffers such as lower densities, setbacks, etc.

Kern County Zoning Ordinance

The Kern County Zoning Ordinance establishes basic regulations under which land is developed. This includes allowable uses, building setback requirements, and development standards. Pursuant to State law, the zoning ordinance must be consistent with the General Plans. The basic intent of the Kern County Zoning Ordinance is to promote and protect the public health, safety, and welfare via the orderly regulation of the land uses throughout the unincorporated area of the County. The zoning ordinance applies to all property in unincorporated Kern County, except land owned by the United States or any of its agencies.

The proposed project site is within the A (Exclusive Agriculture) zoning district. Allowable uses within an A zone are set forth in Section 19.12.020 of the Kern County Zoning Ordinance and include agricultural uses, residential uses, commercial uses, utility and communications facilities, resource extraction and energy development uses, and miscellaneous uses.

The project proposes a zone classification change for the proposed project site, which would convert the zone classification from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development) to be compatible with the approval of a Precise Development Plan required to allow for the future construction and operation of a high-cube warehouse/distribution center at the proposed project site. As stated in Section 19.36.010 of the Zoning Ordinance, the purpose of the M-2 PD (Medium Industrial, Precise Development) zone classification is to designate areas for general manufacturing, processing, and assembly activities.

Williamson Act Standard Uniform Rules

Kern County has adopted a set of rules that identify compatible land uses within agricultural preserves established under the Williamson Act. The rules restrict uses on such land to agricultural or other compatible uses. Agricultural uses include crop cultivation, grazing commercial wind farms, livestock breeding, dairies, and uses that are incidental to these uses. Other compatible agricultural uses include those associated with public utilities (e.g., gas, electric, communications, water). The proposed project site is not under an active Williamson Act contract; however, the proposed project site is bordered by land under active Williamson Act contracts to the north and east.

4.2.4 Impacts and Mitigation Measures

This section of the EIR describes the impact analysis relating to agriculture and forestry resources for the proposed project. It describes the methods used to determine the impacts of the proposed project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate significant impacts accompany each impact discussion.

Methodology

The proposed project's potential impacts on agriculture and forestry resources have been evaluated on a qualitative basis. A change in land use would normally be determined to be significant if the effects described in the thresholds of significance were to occur [see California Code of Regulations Title 14, Section 15064.7(a)]. The evaluation of the proposed project's impacts is based on a thorough analysis of the KCGP's guidance, the KCGP's applicable goals and policies related to agricultural resources, professional judgment, and the significance criteria established by the California Environmental Quality Act (CEQA).

The DOC Important Farmland data was used to determine the most recent classification of farmland on the proposed project site. Williamson Act data was obtained from the Kern County Online Mapping System. In addition, State and local regulations were also reviewed for relevant policies that may be applicable to the proposed project. The proposed project is analyzed for potential conversion of prime farmland, conflict with agricultural zoning designations, or other changes resulting from the proposed project that would remove farmland from agricultural production.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state, per Appendix G of the *CEQA Guidelines*, that a project would have a significant impact on agriculture and forestry resources if it would:

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 nonagricultural uses;

b. Conflict with existing zoning for agricultural use or a Williamson Act contract;

c. Conflict with existing zoning for, or cause rezoning of, forestland (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g));

d. Result in the loss of forestland or conversion of forestland to non-forest use;

e. Involve other changes in the existing environment which, because of their location or nature, could result in conversion of Farmland to nonagricultural use or forest land to non-forest use; or

f. Result in the cancellation of an open space contract made pursuant to the California Land Conservancy Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15205(b)(3) PRC).

The lead agency determined in the Notice of Preparation/Initial Study (NOP/IS) (see **Appendix A**) that the following environmental issue areas would result in no impacts or less than significant impacts and were therefore scoped out of requiring further review in this EIR. Please refer to **Appendix A** of this EIR for a copy of the NOP/IS and additional information regarding these issue areas.

- Conflict with existing zoning for, or cause rezoning of, forestland (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).
- Result in the loss of forestland or conversion of forestland to non-forest use.
- Results in the cancellation of an open-space contract made pursuant to the California Land Conservancy Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15205(b)(3) PRC).

Project Impacts

Impact 4.2-1: 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 nonagricultural use.

The project site consists of land zoned A (Exclusive Agriculture) and has historically been used for production of crops. Currently, a portion of the project site (313 acres) is being utilized for growing table grapes. There is no land that currently meets the requirements for Unique Farmland, or Farmland of Statewide Importance located within the project site. A Department of Conservation mapping update shows the project site being designated as Prime Farmland.

For the purposes of this analysis, the entire 739-acre project site is considered to be designated Prime Farmland. Project conversion of agriculture to developed uses may indirectly impact other designated farmland.

Conversion of the project site, which is close to urban centers, will include potential benefits for the reduction in the use of pesticides and fertilizers, and the potential reduction in groundwater use. However, although business industrial sites exist to the south and east of the project site, agricultural uses also exist contiguous to the project site that may be impacted from the conversion. The conversion of the project site may have an effect on the adjacent agricultural properties by placing restrictions and limitations on pesticides, fungicides, and herbicides used on crops or restrictions placed on noise, burning, and dust. Vehicle emissions from project transportation routes and additional roadways can impact the health and survival of crops, and increased traffic could reduce efficiency and increase the hazards of moving crops and farm machinery along rural roads. Implementation of the Mitigation Measures **MM 4.2-1** through **MM 4.2-4** would reduce potential impacts to adjacent agricultural properties.

Based on the change in zoning from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development), the proposed project would result in the loss of approximately 739 acres of land currently used for agricultural uses. To reduce this impact, Mitigation Measure **MM 4.2-5** would require the establishment of an agricultural easement or purchase of credits from an agricultural farmland mitigation

bank at a one-to-one (1:1) ratio. Such a loss in the context of the Kern County General Plan and Metropolitan Bakersfield General Plan is significant and unavoidable.

CEQA requires that all feasible and reasonable mitigation be reviewed and applied to projects. CEQA Guidelines Section 15364 defines feasible to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." The standard of applicability also includes CEQA case law and determinations on the ability to impose specific mitigation on projects. Agricultural conservation easements (ACEs) are legally recorded deed restrictions that are placed on a specific property used for agricultural production. The goal of an agricultural conservation easement is to maintain agricultural land in active production by removing the development pressures from the land. Such an easement prohibits practices that would damage or interfere with the agricultural use of the land. Because the easement is a restriction on the deed of the property, the easement remains in effect even when the land changes ownership. Such voluntary easements are an important tool for landowners for tax purposes and land trust groups encourage agricultural uses and protect land from urban encroachment and are considered mitigation under CEQA.

The Fifth Appellate District March 7, 2024, decision in V Lions Farming, LLC v. County of Kern, et al. [F084763, F085102, F085220 (Superior Ct. Nos. BCV-15-101645, BCV-15-101666, BCV-15-101679, BCV-21-100533, BCV-21-100536)] states, "ACEs are a type of compensatory mitigation for the conversion of agricultural even though, operating by themselves, they do not replace the converted land or otherwise result in no net loss of agricultural land." CEQA mitigation includes measures that would "substantially lessen the significant environmental effects" of a project. Pub. Res. Code § 21002. Even if a public agency decides to approve a project despite the fact that its significant impacts cannot be completely mitigated, CEQA requires that it nonetheless must reduce them to the extent feasible. Therefore, compliance with CEQA can be achieved through "the use of ACEs as a mitigation measure for the conversion of agricultural land in situations where the permit applicant's adoption of other mitigation has not reduced the net loss of agricultural land to zero acres." Nonetheless, with implementation of Mitigation **Measure MM 4.2-5**, the project and cumulative level impacts remain significant and unavoidable.

Mitigation Measures

MM 4.2-1: Prior to the issuance of building permits, a site plan shall be submitted to the Kern County Planning and Natural Resources Department showing a minimum 100-foot building setback from the property line of adjacent property (defined as property that shares a property line) zoned A (Exclusive Agriculture) to eliminate interference with current or future agricultural operations. Project design features such as roads, berms, required landscaping, and parking lots are permitted within the required setback area.

MM 4.2-2: Prior to issuance of building permits, the project proponent shall ensure that the following note appears on all site plans associated with the project. The project proponent shall also require a form with the same note be signed by all future occupants of the facility and be provided to the County.

> *"The County of Kern encourages operation of properly conducted businesses in agriculture, oil, mining, manufacturing, and other nonresidential operations within the County. If the property you are purchasing or leasing is located near these businesses,*

you may be subject to inconveniences or discomforts arising from such operations to the extent allowed by law. This notice does not waive your legal rights."

MM 4.2-3: Prior to the issuance of building permits, a summary report shall be submitted to the Kern County Planning and Natural Resources Department describing how the project is designed to reduce conflicts to the extent feasible between the project's operation and the continued use of adjacent properties zoned A (Exclusive Agriculture). Design considerations shall include, but not be exclusive to: windows that open and ventilation systems placed so as to not bring in air adjacent to active agricultural operations; project egress and ingress not be in conflict with agricultural operations or access; sufficient on-site parking to discourage parking on or adjacent to agricultural lands; prohibition of such off-site parking; provisions for physical buffers or zones between the project and agricultural zoned properties that reduce conflicts between agricultural uses and the project.

MM 4.2-4: The project proponent/operator shall continuously comply with the following:

a. The construction contractor or project personnel shall use herbicides that are approved for use in California, and are appropriate for application adjacent to natural vegetation areas and agricultural use. Personnel applying herbicides shall have all appropriate State and local herbicide applicator licenses and comply with all State and local regulations regarding herbicide use.

b. Herbicides shall be mixed and applied in conformance with the manufacturer's directions.

c. The herbicide applicator shall be equipped with splash protection clothing and gear, chemical resistant gloves, chemical spill/splash wash supplies, and material safety data sheets for all hazardous materials to be used.

d. To minimize harm to wildlife, vegetation, and water bodies, herbicides shall not be applied directly to wildlife.

e. Products identified as non-toxic to birds and small mammals shall be used if nests or dens are observed.

f. Herbicides shall not be applied if it is raining at the site, rain is imminent, or the target area has puddles or standing water.

g. Herbicides shall not be applied when wind velocity exceeds 10 miles per hour. If spray is observed to be drifting to a non-target location, spraying shall be discontinued until conditions causing the drift have abated.

h. A written record of all herbicide applications on the site, including dates and amounts, shall be maintained and provided to the Kern County Planning and Natural Resources Department, if requested.

MM 4.2-5: Prior to issuance of a grading or building permit, whichever occurs first, the project proponent shall provide written evidence of completion of one (1) or more of the following measures to mitigate the loss of 739 acres of agricultural land before conversion, at a one-to-one (1:1) ratio:

a. Funding and/or purchase of agricultural conservation easements (will be managed and maintained by an appropriate entity); and/or

b. Purchase of credits from an established agricultural farmland mitigation bank.

Mitigation land shall meet the definition of prime farmland or farmland of statewide importance established by the State Department of Conservation. Completion of the selected measure(s), shall be on qualifying agricultural land in perpetuity within the San Joaquin Valley Counties (San Joaquin, Stanislaus, Merced, Fresno, Madera, Kings, Tulare, Kern).

Level of Significance after Mitigation

Impact remains significant and unavoidable after implementation of Mitigation Measures **MM 4.2-1** through **MM 4.2-5**.

Impact 4.2-2: The Project Would Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract.

As shown in **Figure 4.2-1**, *Existing Zoning Classifications*, the Kern County Zoning Ordinance designates the proposed project site as being within the A (Exclusive Agriculture) zone district, however there are no active Williamson Act Land Use Contracts associated with the project site. The proposed project includes a request to amend the Kern County General Plan and Metropolitan Bakersfield General Plan, as well as a request for a change in Zoning Classification. Implementation of the proposed project would convert the agricultural land use designation to industrial and would change the existing A (Exclusive Agriculture) zoning classification to M-2 PD (Medium Industrial, Precise Development).

Effective with the requested change in Zoning Classification, the proposed project would be consistent with the proposed M-2 PD (Medium Industrial, Precise Development) zoning classification and impacts would be less than significant. While the project may conflict with the surrounding existing zoning for agricultural use or Williamson Act Contract, implementation of **Mitigation Measures MM 4.2-1** through **MM 4.2-4**, described above, would reduce the impacts to a less than significant level.

Mitigation Measures

Implementation of Mitigation Measures **MM 4.2-1** through **MM 4.2-4** would be required.

Level of Significance after Mitigation

Impacts would be less than significant with implementation of Mitigation Measures **MM 4.2-1** through **MM 4.2-5.**

Impact 4.2-3: The Project Would 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 Forestland to Non-Forest Use.

As discussed under Impact 4.2-1, the proposed project would result in the conversion of prime farmland to industrial uses. The proposed project would introduce new industrial land uses to traditionally agricultural areas, which could result in temporary indirect impacts to surrounding agricultural operations during construction in the form of fugitive dust and increased use of roadways surrounding agricultural fields. Potential permanent operational impacts include the placement of an incompatible land use immediately adjacent to active agricultural operations, and increased use of surrounding roadways associated with distribution operations. While operations. While conflicts between urban and farming uses may exist, incorporating buffers between the two land uses and adopting policies and regulations to mitigate their mutual impacts can minimize these impacts. State and Federal law restricts pesticide use in certain areas, and "right-to-farm" ordinances alone would not diminish the impact of the restrictions on pesticide use on farming operations.

Although business industrial sites exist to the south and east of the project site, agricultural uses also exist contiguous to the project site that may be impacted. SR 99 would provide a buffer between uses within the project site and agricultural activities west of it. The future Burbank Street expansion would provide a buffer on the north side of Phase 1, and Imperial Avenue on the south side of Phase 1. Compatibility of the project with the surrounding existing or future agricultural operations will require thoughtful design of the project to place landscaping, roads, and parking to act as "setbacks" from the adjacent agricultural land use. As all property zoned A (Exclusive Agriculture) can be commercially farmed without any site plan review or discretionary action, mitigation measure **MM 4.2-1** applies to project areas that share a property line with a parcel zoned for agriculture and not just to existing adjacent agriculture plantings. **Mitigation Measures MM 4.2-1** through **MM 4.2-5** provide feasible and reasonable mitigation to reduce the impacts of the project on adjacent agricultural uses.

Mitigation Measures

Implementation Mitigation Measures MM 4.2-1 through MM 4.2-5

Level of Significance after Mitigation

Impacts would be less than significant with mitigation with implementation of Mitigation Measures MM 4.2-1 through MM 4.2-5.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts to agriculture and forestry resources is Kern County as a whole. Kern County ranks high on the list of California Counties with respect to urbanization and loss of farmland. This is primarily due to population growth within the City of Bakersfield and the conversion of agricultural lands within the Metropolitan Bakersfield General Plan area. Although growth in population is

likely to decrease the amount of agricultural land in Kern County in the future, other factors, including availability of water, also contribute to decreases in farmland.

Due to other factors that influence the feasibility of ongoing agricultural operations in Kern County, such as commodity pricing in the global market, water pricing and availability, there may be a cumulative significant loss in agricultural resources in Kern County for reasons that are outside the jurisdiction and control of the County. The Kern County General Plan (2004) forecasted a net loss of 80,854 acres of Prime and Important Farmland and 55,000 acres of grazing land in Kern County based on land use conversions consistent on existing land use plans, which would further reduce Kern County's agricultural lands. The 2022 Kern County General Plan/Housing Element Annual Report shows that 30,794 acres of farmland have been lost since the 2004 projection.

The Sustainable Groundwater Management Act (SGMA) mandates significant reduction in agricultural water that have forced farmland to be taken out of production. While the existing 313 acres is being farmed, it has become a temporary use until the full impact of the SMGA is implemented. As discussed in Section 4.10, *Hydrology and Water Quality,* the submitted plans for the basins in Kern County have been found inadequate and further adjustments in agricultural water allocations that impact groundwater supplies for the project are being contemplated by the State. The project proposal is a result of the conversion of the land from productive agricultural use, not the cause of the conversion. Therefore, no replacement of the agricultural use through mitigation is warranted. Based on the county wide loss of agricultural land due to the SGMA reduction in water for agricultural use, drought conditions, the loss is considered significant and unavoidable with all feasible and reasonable mitigation considered.

Mitigation Measures

Implementation of Mitigation Measures MM 4.2-1 through MM 4.2-5.

Level of Significance after Mitigation

Impacts remain significant and unavoidable after implementation of Mitigation Measures MM 4.2-1 through MM 4.2-5.

Section 4.3
Air Quality

4.3.1 Introduction

This section of the EIR describes the affected air quality environment and regulatory setting for the project. This section also evaluates the short- and long-term impacts on air quality that would result from the implementation of the project, and includes mitigation measures that would reduce these impacts, where applicable.

Information in this section is based primarily on the *Air Quality Impact Analysis* (AQIA) prepared by Trinity Consultants (Trinity 2023) located in Appendix D of this EIR. The analysis was prepared in accordance with the San Joaquin Valley Air Pollution Control District's *Guidance for Assessing and Mitigation Air Quality Impacts* (GAMAQI) (SJVAPCD 2015) and Kern County Planning and Natural Resources Department's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (Kern County 2006).

4.3.2 Environmental Setting

The California Air Resources Board (CARB) has divided California into regional air basins according to topographic drainage features. The project area is located within Kern County's portion of the San Joaquin Valley Air Basin (SJVAB or Basin). Kern County is included among the eight counties that comprise the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD acts as the regulatory agency for air pollution control in the Basin and is the local agency empowered to regulate air pollutant emissions for the project area. The project site is located in unincorporated Kern County, east of State Route 99 (SR 99) and the City of Shafter, which is on the west side of SR 99, and approximately one mile north of the City of Bakersfield.

Topography and Meteorology

Air pollution, especially the dispersion of air pollutants, is directly related to a region's topographic features. Air quality is a function of both the rate and location of pollutant emissions and the meteorological conditions and topographic features that influence pollutant movement and dispersal of air pollutants, which affects ambient air quality.

The project site is within the central valley portion of unincorporated Kern County. The proposed project site is relatively flat and lacks significant topographical features, ranging in elevation from approximately 440-550 feet above msl throughout the site.

The most significant single control on the weather pattern of the San Joaquin Valley is the semi-permanent subtropical high-pressure cell, referred to as the "Pacific High." During the summer, the Pacific High is positioned off the coast of northern California, diverting ocean-derived storms to the north. Hence, the

summer months are virtually rainless. During the winter, the Pacific High moves southward allowing storms to pass through the San Joaquin Valley. Almost all the precipitation expected during a given year occurs from December through April. During the summer, the predominant surface winds are out of the northwest. Air enters the Valley through the Carquinez strait and flows toward the Tehachapi Mountains. This up-valley (northwesterly) wind flow is interrupted in early fall by the emergence of nocturnal, down-valley (southeasterly) winds which become progressively more predominant as winter approaches. Wind speeds are generally highest during the spring and lightest in fall and winter. The relatively cool air flowing through the Carquinez strait is warmed on its journey south through the Valley. On reaching the southern end of the Valley, the average high temperature during the summer is nearly 100 degrees Fahrenheit (°F). Relative humidity during the summer is quite low, causing large diurnal temperature variations. Temperatures during the summer often drop into the upper 60s. In winter, the average high temperatures reach into the mid-50s and the average low drops to the mid-30s. In addition, another high-pressure cell, known as the "Great Basin High," develops east of the Sierra Nevada Mountain Range during winter. When this cell is weak, a layer of cool, damp air becomes trapped in the basin and extensive fog results. During inversions, vertical dispersion is restricted, and pollutant emissions are trapped beneath the inversion and pushed against the mountains, adversely affecting regional air quality. Surface-based inversions, while shallow and typically short-lived, are present most mornings. Elevated inversions, while less frequent than ground-based inversions, are typically longer lasting and create more severe air stagnation problems. The winter season characteristically has the poorest conditions for vertical mixing of the entire year (Trinity 2023).

Existing Air Quality

Criteria Air Pollutants

For the protection of public health and welfare, the Federal Clean Air Act (FCAA) requires that the U.S. Environmental Protection Agency (USEPA) establish National Ambient Air Quality Standards (NAAQS) for various pollutants. These pollutants are referred to as “criteria” pollutants because the USEPA publishes criteria documents to justify the choice of standards. These standards define the maximum amount of an air pollutant that can be present in ambient air. An ambient air quality standard is generally specified as a concentration averaged over a specific time period, such as 1 hour, 8 hours, 24 hours, or 1 year. The different averaging times and concentrations are meant to protect against different exposure effects. Standards established for the protection of human health are referred to as primary standards; whereas, standards established for the prevention of environmental and property damage are called secondary standards. The FCAA allows states to adopt additional or more health-protective standards. The air quality regulatory framework and ambient air quality standards are discussed in greater detail later in this report.

The following provides a summary discussion of the primary and secondary criteria air pollutants of primary concern. In general, primary pollutants are directly emitted into the atmosphere, and secondary pollutants are formed by chemical reactions in the atmosphere.

The following is a description of criteria air pollutants, typical sources and health effects and the recently documented pollutant levels in the project vicinity (Trinity 2023).

Ozone

Ozone (O_3) occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. At ground level, tropospheric, or “bad,” ozone is an air pollutant that damages human health,

vegetation, and many common materials. Ozone is a key ingredient of urban smog. The troposphere extends to a level approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric, or "good," ozone layer extends upward from approximately 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays (UV-B).

Tropospheric, or "bad" ozone is what is known as a photochemical pollutant. It needs reactive organic gases (ROG), oxides of nitrogen (NOx), and sunlight to form. ROG and NOx are emitted from various sources throughout Kern County. Significant ozone formation generally requires an adequate amount of precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight. To reduce ozone concentrations, it is necessary to control the emissions of these ozone precursors.

The most severe air quality problem in the San Joaquin Valley is high concentrations of O3. O3 is not emitted directly into the atmosphere but is a secondary pollutant produced through photochemical reactions involving hydrocarbons and nitrogen oxides (NOx). Significant O3 generation requires about one to three hours in a stable atmosphere with strong sunlight. For this reason, the months of April through October comprise the "ozone season." O3 is a regional pollutant because O3 precursors are transported and diffused by wind concurrently with the reaction process. The data contained in **Table 4.3-1**, *Existing Air Quality Monitoring Data in Project Area*, shows that the Bakersfield, Oildale, and Shafter area exceeded the 1-hour average ambient O3 CAAQS and the 8-hour average ambient O3 NAAQS and CAAQS for the 2019 through 2021 period.

Ozone Health Effects

While ozone in the upper atmosphere protects the earth from UV-B, high concentrations of ground-level ozone can adversely affect the human respiratory system. Many respiratory ailments, as well as cardiovascular diseases, are aggravated by exposure to high ozone levels.

Ozone is a powerful oxidant—it can be compared to household bleach, which can kill living cells (such as germs or human skin cells) upon contact. Ozone can damage the respiratory tract, causing inflammation and irritation, and it can induce symptoms such as coughing, chest tightness, shortness of breath, and worsening of asthmatic symptoms. Ozone in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. Exposure to levels of ozone above the current ambient air quality standard leads to lung inflammation, lung tissue damage, and a reduction in the amount of air inhaled into the lungs. Health effects include potential increased susceptibility to respiratory infections and reduced ability to exercise. Health effects are more severe in people with asthma and other respiratory ailments. People who work or play outdoors are at a greater risk for harmful health effects from ozone. Children and adolescents are also at greater risk because they are more likely than adults to spend time engaged in vigorous activities. Research indicates that children under 12 years of age spend nearly twice as much time outdoors daily than adults. Teenagers spend at least twice as much time as adults in active sports and outdoor activities. Also, children inhale more air per pound of body weight than adults, and they breathe more rapidly than adults. Children are less likely than adults to notice their own symptoms and avoid harmful exposures. Elevated ozone concentrations also reduce crop and timber yields, damage native plants, and damage materials such as rubber, paints, fabric, and plastics (CARB and American Lung Association of California, 2007).

Suspended Particulate Matter (PM_{10} and $PM_{2.5}$)

Particulate matter (PM) pollution consists of very small liquid and solid particles floating in the air. Some particles are large and dark enough to be seen as soot or smoke. Others are so small they can be detected

only with an electron microscope. PM is a mixture of materials that can include smoke, soot, dust, salt, acids, and metals. PM also forms when gases emitted from motor vehicles and industrial sources undergo chemical reactions in the atmosphere. PM or airborne dusts are the small particles that remain suspended in the air for long periods of time. Particulates of concern are those that are 10 microns or less in diameter (PM_{10}) and 2.5 microns or less in diameter ($PM_{2.5}$). Thus, $PM_{2.5}$ is a subset of PM_{10}. PM_{10} and $PM_{2.5}$ are small enough to be inhaled, pass through the respiratory system and lodge in the lungs, possibly leading to adverse health effects.

The composition of PM_{10} and $PM_{2.5}$ can vary greatly with time, location, the sources of the material and meteorological conditions. Dust, sand, salt spray, metallic and mineral particles, pollen, smoke, mist, and acid fumes are the main components of PM_{10} and $PM_{2.5}$. In addition to those listed previously, secondary particles can also be formed as precipitates from photochemical reactions of gaseous SO_2 and NO_X in the atmosphere to create sulfates (SO_4) and nitrates (NO_3), respectively. Secondary particles are of greatest concern during the winter months when low inversion layers tend to trap the precursors of secondary particulates.

In the western U.S., there are sources of PM_{10} in both urban and rural areas. PM_{10} and $PM_{2.5}$ are emitted from stationary and mobile sources, including diesel trucks and other motor vehicles; power plants; industrial processes; wood-burning stoves and fireplaces; wildfires; dust from roads, construction, landfills, and agriculture; and fugitive windblown dust. Because particles originate from a variety of sources, their chemical and physical compositions vary widely.

Table 4.3-1, *Existing Air Quality Monitoring Data in Project Area*, shows that PM_{10} levels regularly exceeded the CAAQS but not the NAAQS at two monitoring stations over the three-year period of 2019 through 2021. **Table 4.3-1** also shows that $PM_{2.5}$ NAAQS were exceeded from 2019 through 2021. Similar levels can be expected to occur in the vicinity of the project site.

Suspended Particulate Matter Health Impacts

The size of particles is directly linked to their potential for causing health problems. PM_{10} and $PM_{2.5}$ particles are small enough—about one seventh the thickness of a stand of human hair, or smaller—to be inhaled and lodged in the deepest parts of the lung where they evade the respiratory system's natural defenses and can be trapped in the nose, throat, and upper respiratory tract. Health effects from exposure to PM_{10} and $PM_{2.5}$ begin as the body reacts to these foreign particles. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, coughing, bronchitis, and respiratory illnesses in children. Recent mortality studies have shown a statistically significant direct association between mortality and daily concentrations of particulate matter in the air. PM_{10} and $PM_{2.5}$ can aggravate respiratory disease and cause lung damage, cancer, and premature death. Sensitive populations, including children, the elderly, exercising adults, and those suffering from chronic lung disease such as asthma or bronchitis, are especially vulnerable to the effect of PM_{10}. Of greatest concern are recent studies that link PM_{10} exposure to the premature death of people who already have heart and lung disease, especially the elderly. Acidic PM_{10} can also damage manmade materials and is a major cause of reduced visibility in many parts of the United States. Non-health related effects include reduced visibility and soiling of buildings.

Premature deaths linked to particulate matter are now at levels comparable to deaths from traffic accidents and secondhand smoke. One of the most dangerous pollutants, fine particulate matter (e.g., from diesel exhaust) not only bypasses the body's defense mechanisms and becomes embedded in the deepest recesses of the lung, but also can disrupt cellular processes. Population-based studies in hundreds of cities in the

United States and around the world have demonstrated a strong link between elevated particulate levels and premature deaths, hospital admissions, emergency room visits, and asthma attacks. Long-term studies of children's health conducted in California have demonstrated that particulate pollution may significantly reduce lung function growth in children (CARB and American Lung Association of California, 2007).

A recent study provides evidence that exposure to particulate air pollution is associated with lung cancer. This study found that residents who live in an area that is severely affected by particulate air pollution are at risk of developing lung cancer at a rate comparable to nonsmokers exposed to secondhand smoke. This study also found approximately 16 percent excess risk of dying from lung cancer due to fine particulate air pollution (Air & Waste Management, 2006).

Another study shows that individuals with existing cardiac disease can be in a potentially life-threatening situation when exposed to high levels of fine air pollution. Fine particles can penetrate the lungs and cause the heart to beat irregularly, or can cause inflammation, which could lead to a heart attack (Peters et al., 2001).

Attaining the California particulate matter standards would annually prevent about 6,500 premature deaths, or 3 percent of all deaths. These premature deaths shorten lives by an average of 14 years. This is roughly equivalent to the same number of deaths (4,200 to 7,400) linked to secondhand smoke in 2000. In comparison, motor vehicle crashes caused 3,200 deaths, and 2,000 deaths resulted from homicide. Attaining the California particulate matter and ozone standards would annually prevent 4,000 hospital admissions for respiratory disease, 3,000 hospital admissions for cardiovascular disease, and 2,000 asthma-related emergency room visits. Exposure to diesel particulate matter (DPM) causes about 250 excess cancer cases per year in California (Kern County, 2006).

Carbon Monoxide (CO)

Carbon monoxide (CO) is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. CO is an odorless, colorless, poisonous gas that is highly reactive. CO is a byproduct of motor vehicle exhaust, which contributes more than 66 percent of all CO emissions nationwide. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. These emissions can result in high concentrations of CO, particularly in local areas with heavy traffic congestion. Other sources of CO emissions include industrial processes and fuel combustion in sources such as boilers and incinerators. Despite an overall downward trend in concentrations and emissions of CO, some metropolitan areas still experience high levels of CO. High CO concentrations develop primarily during winter when periods of light winds combine with the formation of ground level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures.

Table 4.3-1, *Existing Air Quality Monitoring Data in Project Area*, reports no CO data is available for the three-year period from 2019 through 2021; historically the Bakersfield area data for CO has been below the CAAQS and NAAQS.

Carbon Monoxide Health Effects

When inhaled, CO enters the bloodstream and binds more readily to hemoglobin, the oxygen-carrying protein in blood, than oxygen, thereby reducing the oxygen-carrying capacity of blood and reducing oxygen delivery to organs and tissues. The health threat from CO is most serious for those who suffer from cardiovascular disease. Healthy individuals are also affected but only at higher levels of exposure. Exposure to CO can cause chest pain in heart patients, headaches, and reduced mental alertness. At high concentrations, CO can cause heart difficulties in people with chronic diseases and can impair mental abilities. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, difficulty performing complex tasks, and, with prolonged enclosed exposure, death.

The adverse health effects associated with exposure to ambient and indoor concentrations of CO are related to the concentration of carboxyhemoglobin in the blood. Exposure to elevated concentrations of CO weakens the heart's contractions and lower the amount of oxygen carried by the blood. Health effects observed may include an early onset of cardiovascular disease, behavioral impairment, decreased exercise performance of young, healthy men, reduced birth weight, sudden infant death syndrome, and increased daily mortality rate (Fierro et al., 2001).

Reactive Organic Gases (ROGs) and Volatile Organic Compounds (VOCs)

Hydrocarbons are organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including reactive organic gases (ROGs) and volatile organic compounds (VOCs), which include all hydrocarbons except those exempted by CARB. Therefore, ROGs are a set of organic gases based on State rules and regulations. VOCs are similar to ROGs in that they include all organic gases except those exempted by Federal law. Both VOCs and ROGs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. Combustion engine exhaust, oil refineries, and oil-fueled power plants are the primary sources of hydrocarbons. Another source of hydrocarbons is evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

Reactive Organic Gases (ROGs) and Volatile Organic Compounds (VOCs) Health Effects

The primary health effects of hydrocarbons result from the formation of ozone and its related health effects (see ozone health effects discussion above). High levels of hydrocarbons in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. There are no separate federal or California ambient air quality standards for ROG. Carcinogenic forms of ROG are considered toxic air contaminants (TACs). An example is benzene, which is a carcinogen found in gasoline. The health effects of individual ROGs are described under the “Toxic Air Contaminants” heading below.

Oxides of Nitrogen (NO_x) and Hydrocarbons

Oxides of nitrogen (NO_X) are a family of highly reactive gases that are a primary precursor to the formation of ground-level ozone and reacts in the atmosphere to form acid rain. NO_X is emitted from solvents and combustion processes in which fuel is burned at high temperatures, principally motor vehicle exhaust and stationary sources, such as electric utilities and industrial boilers. In terms of NO_X emissions, the two principal types of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2), with the vast majority (95 percent) of the NO_X emissions being comprised of NO. NO is converted to NO_2 by several processes, the two most

important of these are: (1) the reaction of NO with ozone; and (2) the photochemical reaction of NO with hydrocarbons. A brownish gas, NO_X is a strong oxidizing agent that reacts in the air to form corrosive nitric acid as well as toxic organic nitrates.

Motor vehicles are the major source of reactive hydrocarbons in the Basin. Other sources include evaporation of organic solvents and petroleum production and refining operations. **Table 4.3-1,** *Existing Air Quality Monitoring Data in Project Area*, shows that the Federal and State NO2 standards have not been exceeded at the monitoring stations over the three-year period of 2019 through 2021. Hydrocarbons are not currently monitored.

Oxides of Nitrogen and Hydrocarbons Health Impacts

NO_X is an ozone precursor that combines with ROG to form ozone. See the ozone section above for a discussion of the health effects of ozone. Direct inhalation of NO_X can cause a wide range of health effects. Health effects of NO_X include irritation of the lungs, lung damage, and lowered resistance to respiratory infections such as influenza. Short-term exposures (e.g., less than 3 hours) to low levels of NO_2 may lead to changes in airway responsiveness and lung function in individuals with pre-existing respiratory illnesses. These exposures may also increase respiratory illness in children. Long-term exposures to NO_2 may lead to increased susceptibility to respiratory infection and may cause irreversible lung damage. Other health effects associated with NO_2 are an increase in the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO_2 may lead to eye and mucus membrane aggravation, along with pulmonary dysfunction. Clinical studies of human subjects suggest that NO_2 exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children. Epidemiological studies have also shown associations between NO_2 concentrations and daily mortality from respiratory and cardiovascular causes as well as hospital admissions for respiratory conditions.

NO_X contributes to a wide range of environmental effects both directly and indirectly when combined with other precursors in acid rain and ozone. NO_X can cause fading of textile dyes and additives, deterioration of cotton and nylon, and corrosion of metals due to the production of particulate nitrates.. Increased nitrogen inputs to terrestrial and wetland systems can lead to changes in plant species composition and diversity. Similarly, direct nitrogen inputs to aquatic ecosystems such as those found in estuarine and coastal waters can lead to eutrophication (a condition that promotes excessive algae growth, which can lead to a severe depletion of dissolved oxygen and increased levels of toxins harmful to aquatic life). Nitrogen, alone or in acid rain, also can acidify soils and surface waters. Acidification of soils causes the loss of essential plant nutrients and increased levels of soluble aluminum, which is toxic to plants. Acidification of surface waters creates conditions of low pH and levels of aluminum that are toxic to fish and other aquatic organisms. NO_X also contributes to visibility impairment [California Air Pollution Control Officers Association (CAPCOA), 2019].

Sulphur Dioxide (SO_2)

Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to sulfur dioxide (SO_2) during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California because of regional meteorological features.

SO_2 is a colorless, irritating gas with a "rotten egg" smell that is formed primarily by the combustion of sulfur-containing fossil fuels. Historically, SO_2 was a pollutant of concern in Kern County, but with the successful implementation of regulations, the levels have been reduced significantly.

Table 4.3-1, *Existing Air Quality Monitoring Data in Project Area*, shows no data has been reported over the three-year period in Kern County.

Sulfur Dioxide Health Impacts

High concentrations of SO_2 can result in temporary breathing impairment for asthmatic children and adults who are active outdoors. Health effects from exposure to SO_2 emissions include aggravation of lung diseases, especially bronchitis, and constricting of breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. Short-term exposures of individuals to elevated SO_2 levels during moderate activity may result in health effects including breathing difficulties that can be accompanied by symptoms such as wheezing, chest tightness, or shortness of breath. Other health effects that have been associated with longer-term exposures to high concentrations of SO_2, in conjunction with high levels of particulate matter, include aggravation of existing cardiovascular disease, respiratory illness, and alterations in the lungs' defenses. SO_2 is a major precursor to particulate matter that is 2.5 microns or less ($PM_{2.5}$), which is a significant health concern and a main contributor to poor visibility (see also the discussion of health effects of particulate matter).

SO_2 not only has a bad odor, but can irritate the respiratory system. Exposure to high concentrations for short periods of time can constrict the bronchi and increase mucous flow, making breathing difficult. SO_2 can also irritate the lung and throat at concentrations greater than 6 ppm in many people, impair the respiratory system's defenses against foreign particles and bacteria when exposed to concentrations less than 6 ppm for longer time periods; and enhance the harmful effects of ozone (combinations of the two gases at concentrations occasionally found in the ambient air appear to increase airway resistance to breathing).

SO_2 tends to have more toxic effects when acidic pollutants, liquid or solid aerosols, and particulates are also present. Effects are more pronounced among "mouth breathers," e.g., people who are exercising or have head colds. These effects include:

- Health problems, such as episodes of bronchitis requiring hospitalization associated with lower-level acid concentrations;
- Self-reported respiratory conditions, such as chronic cough and difficult breathing, associated with acid aerosol concentrations (individuals with asthma are especially susceptible to these effects. The elderly and those with chronic respiratory conditions may also be affected at lower concentrations than the general population);
- Increased respiratory tract infections associated with longer-term, lower-level exposures to SO_2 and acid aerosols; and
- Subjective symptoms, such as headaches and nausea, in the absence of pathological abnormalities due to long-term exposure.

SO_2 easily damages many plant species and varieties, both native and cultivated, through interference with photosynthesis and energy metabolism. Some of the most sensitive plants include various commercially valuable pines, legumes, red and black oaks, white ash, alfalfa, and blackberry shrubs. The effects include:

- Visible injury to the most sensitive plants at exposures as low as 0.12 ppm for eight hours;
- Visible injury to many other plant types of intermediate sensitivity at exposures of 0.30 ppm for eight hours; and
- Positive benefits from low levels in a very few species growing on sulfur-deficient soils.

Increases in SO_2 concentrations accelerate the corrosion of metals, probably through the formation of acids. SO_2 is a major precursor to acidic deposition. Sulfur oxides may also damage stone and masonry, paint, various fibers, paper, leather, and electrical components.

Increased concentrations of SO_2 and other sulfur oxides can react with other compounds to form fine particles that reduce and impair visibility. Particulate sulfate, much of which is derived from SO_2 emissions, is a major component of the complex total suspended particulate mixture.

Sulfates

Sulfates (SO_4^{2-}) are particulate product that primarily come from the combustion of sulfur-containing fossil fuels. When sulfur monoxide or SO_2 is exposed to oxygen, it precipitates out into sulfates (SO_3 or SO_4). Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California because of regional meteorological features.

Sulfates Health Effects

CARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in oxygen intake, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. When acidic pollutants and particulates are also present, SO_2 tends to have an even more toxic effect. In addition to particulates, SO_3 and SO_4 are also precursors to acid rain. SO_X and NO_X are the leading precursors to acid rain. Acid rain can lead to corrosion of man-made structures and cause acidification of water bodies. Sulfates are particularly effective in degrading visibility and, because they are usually acidic, can harm ecosystems and damage materials and property (CARB, 2022).

Lead (Pb)

Lead is a metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. Historically, lead was used to increase the octane rating in automobile fuel. However, because gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels and that use has been mostly phased out, the ambient concentrations of lead have dropped dramatically.

Ambient Pb levels in Bakersfield are well below the ambient standard and are expected to continue to decline; the data reported in **Table 4.3-1,** *Existing Air Quality Monitoring Data in Project Area*, only shows

the highest concentration as the number of days exceeding standards are not reported. Suspended sulfate levels have stabilized to the point where no excesses of the State standard are expected in any given year.

Lead Health Impacts

Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ. Recent studies also show that lead may be a factor in high blood pressure and subsequent heart disease. Lead can also be deposited on the leaves of plants, presenting a hazard to grazing animals and humans through ingestion (USEPA, 2012).

This highly toxic metal has been used for many years in everyday products and has been found to cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death. Effects on the nervous systems of children are one of the primary health risk concerns from lead. In high concentrations, children can even suffer irreversible brain damage and death. Children six years old and under are most at risk, because their bodies are growing quickly.

If not detected early, children with high levels of lead in their bodies can suffer from:

- Damage to the brain and nervous system;
- Behavior and learning problems (such as hyperactivity);
- Slowed growth;
- Hearing problems; and
- Headaches.

Lead is also harmful to adults. Adults can suffer from:

- Difficulties during pregnancy;
- Other reproductive problems (in both men and women);
- High blood pressure;
- Digestive problems;
- Nerve disorders;
- Memory and concentration problems; and
- Muscle and joint pain.

Since the 1980s, lead has been phased out in gasoline, reduced in drinking water, reduced in industrial air pollution, and banned or limited in consumer products.

Hydrogen Sulfide

Hydrogen sulfide (H_2S) is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. H_2S in the atmosphere would likely oxidize into SO_2 that can lead to acid rain. At low concentrations, H_2S, which has a characteristic "rotten egg" smell, may cause irritation to the eyes, mucous membranes and respiratory system, dizziness, and headaches. Exposure to high concentrations (800 ppm can cause death) of hydrogen sulfide is extremely hazardous, especially in enclosed spaces. Occupational Safety and Health Administration (OSHA) has the primary responsibility for regulating workplace exposure to H_2S.

Hydrogen Sulfide Health Effects

Exposure to low concentrations of H_2S may cause irritation to the eyes, nose, and/or throat. It may also cause difficulty in breathing for asthmatics. Exposure to higher concentrations (above 100 ppm) can cause olfactory fatigue, respiratory paralysis, and death. Brief exposures to high concentrations of H_2S (greater than 500 ppm) can cause a loss of consciousness. In most cases after exposure, an individual will regain consciousness without any other effects. However, in many individuals, there may be permanent or long-term effects such as headaches, poor attention span, poor memory, and poor motor function. No health effects have been found in humans exposed to typical environmental concentrations of H_2S (0.00011–0.00033 ppm). Deaths due to breathing in large amounts of H_2S have been reported in a variety of different work settings, including sewers, animal processing plants, waste dumps, sludge plants, oil and gas well drilling sites, tanks, and cesspools.

Vinyl Chloride

Vinyl chloride monomer is a sweet-smelling, colorless gas at ambient temperature. Landfills, publicly owned treatment works, and polyvinyl chloride (PVC) production are the major identified sources of vinyl chloride emissions in California. PVC can be fabricated into several products, such as PVC pipes, pipe fittings, and plastics.

Vinyl Chloride Health Effects

In humans, epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of liver angiosarcoma, which is a rare cancer, and have suggested a relationship between exposure cancers of the lung and brain. There are currently no adopted ambient air standards for vinyl chloride.

Short-term exposure to vinyl chloride has been linked with the following acute health effects (USEPA, 2020):

- Acute exposure of humans to high levels of vinyl chloride via inhalation in humans has resulted in effects on the central nervous system, such as dizziness, drowsiness, headaches, and giddiness.
- Vinyl chloride is reported to be slightly irritating to the eyes and respiratory tract in humans. Acute exposure to extremely high levels of vinyl chloride has caused loss of consciousness; irritation to the lungs and kidneys; inhibition of blood clotting in humans; and cardiac arrhythmias in animals.

- Tests involving acute exposure of mice to vinyl chloride have shown high acute toxicity from inhalation exposure to the substance.

Long-term exposure to vinyl chloride concentrations has been linked with the following chronic health effects (USEPA 2020b):

- Liver damage may result in humans from chronic exposure to vinyl chloride, through both inhalation and oral exposure.
- A small percentage of individuals occupationally exposed to high levels of vinyl chloride in the air have developed a set of symptoms termed "vinyl chloride disease," which is characterized by Raynaud's phenomenon (fingers blanch, numbness and discomfort are experienced upon exposure to the cold), changes in the bones at the end of the fingers, joint and muscle pain, and scleroderma-like skin changes (thickening of the skin, decreased elasticity, and slight edema).
- Central nervous system effects (including dizziness, drowsiness, fatigue, headache, visual and/or hearing disturbances, memory loss, and sleep disturbances), as well as, peripheral nervous system symptoms (peripheral neuropathy, tingling, numbness, weakness, and pain in fingers) have also been reported in workers exposed to vinyl chloride.

Several reproductive/developmental health effects from vinyl chloride exposure have been identified (USEPA, 2020b):

- Several case reports suggest that male sexual performance may be affected by vinyl chloride. However, these studies are limited by lack of quantitative exposure information and possible co-occurring exposure to other chemicals.
- Several epidemiological studies have reported an association between vinyl chloride exposure in pregnant women and an increased incidence of birth defects, while other studies have not reported similar findings.
- Epidemiological studies have suggested an association between men occupationally exposed to vinyl chloride and miscarriages during their wives' pregnancies, although other studies have not supported these findings.
- Long-term exposure to vinyl chloride has also been identified as a cancer risk. Inhaled vinyl chloride has been shown to increase the risk of a rare form of liver cancer (angiosarcoma of the liver) in humans. Animal studies have shown that vinyl chloride, via inhalation, increases the incidence of angiosarcoma of the liver and cancer of the liver.

Visibility-Reducing Particles

This standard is a measure of visibility. CARB does not yet have a measurement method that is accurate or precise enough to designate areas in the state as being in attainment or non-attainment. Visibility-reducing particles consist of suspended particulate matter, which are a complex mixture of tiny particles that consist of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. Except for Lake County (which is designated to be in attainment), California's attainment status with respect to visibility-reducing particles is currently designated as unclassified.

Toxic Air Contaminants (TAC)

Hazardous air pollutants (HAPs) is a term used by the FCAA that includes a variety of pollutants generated or emitted by industrial production activities. Referred to as Toxic Air Contaminants (TACs) under the California Clean Air Act of 1988 (CCAA), 10 pollutants have been identified through ambient air quality data as posing the most substantial health risk in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, damage to the brain and nervous system, and respiratory disorders. CARB provides emission inventories for only the larger air basins.

Sources include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations, dry cleaners, and motor vehicle exhaust. TACs do not have ambient air quality standards. Since no safe levels of TACs can be determined, there are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic "Hot Spots" Information and Assessment Act apply to facilities that use, produce, or emit toxic chemicals. Facilities that are subject to the toxic emission inventory requirements of the Act must prepare and submit toxic emission inventory plans and reports to CARB and periodically update those reports. While TACs do result in potential health risks for those exposed, the proposed project would not emit TACs, with the exception of diesel particulate matter which, therefore, is the only TAC described further in this analysis.

Diesel Particulate Matter

Diesel particulate matter (DPM) is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute about 24 percent of the statewide total, with an additional 71 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute about five percent of total diesel particulate matter.

Diesel Particulate Matter Health Impacts

Diesel exhaust and many individual substances contained therein (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by the California Office of Environmental Health Hazard Assessment (OEHHA). CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing TACs stems from diesel exhaust particles.

In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. Using information from OEHHA's assessment, CARB estimates that diesel-particle levels measured in California's air in 2000 could cause 540 "excess" cancers (beyond what would occur if there were no diesel particles in the air) in a population of one million people over a 70-year lifetime. Other researchers and scientific organizations, including the National Institute for Occupational Safety and Health (NIOSH), have calculated similar cancer risks from diesel exhaust as those calculated by OEHHA and CARB.

Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine-particle pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Numerous 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. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can reduce lung function in children. In California, diesel exhaust particles have been identified as carcinogens.

Airborne Fungus (Valley Fever)

Coccidioidomycosis, often referred to as San Joaquin Valley Fever or Valley Fever, is one of the most studied and oldest known fungal infections. Valley Fever most commonly affects people who live in hot, dry areas with alkaline soil that varies with the season. This disease, which affects both humans and animals, is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis*. *Coccidioides immitis* spores are found in the top few inches of soil and the existence of the fungus in most soil areas is temporary. The cocci fungus lives as a saprophyte in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-disturbing activities and become airborne. Agricultural workers, construction workers, and other people who work outdoors and exposed to wind and dust are more likely to contract Valley Fever. Children and adults whose hobbies or sports activities expose them to wind and dust are also more likely to contract Valley Fever. After the fungal spores have settled in the lungs, they change into a multicelluar structure called a spherule. Fungal growth in the lungs occurs as the spherule grows and bursts, releasing endospores, which then develop into more spherules.

About 60 percent of Valley Fever cases are mild and display flu-like symptoms or no symptoms at all. Of those who are exposed and seek medical treatment, the most common symptoms include fatigue, cough, loss of appetite, rash, headache, and joint aches. In some cases, painful red bumps may develop on the skin. One important fact to mention is that these symptoms are not unique to Valley Fever and may be caused by other illnesses as well. Identifying and confirming this disease require specific laboratory tests such as: (1) microscopic identification of the fungal spherules in infected tissue, sputum or body fluid sample; (2) growing a culture of *Coccidioides immitis* from a tissue specimen, sputum, or body fluid; (3) detection of antibodies (serological tests specifically for Valley Fever) against the fungus in blood serum or other body fluids; and (4) administering the Valley Fever Skin Test (called coccidioidin or spherulin), which indicate prior exposure to the fungus (Valley Fever Center for Excellence 2022b). It should be noted that the incident rate for Valley Fever in Kern County within the San Joaquin Valley Air Basin is the highest within California with approximately 330 cases per 100,000 people in 2021. (Kern County Public Health Services Department, 2023).

Valley Fever is not contagious and, therefore, cannot be passed on from person to person. Most of those who are infected would recover without treatment within six months and would have a life-long immunity to the fungal spores. In severe cases, especially in those patients with rapid and extensive primary illness, those who are at risk for or have dissemination of disease, antifungal drug therapy is used. The type of medication used and the duration of drug therapy are determined by the severity of disease and response to the therapy. The medications used include ketoconazole, itraconazole, and fluconazole in chronic, mild-to-moderate disease, and amphotericin B, given intravenously or inserted into the spinal fluid, for rapidly progressive disease. Although these treatments are often helpful, evidence of disease may persist and years of treatment may be required (Valley Fever Center for Excellence 2022a).

About five percent of Valley Fever cases result in pneumonia (infection of the lungs), while another five percent of patients develop lung cavities after their initial infection with Valley Fever. These cavities occur most often in older adults, usually without symptoms, and about 50 percent of the cavities disappear within two years. Occasionally, these cavities rupture, causing chest pain and difficulty breathing, and require surgical repair. Only one to two percent of those exposed who seek medical attention would develop a disease that disseminates to other parts of the body other than the lungs (Valley Fever Center for Excellence 2010c).

Factors that affect the susceptibility to coccidioidal dissemination are race, sex, pregnancy, age, and immunosuppression. While there are no racial or gender differences in susceptibility to primary infection with coccidioidomycosis, differences in risk of disseminated infection do appear to exist. Men have a higher rate of dissemination than do women, and several studies have shown that the rate of dissemination in African Americans and Filipinos is several times higher than in the rest of the U.S. population. Native Americans, Hispanics, and Asians may also have a higher rate of dissemination than the general population, but these population differences are not well defined.

The *Coccidioides immitis* fungal spores are often found in the soil around rodent burrows, Indian ruins, and burial grounds. The spores become airborne when the soil is disturbed by winds, construction, farming, and soil-disturbing activities. This type of fungus is endemic to the southwestern United States and more common in Kern County. The ecological factors that appear to be most conducive to the survival and replication of the fungal spores are high summer temperatures, mild winters, sparse rainfall, and alkaline, sandy soils. During drought years, the number of organisms competing with *Coccidioides immitis* decreases, and the fungus remains alive, but dormant. When rain finally occurs, the arthrocondia germinate and multiply more than usual because of a decreased number of other competing organisms. Later, the soil dries out in the summer and fall, and the fungi can become airborne and potentially infectious.

Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals. 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. Naturally occurring asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. Serpentinite and/or ultramafic rock are

known to be present in 44 of California's 58 counties. These rocks are particularly abundant in the counties associated with the Sierra Nevada foothills, the Klamath Mountains, and Coast Ranges. According to information provided by the California Department of Conservation Division of Mines and Geology (DMG), the proposed project site is not located in an area where naturally occurring asbestos is likely to be present (California Department of Conservation, 2000).

Coronavirus Disease 2019

Coronavirus Disease 2019 (COVID-19) is a new disease, caused by a novel (or new) human coronavirus that has not previously been seen in humans. The first known case of COVID-19 was confirmed in the United States on January 20, 2020 (Holshue et al., 2020). There are many types of human coronaviruses, including some that commonly cause mild upper-respiratory tract illnesses. COVID-19 is a respiratory illness that can spread from person to person. According to the Center for Disease Control (CDC), older adults and people who have severe underlying medical conditions like heart or lung disease or diabetes seem to be at higher risk for developing more serious complications from COVID-19 illness. Symptoms may appear two to 14 days after the exposure to the virus and may include, but are not limited to: fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, and diarrhea (CDC, 2020a). According to the CDC, COVID-19 is believed to spread between people who are in close contact with one another (within about six feet) through respiratory droplets produced when an infected person coughs, sneezes, or talks (CDC, 2020b). COVID-19 research and causality is still in the beginning stages. A nationwide study by Harvard University found a linkage between long-term exposure to $PM_{2.5}$ (averaged from 2000 to 2016) as air pollution and statistically significant increased risk of COVID-19 death in the United States (Harvard, 2020).

Odors

Typically, odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from the psychological (e.g., irritation, anger, or anxiety) to the physiological (e.g., circulatory and respiratory effects, nausea, vomiting, headache). The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell very minute quantities of specific substances; others may not have the same sensitivity, but may have sensitivities to odors of other substances. People may have different reactions to the same odor and an odor that is offensive to one person may be perfectly acceptable to another (e.g., fast food restaurant). It is important to also note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word strong to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection

threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Neither the state nor the federal governments have adopted rules or regulations for the control of odor sources. The SJVAPCD does not have an individual rule or regulation that specifically addresses odors; however, odors would be subject to the SJVAPCD's *Rule 4102, Nuisance*. Any actions related to odors would be based on citizen complaints to local governments and the SJVAPCD.

Existing Air Quality

CARB has established and maintains a network of sampling stations [called the State and Local Air Monitoring Stations (SLAMS) network] that work in conjunction with local air pollution control districts (APCDs) and air quality management districts to monitor ambient pollutant levels. The SLAMS network in Kern County consists of eight stations that monitor various pollutant concentrations. The locations of these stations were chosen to meet monitoring objectives, which for the SLAMS network, call for stations that monitor the highest pollutant concentrations, representative concentrations in areas of high population density, the impact of major pollution emissions sources, and general background concentration levels.

For the purposes of background data and this air quality analysis, this analysis relied on data collected in the last three years for the CARB monitoring stations that are located in the closest proximity to the project site. **Table 4.3-1,** *Existing Air Quality Monitoring Data in Project Area*, provides the background concentrations for O_3, PM_{10}, $PM_{2.5}$, CO, NO_2, SO_2, and Pb. Information is provided for the Bakersfield-5558 California Avenue, Bakersfield-Golden State Highway, Bakersfield-Municipal Airport, Bakersfield-410 East Planz Road, and Edison monitoring stations for 2018 through 2020. No data is available for H_2S, vinyl chloride or other toxic air contaminants in Kern County.

Table 4.3-1: Existing Air Quality Monitoring Data in Project Area

	Maximum Concentration			Days Exceeding Standard		
Pollutant and Monitoring Station Location	**2019**	**2020**	**2021**	**2019**	**2020**	**2021**
O_3 – 1-hour CAAQS (0.09 ppm)						
Bakersfield - 5558 California Ave	0.097	0.110	0.090	2	3	0
Oildale - 3311 Manor Street	0.099	0.109	0.107	1	3	6
Shafter - Walker Street	0.087	0.116	0.104	0	6	1
O_3 – 8-hour CAAQS (0.07 ppm)						
Bakersfield - 5558 California Ave	0.088	0.098	0.081	28	25	11
Oildale - 3311 Manor Street	0.087	0.096	0.095	20	24	46
Shafter - Walker Street	0.077	0.098	0.086	15	34	16
O_3 – 8-hour NAAQS (0.070 ppm)						
Bakersfield - 5558 California Ave	0.088	0.098	0.080	24	25	11
Oildale - 3311 Manor Street	0.086	0.096	0.095	16	23	43
Shafter - Walker Street	0.077	0.098	0.085	14	34	15
PM_{10} – 24-hour CAAQS (50 µg/m^3)						
Bakersfield - 5558 California Ave	125.9	196.8	439.3	17	18	124
Bakersfield – Golden State Hwy	664.2	144.0	176.3	21	26	25

	Maximum Concentration			Days Exceeding Standard		
Pollutant and Monitoring Station Location	**2019**	**2020**	**2021**	**2019**	**2020**	**2021**
PM_{10} – 24-hour NAAQS (150 µg/m^3)						
Bakersfield-5558 California Ave	116.3	193.8	437.5	0	1	3
Bakersfield – Golden State Hwy	652.2	146.8	175.0	1	0	1
$PM_{2.5}$ - 24-hour NAAQS (35 µg/m^3)						
Bakersfield – 5558 California Ave	59.1	150.7	72.3	12	44	40
Bakersfield – Golden State Hwy	66.1	150.2	78.5	4	10	43
CO - 8-Hour CAAQS & NAAQS (9.0 ppm)						
No data collected	*	*	*	*	*	*
NO_2 - 1-Hour CAAQS (0.18 ppm)						
Bakersfield - 5558 California Ave	67	50	57	0	0	0
Shafter - Walker Street	49	40	47	0	0	0
NO_2 - 1-Hour NAAQS (0.10 ppm)						
Shafter - Walker Street	49.3	40.9	47.8	0	0	0
Bakersfield-5558 California Avenue	67.1	50.4	57.2	0	0	0
SO_2 – 24-hour Concentration - CAAQS (0.04 ppm) & NAAQS (0.14 ppm)						
No data collected	*	*	*	*	*	*
Pb - Maximum 30-Day Concentration CAAQS (1500 ng/m^3)						
Bakersfield-5558 California Avenue	8.5	5.7	9.9	0	0	0

Notes: ppm= parts per million

* There was insufficient (or no) data available to determine the value.

Source: Trinity Consultants 2023

Sensitive Receptors

Sensitive receptors are considered to be more sensitive than others to air pollutants. The reasons for greater than average sensitivity include pre-existing health problems, proximity to emissions sources, or duration of exposure to air pollutants. Residences, schools, hospitals, convalescent homes, and parks are considered to be relatively sensitive to poor air quality because they house or include children, elderly people, and the infirm, who are more susceptible to respiratory distress and other air quality-related health problems than the general public. Residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, with associated greater exposure to ambient air quality. Recreational uses are also considered sensitive due to greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system.

The proposed project will be situated on approximately 739 acres of privately-owned land in the central valley portion of unincorporated Kern County. The nearest rural residence is located approximately 350 feet south of the project site, across and south of State Route (SR) 99. There are no known non-residential sensitive receptors within two miles of the proposed project site.

National and State Ambient Air Quality Standards

Regulation of air pollution is achieved through both federal and State ambient air quality standards and permitted emission limits for individual sources of air pollutants. As required by the federal Clean Air Act (CAA), the United States Environmental Protection Agency (USEPA) has identified criteria pollutants and has established National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM) specifically PM_{10} and $PM_{2.5}$), and lead (Pb). These pollutants are called "criteria" air pollutants because standards have been established for each of them to meet specific public health and welfare criteria.

To protect human health and the environment, the USEPA has set "primary" and "secondary" ambient standards for each of the criteria pollutants. Primary thresholds were set to protect human health, particularly sensitive receptors such as children, the elderly, and individuals suffering from chronic lung conditions such as asthma and emphysema. Secondary standards were set to protect the natural environment and prevent further deterioration of animals, crops, vegetation, and buildings.

Regional and Local Standards

NAAQS establish the level for an air pollutant above which detrimental effects to public health or welfare may result. NAAQS are defined as the maximum acceptable concentrations that, depending on the pollutant, may not be equaled or exceeded more than once per year, or in some cases as a percentile of observations. California has generally adopted more stringent ambient air quality standards for the criteria air pollutants [e.g., California Ambient Air Quality Standards (CAAQS)].

Table 4.3-2, *Federal and California Air Quality Standards,* presents both sets of ambient air quality standards (e.g., national and State). If a pollutant concentration in an area is lower than the established standard, the area is classified as being in "attainment" for that pollutant. If the pollutant concentration meets or exceeds the standard (depending on the specific standard for the individual pollutants), the area is classified as a "nonattainment" area. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified."

Table 4.3-2: Federal & California Air Quality Standards

Particulate Matter (PM10)	Annual Arithmetic Mean	NAAQS Concentration	CAAQS
O_3	8-hour	0.070 ppm (137 µg/m^3) [a]	0.070 ppm (137 µg/m^3)
	1-hour		0.09 ppm (180 µg/m^3)
CO	8-hour	9 ppm (10 µg/m^3)	9 ppm (10 µg/m^3)
	1-hour	35 ppm (40 µg/m^3)	20 ppm (23 µg/m^3)
NO_2	Annual Average	53 ppb (100 µg/m^3)	0.030 ppm (57 µg/m^3)
	1-Hour	100 ppb (188.68 µg/m^3)	0.18 ppm (339 µg/m^3)
SO_2	3-Hour	0.5 ppm (1,300 µg/m^3)	
	24 Hour	0.14 ppm (365 µg/m^3)	0.04 ppm (105 µg/m^3)
	1-Hour	75 ppb (196 µg/m^3)	0.25 ppm (655 µg/m^3)
Particulate Matter (PM_{10})	Annual Arithmetic Mean		20 µg/m^3
	24-Hour	150 µg/m^3	50 µg/m^3

Particulate Matter (PM10)	Annual Arithmetic Mean	NAAQS Concentration	CAAQS
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3
	24-Hour	35 µg/m^3	
Sulfates	24-Hour		25 µg/m^3
Pb[d]	Rolling Three-Month Average	0.15 µg/m^3	
	30 Day Average		1.5 µg/m^3
H2S	1-Hour		0.03 ppm (42 µg/m^3)
Vinyl Chloride (chloroethene)	24-Hour		0.010 ppm (26 µg/m^3)
Visibility Reducing particles	8 Hour (1000 to 1800 PST)		[b]
ppm = parts per million ppb = parts per billion		mg/m^3 = milligrams per cubic meter	µg/m^3 = micrograms per cubic meter

[a] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm

[b] In 1989, CARB converted both the general statewide 10-mile visibility standards 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.

Source: Trinity Consultants 2023

The SJVAPCD's attainment status with the federal and State standards, for each pollutant, is summarized in **Table 4.3-3**, *SJVAB Attainment Status,* below.

Table 4.3-3: SJVAB Attainment Status

Pollutant	NAAQS[a]	CAAQS[b]
O_3, 1-hour	No Federal Standard [f]	Nonattainment/Severe
O_3, 8-hour	Nonattainment/Extreme [e]	Nonattainment
PM_{10}	Attainment [c]	Nonattainment
$PM_{2.5}$	Nonattainment [d]	Nonattainment
CO	Attainment/Unclassified	Attainment/Unclassified
NO_2	Attainment/Unclassified	Attainment
SO_2	Attainment/Unclassified	Attainment
Pb (Particulate)	No Designation/Classification	Attainment
H_2S	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particulates	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

[a] See 40 Code of Federal Regulations Part 81

[b] See CCR Title 17 Sections 60200-60210

[c] On September 25, 2008, USEPA redesignated the San Joaquin Valley to attainment for the PM_{10} National Ambient Air Quality Standard (NAAQS) and approved the PM_{10} Maintenance Plan.

[d] The Valley is designated nonattainment for the 1997 $PM_{2.5}$ NAAQS. USEPA designated the Valley as nonattainment for the 2006 $PM_{2.5}$ NAAQS on November 13, 2009 (effective December 14, 2009).

[e] Though the Valley was initially classified as serious nonattainment for the 1997 8-hour O_3 standard, USEPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

[f] Effective June 15, 2005, the USEPA revoked the federal 1-hour O_3 standard, including associated designations and classifications. USEPA had previously classified the SJVAB as extreme nonattainment for this standard. USEPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour O_3 nonattainment areas continue to apply to the SJVAB.

Source: Trinity Consultants 2023

4.3.3 Regulatory Setting

In California, air quality is regulated by several agencies, including USEPA, CARB, and local air districts such as the SJVAPCD. Each of these agencies develops rules and/or regulations to attain the goals or directives imposed upon them through legislation. Although USEPA regulations may not be superseded, some State and local regulations may be more stringent than federal regulations. The project site is located within the San Joaquin Valley Air Basin, which is under the jurisdiction of the SJVAPCD. SJVAPCD has developed CEQA guidance for assessing air quality impacts. In addition, Kern County has its own *CEQA Guidelines* for assessing air quality impacts.

Federal

U.S. Environmental Protection Agency

The principal air quality regulatory mechanism on the federal level is the CAA and in particular, the 1990 amendments to the CAA, and the NAAQS that it establishes. These standards identify levels of air quality for "criteria" pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect the public health and welfare. Criteria pollutants include O_3, CO, NO_2 (which is a form of NO_X), SO_2 (which is a form of SO_X), PM_{10}, $PM_{2.5}$, and lead. The USEPA also has regulatory and enforcement jurisdiction over emission sources beyond State waters (outer continental shelf), and those that are under the exclusive authority of the federal government, such as aircraft, locomotives, and interstate trucking. The EPA's primary role at the State level is to oversee the State air quality programs. EPA sets federal vehicle and stationary source emission standards and oversees approval of all State Implementation Plans (SIP), as well as providing research and guidance in air pollution programs. The SIP is a State level document that identifies all air pollution control programs within California that are designed to meet the NAAQS.

Toxic Substances Control Act

The Toxic Substances Control Act first authorized the USEPA to regulate asbestos in schools, public, and commercial buildings under Title II of the law, which is also known as the Asbestos Hazard Emergency Response Act (AHERA). AHERA requires Local Education Agencies to inspect their schools for asbestos-containing building materials (ACBMs) and to prepare management plans to reduce the hazards posed by asbestos hazard. The Act also established a program for the training and accreditation of individuals performing certain types of asbestos work.

National Emission Standards for Hazardous Air Pollutants

Pursuant to the FCAA of 1970, the USEPA established the National Emission Standards for Hazardous Air Pollutants (NESHAPs). These are technology-based source-specific regulations that limit allowable emissions of HAPs. Among these sources are ACBMs. NESHAPs include requirements pertaining to the inspection, notification, handling, and disposal of ACBMs associated with the demolition and renovation of structures.

State

California Air Resources Board

The CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA). Other CARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control districts and air quality management districts), establishing CAAQS, which in many cases are more stringent than the NAAQS, and setting emissions standards for new motor vehicles. The CAAQS are summarized in **Table 4.3-2**, *Federal and California Air Quality Standards,* above. The emission standards established for motor vehicles differ depending on various factors including the model year, the type of vehicle, fuel required, and engine used.

California Clean Air Act

The CARB is a department of the California Environmental Protection Agency that oversees air quality planning and control throughout California by administering the SIP. Its primary responsibility lies in ensuring implementation of the 1989 amendments to the CCAA, responding to the FCAA requirements, and regulating emissions from motor vehicles sold in California. It also sets fuel specifications to further reduce vehicular emissions.

The amendments to the CCAA establish CAAQS and a legal mandate to achieve these standards by the earliest practical date. These standards apply to the same criteria pollutants as the Federal CAA, and also include sulfate, visibility reducing particulates, hydrogen sulfide, and vinyl chloride. They are also generally more stringent than the Federal standards in most cases, although recently promulgated NAAQS for 1-hour NO_2 and SO_2 can in some instances be more stringent than the respective CAAQS.

The CARB is also responsible for regulations pertaining to TACs. The Air Toxics "Hot Spots" Information and Assessment Act [Assembly Bill (AB) 2588] was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. AB 2588, as amended, establishes a process that requires stationary sources to report the type and quantities of TACs their facilities routinely release into their air basin. Each APCD ranks the data into high, intermediate, and low priority categories. When considering the ranking, the potency, toxicity, quantity, volume, and proximity of the facility to receptors are given consideration by an air district.

The CARB has on-road and off-road engine emission reduction programs that indirectly affect the proposed project's emissions through the phasing in of cleaner on-road and off-road equipment engines. Additionally, CARB has a Portable Equipment Registration Program that allows owners or operators of portable engines and associated equipment to register their units under a statewide portable program to operate their equipment, which must meet specified program emission requirements, throughout California without having to obtain individual permits from local air districts.

The State has also enacted a regulation for the reduction of DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles (California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449). This regulation provides target emission rates for PM and NO_x emissions from owners of fleets of diesel-fueled off-road vehicles. It applies to equipment fleets of three specific sizes, and the target

emission rates are reduced over time, with full implementation by 2023 for large and medium fleets and 2028 for small fleets.

California Air Toxics "Hot Spots" Information and Assessment Act (2588)

Enacted in 1981, AB 2588 is a state-wide program that requires facilities that exceed recommended Office of Environmental Health Hazards Assessment (OEHHA) levels to reduce risks to acceptable levels. Typically during construction and operation of new infrastructure, diesel trucks and/or equipment generate diesel emissions. Diesel exhaust is composed of particulate matter and gases that contain potentially cancer-causing substances. DPM emissions include over 40 substances listed by the EPA as hazardous air pollutants, and/or by CARB as TACs. The CARB adopted a comprehensive diesel risk reduction plan in 2000 with a goal of reducing DPM emissions associated with health risk by 85 percent by 2020.

Assembly Bills 1807 & 2588 – Toxic Air Contaminants

Within California, TACs are regulated primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics Hot Spots Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB designates a substance as a TAC. Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

Title V and Extreme Designation

Title V of the CAA, as amended in 1990, creates an operating permit program for certain defined sources. In general, owners/operators of defined industrial or commercial sources that emit more than 25 tons per year of NO_X and ROG must process a Title V permit. In "Extreme Designation" areas, the definition of a major source which requires Title V permitting changes from 25 tons per year to 10 tons per year. This change results in more businesses having to comply with Title V permitting requirements under the Extreme nonattainment designation.

Title V does not impose any new air pollution standards, require installation of any new controls on the affected facilities, or require reductions in emissions. Title V does enhance public and USEPA participation in the permitting process and requires additional record keeping and reporting by businesses, which result in significant administrative requirements.

Local

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the *Kern County General Plan* (KCGP) for air quality applicable to the proposed project are provided below. The KCGP identifies the federal, State, and local statutes, ordinances, or policies that govern the conservation of air quality that must be considered by Kern County during the decision-making process for any project that could impact air quality. The KCGP contains additional policies, goals, and implementation measures that are more general in nature and are

not specific to development such as the proposed project. Therefore, although they are not listed below, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

1.10.2 – Air Quality Element

Goal

Goal 1: Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving valuable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

Policies

Policy 18: The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on minimizing air quality degradation in the desert to enable effective military operations.

Policy 19: In considering discretionary projects for which an EIR must be prepared pursuant to the California Environmental Quality Act (CEQA), the appropriate decision-making body, as part of its deliberations, will ensure that:

(1) All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and

(2) The benefits of the proposed project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the CEQA.

Policy 20: The County shall include fugitive dust control measures as a requirement for discretionary projects and as required by the adopted rules and regulations of the SJVAPCD and the Eastern Kern Air Pollution Control District on ministerial permits.

Policy 21: The County shall support air districts' efforts to reduce PM_{10} and $PM_{2.5}$ emissions.

Policy 22: The County shall continue to implement the local government control measures in coordination with the Kern Council of Governments and the SJVAPCD.

Implementation Measures

Measure F: All discretionary permits shall be referred to the appropriate air district for review and comment.

Measure G: Discretionary development projects involving the use of tractor-trailer rigs shall incorporate diesel exhaust reduction strategies including, but not limited to:

a. Minimizing idling time.

b. Electrical overnight plug-ins.

Measure H: Discretionary projects may use one or more of the following to reduce air quality effects:

a. Pave dirt roads within the development.

b. Pave outside storage areas.

c. Provide additional low Volatile Organic Compounds (VOC) producing trees on landscape plans.

d. Use of alternative fuel fleet vehicles or hybrid vehicles.

e. Use of emission control devices on diesel equipment.

f. Residential fireplaces – Does not apply to proposed project

g. Bicycle lockers – Does not apply to proposed project

h. Increasing the amount of landscaping beyond what is required in the Zoning Ordinance (Chapter 19.86).

i. The use and development of park and ride facilities in outlying areas.

j. Other strategies that may be recommended by the local air pollution control districts.

Measure J: The County should include PM_{10} control measures as conditions of approval for subdivision maps, site plans, and grading permits.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The policies, goals, and implementation measures in the *Metropolitan Bakersfield General Plan* (MBGP) for air quality applicable to the proposed project are provided below. The MBGP identifies the federal, State, and local statutes, ordinances, or policies that govern the conservation of air quality that must be considered by Kern County during the decision-making process for any project that could impact air quality. The Metropolitan Bakersfield General Plan contains additional policies, goals, and implementation measures that are more general in nature and are not specific to development such as the proposed project. Therefore, although they are not listed below, all policies, goals, and implementation measures in the MBGP are incorporated by reference.

Chapter 5. Conservation/ Air Quality

Goal

Goal 1: Promote air quality that is compatible with health, well-being, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.

Goal 2: Continue working toward attainment of Federal, State and Local standards as enforced by the SJVAPCD.

Policies

Policy 1: Comply with and promote SJVAPCD control measures regarding reactive organic gases. Such measures are focused on: (a) steam driven well vents, (b) Pseudo-cyclic wells, (c) natural gas processing plant fugitives, (d) heavy oil test stations, (e) light production fugitives, (f, refinery pumps and compressors, and (g) vehicle inspection and maintenance.

Policy 2: Encourage land uses and land use practices which do not contribute significantly to air quality degradation.

Policy 10: Implement the Transportation System Management Program for Metropolitan Bakersfield to improve traffic flow, reduce vehicle trips, and increase street capacity.

Policy 19: Promote a pattern of land uses which locates residential uses in close proximity to employment and commercial services to minimize vehicular travel.

Policy 21: Disperse urban service centers to minimize vehicle trips and trip miles traveled and concomitant air pollutants.

San Joaquin Valley Air Pollution Control District (SJVAPCD)

The proposed project site, located in the SJVAB portion of Kern County, is under jurisdiction of SJVAPCD. SJVAPCD has regulatory authority over stationary source air pollution control and is responsible for implementing certain FCAA and CCAA programs and regulations. SJVAPCD also maintains air quality plans to attain CAAQS and NAAQS. APCD regulations that may apply to the proposed project include Regulation II (Permits), Regulation III (Fees), Regulation IV (Prohibitions), and Regulation VIII (Fugitive PM_{10} Prohibitions).

Regulation II (Permits)

Regulation II (Rules 2010–2550) is a series of rules covering permitting requirements within the air basin. The SJVAPCD regulations require any person constructing, altering, replacing, or operating any source operation that emits, may emit, or may reduce emissions to obtain an Authority to Construct or a Permit to Operate. Most new stationary sources, if they emit over two pounds of pollutants per day, will be subject to Best Available Control Technology in accordance with the SJVAPCD's New and Modified Stationary Source Review Rule and to the New Source Review Rule.

Regulation VIII (Fugitive PM10 Prohibitions)

Regulation VIII (Rules 8011–8081) is a series of rules 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 track out, etc. If a construction project is 10 or more acres in area or will include moving, depositing, or relocating more than 2,500 cubic yards of bulk materials per day on at least three days, a Dust Control Plan must be submitted as specified in Section 6.3.1 of Rule 8021. Construction activities shall not commence until the SJVAPCD has approved the Dust Control Plan. The proposed project could also be subject to provisions within Rule 8021 (Construction, Demolition, Excavation, Extraction and Other Earthmoving Activities), Rule 8031 (Bulk Materials), Rule

8041 (Carryout and Track Out), Rule 8051 (Open Areas), Rule 8061 (Paved and Unpaved Roads), and Rule 8071 (Unpaved Vehicle/Equipment Traffic Areas). Rule 8061 places thresholds and requirements on limiting visible dust emissions (VDE) from unpaved road segments. Rule 8071 also contains thresholds and requirements.

Rule 3135 (Dust Control Plan Fee)

Rule 3135 requires the applicant to submit a fee in addition to a Dust Control Plan. The purpose of this fee is to recover the SJVAPCD's cost for reviewing these plans and conducting compliance inspections.

Rule 4101 (Visible Emissions)

Rule 4101 prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants.

Rule 4102 (Nuisance)

Rule 4102 applies to any source operation that emits or may emit air contaminants or other materials. In the event that the proposed project or construction of the proposed project creates a public nuisance, it could be in violation and subject to the SJVAPCD's enforcement action.

Rule 4601 (Architectural Coatings)

Rule 4601 limits volatile organic compound emissions from architectural coatings.

Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt Paving and Maintenance Operations)

Rule 4641 limits VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations.

Rule 9510 (Indirect Source Review)

The purpose of the independent source review (ISR) is to reduce emissions of NO_X and PM_{10} from new development projects. Rule 9510 places application and emission-reduction requirements on certain development projects to reduce emissions through on-site mitigation, off-site SJVAPCD-administered projects, or a combination of the two. The project proponent is required to submit an air impact assessment application concurrent with the last discretionary approval by the lead agency/jurisdiction pursuant to Rule 9510's requirements.

Although compliance with Rule 9510 is separate from the CEQA process, control measures used to comply with Rule 9510 are considered mitigation to a less than significant impact under CEQA.

Kern County Public Health Services Department

Section 101080 of the California Health and Safety Code authorizes a local health officer to declare a local health emergency in the health officer's jurisdiction, or any part thereof, when the health officer determines that there is an imminent and proximate threat of the introduction of any contagious, infectious, or

communicable disease, chemical agent, noncommunicable biological agent, toxin, or radioactive agent. On April 2, 2020, the Kern County Health Officer issued an Order that was implemented to garner additional tools to assist with Kern County's compliance with Executive Order N-33-20 issued by the Governor of the State of California and the California Department of Public Health's gathering guidance for COVID-19. The Order was rescinded on May 2, 2020, by the Kern County Health Officer. The Kern County Public Health Services Department and the Kern County Health Officer continues to provide guidance and recommendations for residents and businesses in Kern County to safely conduct business, including construction activities, during the COVID-19 pandemic.

Air Quality Conformity Determination for Transportation Plans and Programs

The CAA amendments of 1990 require a finding to be made stating that any project, program, or plan subject to approval by a metropolitan planning organization conforms to air plans for attainment of air quality standards. The Kern Council of Governments (COG) is designated the Regional Transportation Planning Agency and metropolitan planning organization for Kern County. In that capacity, the Kern COG models air quality projections on population projections in conjunction with current general plan designations and estimated vehicle miles traveled, as well as the current Regional Transportation Plan (RTP) and the federal transportation plan for Kern County. These results are compared to pollutant budgets for each basin approved by the USEPA in the 1999 base year. Kern County is contained within two air basins: San Joaquin Valley Air Basin and the Mojave Desert Air Basin. Each air basin has its own plans and pollutant budgets. Kern COG makes conformity findings for each air basin.

Kern County recently prepared an 8-hour ozone air quality conformity analysis to analyze Kern County's federally approved Federal Transportation Improvement Program (FTIP) and the 2022 RTP. The conformity findings conclude that the FTIP and RTP result in emissions that are less than the emission budgets of baseline emissions for VOC, NO_X, and PM_{10} (Kern COG, 2022).

4.3.4 Impacts and Mitigation Measures

This section describes the impact analysis relating to air quality for the proposed project. It describes the methods used to determine the impacts of the proposed project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Methodology

The air quality significance criteria were developed considering the CEQA significance criteria developed by the local air quality district in the project area, approved CEQA air quality checklists, and considering other federal criteria. The analysis presented within this section is based on both qualitative and quantitative approaches for determining air quality impacts associated with construction and operation of the proposed project. The findings in the Air Quality and GHG Technical Report prepared for the proposed project (see **Appendix D** of this EIR), which was prepared in accordance with the Kern County Planning Department's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* and SJVAPCD's 2015 *Guidance for Assessing and Mitigating Air Quality Impacts* documents, were used to assess the proposed project's impacts related to air quality.

Air Quality Plan Consistency

As a component of the cumulative impact analysis, the County Air Quality Assessment guidance (Kern County, 2006) states that the following should be included in the consistency determination for existing air quality plans:

- Discuss project in relation to Kern COG conformity and traffic analysis zones (TAZs)
- Quantify the emissions from similar projects in the Ozone Attainment Plan for the applicable basin. Discuss the Ozone Attainment Plan for the applicable air district, development, and relation to regional basin, Triennial Plan, and SIP

Pollutant Emissions Modeling

Impacts were quantitatively assessed using the following:

- Construction equipment horsepower, load factors, and emission factors from the *California Emissions Estimator Model* (CalEEMod) model, version 2022.1.
- Vehicle emission factors, as incorporated from EMFAC2021 (EMFAC is short for EMission FACtor) into the CalEEMod model, version 2022.1.
- Fugitive dust emission factors for grading, truck loading/dumping, and paved road travel from the CalEEMod model and particulate matter control efficiencies based on water and reduced vehicle speed for construction dust control.

Refer to **Appendix D** for details on equipment fleet, hours of operation, vehicle miles traveled (VMT) and other assumptions used in the CalEEMod model for emission calculations.

Short-term Construction-Generated Emissions

Short-term construction emissions associated with the proposed project, including emissions associated with the operation of off-road equipment, haul-truck trips, on-road worker vehicle trips, and vehicle travel on paved and unpaved surfaces and fugitive dust from material handling activities, were calculated using the California Emissions Estimator Model (CalEEMod), version 2022.1. The project applicant did not provide a list of specific construction equipment; the construction emissions were, therefore, based on the default CalEEMod equipment list for the proposed project's land use type, development intensity, applying model defaults, and a conservative analysis approach. Construction emissions were estimated under the assumption that both phases will begin construction as early as June 2025. The dates entered into the CalEEMod program represent the earliest construction timeline, which would estimate the worst-case emissions as construction equipment technology and emissions improve over time; therefore, all estimated emission totals are conservative and reflect a reasonable and legally sufficient estimate of potential impacts. All construction equipment activity levels assumed were based on the applicant-specified values for type and number of equipment and CalEEMod adjusted hours per day and horsepower.

Long-term Operational Emissions

The CalEEMod computer program, version 2022.1 was used to estimate emissions of criteria pollutants (i.e., NO_x, ROG, PM_{10}, $PM_{2.5}$, SO_x, and CO) associated with long-term operation of the proposed project. During long-term operation of the proposed project, emissions would be associated with on-site energy use, motor vehicle operations, and on-site equipment operations. To a lesser extent, emissions would also be generated by on-site area sources including the occasional application of architectural coatings, landscape maintenance, and use of consumer products. On-site emissions associated with energy use and area sources were based on the default parameters contained in the CalEEMod. Energy usage rates for future years were adjusted to reflect compliance with California's Renewables Portfolio Standards.

Operation of the project site at full build-out is not expected to present a substantial source of fugitive dust (PM_{10}) emissions. The main source of PM_{10} emissions would be from vehicular traffic associated with the project site. PM_{10}, on its own and in combination with other pollutants, creates a health hazard. The SJVAPCD's Regulation VIII establishes required controls to reduce and minimizing fugitive dust emissions. Project-related transportation activities from employees and consumers would generate mobile source ROG, NO_x, SO_x, CO, PM_{10}, and $PM_{2.5}$ exhaust emissions. Exhaust emissions would vary substantially from day to day but would average out over the course of an operational year. The variables factored into estimating total project emissions include: level of activity, site characteristics, weather conditions, and number of visitors. As the project is not expected to generate an adverse change in current activity levels, substantial emissions are not anticipated.

The fleet mix used in CalEEMod was adjusted to reflect project-specific estimates. The traffic study (Appendix L) provided daily trip rates for trucks and passenger vehicles, broken down by phase. Based on traffic estimates, 62 percent of the truck trips are expected to be heavy duty (HHD) trucks. HHD truck trips were entered into CalEEMod as 62 percent, with the remaining 38 percent of truck trips distributed across the remaining truck types. The fleet mix for the passenger vehicles was also adjusted in CalEEMod to use a weighted ratio across the three passenger vehicle types.

Health Risk Assessment

As previously stated, residences, schools, hospitals, convalescent homes, and parks are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality-related health problems than the general public. The area surrounding the project site is sparsely populated with the nearest rural residence located approximately 350 feet south of the project site, across and south of State Route (SR) 99. The SJVAPCD guidance (SJVAPCD 2015) cites the Air Resources Board (ARB) Handbook: *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB, 2005) and the California Air Pollution Control Officers Association (CAPCOA) Guidance Document: *Health Risk Assessments for Proposed Land Use Projects* (CAPCOA 2009) for determining when to conduct risk assessments. Both documents include recommendations for buffer distances for siting sensitive receptors near specific sources of air pollution, including high traffic freeways and roads (with a buffer of 500 feet), distribution centers (1,000 feet), rail yards (1,000 feet), ports (immediately downwind of ports), refineries (immediately downwind of a petroleum refinery), chrome plating facilities (1,000 feet), dry cleaners (300 feet), and large gas dispensing facilities (300 feet).

SJVAPCD also provides significance thresholds for TACs:

- Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in:
  - A cancer risk greater than or equal to 20 in a million and/or
  - A Hazard Index (HI) (non-cancerous) greater than or equal to 1.

Ambient Air Quality Analysis

Kern County Planning Department's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* requires a dispersion modeling analysis of the maximum 24-hour average concentrations of PM_{10} and $PM_{2.5}$ resulting from construction in comparison to applicable ambient air quality standards and thresholds. An ambient air quality analysis (AAQA) was performed for project construction and operation activities to determine if on-site emissions from any criteria pollutant is found to be equal or exceed applicable significance thresholds. The purpose of the AAQA is to determine whether the proposed project's emissions would cause or contribute to exceedances of any CAAQS or NAAQS during construction or operation.

CO Hotspot

Heavy traffic congestion can contribute to high levels of CO. Individuals exposed to these CO "hot-spots" may have a greater likelihood of developing adverse health effects. The potential for the proposed project to result in localized CO impacts at intersections resulting from increased traffic volumes is assessed based on Kern County's suggested criteria, which recommends performing a localized CO impact analysis for intersections operating at or below level of service (LOS) E.

Visibility Impacts

The County guidance states that potential impacts to visibility should be evaluated for all industrial projects and any other projects, such as mining projects, that have components that could generate dust or emissions related to visibility.

Based on the Kern County guidelines, a visibility analysis is not required since the proposed project is not a large industrial stationary-source or a mining project, and it would not have long-term operational components that could generate substantial dust or emission plumes related to visibility.

Coccidioides immitis Exposure

While there are no specific thresholds for the evaluation of potential *Coccidioides immitis* (Valley Fever) exposure, the potential for workers or area residents contracting Valley Fever as a result of the proposed project is evaluated based on the anticipated earth-moving activities, and considers applicant-proposed measures and compliance with Rule 8021, Section 6.3, which requires development and implementation of a Dust Control Plan to help control the release of the *Coccidioides immitis* fungus during construction activities.

Asbestos

There are no quantitative thresholds related to receptor exposure to asbestos. The project site is not located in an area where naturally occurring asbestos is likely to be present. Therefore, impacts associated with exposure of construction workers and nearby sensitive receptors to asbestos are not anticipated.

COVID-19

There are no definitive quantitative thresholds related to receptor exposure to COVID-19, and the relationship to exposure to $PM_{2.5}$.

Thresholds of Significance

Kern County

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on air quality if it 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 in nonattainment under an applicable federal or state ambient air quality standard. Specifically, implementation of the project would exceed either of the following adopted thresholds:

   i) San Joaquin Valley Unified Air Pollution Control District:

      Operational and Area Sources:

      - 10 tons per year for ROG
      - 10 tons per year for NO_X
      - 15 tons per year for PM_{10}

      Stationary Sources as Determined by District Rules

      - Severe Nonattainment: 25 tons per year
      - Extreme Nonattainment: 10 tons per year

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.

San Joaquin Valley Air Pollution Control District

The SJVAPCD adopted thresholds of significance in the 2015 *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI; SJVAPCD, 2015). Section 8.4.2 of the GAMAQI provides that project-related impacts on air quality may be significant when on-site emission increases from construction activities or operational activities exceed the 100 pounds per day screening level of any criteria pollutant after

implementation of all enforceable mitigation measures. Under such circumstances, the SJVAPCD recommends that an ambient air quality analysis be performed to determine if emission increases from a project will cause or contribute to a violation of the ambient air quality standards based on the significance thresholds as follows:

- Construction and Operational (permitted and non-permitted equipment and activities) Emissions;
- 10 tons per year for ROG
- 10 tons per year for NO_X
- 100 tons per year for CO
- 27 tons per year for SO_X
- 15 tons per year for PM_{10}
- 15 tons per year for $PM_{2.5}$

SJVPACD's *2015 Guidance for Assessing and Mitigation Air Quality Impacts* provides thresholds for analysis of health risk impacts from project operation, both permitted and non-permitted sources combined. The following are the significance thresholds for toxic air contaminants:

- Carcinogens: Maximally exposed individual risk equals or exceeds 20 in one million.
- Non-Carcinogens, Acute: Hazard Index equals or exceeds one for the maximally exposed individual.
- Non-Carcinogens, Chronic: Hazard Index equals or exceeds one for the maximally exposed individual.

Project Impacts

Impact 4.3-1: The Project Would Obstruct Implementation of the Applicable Air Quality Plan.

In general, a project would not interfere with the applicable air quality plan if it is consistent with growth assumptions used to form the applicable air quality plan and if the proposed project implements all reasonably available and feasible air quality control measures. The consistency with the Air Quality Management Plan (AQMP) is discussed below for construction and operation.

Air quality impacts are controlled through policies and provisions of the SJVAPCD, the Kern County General Plan, the Metropolitan Bakersfield General Plan, and the Kern County Code of Building Regulations. The CCAA requires air pollution control districts with severe or extreme air quality problems to provide for a 5 percent reduction in nonattainment emissions per year. The Attainment Plans prepared for the SJVAPCD comply with this requirement. The CARB reviewers approve or amend the document and forward the plan to the EPA for final review and approval within the SIP.

Required Evaluation Guidelines

CEQA Guidelines and the CAA (Sections 176 and 316) contain specific references regarding the need to evaluate consistencies between a project and the applicable AQMP for a project. To accomplish this, CARB has developed a three-step approach to determine project conformity with the applicable AQMP:

1. *Determination that an AQMP is being implemented in the area where the project is being proposed.* The SJVAPCD's most recently adopted air quality management plan is its current, modified 2016 8- hour AQMP that is approved by the CARB and USEPA for the 2008 8-hour O_3 standard.
2. *The project must be consistent with the growth assumptions of the applicable AQMP.* The Kern COG growth modelling for the 2018 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) provides for future employment/population factors. The proposed project would not introduce land uses that would generate vehicle trips or promote growth in the project area beyond what is projected in the Kern County General Plan and, therefore, incorporated into the AQMP.
3. *The project must contain in its design all reasonably available and feasible air quality control measures.* The proposed project incorporates Regulation VIII dust measures and will comply withthe ISR Rule (Rule 9510).

Because implementation of the proposed project would not result in additional growth beyond what was anticipated by the Kern County General Plan and incorporated into the AQAP, conclusions may be drawn from the following criteria:

- The findings of the analysis conducted using Traffic Analysis Zones (TAZ) show that sufficient employment increase is planned for the project area, such that new employment opportunities afforded by the proposed project were included in the growth assumptions used to develop the AQMP.
- The primary source of emissions from the proposed project would be from construction and operation vehicles that are licensed through the state and whose emissions are already incorporated into CARB's emissions inventory.

Construction

The proposed project would comply with all applicable SJVAPCD rules and regulations. For example, the proposed project would comply with SJVAPCD's Rule 8021 (Construction, Demolition, Excavation, Extraction, and other earth moving activities), which requires the control of dust emissions during earth moving activities, such as grading. Standard construction practices that would be employed to reduce fugitive dust emissions include the following:

- Develop a Dust Control Plan to outline how the proposed project will comply with Rule 8021 and minimize fugitive dust during construction;
- Land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled utilizing application of water or by presoaking;
- Minimize and cleanup trackout onto paved roads;
- Cover haul trucks;
- Rapid cleanup of project-related trackout or spills on paved roads;

- Minimize grading and soil movement when winds exceed 30 miles per hour; and
- Implement a speed limit of 15 miles per hour during all construction phases for vehicles traveling on unpaved roads.

Because the proposed project does not include any stationary sources, the stationary control measures identified in the SJVAPCD's *2022 Ozone Plan* are not applicable. As shown in **Table 4.3-4**, *Short-Term Project Emissions*, as calculated with CalEEMod, the estimated short-term construction-related emissions for criteria pollutants would not exceed the SJVAPCD significance threshold levels during any given year and would therefore be less than significant. In addition, Mitigation Measure **MM 4.3-1** would require the proposed project to comply with applicable SJVAPCD rules and regulations including Rule 9510 (ISR Rule), which requires projects to reduce NO_X emissions by 20 percent and Rule 8021 (Construction, Demolition, Excavation,Extraction, and other earth moving activities), which requires the control of dust emissions during earth moving activities, such as grading. Mitigation Measure **MM 4.3-2** would require preparation of a Dust Control Plan and Mitigation Measure **MM 4.3-3** would require the project proponent and its contractors to comply with various measures that would result in all vehicles and construction equipment meeting CARB engine emission standards. Mitigation Measure **MM 4.3-4** would require the project owner/operator to enter into a Developer Mitigation Agreement (DMA) with the SJVAPCD.

With implementation of Mitigation Measures **MM 4.3-1 through MM 4.3-4**, the proposed project's construction emissions from heavy-duty, off-road equipment would not exceed the SJVAPCD's significance thresholds. The mobile source control measures pertaining toheavy-duty, off-road equipment identified in the SJVAPCD's *2022 Ozone Plan* are also not applicable. The proposed project's construction activities would neither conflict with nor obstruct implementation of the applicable air quality plans and no impacts would occur.

Overall, based on the analysis above, with the implementation of Mitigation Measures **MM 4.3-1 through MM 4.3-4**, any potential impacts to criteria pollutants designated as nonattainment within the SJVAPCD would be reduced and construction of the proposed project would not conflict with or obstruct implementation of applicable air quality plans. Therefore, impacts would be less than significant.

Table 4.3-4: Short-Term Project Emissions

Source	Pollutant (tons/year)					
	ROG	NOx	CO	SOx	PM10	PM2.5
Unmitigated						
Maximum Annual Emissions	2.62	3.62	6.37	0.01	1.15	0.50
Mitigated						
Maximum Annual Emissions	2.62	3.62	6.37	0.01	0.97	0.32
Significance Thresholds	10	10	100	27	15	15
Is Threshold Exceeded After Mitigation	No	No	No	No	No	No
Source: Trinity Consultants 2023						

Operation

In general, a project would not interfere with the applicable air quality plan if it is consistent with growth assumptions used to form the applicable air quality plan. The proposed project would be consistent with the existing land use designations in the current Kern County General Plan and would not introduce a land use that would induce population or housing growth that could result in a substantial increase in vehicle miles traveled and associated criteria pollutant emissions. When compared against the current zoning of theproject site that would allow for the development of agricultural uses, the industrial uses of the proposed project would result in less operational emissions from mobile and area sources. Project-related transportation activities from employees and consumers would generate mobile source ROG, NO_x, SO_x, CO, PM_{10}, and $PM_{2.5}$ exhaust emissions. Exhaust emissions would vary substantially from day to day, but would average out over the course of an operational year.

As shown in **Table 4.3-5,** *Post-Project (Operational) Emissions*, the proposed project is expected to have long-term air quality impacts. Operation-related emissions, as calculated by CalEEMod, would be less than the SJVAPCD significant threshold levels for CO and SO_x, but would exceed significant threshold levels for ROG, NO_x, PM_{10}, and $PM_{2.5}$ prior to additional mitigation. However, ROG, NOx, PM_{10}, and $PM_{2.5}$ emissions will be mitigated by implementation of a Voluntary Emissions Reduction Agreement (VERA) through implementation of Mitigation Measure **MM 4.3-4**.

A Voluntary Emission Reduction Agreement (VERA) is an air quality mitigation measure by which a developer can voluntarily enter into a contractual agreement with the SJVAPCD to mitigate a development project's impact on air quality. Under the agreement, the developer provides funds to the District to administer the implementation of the VERA. The District then identifies emissions reductions projects, funds those projects, and verifies that the specified emission reductions have been successfully achieved. The District considers implementation of a VERA to be a feasible mitigation measure under CEQA, effectively achieving emission reductions necessary to reduce impacts to a less than significant level. Under a VERA, a developer may reduce emissions either to less than significant levels or to net zero levels (SJVAPCD 2020). The project proponent, at the time of this analysis, intends to enter into a VERA to reduce project emissions. The project proponent will engage in future discussions with SJVAPCD staff in order to determine the specific terms of the VERA.

Table 4.3-5: Post-Project (Operational) Emissions

	Annual Emissions (Tons/Year)[1]					
Source	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Unmitigated Operational Emissions						
Mobile Emissions	3.26	56.08	54.65	0.60	39.55	10.92
Aera Emissions	7.97	0.29	34.87	0.00	0.06	0.05
Energy Emissions	0.12	2.33	1.96	0.01	0.17	0.17
Total	**11.36**	**58.70**	**91.48**	**0.62**	**39.78**	**11.15**
Mitigated Operational Emissions						
Mobile Emissions	3.26	56.08	54.65	0.60	39.55	10.92
Aera Emissions	7.97	0.29	34.87	0.00	0.06	0.05

Source	Annual Emissions (Tons/Year)[1]					
	ROG	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Energy Emissions	0.12	2.33	1.96	0.01	0.17	0.17
Total	**11.36**	**58.70**	**91.48**	**0.62**	**39.78**	**11.15**
Mitigated Operational Emissions (Mitigated with VERA)						
Final Operational Emissions	0	0	91.48	0.62	0	0
SJAPCD Significance Thresholds	10	10	100	27	15	15
Exceed Threshold?	No	No	No	No	No	No
Source: Trinity Consultants 2023 (Appendix D)						

Mitigation Measures

MM 4.3-1: The project shall continuously comply with the following: Construction and operation of the proposed project shall be conducted in compliance with applicable rules and regulations set forth by the San Joaquin Valley Air Pollution Control District. Dust control measures outlined below shall be implemented where they are applicable and feasible. The list shall not be considered all-inclusive, and any other measures to reduce fugitive dust emissions not listed shall be encouraged.

a. Land Preparation, Excavation and/or Demolition. The following dust control measures shall be implemented:

1. All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall take place a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations.
2. All clearing, grading, earthmoving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (averaged over one hour), if disturbed material is easily windblown, or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property.
3. All fine material transported off-site shall be either sufficiently watered or securely covered to prevent excessive dust.
4. Areas disturbed by clearing, earthmoving, or excavation activities shall be minimized at all times.
5. Stockpiles of dirt or other fine loose material shall be stabilized by watering or other appropriate method to prevent windblown fugitive dust.
6. Where acceptable to the Kern County Fire Department, weed control shall be accomplished by mowing instead of disking, thereby leaving the ground undisturbed with a mulch covering.

b. Site Construction. After clearing, grading, earthmoving and/or excavating is completed within any portion of the project site, the following dust control practices shall be implemented:

1. Once initial leveling has ceased, all temporarily open and inactive soil areas within the construction site shall be (1) seeded and watered until plant growth is evident, (2) treated with a dust palliative, or (3) watered twice daily until soil has sufficiently crusted to prevent fugitive dust emissions.
2. Dependent on specific site conditions (season and wind conditions), revegetation shall occur in open areas.
3. All active disturbed soil areas shall be sufficiently watered at least twice daily or have dust palliatives applied to prevent excessive dust.

c. Vehicular Activities. During all phases of construction, the following vehicular control measures shall be implemented:

1. Onsite vehicle speed shall be limited to 15 miles per hour.
2. All areas with vehicle traffic shall be paved, treated with dust palliatives, or watered a minimum of twice daily.
3. Streets adjacent to the project site shall be kept clean, and project-related accumulated silt shall be removed.
4. Access to the project site shall be by means of an apron into the project site from adjoining surfaced roadways. The apron shall be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of vehicles, a grizzly, wheel washer, or other such device shall be used on the road exiting the project site, immediately prior to the pavement, in order to remove most of the soil material from vehicle tires.

MM 4.3-2: Prior to issuance of grading or building permits, the project proponent shall prepare a comprehensive Fugitive Dust Control Plan for review and approval by the SJVAPCD and submitted to the Kern County Planning and Natural Resources Department. The Plan shall take into consideration grading and construction schedule, seasonal winds, site-specific wind patterns and conditions to ensure adequate measures are implemented to manage fugitive dust. The Dust Control Plan shall include:

a. Name(s), address(es), and phone number(s) of person(s) responsible for the preparation, submission, and implementation of the plan.

b. Description and location of operation(s).

c. Listing of all fugitive dust emission sources included in the operation.

d. The following dust control measures shall be implemented:

1. Identify a comprehensive grading schedule for the entire project site. When feasible, grading activities shall be phased and minimized to those areas necessary for project access and installation of project features.
2. All on-site unpaved roads and off-site unpaved access roads shall be stabilized

using water or chemical soil stabilizers that can be determined to be as efficient as or more efficient for fugitive dust control than California Air Resources Board approved soil stabilizers, and that shall not increase any other environmental impacts including loss of vegetation.

3. All material excavated or graded will be watered to prevent excessive dust. Watering will occur as needed with complete coverage of disturbed areas. The excavated soil piles will be watered as needed to limit dust emissions to less than 20 percent opacity or covered with temporary coverings.
4. Construction activities that occur on unpaved surfaces will be discontinued during windy conditions when winds exceed 25 miles per hour and those activities cause visible dust plumes that exceed the SJVAPCD 20 percent opacity standard.
5. Track-out debris onto public paved roads shall not extend 50 feet or more from an active operation and track-out shall be removed or isolated such as behind a locked gate at the conclusion of each workday, except on agricultural fields where speeds are limited to 15 mph.
6. All hauling materials should be moist while being loaded into dump trucks.
7. All haul trucks hauling soil, sand, and other loose materials on public roads shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).
8. Soil loads should be kept below six inches or the freeboard of the truck.
9. Drop heights when loaders dump soil into trucks shall not exceed five feet above the truck.
10. Gate seals should be tight on dump trucks.
11. Traffic speeds on unpaved roads shall be limited to 15 miles per hour.
12. All grading activities shall be suspended when visible dust emissions exceed 20 percent.
13. Other fugitive dust control measures as necessary to comply with SJVAPCD Rules and Regulations.

MM 4.3-3: The project proponent and/or its contractors shall implement the following measures during construction of the project to control emissions from the on-site equipment:

a. All equipment shall be maintained in accordance with the manufacturer's specifications.
b. Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for extended periods of time.
c. Construction equipment shall not operate longer than eight cumulative hours per day without prior written authorization provided by the Kern County Planning and Natural Resources Department.

d. Electric equipment shall be used whenever possible in lieu of diesel- or gasoline-powered equipment.

e. All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NO_x emissions.

f. On-road and off-road diesel equipment shall use diesel particulate filters (or the equivalent) if permitted under manufacturer's guidelines.

g. Tier 3 engines shall be used on all equipment when available.

MM 4.3-4: Prior to issuance of any grading or construction permits, the Owner/Operator shall enter into a Developer Mitigation Agreement (DMA) (synonymous with a Voluntary Emissions Reduction Agreement)with the SJVAPCD. The DMA is to fully mitigate construction and operations criteria air emissions of project implementation for project vehicle and other mobile source emissions. The Owner/Operator shall pay fees to fully mitigate project emissions of NO_x (oxides of nitrogen), ROG (reactive organic gases), PM_{10} (particulate matter of 10 microns or less in diameter), and $PM_{2.5}$ (particulate matter of 2.5 microns or less in diameter) (collectively referred to as "designated criteria emissions") to avoid any net increase in these pollutants. The air quality mitigation fee shall be paid prior to the approval of any construction or grading approval or payment plan as designated per the SJVAPCD.

Level of Significance after Mitigation

With implementation of Mitigation Measures **MM 4.3-1** through **MM 4.3-4**, impacts would be less than significant.

Impact 4.3-2: The Project Would Result In A Cumulatively Considerable Net Increase Of Any Criteria Pollutant For Which The Project Region Is In Nonattainment Under An Applicable Federal Or State Ambient Air Quality Standard. Specifically, implementation of the project would exceed any of the following adopted thresholds:

i. SJVAPCD:

a Operational and Area Sources:

10 tons per year for ROG

10 tons per year for NO_x

15 tons per year for PM_{10}

b Stationary Sources as Determined by District Rules

Severe Nonattainment: 25 tons per year

Extreme Nonattainment: 10 tons per year

San Joaquin Valley Air Pollution Control District

The SJVAPCD adopted thresholds of significance in the 2015 *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI) (SJVAPCD 2015). Section 8.4.2 of the GAMAQI provides that project-related impacts on air quality may be significant when on-site emission increases from construction activities or operational activities exceed the 100 pounds per day screening level of any criteria pollutant after implementation of all enforceable mitigation measures. Under such circumstances, the SJVAPCD recommends that an AAQA be performed to determine whether emission increases from a project will cause or contribute to a violation of the AAQS based on the significance thresholds as follows:

- Construction and Operational (permitted and non-permitted equipment and activities) Emissions;
  - 10 tons per year for ROG
  - 10 tons per year for NO_X
  - 100 tons per year for CO
  - 27 tons per year for SO_X
  - 15 tons per year for PM_{10}
  - 15 tons per year for $PM_{2.5}$

SJVPACD's *2015 Guidance for Assessing and Mitigation Air Quality Impacts* provides thresholds for analysis of health risk impacts from project operation, both permitted and non-permitted sources combined. The following are the significance thresholds for TACs:

- Carcinogens: Maximally exposed individual risk equals or exceeds 20 in one million.
- Non-Carcinogens, Acute: Hazard Index equals or exceeds 1 for the maximally exposed individual.
- Non-Carcinogens, Chronic: Hazard Index equals or exceeds 1 for the maximally exposed individual.

Localized Impacts

The proposed project site is located on agricultural land within the SJVAPCD. The project site is zoned Exclusive Agriculture. A portion of the project site is within the Kern County General Plan, designated as Map Code 8.1, and a portion of the project site is within the Metropolitan Bakersfield General Plan, designated R-IA. Surrounding roads are mostly dirt roads used for access to agricultural areas. The project site can be accessed from Saco Road and Imperial Avenue. SR 99 is located along the west side of the proposed project site.

The cumulative projects are based on a qualitative cumulative analysis, which includes all of the projects located within a six-mile radius of the proposed project site, as well as growth projections to the Year 2030. The Kern County General Plan, Metropolitan Bakersfield General Plan (Unincorporated Planning Area), and Malibu Vineyards Industrial Complex Specific Plan are the primary guides for land development in the vicinity of the proposed project. The Land Use Element of the Metropolitan Bakersfield General Plan (Unincorporated Planning Area) assumes the northeast Bakersfield area will experience significant growth. There are 36 cumulative projects planned within a six-mile radius of the proposed project site, as well as

cumulative industrial projects planned within Kern County. These are identified in Table 3-4 *Cumulative Projects List* of this EIR.

Implementation of the proposed project would generate both temporary construction and long-term operational emissions. Short-term and long-term project emissions are discussed in detail below.

Short-term Construction

Short-term increases in emissions would occur during the construction process. Construction-generated emissions are of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. The construction of the proposed project would result in the temporary generation of emissions associated with various activities, including site preparation, grading, paving, building construction, and application of architectural coatings. Emissions of fugitive dust would be primarily associated with ground-disturbing activities and vehicle travel on unpaved surfaces. Emissions of ozone-precursor pollutants (ROG and NO_x) would be largely associated with off-road equipment use, the application of architectural coatings, and on-road vehicle operations associated with workers commuting to and from the proposed project site and haul truck trips.

Estimated annual construction-generated emissions are summarized in **Table 4.3-4**, *Short-Term Project Emissions*. Construction of the proposed project would generate maximum uncontrolled/unmitigated annual emissions of approximately 2.62 tons/year of ROG, 3.62 tons/year of NO_x, 6.37 tons/year of CO, 0.01 tons/year of SO_x, 1.15 tons/year of PM_{10}, and 0.50 tons/year of $PM_{2.5}$. As shown in **Table 4.3-4**, *Short-Term Project Emissions*, annual construction-generated emissions of just the project would not exceed the SJVAPCD'S significance thresholds for each pollutant.

The SJVAPCD uses a single threshold for determination of significance for both project specific and cumulative impacts. Air quality in the SJVAB has improved over the past decades, which indicates that the single threshold is sufficient for assessing cumulative impacts. The proposed project would generate less than significant impacts to criteria air pollutants; therefore, the proposed project's incremental contribution to cumulative air quality impacts would not be cumulatively considerable.

Long-term Operation

Estimated annual operational emissions are summarized in **Table 4.3-5,** *Post-Project (Operational) Emissions*. As indicated, annual operation of the proposed project would generate a total of approximately 11.36 tons/year of ROG, 58.70 tons/year of NO_x, 91.48 tons/year of CO, 39.79 tons/year of PM_{10}, and 11.15 tons/year of $PM_{2.5}$. Emissions of SO_x would be negligible, totaling less than one (0.62) ton/year. Estimated operational emissions of ROG, NO_x, and CO from stationary sources would not exceed the SJVAPCD's significance thresholds. Most emissions generated by the proposed project would be associated with off-site vehicle travel. However, operational emissions from combined project and cumulative project emissions could exceed regulatory thresholds. As a result, this impact could be considered potentially significant.

Air quality impacts from proposed projects within the City of Bakersfield are governed by policies and provisions of the SJVAPCD, the Metropolitan Bakersfield General Plan and the Kern County General Plan (Kern County 2009). In order to demonstrate that a proposed project would not cause further air quality

degradation in either the SJVAPCD's plan to improve air quality within the air basin or the federal requirements to meet certain air quality compliance goals, each project should also demonstrate consistency with the SJVAPCD's adopted AQAP for O_3 and PM_{10}. The SJVAPCD is required to submit a "Rate of Progress" document to CARB that demonstrates past and planned progress toward reaching attainment for all criteria pollutants. The California Clean Air Act (CCAA) requires air pollution control districts with severe or extreme air quality problems to provide for a five percent reduction in non-attainment emissions per year. The AQAP prepared for the San Joaquin Valley by the SJVAPCD complies with this requirement. CARB reviews, approves or amends the document and forwards the plan to the USEPA for final review and approval within the SIP.

Air pollution sources associated with stationary sources are regulated through the permitting authority of the SJVAPCD under the New and Modified Stationary Source Review Rule (SJVAPCD Rule 2201). Owners of any new or modified equipment that emits, reduces, or controls air contaminants, except those specifically exempted by the SJVAPCD, are required to apply for an Authority to Construct and Permit to Operate (SJVAPCD Rule 2010). Additionally, the best available control technology is required on specific types of stationary equipment and are required to offset both stationary source emission increases along with increases in cargo carrier emissions if the specified threshold levels are exceeded (SJVAPCD Rule 2201, 4.7.1). Through this mechanism, the SJVAPCD would ensure that all stationary sources within the project area would be subject to the standards of the SJVAPCD to ensure that new developments do not result in net increases in stationary sources of criteria air pollutants.

The CEQA Guidelines and the Federal Clean Air Act (Sections 176 and 316) contain specific references on the need to evaluate consistencies between the proposed project and the applicable AQAP for the project site. To accomplish this, CARB has developed a three-step approach to determine project conformity with the applicable AQAP:

a. *Determination that an AQAP is being implemented in the area where the project is being proposed*. The SJVAPCD has implemented the current, modified AQAP as approved by CARB.

b. *The proposed project must be consistent with the growth assumptions of the applicable AQAP*. The proposed project land use type was not anticipated in the current growth assumptions. Therefore, growth assumptions in the Kern County General Plan will be modified with the approval of the proposed Project.

c. *The project must contain in its design all reasonably available and feasible air quality control measures.* The proposed project incorporates various policy and rule-required implementation measures that will reduce related project emissions.

The CCAA and AQAP identify transportation control measures as methods to further reduce emissions from mobile sources. Strategies identified to reduce vehicular emissions such as reductions in vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, and traffic congestion, in order to reduce vehicular emissions, can be implemented as control measures under the CCAA, as well. Additional measures may also be implemented through the building process such as providing electrical outlets on exterior walls of structures to encourage use of electrical landscape maintenance equipment or measures such as electrical outlets for electrical systems on diesel trucks to reduce or eliminate idling time.

As the growth represented by the proposed project would be updated in the Bakersfield and Kern County General Plans and incorporated into the AQAP, conclusions may be drawn from the following criteria:

a. That, by definition, the proposed emissions from the project are below the SJVAPCD's established emissions impact thresholds;

b. That the primary source of emissions from the project would be motor vehicles that are licensed through the State of California and whose emissions are already incorporated into CARB's San Joaquin Valley Emissions Inventory.

Based on these factors, the project appears to be *consistent with the AQAP*.

Regional Emissions

As shown in **Table 4.3-6**, *Comparative Analysis Based on SJV Air Basin 2020 Inventory,* the proposed project does not pose a substantial increase to basin emissions, as such basin emissions would be essentially the same if the project is approved.

Table 4.3-7, *Emission Inventory SJVAB 2025 Projection;* **Table 4.3-8***, Emission Inventory SJVAB - Kern County Portion 2025 Projection*; and **Table 4.3-9**, *Emissions Projections - Proposed Project, Kern County, and SJVAB,* provide CARB Emissions Inventory projections for the year 2025 for both the SJVAB and the Kern County portion of the air basin. Looking at the SJVAB Emissions predicted by the CARB year 2025 emissions inventory, the Kern County portion of the air basin is a moderate source of the emissions. The proposed project produces a small portion of the total emissions in both Kern County and the entire SJVAB.

Table 4.3-6: Comparative Analysis Based on SJV Air Basin 2020 Inventory

Source	Pollutant (tons/year)					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Kern County - 2020	21,535	15,877	27,339	511	13,651	3,723
SJVAB - 2020	108,113	74,204	162,425	2,847	96,652	21,535
Proposed Project	11.36	58.70	91.48	0.62	39.79	11.15
Proposed Project's % of Kern	0.053%	0.370%	0.335%	0.121%	0.291%	0.300%
Proposed Project's % of SJVAB	0.011%	0.079%	0.056%	0.022%	0.041%	0.052%
Source: Trinity Consultants 2024						

Table 4.3-7: Emission Inventory SJVAB 2025 Projection

Source	Pollutant (tons/year)					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Kern County - 2020	107,346.5	52,450.5	145,963.5	2,920.0	95,922.0	21,279.5
Total Emissions	32.78%	19.28%	6.93%	85.00%	5.97%	15.44%
Percent Stationary Sources	52.70%	5.15%	13.30%	3.75%	89.38%	71.87%
Percent Area-Wide Sources	14.52%	75.57%	79.77%	11.25%	4.68%	12.86%
Percent Mobile Sources	35,186.0	10,110.5	10,110.5	2,482.0	5,730.5	3,285.0
Total Stationary Source Emissions	56,575.0	2,701.0	19,418.0	109.5	85,738.5	15,293.5
Total Area-Wide Source Emissions	15,585.5	39,639.0	116,435.0	328.5	4,489.5	2,737.5
Total Mobile Source Emissions Source: Trinity Consultants 2024						

Table 4.3-8: Emission Inventory SJVAB - Kern County Portion 2025 Projection

Source	Pollutant (tons/year)					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Total Emissions	21,352.5	10,804.0	24,674.0	474.5	13,651.0	3,686.5
Percent Stationary Sources	53.50%	25.68%	15.83%	84.62%	11.76%	31.68%
Percent Area-Wide Sources	34.70%	4.05%	7.69%	0.00%	82.62%	56.44%
Percent Mobile Sources	11.97%	70.27%	76.33%	15.38%	5.61%	10.89%
Total Stationary Source Emissions	11,424.5	2,774.0	3,905.5	401.5	1,606.0	1,168.0
Total Area-Wide Source Emissions	7,409.5	438.0	1,898.0	0.0	11,278.5	2,080.5
Total Mobile Source Emissions	2,555.0	7,592.0	18,834.0	73.0	766.5	401.5
Source: Trinity Consultants 2024						

Table 4.3-9: Emissions Projections - Proposed Project, Kern County, and SJVAB

Source	Pollutant (tons/year)		
	ROG	NO_x	PM_{10}
Proposed Project	11.36	58.70	39.79
Kern County	21,353	10,804	13,651
SJVAB	107,347	52,451	95,922
Proposed Project Percent of Kern County	0.053%	0.543%	0.291%
Proposed Project Percent of SJVAB	0.011%	0.112%	0.041%
Kern County Percent of SJVAB	19.89%	20.60%	14.23%
Source: Trinity Consultants 2024			

As shown above, the proposed project would pose an inconsequential impact on regional O_3 and PM_{10} formation. The regional contribution to these cumulative impacts would be negligible and additionally, the project would not exceed cumulatively considerable thresholds since the project would be less than thresholds outlined in Kern County's Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports (Kern County 2006).

However, potential cumulative impacts to air quality could occur from construction and operation of the proposed project in combination with regional growth projections in the same air basin. It is speculative to determine how exceeding the regional thresholds would affect the number of days the region is in nonattainment since mass emissions are not correlated with concentrations of emissions or how many additional individuals in the air basin would be affected by the health impacts mentioned. The SJVAPCD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of air quality in the San Joaquin Valley Air Basin at the present time and it has not provided methodology to assess the specific correlation between mass emissions generated and the effect on public health and welfare. Therefore, cumulative impacts for criteria pollutants are considered significant and unavoidable.

Mitigation Measures

Implement Mitigation Measures **MM 4.3-1** through **MM 4.3-4**.

Level of Significance after Mitigation

With implementation of Mitigation Measures **MM 4.3-1** through **MM 4.3-4**, cumulative impacts would remain significant and unavoidable.

Impact 4.3-3: Construction and Operation of the Project Would Expose Sensitive Receptors to Substantial Pollutant Concentrations.

Health Risk

Sensitive receptors are particularly sensitive to air pollution because they are persons that are ill, elderly, or have lungs that are not fully developed. Locations where such persons reside, spend considerable amounts of time, or engage in strenuous activities are also referred to as sensitive receptors. Typical sensitive receptors include inhabitants of long-term healthcare facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, childcare centers, and athletic facilities. As previously discussed, the nearest sensitive land use is a rural residential dwelling located approximately 350 feet south of the project site, across and south of State Route (SR) 99. There are no known non-residential sensitive receptors within two miles of the project site.

Toxic Air Contaminants (TACs)

The Air Toxic "Hot Spots" Information and Assessment Act, also known as AB 2588, identifies toxic air contaminant hot spots where emissions from specific stationary sources may expose individuals to an elevated risk of adverse health effects, particularly cancer or reproductive harm. Many toxic air contaminants are also classified as hazardous air pollutants (HAPs). AB 2588 requires that a business or other establishment identified as a significant stationary source of toxic emissions provide the affected population with information about health risks posed by the emissions.

Projects are considered for potential health risks wherein a new or modified source of TACs is proposed for a location near an existing residential area or other sensitive receptor when evaluating potential impacts related to TACs.

Short-term Construction

Construction of the proposed project may result in temporary increases in emissions of DPM associated with the use of off-road diesel equipment. Health-related risks associated with diesel-exhaust emissions are primarily associated with long-term exposure and associated risk of contracting cancer. As such, the calculation of cancer risk associated with exposure to TACs is typically calculated based on a long-term (e.g., 70-year) period of exposure. The use of diesel-powered construction equipment, however, would be temporary and episodic and would occur over a relatively large area. No sensitive land uses are located within the proposed project vicinity. For this reason and given the relatively high dispersive properties of DPM, exposure to construction-generated DPM would not be anticipated to exceed applicable thresholds

(i.e., incremental increase in cancer risk of 10 in one million). Compliance with the ISR Rule also encourages clean fleet vehicle and electric equipment for construction when available. For these reasons, emissions of DPM associated with project construction would be considered to have a less than significant impact.

Long-term Operation

As previously discussed, the proposed project site is located northeast of SR 99 and Imperial Avenue in the unincorporated area of Kern County. The CARB recommends that sensitive land uses not be located closer than 500 feet from major diesel emissions sources, such as freeways, urban roads with 100,000 vehicles/day, or rural roads with 53,000 vehicles/day. Traffic volumes on nearby roadways average approximately 1,649 vehicles/day on SR 65 and approximately 2,852 vehicles/day on the adjacent segment of SR 99 (Ruettgers and Schuler 2023). As noted in ***Table 4.3-1****, Existing Air Quality Monitoring Data in Project Area* of the traffic report, implementation of the proposed project would generate an estimated 13,575 trips/day. With project implementation, traffic volumes along these roadways would be below the CARB's recommended criteria of 50,000 vehicles/day for rural roads. It is also important to note that heavy-duty trucks operating onand off-site, would be subject to the CARB's Airborne Toxic Control Measures (ATCMs) for heavy-duty trucks, which limits idling of heavy-duty diesel-fueled trucks.

The CARB also recommends that sensitive land uses not be located within 1,000 feet of large distribution center. As previously discussed, the nearest sensitive land use is a rural residential dwelling located approximately 350 feet south of the project site, across and south of State Route (SR) 99.

According to the AQIA, SJVAPCD has set the level of significance for carcinogenic risk at twenty in one million, which is understood as the possibility of causing twenty additional cancer cases in a population of one million people. The level of significance for chronic non-cancer risk is a hazard index of 1.0. All receptors for project-related emissions were modeled as residential receptors with a 27-year exposure for construction and 70-year exposure for operation. This is conservative since all on-site receptors and business receptors would be exposed less than 70 years.

The carcinogenic risk and the health hazard index (HI) for chronic non-cancer risk at the point of maximum impact (PMI) do not exceed the significance levels of twenty in one million (20×10^{-6}) and 1.0, respectively, for the proposed project. The PMIs are identified by receptor location and risk and are provided in **Table 4.3-10**, *Projected Maximum Impacts Predicted by HARP 2*. The electronic AERMOD and HARP2 model output files are provided in **Attachment E** of the AQIA.

Table 4.3-10: Projected Maximum Impacts Predicted by HARP 2

	Value	UTM East	UTM North
Excess Cancer Risk - Total	1.57 in a million	311667.9	3925652.6
Construction	1.56 in a million		
Operations	0.01 in a million		
Chronic Hazard Index - Total	0.0034		
Construction	0.0034		
Operations	2.17E-06		
Source: Trinity Consultants 2024			

For the above-discussed reasons, the proposed project would not be anticipated to result in short-term or long-term incremental increases in the exposure of individuals to localized concentrations of TACs that would exceed SJVAPCD's significance thresholds. This impact is considered less than significant.

Criteria Air Pollutants

Sierra Club vs. County of Fresno (December 24, 2018)

In *Sierra Club v. County of Fresno* (S219783) (*Sierra Club*) the California Supreme Court held that CEQA requires environmental impact reports (EIRs)to either

(i) make a "reasonable effort" to substantively connect the estimated amount of a given air pollutant a project will produce and the health effects associated with that pollutant, or

(ii) explain why such an analysis is infeasible (6 Cal.5th at 1165-66).

However, the Court also clarified that CEQA "does not mandate" that EIRs include "an in-depth risk assessment" that provides "a detailed comprehensive analysis … to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and population wide health risks associated with those levels of exposure." *Id*. at 1665. However, correlating the proposed project's criteria air pollutant to specific health impacts, particularly with respect to O_3 is not possible because there is no feasible or established scientific method to perform such analysis. This conclusion is supported by both the SJVAPCD and the SCAQMD, both of which have determined that this type of analysis is speculative and infeasible and there are no unique issues for the SJVAPCD that would make this analysis invalid.

Writing as amicus curiae in *Sierra Club*, the SJVAPCD explained that "[t]he 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 [National Ambient Air Quality Standards (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" (SJVAPCD, 2015b).

Instead, the SJVAPCD explained that it assesses a project's potential to exceed NAAQS by evaluating the proposed project's compliance with district thresholds of significance, which are measured in mass emissions (SJVAPCD, 2015b). As explained by the SJVAPCD, its thresholds are based on factual, scientific data and have been set at a level that ensures that NAAQS will not be exceeded, taking into consideration all cumulative emission sources (SJVAPCD, 2015b). The SJVAPCD explained that attempting to connect criteria pollutant emissions to localized health impacts will "not yield reliable information because currently available modeling tools are not well suited for this task" (SJVAPCD, 2015b). Available models are only equipped to model the impact of all emissions sources on an air basin-wide or regional basis, not on a project-level basis, and "[r]unning the photochemical grid model used for predicting ozone attainment with emissions solely from one project would thus not be likely to yield valid information given the relative scale involved" (SJVAPCD, 2015b).

This inability to "accurately ascertain local increases in concentration" of mass emissions and then to further link emissions with health effects is particularly true for O_3 and its precursors NO_X, ROG and VOC. Ozone is not directly emitted into the air, but is instead formed as ozone precursors undergo complex chemical

reactions through sunlight exposure (SJVAPCD, 2015). Given the complex nature of this process, and the fact that O_3 can be transported by wind over long distances, "a specific tonnage amount of NO_X or VOCs emitted in a particular area does not equate to a particular concentration of ozone in that area" (SJVAPCD, 2015b). For this reason, the photochemical analysis for O_3 is done on a regional scale and it is inappropriate to analyze O_3 impacts at a local or project-level basis because a localized analysis would at most be speculative, and at worst be misleading. Speculative analysis is not required by CEQA (*CEQA Guidelines* Section 15145; *Laurel Heights Improvement Association v. Regents of the University of California 1988*).

The SJVAPCD also explained that the disconnect between the tonnage of precursor pollutants and the concentration of O_3, or particulate matter formed in a particular area, is especially important to understand in considering potential health effects because it is the concentration, not the tonnage, that causes health effects (SJVAPCD, 2015b). The SJVAPCD explained that even if a model were developed that could accurately assess local increases in concentrations of pollutants like O_3 and particulates, it would still be "impossible, using today's models, to correlate that increase in concentration to a specific health impact" (SJVAPCD, 2015b). The SJVAPCD stated that even a project with criteria pollutant emissions above its CEQA thresholds does not necessarily cause localized human health impacts as, even with relatively high levels of emissions, the SJVAPCD cannot determine "whether and to what extent emissions from an individual project directly impact human health in a particular area" (SJVAPCD, 2015b). The SJVAPCD explained that this is particularly true for development projects like the proposed project, where most of the criteria pollutants derive from mobile and area sources and not stationary sources. The SCAQMD also, as amicus curiae in *Sierra Club*, made similar points, reiterating that "an agency should not be required to perform analyses that do not produce reliable or meaningful results" (SCAQMD, 2015). The SCAQMD agrees that it is very difficult to quantify health impacts with regard to O_3, opining that the only possible means of successfully doing so is for a project so large that emissions would essentially amount to *all* regional increases (SCAQMD, 2015). With regard to particulate matter, the SCAQMD noted that while the CARB has created a methodology to predict expected mortality from large amounts of $PM_{2.5}$, the primary author of the methodology has reported that it "may yield unreliable results due to various uncertainties" and the CARB staff has been directed by its Governing Board to reassess and improve it, which factor "also counsels against setting any hard-and-fast rule" about conducting this type of analysis (SCAQMD, 2015). The amicus briefs filed by the SJVAPCD and SCAQMD in *Sierra Club* are attached as part of **Appendix E** of this EIR.

Ambient Air Quality

An ambient air quality analysis was performed to determine if the proposed project has the potential to impact ambient air quality through a violation of the ambient air quality standards or a substantial contribution to an existing or projected air quality standard. Emissions were evaluated for each pollutant on a short-term (correlating to pollutant averaging period) and long-term (annual) basis, with the exception of CO that was evaluated only for short-term exposures since there are no long-term significance thresholds for CO.

Most mobile emissions predicted by CalEEMod would occur beyond the project boundary due to vehicle trips. In order to determine the on-site vehicle emissions, an estimated on-site trip distance was determined by calculating the average trip distance through the parking lot using the proposed project site plan. The on-site estimated trip distance for the project was determined to be 0.795 miles for Phase 1 and 0.670 miles for Phase 2. The on-site estimated trip distance was then multiplied by annual vehicle trips to calculate an on- site vehicle miles traveled (VMT). The on-site VMTs were then divided by the annual VMTs calculated

in CalEEMod for each phase in order to determine the on-site to off-site mobile emissions ratio, 3.19 percent. The total mobile emissions calculated by CalEEMod for the project were then reduced by 96.81 percent to estimate the mobile on-site emissions used for ambient air quality modeling.

A fence-line coordinate grid of receptor points was constructed. The grid consisted of a 25-meter fence-line spacing and three receptor tiers. The first tier had 25-meter tier spacing extending a distance of 100 meters with initial receptors starting 25 meters from the facility boundary. The second tier had 50-meter tier spacing extending a distance of 150 meters. The third tier had 100-meter tier spacing extending a distance of 250 meters. The fourth tier had 250-meter tier spacing extending a distance of 500 meters. The fifth tier had 500-meter tier spacing extending a distance of 1,000 meters. Elevated terrain options were employed even though there is not complex terrain in the project area.

For each pollutant and averaging period modeled, a "total" concentration was estimated by adding the maximum measured background air concentration to the maximum predicted project impacts. The maximum measured background air concentrations used in this analysis were calculated from measured concentrations at the nearest monitoring stations.

The results of the air dispersion modeling, presented in **Table 4.3-11**, *Short-Term Project Emissions*, demonstrate that the maximum impacts attributable to the project, when considered in addition to the existing background concentrations, are below the applicable ambient air quality standard for NO_x, SO_x, and CO. The electronic AERMOD output files are provided in Appendix D.

Table 4.3-11: Short-Term Project Emissions

Pollutant	Averaging Period	Background (ug/m^3)	Project (ug/m^3)	Project + Background (ug/m^3)	NAAQS (ug/m^3)	CAAQS (ug/m^3)
Construction						
NO_2	1-hour	115.10	4.62	119.72	188.68	338
	Annual	20.37	0.09	20.46	100	57
CO	1-hour	3,262.00	8.78	3270.78	40,000	23,000
	8-hour	1,514.50	2.38	1516.88	10,000	10,000
SO_2	1-hour	19.98	0.04	20.02	196	655
	3-hour	17.98	0.02	18.00	1,300	–
	24-hour	7.19	0.00	7.19	365	105
	Annual	1.15	0.00	1.15	–	–
PM_{10}	24-hour	437.00	0.16	437.16	150	50
	Annual	237.07	0.03	237.09	–	20
$PM_{2.5}$	24-hour	72.30	0.04	72.34	35	–
	Annual	7.10	0.01	7.11	12	12
Operation						
NO_2	1-hour	115.10	47.63	162.73	188.68	338
	Annual	20.37	1.60	21.97	100	56

Pollutant	Averaging Period	Background (ug/m^3)	Project (ug/m^3)	Project + Background (ug/m^3)	NAAQS (ug/m^3)	CAAQS (ug/m^3)
CO	1-hour	3,262.00	148.56	3,411	40,000	23,000
	8-hour	1,514.50	42.36	1,557	10,000	10,000
SO_2	1-hour	19.98	0.48	20.46	196	655
	3-hour	17.98	0.23	18.21	1,300	–
	24-hour	7.19	0.07	7.26	365	105
	Annual	1.15	0.02	1.17	–	–
PM_{10}	24-hour	437.00	4.59	441.59	150	50
	Annual	237.07	1.08	238.15	–	20
$PM_{2.5}$	24-hour	72.30	1.29	73.59	35	–
	Annual	7.10	0.30	7.40	12	12
Source: Trinity Consultants 2024						

Pre-project concentrations of PM_{10} and $PM_{2.5}$ exceed their respective ambient air quality standards. Therefore, these averaging periods for $PM_{2.5}$ and PM_{10} are evaluated in accordance with the Prevention of Significant Deterioration (PSD) procedure in Title 40, Code of Federal Regulations, Part 52.21. It is the USEPA's policy to use significant impact levels (SIL) to determine whether a proposed new or modified source will cause or contribute significantly to an AAQS or PSD increment violation. The SJVAPCD has developed SILs for fugitive emissions of PM_{10} and $PM_{2.5}$. Over 99 percent of the project's predicted PM_{10} and $PM_{2.5}$ concentrations are attributable to fugitive emissions; therefore, SJVAPCD SILs are applicable to this project. If a source's maximum impacts are below the SIL, the source is judged to not cause or contribute significantly to an AAQS or increment violation.

Table 4.3-12: Comparison of Maximum Modeled Project Impacts with Significance Thresholds

Pollutant	Averaging Period	Predicted Concentration (ug/m^3)	SIL (u/m^3)
Construction Emissions			
PM_{10}	24-hour	0.16	10.4
	Annual	0.03	2.08
$PM_{2.5}$	24-hour	0.04	42.5
	Annual	0.01	0.63
Operation Emissions			
PM_{10}	24-hour	4.59	10.4
	Annual	1.08	2.08
$PM_{2.5}$	24-hour	1.29	42.5
	Annual	0.30	0.63
Source: Trinity Consultants 2024			

Carbon Monoxide Hotspots

Localized concentrations of CO are typically associated with the idling of vehicles, particularly in highly congested areas. For this reason, the areas of primary concern are congested roadway intersections that experience high levels of vehicle traffic with degraded levels of service (LOS). With regard to potential increases in CO concentrations that could potentially exceed applicable ambient air quality standards, signalized intersections that are projected to operate at an unacceptable LOS E or F are of particular concern.

Based on the traffic analysis prepared for this project, nearby signalized intersections of SR 99 currently operate at LOS C. With project implementation, these intersections would be degraded to LOS F during the p.m. peak hour. However, Caltrans has planned improvements that are currently being designed that would improve the LOS at these intersections. The implementation of these improvements would improve LOS to acceptable levels under existing-plus-project conditions (Central Coast Transportation Consulting 2016). Implementation of the proposed project would not be anticipated to result in a substantial increase in localized CO concentrations having the potential to exceed applicable ambient air quality standards. It is also important to note that no sensitive land uses or areas where individuals would congregate for extended durations (e.g., one hour, or longer) are located in the vicinity of these intersections. Localized concentrations of CO are, therefore, considered to be less than significant.

Visibility

Short-term construction activities may also result in increased emissions of airborne particulate matter that could impact visibility at off-site locations. Of particular concern are federally designated Class I areas, which include many wilderness areas and national parks. Military aircraft use areas are also of concern with regard to visibility.

No federally-designated Class I areas are located in the vicinity of the proposed project site that would be adversely affected by short-term construction activities. The nearest federal Class I area is the San Rafael Wilderness area, which is located approximately 62 miles southwest of the proposed project site. No military installations that would be adversely affected by the proposed project are located within 100 miles of the proposed project site. This impact is considered less than significant.

Valley Fever

The proposed project has the potential to generate fugitive dust and suspend Valley Fever spores with the dust that could then reach nearby sensitive receptors. It is possible that on-site workers could be exposed to Valley Fever as fugitive dust is generated during construction. The proposed project would be required to comply with Rule 8021 Section 6.3, which requires applicants to develop, prepare, submit, obtain approval of, and implement a Dust Control Plan, which would reduce fugitive dust impacts to less than significant for all construction phases of the proposed project, which would also control the release of the *Coccidioides immitis* fungus from construction activities. This requirement is included in **Mitigation Measure MM 4.3-2**; however, exposure to the *Coccidioides immitis* fungus would be potentially significant and **Mitigation Measure MM 4.3-5** is provided to further reduce impacts associated with Valley Fever and to protect on-site construction workers and nearby receptors. In addition, **Mitigation Measure MM 4.3-6** would be required and includes payment of a onetime fee for public awareness programs related to Valley

Fever. Therefore, the exposure to Valley Fever would be minimized and impacts would be reduced to less than significant levels with implementation of the mitigation measures identified.

Naturally Occurring Asbestos

Naturally occurring asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading of development projects, and at mining operations.

Serpentine and/or ultramafic rock are known to be present in 44 of California's 58 counties. These rocks are particularly abundant in the counties associated with the Sierra Nevada foothills, the Klamath Mountains, and Coast Ranges. However, according to information provided by the Department of Conservation Division of Mines and Geology, the project site is not in an area likely to contain ultramafic rock or naturally occurring asbestos (California Department of Conservation, 2000). Therefore, impacts associated with exposure of construction workers and nearby sensitive receptors to asbestos would be less than significant.

COVID

A public health emergency (PHE) was initially declared by the Secretary of the Department of Health and Human Services (HHS) in late January 2020, pursuant to Section 319 of the Public Health Service Act. A PHE lasts for 90 days and must be renewed to continue; the PHE for COVID-19 was renewed several times, most recently in February 2023, and is currently expired on May 11, 2023. A national emergency declaration was issued in March of 2020, pursuant to Section 201 of the National Emergencies Act, and expired on May 11, 2023. However, **MM 4.3-7** would require a COVID Health and Safety Plan outlining best practices to prevent and respond to COVID outbreaks.

Mitigation Measures

In addition to Mitigation Measures **MM 4.3-1** through **MM 4.3-4**, the following mitigation measures shall be implemented to reduce potential impacts to less than significant.

MM 4.3-5: To minimize personnel and public exposure to potential Valley Fever–containing dust on and off site, the following control measures shall be implemented during project construction:

a. Equipment, vehicles, and other items shall be thoroughly cleaned of dust before they are moved off-site to other work locations.

b. Wherever possible, grading and trenching work shall be phased so that earth-moving equipment is working well ahead or down-wind of workers on the ground.

c. The area immediately behind grading or trenching equipment shall be sprayed with water before ground workers move into the area.

d. In the event that a water truck runs out of water before dust is sufficiently dampened, ground workers being exposed to dust are to leave the area until a full truck resumes water spraying.

e. To the greatest extent feasible, heavy-duty earth-moving vehicles shall be closed-cab and equipped with a high efficiency particulate air a HEPA-filtered air system.

f. Workers shall receive training in procedures to minimize activities that may result in the release of airborne *Coccidioides immitis* spores and recognize the symptoms of Valley Fever and shall be instructed to promptly report suspected symptoms of work-related Valley Fever to a supervisor. Evidence of training shall be provided to the Kern County Planning and Natural Resources Department within 5 days of the training session.

g. A Valley Fever informational handout shall be provided to all on-site construction personnel and surrounding residents within three miles of the project site. The handout shall, at a minimum, provide information regarding the symptoms, health effects, preventative measures, and treatment of Valley Fever. No less than 30 days prior to any work commencing, this handout shall be mailed to all existing residences within three miles of the project boundaries. Additional information and handouts can be obtained by contacting the Kern County Public Health Services Department.

h. On-site personnel shall be trained on the proper use of personal protective equipment, including respiratory equipment. National Institute for Occupational Safety and Health (NIOSH)-approved respirators shall be provided to on-site personnel, upon request. When exposure to dust is unavoidable, affected workers shall be provided appropriate NIOSH -approved respiratory protection. If respiratory protection is deemed necessary, employers must develop and implement a respiratory protection program in accordance with the California Occupational Safety and Health Administration's Respiratory Protection standard (8 CCR 5144).

MM 4.3-6: Prior to the issuance of grading permits, a one-time fee shall be paid to the Kern County Public Health Services Department in the amount of $3,200 for the continuing education program for bringing awareness of Valley Fever.

MM 4.3-7: Prior to the issuance of grading or building permits, a COVID Health and Safety Plan shall be prepared in accordance with the California Department of Public Health Guidance. A copy of the COVID Health and Safety Plan shall be submitted to the Kern County Planning and Natural Resources Department for review and approval.

MM 4.3-8: Prior to commencement of any on-site construction activities (i.e., fence construction, mobilization of construction equipment, initial grading), the project proponent shall provide written notice to the public through mailing a notice to all parcels within 1,000 feet of the project site, no sooner than 15 days prior to construction activities. The notices shall include the construction schedule, a telephone number and email address where complaints and questions can be registered. Additionally, a minimum of one sign, legible at a distance of 50 feet, shall also be posted at the construction sites or adjacent to the nearest public access to the main construction entrances throughout construction activities which include the construction schedule (updated as needed) and a telephone number where complaints

can be registered. Documentation that the public notice has been sent and the sign has been posted shall be provided to the Kern County Planning and Natural Resources Department.

MM 4.3-9: Prior to the issuance of any grading or building permit, the project proponent shall establish a "construction coordinator" and submit written documentation which includes their phone number, email address and mailing address. The construction coordinator shall be responsible for the following:

a. Responding to any local complaints about construction activities. The construction coordinator shall determine the cause of the construction complaint and shall be required to implement reasonable measures such that the complaint is resolved.

b. Ensuring all appropriate construction notices have been made available to the public and that all appropriate construction signs have been installed.

c. Maintaining an ongoing up-to-date log of all construction related complaints (i.e., blowing dust, inability to access parcels, etc.) during project construction activities. The log shall include the nature of the complaint and the measures that were undertaken to address the concerns. Upon request, the construction coordinator shall provide the log to the Planning and Natural Resources Department no later than three business days from request.

MM 4.3-10: All required landscaping along major and arterial roadways will be designed with native drought-resistant species (plants, trees, and bushes) to reduce demand for gas-powered landscape maintenance equipment.

Level of Significance after Mitigation

With implementation of Mitigation Measures **MM 4.3-1** through **MM 4.3-10**, impacts would be less than significant.

Impact 4.3-4: The Project Would Result In Other Emissions (Such As Those Leading To Odors) Adversely Affecting A Substantial Number Of People.

The occurrence and severity of odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source, the wind speed and direction, and the sensitivity of the receptor. Types of land uses that typically pose potential odor problems include agriculture, wastewater treatment plants, food processing and rendering facilities, chemical plants, composting facilities, landfills, waste transfer stations, and dairies. Distribution centers are not considered major sources of odorous emissions. However, odors from vehicle exhausts and other construction equipment would occur. These odors, however, are not expected to affect a substantial number of people because the project site is located in a sparsely populated area and any odors or emissions would disperse rapidly. The proposed project would be required to comply with California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. Therefore, impacts related to other emissions adversely affecting a substantial number of people would be less than significant.

Mitigation Measures

Mitigation measures are not required.

Level of Significance after Mitigation

Impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The Kern County Planning and Natural Resources Department's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (Kern County 2006) requires a cumulative air quality assessment to consider localized impacts, determine consistency with existing air quality plans, and provide SJVAB and Kern County emission comparison tables. In addition, the SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts (SJVAPCD 2015) recommends accessing cumulative impacts by evaluating past, present, and reasonably foreseeable projects in the future that may impact air quality in correlation with the proposed project. Cumulative impacts are defined by CEQA as two or more individual affects that when considered together cause considerable impacts. The cumulative impact of NO_x, ROG, CO, PM_{10}, and TACs are cumulatively evaluated for this assessment.

The geographic extent for considering cumulative regional air quality impacts would include Kern County as well as the SJVAB, within which the project is located. For the assessment of localized cumulative air quality impacts, Kern County's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* recommends that the assessment include projects located within a one-mile and six-mile radius of the project boundaries, as well as similar development projects located within the SJVAB. The list of cumulative projects included in this analysis was provided by the County and every attempt to acquire and quantify the corresponding emissions for these projects was made, based on available environmental documentation at the time this report was prepared. However, no emissions data or estimated periods of construction and operation for these projects were available. Projects located within a one-mile and six-mile radius of the project site are summarized in **Table 3-4**, *Cumulative Projects List,* of this EIR.

A list-type approach works well for the evaluation of some environmental issues, such as the evaluation of localized pollutant concentrations. However, because cumulative air quality impacts are a result of multiple types of land uses and sources of emissions, other than just industrial warehouses, this approach may not be appropriate for the analysis of cumulative regional air quality impacts. For the evaluation of cumulative regional air quality impacts and in accordance with the SJVAPCD-recommended guidance, projects that exceed project-specific annual thresholds would also be considered to have a cumulatively considerable impact.

Projected Year 2020 emissions inventory data for the SJVAB, including the portion of Kern County located within the SJVAB, is summarized in **Table 4.3-13**, *Comparative Analysis Based on SJV Air Basin 2020 Inventory*. The emissions projections were obtained from the CARB and were developed based on the most current emissions inventory available for year 2012. The projected Year 2020 emissions data is representative of future cumulative conditions at project buildout. This data is used by SJVAPCD to assist

in demonstrating attainment of ambient air quality standards. As depicted in **Table 4.3-13,** *Comparative Analysis Based on SJV Air Basin 2020 Inventory*, the proposed project would constitute only a small fraction of basin-wide or countywide emissions.

Table 4.3-13: Comparative Analysis Based on SJV Air Basin 2020 Inventory

Source	Pollutant (tons/year)					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Kern County - 2020	21,535.0	15,877.5	27,338.5	511.0	13,651.0	3,723.0
SJVAB - 2020	108,113.0	74,204.5	162,425.0	2,847.0	96,652.0	21,535.0
Proposed Project	11.36	58.70	91.48	0.62	39.79	11.15
Proposed Project's % of Kern	0.053%	0.370%	0.335%	0.121%	0.291%	0.300%
Proposed Project's % of SJVAB	0.011%	0.079%	0.056%	0.022%	0.041%	0.052%
Source: Trinity Consultants 2024						

However, as noted in Impact 4.3-2, the construction and long-term operation of the proposed project would result in increased emissions that would exceed project-level significance thresholds. In accordance with the SJVAPCD-recommended guidance, projects that exceed applicable project-level CEQA significance thresholds would also be considered to have a potentially significant cumulative impact to regional air quality. Furthermore, as previously discussed, the SJVAB is a nonattainment area for the State O_3, PM_{10}, and $PM_{2.5}$ standards and is a nonattainment area for national 8-hour O_3 and $PM_{2.5}$ standards. Significant cumulative contributions to regional air quality could interfere with regional air quality attainment and maintenance planning efforts. As a result, this impact is considered potentially significant and unavoidable.

Local Air Quality Impacts

Projects located within a one-mile and six-mile radius of the project site are summarized in **Table 3-4**, *Cumulative Projects List,* of this EIR. One project is located within a one-mile radius of the project boundaries. Including this project, a total of 36 projects are located within a six-mile radius of the project site. As discussed above, detailed construction information and emissions estimates were not available for these projects.

As noted earlier in this report, the proposed project would result in increased emissions of localized pollutants, including emissions of fugitive dust, DPM, and CO. Depending on the emissions generated by projects for which information is not currently available, it is possible that construction and operational emissions could potentially exceed SJVAPCD's significance thresholds. Of particular concern with regard to localized air quality impacts are emissions from PM_{10}. For this reason, cumulative localized air quality impacts associated with short-term construction and long-term operational activities would be considered potentially significant and unavoidable.

Mitigation Measures

Implement Mitigation Measures **MM 4.3-1** through **MM 4.3-10**.

Level of Significance After Mitigation

With implementation of the proposed mitigation measures, the proposed project's contribution to cumulative short-term and long-term regional and local air quality impacts would be considered significant and unavoidable.

Section 4.4

Biological Resources

Section 4.4

Biological Resources

4.4.1 Introduction

This section of the Draft Environmental Impact Report (Draft EIR) describes the affected environment and regulatory setting for biological resources that have been confirmed present or have the potential to be present, on the project site. This section includes the physical and regulatory setting for the project, an evaluation of the existing biological conditions on the project site and its vicinity, the criteria used to evaluate the significance of potential impacts on biological resources, the methods used in evaluating these potential impacts, and project-specific mitigation. The analysis presented in this section is based on the *Biological Assessment* prepared by Mesa Biological, LLC (Mesa Biological LLC, 2020) located in Appendix F, of this EIR, and a review of relevant literature, maps, online databases, and previous survey results and experiences in the region.

The literature review included information available in peer-reviewed journals, standard reference materials, and relevant databases on sensitive resource occurrences, including a query of the California Natural Diversity Database (CNDDB) (California Department of Fish and Wildlife [CDFW] 2024), *Oildale, California* U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle and the surrounding eight quadrangles (*Knob Hill, Lamont, Gosford, Oil Center, North of Oildale, Famoso, Rosedale,* and *Stevens*), the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants (CNPS 2024), the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) online database (USFWS 2022a), and the Critical Habitat Portal (USFWS 2022b). The Special Animals List (CDFW 2022a) and Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2022b) were also reviewed to account for other special-status species with potential to occur in the vicinity of the proposed project site. Additional sources of information reviewed included aerial photographs, topographic maps, soil survey maps, geologic maps, climatic data, and proposed project plans.

4.4.2 Environmental Setting

Regional Setting

Geographic Location

The proposed project site includes 21 Assessor's Parcel Numbers (APN) totaling approximately 739 acres located within unincorporated Kern County, north of Imperial Avenue and generally east of State Route 99 (SR 99), with site access from Saco Road and Imperial Avenue. The project site is just east of the City of Shafter, which is on the west side of SR 99, and approximately one mile north of the City of Bakersfield. Phase 1 of the project is in Kern County Zone Map 81, as portions of Sections 29 and 30, Township 28 South, Range 27 East, Mount Diablo Base & Meridian (MDBM). Phase 2 of the project is in Kern County

Zone Maps 80 and 81, as portions of Sections 24 and 25, Township 28 South, Range 26 East, MDBM, and Section 30, Township 28 South, Range 27 East, MDBM.

The project site is predominantly bordered by agricultural lands, specifically vineyards, and SR 99 to the west.

Climate

The project site, located in the Kern County area of the San Joaquin Valley, is characterized as having a semi-arid, dry climate with hot, dry summers that see daytime temperatures frequently above 100 degrees Fahrenheit (°F) and occasional heat waves. Winters are typically cool and foggy as the semi-permanent high-pressure area of the north Pacific Ocean swings southward, permitting storm centers to move east through California. The proposed project area has an average annual maximum temperature of 77.8°F, with the average peak temperature of 98.6°F occurring in July, and an average annual minimum temperature of 52.7°F, with the average lowest temperature of 38.5°F occurring in January and December. The proposed project area experiences an average annual precipitation rate of 6.17 inches per year with the most rain falling during the months of December through March [Western Regional Climate Center (WRCC) 2024].

Vegetation

Vegetation in the San Joaquin Valley region is influenced by arid climatic conditions, topography, and past land uses. This region is an elongated, north–south oriented lowland surrounded by coastal ranges to the west and the Sierra Nevada Mountains to the east. Vegetation in the valley is characteristic of California Floristic Province (CA-FP) communities and includes valley and foothill grasslands, meadows and seeps, vernal pools, freshwater marsh and riparian communities, coastal scrub, chenopod scrub, chaparral, and cismontane woodlands, stands of valley oak, and some desert elements in the southern San Joaquin Valley. Vegetation communities of the valley are bordered by oak-pine woodlands and mixed hardwood forests at higher elevations. Native vegetation within the valley has largely been replaced by a variety of agricultural uses.

Wildlife

The San Joaquin Valley supports a variety of reptiles, birds, and mammals. Reptile species commonly occurring in the San Joaquin Valley portion of Kern County include western side-blotched lizard (*Uta stansburiana elegans*), California whiptail (*Aspidoscelis tigris munda*), and Pacific gopher snake (*Pituophis catenifer catenifer*). Bird species common to the region include common raven (*Corvus corax*), horned lark (*Eremophila alpestris*), western meadowlark (*Sturnella neglecta*), house finch (*Haemorhous mexicanus*), and red-tailed hawk (*Buteo jamaicensis*). Mammal species typical of the area include California ground squirrel (*Otospermophilus beecheyi*), coyote (*Canis latrans*), black-tailed jackrabbit (*Lepus californicus*) and Yuma myotis (*Myotis yumanensis*).

Sensitive Natural Communities

Sensitive natural communities are designated by the CDFW and are generally considered to have important functions or values for wildlife or are recognized as declining in extent and/or distribution. CDFW ranks sensitive communities as “threatened” or “very threatened” and keeps records of their occurrences in the

CNDDB. Sensitive natural communities included in the CNDDB follow the original methodology according to *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). The methodology for determining sensitivity continues to be revised and is now based on the *Manual of California Vegetation* (Sawyer et al. 2009). Communities considered sensitive by CDFW are published in the California Sensitive Natural Communities List (CDFW 2023a). Vegetation alliances are ranked 1 through 5 based on NatureServe's 2010 methodology, with those alliances ranked globally (G) or statewide (S), with 1 through 3 considered sensitive. Some alliances with the ranks of 4 and 5 have also been included in the 2018 sensitive natural communities list under CDFW's revised ranking methodology (CDFW 2023a). There are no CDFW-designated sensitive natural communities on-site.

Surface Hydrology and Jurisdictional Waters

Within the arid and semi-arid western United States, limited precipitation restricts wetland and riparian resources to 1 to 5 percent of the land surface, a relatively low proportion compared to other systems globally [United States Army Corps of Engineers (USACE) 2008].

The project site is located within the San Joaquin Valley which is comprised of approximately 2,600 square miles of alluvial valley. The project site is in the Middle Kern-Upper Tehachapi-Grapevine Subbasin watershed. This subbasin is bound by the Tehachapi Mountains to the east and south and the San Emigdio Mountains to the west. The southern portion of the Central Valley, known as the San Joaquin Valley, is drained by the San Joaquin River, which is a known water of the United States and water of the State of California and is also subject to the jurisdiction of the CDFW. This portion of the valley drains to the former Tulare Lake, now known as the Tulare Lake Hydrologic Region. Tulare Lake was the largest of several similar lakes (e.g., Kern and Buena Vista lakes) in the lower basin. The lake historically received water from the Kern, Tule, and Kaweah Rivers, as well as southern tributaries of the Kings River. Diversions for agriculture and municipal purposes have resulted in drying of the lake except for residual wetlands and occasional floods. These lakes have been dry for many decades and the lake bottoms are now heavily farmed. Aquatic resources in the region typically lack waters of the United States due to being non-navigable, isolated water bodies. However, they may contain a combination of waters of the State under CDFW jurisdiction.

Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by natural and anthropogenic dispersal barriers, including rugged terrain, changes in vegetation, human developments, or human land uses and disturbances. Urbanization and the resulting fragmentation of open space areas create isolated "islands" of wildlife habitat, forming separated populations. Corridors act as an effective link between habitats and populations.

Natural wildlife movement corridors within the southern San Joaquin Valley have largely been eliminated or highly degraded through agricultural conversion of the region. Several canals and agricultural aqueducts throughout the region flow along former natural drainages in the valley floor that originate in the surrounding mountain ranges. These former riparian features historically served as corridors for wildlife moving between habitats in the valley and the foothills of the Tehachapi Mountains. In their modern condition, the canal/aqueduct features serve to restrict wildlife movement across them, though they may facilitate movements of terrestrial wildlife along them. The California Aqueduct, I-5, and State Route (SR)

99 further restrict wildlife movements in the southern San Joaquin Valley. While migratory birds historically utilized the former lakes and riparian zones of the valley floor and currently fly over the San Joaquin Valley, there are currently no significant stopover sites in the vicinity of the project site.

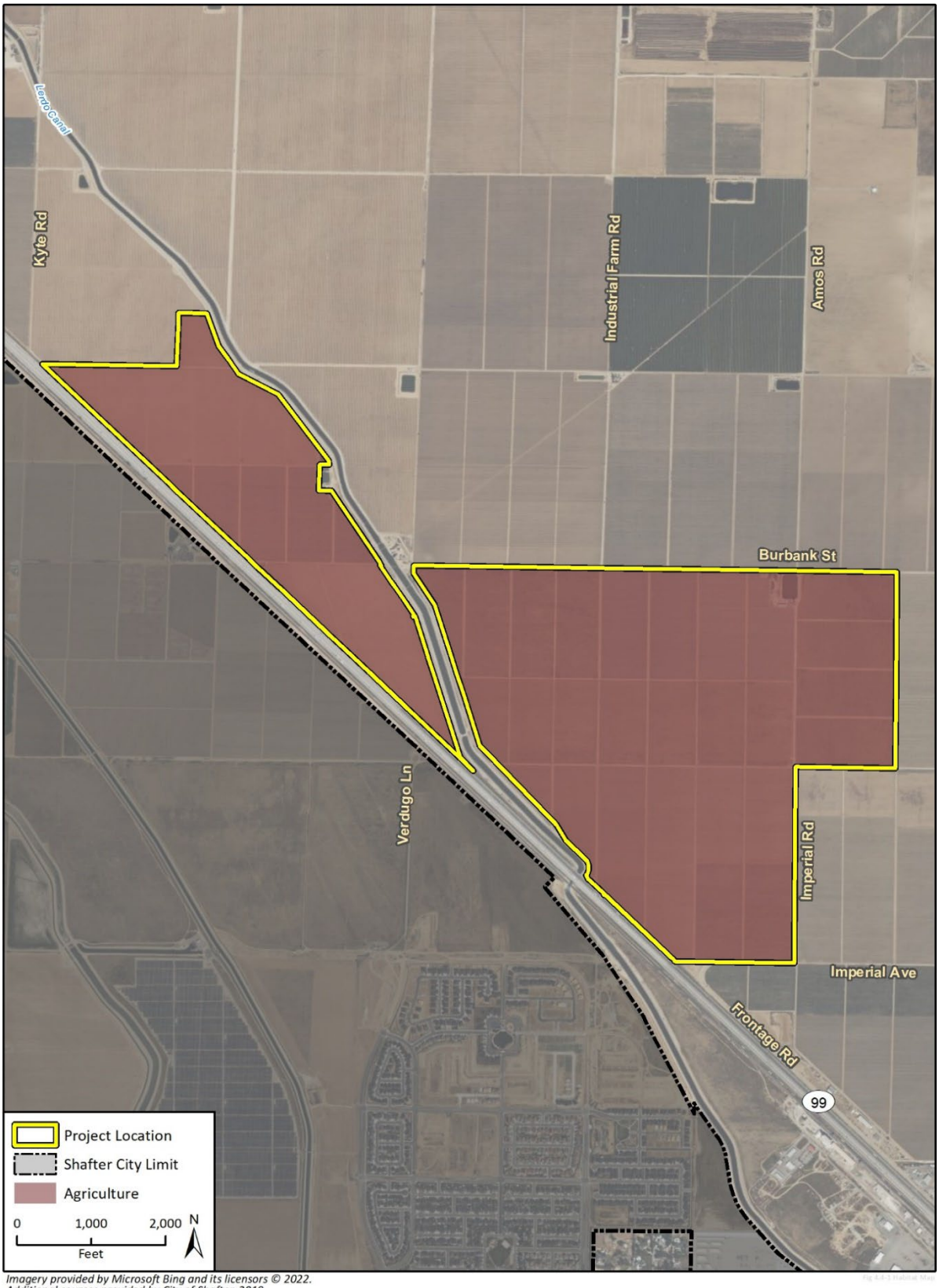
Local Setting

The proposed project site consists of approximately 739 acres of agricultural land. All surrounding properties are used for agriculture or are vacant. The project parcels are currently owned by Malibu Vineyards, L.P., with a portion of the property being utilized for growing table grapes. A review of historic aerial maps indicates the site has been used for grape vineyards since at least 2003. There exists a structure located on the eastern portion of the site that is used as an agricultural storage building. The site includes outdoor storage of various farm related operational equipment, along with a fenced and secured concrete floor storage shed for storing pesticides; no riparian or wetland habitat exists within or immediately adjacent to the proposed project site. The Lerdo Canal trends northwest to southeast through the center of project site, dividing the two phases of the project (refer to **Figure 4.4-1**, *Habitat Map*).

Topography and Soils

The proposed project site is located in a relatively flat area of the County, ranging in elevation from approximately 400 to 500 feet above mean sea level (msl) throughout the site. The property is routinely disked for agricultural activities. According to the California Department of Conservation, California Geological Survey (CGS), 2010 Geological Map of California, the proposed project rests on older alluvium, lake, playa and terrace deposits (Qoa) of the Quaternary (California Department of Conservation 2010). According to the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Soils Survey, soils on the proposed project site consist of (138) Delano sandy loam, (145) Driver coarse sandy loam, (146ne) Delano sandy loam, (174) Kimberlina fine sandy loam and (184) Lewkalb sandy loam (NRCS 2022). The depth to the water table is generally more than 121 feet (Krazan & Associates 2021).

Figure 4.4-1: Habitat Map



Hydrology

The Lerdo Canal trends northwest to southeast through the center of the project site, dividing the two phases of the project, but is not included within the project site boundaries. Based on a review of the USFWS National Wetland Inventory (NWI) Mapper, a one-acre freshwater pond is located within the proposed project site (USFWS 2024).

Based on a biological reconnaissance survey conducted by Mesa Biological, LLC, on August 14th through 16th, 2019, no evidence of potential wetland habitat was present near the canal, nor immediately on-site in any direction. Also, no sign of any bed, bank, channel, or constituent elements were present at the project site that would indicate wetlands or wetland features present at the project site. The reconnaissance survey indicated that the area identified by the NWI Mapper did not support any indicators of hydrology or hydrophytic soil. Therefore, although the USFWS NWI Mapper indicates the presence of a freshwater emergent wetland within the proposed project site, due to the absence of hydrologic indicators and hydrophytic soil detected during the reconnaissance survey, Mesa Biological, LLC, has concluded the proposed project site does not support wetland habitat.

Vegetation Communities and Land Cover Types

No natural vegetation communities or native habitats occur within the proposed project site. The project site is composed of active agriculture and fallow fields. The site is surrounded by the Lerdo Canal and SR 99 to the west and by active agriculture to the north, south, and east.

The project site consists of vineyards and regularly disked fallow agricultural fields (former vineyards). Dominant herbaceous vegetation at the site is largely nonnative, including: red brome (*Bromus madritensis* ssp. *rubens*), field mustards (*Brassica* spp.), Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca gradiflora*), datura (*Datura watsonii*), nightshade (*Solanum elaegnifolium*), storksbill (*Erdoium circularium*), goosefoot (*Chenopodium* sp.), cheese weed (*Malva neglecta*), and puncture vine (*Tribulus terrestris*). Native vegetation observed on-site included: fiddleneck (*Amsinckia intermedia*), horsetail (*Equisetum* sp.), allscale saltbush (*Atriplex polycarpa*), and rabbitbush (*Ericameria paniculata*) (Mesa, 2020).

Wildlife

Wildlife observed on-site was limited to visible tracks in the dirt indicative of the black tailed jackrabbit (*Lepus californicus*), domestic dog (*Canis familiaris*), domestic cat (*Felis catus*), stripped skunk (*Mephitis mephitis*), western toad (*Anaxyrus boreas*), California ground squirrel (*Otospermophilus beecheyi*), and common field mouse (*Perognathus inornatus*) (Mesa, 2020). Birds observed at the site consisted of mourning dove (*Zenaida macroura*), feral pigeon (*Columba livia*), house sparrow (*Passer domesticus*) turkey vulture (*Cathartes aura*), common raven (*Corvous corax*), and European starling (*Sturnus vulgaris*) (Mesa, 2020).

Special-Status Species

Special-status species are defined as those plants and wildlife that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, State, or

other agencies as under threat from human-associated developments. Some of these species receive specific protection that is defined by federal or State endangered species legislation. Others have been designated as special status on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. Special-status species include:

- Species listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA);
- Species that meet the definitions of rare or endangered under California Environmental Quality Act (CEQA) Guidelines Section 15380;
- All of the plants constituting California Rare Plant Rank (CRPR) 1B and Rank 2A meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (CESA) of the Fish and Game Code, and are eligible for State listing;
- Species covered under an adopted Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP);
- Wildlife designated by CDFW as "species of special concern" or "special animals;"
- Wildlife "fully protected" in California (Fish and Game Code Sections 3511, 4700, and 5050); and,
- Wildlife species protected as "fur-bearing mammals" (Fish and Game Code Section 4000 et seq.).

Sensitive natural communities are designated as such by various resource agencies, such as the CDFW, or in local policies and regulations, and are generally considered to have important functions or values for wildlife and/or are recognized as declining in extent or distribution and are considered threatened enough to warrant some level of protection. For example, many local agencies in California consider protection of oak woodlands important, and federal, State, and most local agencies also consider wetlands and riparian habitat as sensitive communities. CDFW tracks communities it believes to be of conservation concern through its List of California Terrestrial Communities and the CNDDB, and these communities are typically considered special status for the purposes of CEQA analysis. The potential for each special-status species to occur in the proposed project site was evaluated according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on the site if present (e.g., oak trees). Protocol surveys (if conducted) did not detect species.
- **Low Potential.** Few of the habitat components meeting the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site. Protocol surveys (if conducted) did not detect species.
- **Moderate Potential**. Some of the habitat components meeting the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

- **High Potential.** All the habitat components meeting the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

Most avian species are afforded certain protections by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (FGC Sections 3500–3516). However, many of these species, including some raptors, are common and are not considered special-status on the basis of other regulations.

Special-Status Plants

Based on the IPaC, CNDDB, CNPS records searches, and literature review, 18 special-status plant species were evaluated for potential occurrence on the proposed project site. The existing conditions on the proposed project site do not provide suitable conditions for any of the evaluated special-status plant species and none were observed on the property. These species, identified in the literature review and database search, are listed and described in **Table 4.4-1**, *Special-Status Plant Species with the Potential to Occur on the Proposed Project Site*, which identifies the regulatory status, habitat requirements, and blooming period for each plant species, as well as the potential for the species to occur on the proposed project site based on focused survey results. Due to the absence of suitable habitat and existing level of disturbance due to active agricultural management, including herbicide use, and regular disking at the proposed project site, special-status plants are not expected to occur and are not discussed further in this document.

Table 4.4-1: Special-Status Plant Species with the Potential to Occur on the Proposed Project Site

Species Name	Habitat and Distribution	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Horn's milk-vetch *Astragalus hornii* var. *hornii*	Annual herb. Meadows and seeps, playas. Alkaline, lake margins. Elevations: 195-2790ft. (60-850m.) Blooms May-October.	--/--/1B.1	**No Potential to Occur:** The proposed project site does not contain meadows, seeps, playas, or lake margins with alkaline soils.
Bakersfield smallscale *Atriplex tularensis*	Annual herb found in chaparral and valley and foothill grassland habitats in subalkaline margins of alkali sinks at elevations of 91-96 meters. Typical blooming season: June–October.	--/SE/1A	**No Potential to Occur:** The proposed project site does not support chaparral or valley and foothill grassland habitats suitable for Bakersfield small-scale. The proposed project site is nearly devoid of vegetation and undergoes regular disking activities for fire prevention. This species was not observed during the field survey of the proposed project site and is not expected to occur due to the lack of suitable habitat and existing level of disturbance at the proposed project site.

Species Name	Habitat and Distribution	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
alkali mariposa-lily *Calochortus striatus*	Perennial bulbiferous herb. Chaparral, chenopod scrub, meadows and seeps, mojavean desert scrub. Alkaline, mesic. Elevations: 230-5235ft. (70-1595m.) Blooms April-June.	--/--/1B.2	**No Potential to Occur:** The proposed project site does not contain chaparral, chenopod scrub, desert scrub, meadows, or seeps with alkaline soils.
California jewelflower *Caulanthus californicus*	Annual herb found in chenopod scrub, pinyon and juniper woodland, and valley and foothill grassland habitat in sandy soils. Elevation: 61–1000 meters. Typical blooming period: February–May.	FE/SE/1B.1	**No Potential to Occur:** The proposed project site is not located within the appropriate elevation range and does not support chenopod scrub, pinyon and juniper woodland and foothill grassland habitats suitable for California jewel flower. The proposed project site is nearly devoid of vegetation and undergoes regular disking activities for fire prevention. This species was not observed during the field survey of the proposed project site and is not expected to occur due to the lack of suitable habitat and existing level of disturbance at the proposed project site.
hispid salty bird's-beak *Chloropyron molle* ssp. *hispidum*	Annual herb (hemiparasitic). Meadows and seeps, playas, valley and foothill grassland. Alkaline. Elevations: 5-510ft. (1-155m.) Blooms June-September.	--/--/1B.1	**No Potential to Occur:** The proposed project site does not contain meadows and seeps, playas, valley and foothill grasslands, or alkaline soils.
recurved larkspur *Delphinium recurvatum*	Perennial herb. Chenopod scrub, cismontane woodland, valley and foothill grassland. Alkaline. Elevations: 10-2590ft. (3-790m.) Blooms March-June.	--/--/1B.2	**No Potential to Occur:** The proposed project site does not contain chenopod scrub, cismontane woodland, or valley and foothill grasslands with alkaline soils.
calico monkeyflower *Diplacus pictus*	Annual herb. Broadleafed upland forest, cismontane woodland. In bare ground around gooseberry bushes or around granite rock outcrops. Elevations: 330-4690ft. (100-1430m.) Blooms March-May.	--/--/1B.2	**No Potential to Occur:** The proposed project site does not contain woodland or forest habitats with granite rock outcrops.
Kern mallow *Eremalche parryi* ssp. *kernensis*	Annual herb that occurs in chenopod scrub and valley and foothill grassland. Elevations: 210 – 3,870 feet (70–1,290 meters). Typical blooming period: March–May.	FE/--/1B.2	**No Potential to Occur:** The proposed project site does not support chenopod scrub and valley and foothill grassland habitats suitable for Kern mallow. The proposed project site is nearly devoid of vegetation and undergoes regular disking activities for fire prevention. This species was not observed during the field survey of the proposed project site and is not expected to occur due to the lack of suitable habitat and existing level of disturbance at the proposed project site.

Species Name	Habitat and Distribution	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Hoover's eriastrum *Eriastrum hooveri*	Annual herb. Chenopod scrub, pinyon and juniper woodland, valley and foothill grassland. On sparsely vegetated alkaline alluvial fans; also in the Temblor Range on sandy soils. Elevations: 165-3000ft. (50-915m.) Blooms March-July.	FD/--/4.2	**No Potential to Occur:** The proposed project site does not contain woodland or grassland habitats with alkaline or sandy soils.
Tejon poppy *Eschscholzia lemmonii* ssp. *kernensis*	Annual herb. Chenopod scrub, valley and foothill grassland. Little information available on habitat. Elevations: 525-3280ft. (160-1000m.) Blooms (February) March-May.	--/--/1B.1	**No Potential to Occur:** The proposed project site does not contain chenopod scrub of valley and foothill grasslands.
California satintail *Imperata brevifolia*	Perennial rhizomatous herb. Chaparral, coastal scrub, meadows and seeps, mojavean desert scrub, riparian scrub. Mesic sites, alkali seeps, riparian areas. Elevations: 0-3985ft. (0-1215m.) Blooms September-May.	--/--/2B.1	**No Potential to Occur:** The proposed project site does not contain chaparral, coastal scrub, desert scrub, meadows, riparian areas and seeps with alkaline soils.
Comanche Point layia *Layia leucopappa*	Annual herb. Chenopod scrub, valley and foothill grassland. Dry hills in white-grey clay soils, often with weedy grasses. Does not reliably appear every year. Elevations: 330-1150ft. (100-350m.) Blooms March-April.	--/--/1B.1	**No Potential to Occur:** The proposed project site does not contain chenopod scrub, valley and foothill grasslands, or dry hills with white-grey clay soils.
San Joaquin woolly-threads *Monolopia congdonii*	Annual herb found in chenopod scrub and valley and foothill grassland habitat in sandy soils. Elevation: 180-2,400 feet (60–800 meters). Typical blooming period: February–May.	FE/--/1B.2	**No Potential to Occur:** The proposed project site does not support chenopod scrub and valley and foothill grassland habitat suitable for San Joaquin woolly-threads. The proposed project site is nearly devoid of vegetation and undergoes regular disking activities for fire prevention. This species was not observed during the field survey of the proposed project site and is not expected to occur due to the lack of suitable habitat and existing level of disturbance at the proposed project site.
Piute Mountains navarretia *Navarretia setiloba*	Annual herb. Cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Red clay soils, or on gravelly loam. Elevations: 935-6890ft. (285-2100m.) Blooms April-July.	--/--/1B.1	**No Potential to Occur:** The proposed project site does not contain cismontane woodlands, pinyon and juniper woodland, or valley and foothill grasslands with red clay or gravelly soils.

Species Name	Habitat and Distribution	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Bakersfield cactus *Opuntia basilaris* var. *treleasei*	The Bakersfield cactus is endemic to a limited area of central Kern County in the city of Bakersfield. Known extant populations occur on flood plains, ridges, bluffs and rolling hills in saltbush scrub plant communities and riparian woodlands Elevation:420 – 2,550 ft. (140-850 m.)	FE/SE/1B.1	**No Potential to Occur:** The proposed project site does not support native satltbrush scrub, or riparian habitats. Species not detected during August 2019 survey.
oil neststraw *Stylocline citroleum*	Annual herb. Chenopod scrub, coastal scrub, valley and foothill grassland. Flats, clay soils in oil-producing areas. Elevations: 165-1310ft. (50-400m.) Blooms March-April.	--/--/1B.1	**No Potential to Occur:** The proposed project site does not contain chenopod scrub, coastal scrub, or valley and foothill grasslands with clay soils.
Mason's neststraw *Stylocline masonii*	Annual herb. Chenopod scrub, pinyon and juniper woodland. Sandy washes. Elevations: 330-3935ft. (100-1200m.) Blooms March-May.	--/--/1B.1	**No Potential to Occur:** The proposed project site does not contain chenopod scrub, pinyon and juniper woodland, or sandy washes.
California screw moss *Tortula californica*	Moss. Chenopod scrub, valley and foothill grassland. Moss growing on sandy soil. Elevations: 35-4790ft. (10-1460m.)	--/--/1B.2	**No Potential to Occur:** The proposed project site does not contain chenopod scrub, or valley and foothill grasslands with sandy soils.

General references: Habitat descriptions CNPS 2022, Baldwin et al. 2012, CDFW 2020.

Status Codes
--= No status

Federal:
FE = Federal Endangered
FT=Federal Threatened
FD=Federal Delisted

State:
SE=State Endangered
ST= State Threatened
SR= State Rare

California Native Plant Society (CNPS):
Rank 1B = rare, threatened, or endangered in California and elsewhere.
Rank 2 = rare, threatened, or endangered in California, but more common elsewhere.
Rank 3 = plants that about which more information is needed.
Rank 4 = a watch list plants of limited distribution.

Threat Code:
.1 = Seriously endangered I California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Fairly endangered in California (20-80% occurrences threatened)
.3 = Not very endangered I California (<20% of occurrences threatened, or no current threats known)

I Source: CDFW 2023.

Special-Status Wildlife

The literature review identified 24 special-status wildlife species that have the potential to occur or have recorded occurrences in the vicinity of the proposed project site. These species, identified in the literature review and database search, are listed and described in **Table 4.4-2**, *Special-Status Wildlife Species with the Potential to Occur on the Proposed Project Site*, which identifies their regulatory status and habitat requirements, as well as the potential for the species to occur on the proposed project site or immediate vicinity based on focused survey results.

Table 4.4-2: Special-Status Wildlife Species with the Potential to Occur on the Proposed Project Site

Species Name	Habitat and Distribution	Legal Status	Rationale for Expecting Presence or Absence
Insects			
Crotch bumble bee *Bombus crotchii*	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	--/SCE/--	**No Potential to Occur:** The proposed project site does not support natural vegetation communities and is heavily disturbed by agriculture herbicide use, and regular disking.
monarch - California overwintering population *Danaus plexippus* pop. 1	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	FC/--/--	**No Potential to Occur:** The proposed project site does not support suitable wintering habitat (groves of tall wind protected trees).
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	Occurs in the Central Valley of California, in association with blue elderberry (Sambucus mexicana). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	FT/--/--	**No Potential to Occur:** The proposed project site does not support blue elderberry stands.
Amphibians			
western spadefoot *Spea hammondii*	Inhabits vernal pools in primarily grassland, but also in valley and foothill hardwood woodlands.	PT/--/SSC	**No Potential to Occur:** The proposed project site does not support vernal pool or other aquatic habitats suitable for western spadefoot. This species was not observed during the field survey of the proposed project site and is not expected to occur at the proposed project site due to the lack of suitable habitat and existing level of disturbance. No further studies are necessary.
Reptiles			
Temblor legless lizard *Anniella alexanderae*	Sandy soil at the southeast base of the Temblor Ranges, southwestern San Joaquin Valley, Kern County. Microhabitat of this species is poorly known. Other legless lizard species occur in sparsely vegetated areas with moist, loose soil. Often found underneath leaf litter, rocks, and logs.	--/SCE/SSC	**No Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and does not support suitable habitat or soils for Temblor legless lizard. The site is also outside this species known range, a narrow strip along the western edge of the San Joaquin Valley west of Tulare Lake and Interstate 5 (CFGC 2022).
Bakersfield legless lizard *Anniella grinnelli*	Occur in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Suitable habitat includes leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather.	--/--/SSC	**No Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and does not support suitable habitat or soils for Bakersfield legless lizard.

Species Name	Habitat and Distribution	Legal Status	Rationale for Expecting Presence or Absence
California legless lizard *Anniella* sp	Generally found in sandy or loose organic soils or where there is plenty of leaf litter.	--/--/SSC	**No Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and does not support suitable habitat or soils for California legless lizard.
California glossy snake *Arizona elegans occidentalis*	Generally found in desert habitats but also occur in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass. The species prefer open sandy areas with scattered brush, but also found in rocky areas.	--/--/SSC	**Low Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and does not support suitable natural habitat California glossy snake. However, this species may occur along parcel margins and within vineyards.
western pond turtle *Emys marmorata*	Quiet waters of ponds, lakes, streams, and marshes. Typically, in the deepest parts with an abundance of basking sites.	PT/--/SSC	**No Potential to Occur:** The proposed project site does not support aquatic habitat suitable for western pond turtle. This species was not observed during the field survey of the proposed project site and is not expected to occur at the proposed project site due to the lack of suitable habitat and existing level of disturbance. No further studies are necessary.
blunt-nosed leopard lizard *Gambelia sila*	Occur in semiarid grasslands, alkali flats, low foothills, canyon floors, large washes, and arroyos, typically on sandy, gravelly, or loamy substrate and sometimes on hardpan. Occur in areas where abundant rodent burrows are available and are rare or absent in dense vegetation or tall grass.	FE/SE/FP	**No Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and does not support suitable habitat for blunt-nosed leopard lizard. Blunt-nosed leopard lizard or their sign was not observed during the field survey of the proposed project site and is not expected to occur within the site due to the lack of suitable habitat, historical land use, lack of nearby source populations, and proximity to development.
San Joaquin coachwhip *Masticophis flagellum ruddocki*	Generally occur in open, dry, treeless areas with little or no cover, including valley grassland and saltbush scrub. Avoids dense vegetation where it cannot move quickly, including mixed oak chaparral woodland. Takes refuge in rodent burrows, under shaded vegetation, and under surface objects.	--/--/SSC	**Low Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and does not support suitable habitat for San Joaquin coachwhip. San Joaquin coachwhip was not observed during the field survey of the proposed project site and is not expected to occur within the site; however, it is possible for individuals to move through the site from surrounding areas if present.
coast horned lizard *Phrynosoma coronatum* (*blainvillii* population)	Frequents a wide variety of habitats, commonly occurring in lowlands along sandy washes, coastal sage scrub and chaparral in arid and semi-arid climate conditions. Species prefers friable, rocky or shallow sandy soils.	--/--/SSC	**No Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and does not support suitable habitat or soils for coast horned lizard. Coast horned lizard was not observed during the field survey of the proposed project site and is not considered to have the potential to occur on the proposed project site.

Species Name	Habitat and Distribution	Legal Status	Rationale for Expecting Presence or Absence
Birds			
tricolored blackbird *Agelaius tricolor*	(Nesting colony); requires open water, protected nesting substrate such as cattails or tall rushes, and foraging area with insect prey.	MBTA/ST/ SSC	**No Potential to Occur:**. There is no suitable habitat for a nesting colony of tricolored blackbird within the project site, aquatic habitats with tall emergent vegetation and open waters are not present. This species was not observed during the field survey of the proposed project site.
burrowing owl *Athene cunicularia*	Open, dry grasslands, deserts and scrublands. Subterranean nester, dependent upon burrowing mammals.	MBTA/--/ SSC	**Low Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and does not support suitable habitat for burrowing owl. However, the proposed project site is bordered by undeveloped areas and, should disking activities stop, burrowing owl could occur within the proposed project site. Burrowing owl was not observed during the field survey of the proposed project site, but is considered to have the potential to occur on the proposed project site.
Swainson's hawk *Buteo swainsoni*	Open desert, grassland, or cropland containing scattered, large trees or small groves. Roosts in large trees, but will roost on ground if no trees are available. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley.	MBTA/ST/ - -	**Moderate Potential to Occur:** No Swainson's hawks were observed on-site during the survey, suitable nest trees may occur within the project site; however vineyards do not provide suitable foraging habitat for Swainson's hawk. The potential for occurrence is moderate due to the presence of suitable foraging habitat within fallow fields and known occurrences within the San Joaquin Valley.
white-tailed kite *Elanus leucurus*	Occupies undisturbed, open grasslands, meadows, farmlands and emergent wetlands. Uses trees with dense canopies for cover. In southern California, also roosts in saltgrass and Bermudagrass.	MBTA/--/FP	**No Potential to Occur:** The project site provides minimal foraging opportunities. No suitable nesting opportunities on-site or in the immediate vicinity of the project site.
California horned lark *Eremophila alpestris actia*	Generally found in shortgrass prairies, grasslands, disturbed fields, or similar habitat types along the coast or in deserts. Trees are shrubs are usually scarce or absent. Generally rare in montane, coniferous, or chaparral habitats. Forms large flocks outside of the breeding season.	MBTA/-- /WL	**No Potential to Occur:** The project site provides minimal foraging opportunities. No suitable nesting opportunities on-site or in the immediate vicinity of the project site.
Mammals			
Nelson's (San Joaquin) antelope squirrel *Ammospermophilus nelsoni*	Found in Western San Joaquin Valley from 200-1200 ft. on dry sparsely vegetated loam soils. Needs widely scattered shrubs, forbes, and grasses in broken terrain with gullies and washes. Digs burrows or utilizes existing kangaroo rat burrows.	--/ST/--	**No Potential to Occur:** The proposed project site is located within the appropriate elevation range for Nelson's antelope squirrel; however, the proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and does not support suitable desert habitat for this species.

Species Name	Habitat and Distribution	Legal Status	Rationale for Expecting Presence or Absence
			Nelson's antelope squirrel or their sign was not observed during the field survey.
Tipton kangaroo rat *Dipodomys nitratoides nitratoides*	Occurs in saltbush scrub and sink scrub communities in the Tulare Lake basin of the southern San Joaquin Valley. Also occurs in terrace grasslands lacking woody shrubs. Needs soft friable soils that escape seasonal flooding. Digs burrows in elevated soil mounds at bases of shrubs.	FE/SE/--	**No Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and does not support suitable habitat for Tipton kangaroo rat. Tipton kangaroo rat or their sign was not observed during the field survey of the proposed project site. This species is not expected to occur due to the lack of suitable habitat, historical land use, lack of nearby source populations, and proximity to development.
western mastiff bat *Eumops perotis californicus*	Found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in cliff faces, high buildings, trees, and tunnels.	--/--/SSC	**No Potential to Occur:** The proposed project site does not support suitable roosting habitat for western mastiff bat. This species was not observed during the field survey of the proposed project site and is not expected to occur at the proposed project site due to the lack of suitable habitat. No further studies are necessary.
Tulare grasshopper mouse *Onychomys torridus tularensis*	Hot, arid valleys and scrub deserts in the southern San Joaquin Valley. Diet almost exclusively composed of arthropods, therefore needs abundant supply of insects.	--/--/SSC	**No Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and does not support suitable habitat for Tulare grasshopper mouse. Tulare grasshopper mouse was not observed during the field survey of the proposed project site.
Buena Vista Lake ornate shrew *Sorex ornatus relictus*	Occurs in marshlands and riparian areas in the Tulare Basin. Uses stumps and logs for cover.	FE/--/SSC	**No Potential to Occur:** The proposed project site does not support marshlands or riparian areas suitable for Buena Vista Lake ornate shrew. This species was not observed during the field survey of the proposed project site and is not expected to occur at the proposed project site.
American badger *Taxidea taxus*	Occurs in open stages of shrub, forest, and herbaceous habitats; needs uncultivated ground with friable soils.	--/--/SSC	**Low Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and is surrounded by undeveloped suitable habitat. The proposed project site supports marginally suitable foraging habitat for American badger. American badger was not observed during the field survey of the proposed project site, but is considered to have the potential to occur within the proposed project site.

Species Name	Habitat and Distribution	Legal Status	Rationale for Expecting Presence or Absence
San Joaquin kit fox *Vulpes macrotis mutica*	Inhabits annual grasslands or grassy open stages with scattered shrubby vegetation; needs loose-textured sandy soils for burrowing, and suitable prey base.	FE/ST/--	**Low Potential to Occur:** The proposed project site is entirely disturbed and devoid of vegetation due to ongoing disking activities and is surrounded by undeveloped suitable habitat. The proposed project site supports marginally suitable foraging habitat for San Joaquin kit fox. San Joaquin kit fox or their sign was not observed during the field survey of the proposed project site but is considered to have low potential to occur within the proposed project site.
General references: Unless otherwise noted all habitat and distribution data provided by CNDDB (CDFW 2023).			
Status Codes --= No status **Federal:** FE = Federal Endangered FT= Federal Threatened FC= Federal Candidate PT= Proposed Threatened CH= Federal Critical Habitat PCH= Proposed Federal Critical Habitat MBTA= Protected by Federal Migratory Bird Treaty Act		**State:** SE= State Endangered ST= State Threatened SCE=State Candidate Endangered **California Department of Fish and Wildlife:** SSC= California Species of Special Concern FP= Fully Protected Species WL=Watch List -	

Of the special-status wildlife species identified in **Table 4.4-2**, six species were determined to have the potential to occur on the proposed project site based on the presence and proximity of suitable habitat on the proposed project site based upon historical records.

No special-status wildlife species were observed during the field survey of the proposed project site. Each of the six special-status wildlife species with the potential to occur on the proposed project site are discussed in further detail below.

Reptiles

California Glossy Snake

California glossy snake (*Arizona elegans occidentalis*) is a CDFW Species of Special Concern (SSC) found in a range of scrub and grassland habitats, often with loose or sandy soils. The species is nocturnal and hides underground beneath rocks during the daytime. California glossy snakes are typically active from late February through November and are most active in May. Prey species include small lizards, snakes, birds, and mammals. Females typically lay 5 to 12 eggs during June and July, which typically hatch in late summer and early fall. The species occurs from the eastern part of San Francisco Bay Area south to northwestern Baja California. There have been reports of this species in the Santa Monica Mountains (Nafis 2024).

Survey Results

The proposed project site is entirely disturbed and devoid of natural vegetation communities due to vineyard agriculture and ongoing disking activities and does not support suitable habitat for glossy snake. However, individuals may occur within the site if small mammal prey is present, particularly within fallow fields between disking.

San Joaquin Coachwhip

San Joaquin coachwhip (*Masticophis flagellum ruddocki*) SSC, are a common to uncommon species found in arid regions below 6,000 feet in California (Nafis 2024).

The known range of this California endemic species extends from eight miles west of the community of Arbuckle in Colusa County in the Sacramento Valley, southward to the Grapevine in the Kern County portion of the San Joaquin Valley, and westward into the inner South Coast Ranges. They occur in open, dry, vegetative associations with little or no tree cover. In the western San Joaquin Valley, the San Joaquin coachwhip occurs in valley grassland and saltbush scrub associations and is known to climb bushes, such as *Atriplex,* for viewing prey and potential predators. They use mammal burrows for refuge and possibly for oviposition sites. Coachwhips occur in open terrain and are most abundant in grass, desert scrub, chaparral, and pasture habitats. Coachwhips seek cover in rodent burrows, bushes, trees, and rock piles. They hibernate in soil or sand approximately one foot below the surface, sometimes at the bases of plants (Nafis 2024). Their diet consists of rodents, lizards and eggs, snakes (including rattlesnakes), birds and eggs, young turtles, insects, and carrion (Nafis 2024). Coachwhips actively search for prey, with their heads elevated. They poke their heads in burrows or climb trees, using both vision and olfaction to detect prey, which is consumed alive and whole (Nafis 2024). San Joaquin coachwhips mate in April and May, lay their eggs in June and July, and the first young appear in late August or early September. Their clutch size ranges from four to 16 eggs with a mean of eight to 10 (Nafis 2024).

Survey Results

The proposed project site is entirely disturbed and devoid of natural vegetation communities due to vineyard agriculture and ongoing disking activities and does not support suitable habitat for the San Joaquin coachwhip. However, individuals may occur within the site if small mammal prey is present, particularly within fallow fields between disking.

Birds

Burrowing Owl

Burrowing owl (*Athene cunicularia*) is recognized by the CDFW as an SSC. Burrowing owls prefer annual and perennial grasslands, typically with sparse or non-existent tree or shrub canopies. In California, they are found in close association with California ground squirrel (*Otospermophilus beecheyi*) burrows, which provide them with year-round shelter and seasonal nesting habitat. Burrowing owls also use human-made structures such as culverts, debris piles, or openings beneath pavement as shelter and nesting habitat (CDFW 2012). Burrowing owl populations have been on the decline due to diminishing habitat (CDFW 2012) and burrowing mammal control (Center for Biological Diversity, et al. 2024). Burrowing owls exhibit a high degree of nest site fidelity and, as habitat becomes increasingly fragmented and isolated by development, these sites become increasingly inhospitable for breeding burrowing owls.

Survey Results

The proposed project site is entirely disturbed and devoid of natural vegetation communities due to vineyard agriculture and ongoing disking activities and does not support suitable habitat for burrowing owls. However, undeveloped suitable grassland habitat occurs within the immediate vicinity of the project site

and, should California ground squirrels be allowed to establish, burrowing owl could occur within the proposed project site. Burrowing owl was not observed during the field survey of the proposed project site, but is considered to have the potential to occur on the proposed project site.

Burrowing owl is not currently a state or federally listed species; however, it should be noted that the California Fish and Game Commission received a petition in March 2024 to list this species under the CESA. If the California Fish and Game Commission accepts the petition for consideration, the species would be considered a "candidate" and would be afforded the same protections as a threatened and endangered species under the CESA. Impacts to burrowing owl would then require consultation with CDFW and potentially an incidental take permit for "take" of a listed species under California Fish and Game Code.

Swainson's Hawk

Swainson's hawk (*Buteo Swainsoni*) is a state threatened species that breeds in the western United States and winters in South America. In southern California, the species is generally limited to a spring and fall transient but can nest in the Central Valley. Breeding sites often occur near riparian areas, lone trees in agricultural fields or pastures, and roadside trees when adjacent to suitable foraging habitat. Breeding typically occurs from March to September. Habitat preference is usually near water in the Central Valley, but the species may occur in arid regions as well. The species has become more dependent on agriculture such as alfalfa crops due to native community conversion. The species prefers nesting in solitary trees, bushes, small groves, or a line of trees along a stream course from 4-100 feet above ground. This species may, but is less likely to nest in utility poles. Swainson's hawk feed mainly on small rodents (voles) as well as other small mammals, birds, and insects (CDFW 2014). In the Central Valley, this species' nesting habitat is fragmented and more than 85 percent of known nests are within riparian systems.

Survey Results

The proposed project site is entirely disturbed and devoid of natural vegetation communities due to vineyard agriculture and ongoing disking activities and does not support suitable habitat for Swainson's hawk. Trees of a suitable size may occur within the project site at an equipment storage area on the south side of Burbank Street. However, there is a high level of disturbance from human presence and agricultural activities, and vineyards do not provide suitable foraging habitat. Swainson's hawk was not observed during the field survey of the proposed project site, but is considered to have the potential to occur on the proposed project site if small mammal prey is present within fallow fields between disking.

Mammals

American Badger

American badger (*Taxidea taxus*) is an SSC that is found in dry, open habitats including grassland and open woodland. It is a highly specialized, semi-fossorial mustelid (Quinn 2008). Suitable burrowing habitat requires dry, sandy soil. The species is largely nocturnal, and most abundant in drier open stages of most shrub, forest, and herbaceous habitats with suitable soils to support burrows (Zeiner et al. 1990). Breeding occurs in summer and early fall, with young being born from March to April. Home range requirements vary geographically and seasonally and can range from 338 acres up to 1,549 acres (Zeiner et al. 1990).

Survey Results

The proposed project site is entirely disturbed and devoid of natural vegetation communities due to vineyard agriculture and ongoing disking activities and does not support suitable habitat for American badger. However, undeveloped suitable grassland habitat occurs within the immediate vicinity of the project site and American badger could occur within the proposed project site during dispersal or nocturnal movement. American badger was not observed during the field survey of the proposed project site, but is considered to have the potential to occur within the proposed project site.

San Joaquin Kit Fox

San Joaquin kit fox (*Vulpes macrotis mutica*) is federally listed as endangered and State listed as threatened. Development of suitable kit fox habitat for intensive agricultural, oil production, and urban land uses has contributed to the decline of this species. San Joaquin kit fox occurs primarily in the San Joaquin Valley, Carrizo Plain, Panoche Valley, and from northern San Luis Obispo County north through the Salinas Valley. It inhabits valley and foothill grasslands, sparsely vegetated shrubby habitats and some agricultural and urban areas. Adult foxes are usually solitary during the late summer and fall. By September and October, adult females have begun to excavate and enlarge natal dens. Adult males join the vixens in October or November and mating probably occurs near the first of the year. Pups typically are born in late February or early March, begin foraging for themselves at about four to five months, and disperse shortly thereafter (USFWS 2010c).

San Joaquin kit fox use complex dens for shelter and protection. Most dens are located in flat terrain or the lower slopes of hills. Common locations for dens include washes, drainages, and roadside berms. San Joaquin kit foxes are reputed to be poor diggers and are usually found in areas with loose-textured, friable soils. Some studies have suggested that where hardpan layers predominate, kit foxes create dens by enlarging the burrows of California ground squirrel or American badger. They also commonly den in human-made structures such as small-diameter culverts. A diet of small rodents, such as kangaroo rats and California ground squirrels, is common for the San Joaquin kit fox (USFWS 2010c).

Survey Results

The proposed project site is entirely disturbed and devoid of natural vegetation communities due to vineyard agriculture and ongoing disking activities and does not support suitable habitat for San Joaquin kit fox. There are several recorded occurrences of this species within a five-mile radius of the proposed project site. San Joaquin kit fox was not observed during the field survey of the proposed project site, but is considered to have the potential to move through the proposed project site during dispersal, or movement from natural habitats to the east.

Critical Habitat

The proposed project site is not located within any federally designated critical habitat units or within the vicinity of any designated critical habitat. This determination is based on a review of the USFWS Critical Habitat Portal (2024).

Wildlife Movement Corridors

Wildlife movement corridors, also referred to as dispersal corridors or landscape linkages, are generally defined as linear features along which animals can travel from one habitat or resource area to another. The California Essential Habitat Connectivity Project was queried for Essential Habitat Connectivity, which is the best available data describing important areas for maintaining connectivity between large blocks of land for wildlife corridor purposes (CDFW 2010). These important areas are referred to as Essential Connectivity Areas (ECAs). ECAs are only intended to be a broad scale representation of areas that provide essential connectivity. It is expected that additional linkages will be identified as new data becomes available for various species.

The proposed project site is not located within an ECA. However, it is reasonable to assume that the Lerdo Canal, which intersects the proposed project site, may be used by wildlife as a movement corridor on a smaller scale.

4.4.3 Regulatory Setting

Federal

Endangered Species Act of 1973 *(USC, Title 16, Sections 1531 through 1543)*

The Endangered Species Act and subsequent amendments provide guidance for the conservation of listed Endangered and Threatened species and the ecosystems upon which they depend. In addition, the Endangered Species Act defines species as Threatened or Endangered and provides regulatory protection for listed species. The Endangered Species Act also provides a program for the conservation and recovery of Threatened and Endangered species, as well as the conservation of designated Critical Habitat that USFWS determines is required for the survival and recovery of these listed species.

Section 9 lists those actions that are prohibited under the Endangered Species Act. The Endangered Species Act protects federally listed wildlife species from harm or take, which is broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." Take can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species. An activity can be defined as take even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under the Endangered Species Act only if they occur on federal lands. The definition of "harm" includes significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns related to breeding, feeding, or shelter. "Harass" is defined as actions that create the likelihood of injury to listed species by disrupting normal behavioral patterns related to breeding, feeding, and shelter significantly.

Section 10 provides a means whereby a nonfederal action with the potential to result in take of a listed species can be allowed under an Incidental Take Permit (ITP). Application procedures are found at Code of Federal Regulation, Title 50, Sections 13 and 17 for species under the jurisdiction of the USFWS and Code of Federal Regulations, Title 50, Sections 217, 220, and 222 for species under the jurisdiction of the National Marine Fisheries Service (NOAA).

Endangered Species Act Sections 4(a)(3) and (b)(2) requires the designation of Critical Habitat to the maximum extent possible and prudent, based on the best available scientific data and after considering the economic impacts of any designations. Critical Habitat is defined in the Endangered Species Act Section 3(5)(A): (1) areas within the geographic range of a species that are occupied by individuals of that species and contain the primary constituent elements (physical and biological features) essential to the conservation of the species, thus warranting special management consideration or protection; and (2) areas outside of the geographic range of a species at the time of listing, but that are considered essential to the conservation of the species.

Migratory Bird Treaty Act (USC, Title 16, Sections 703 through 711)

The MBTA, first enacted in 1918, domestically implements a series of treaties between the United States and Great Britain (on behalf of Canada), Mexico, Japan, and the former Soviet Union that provide for international migratory bird protection. The MBTA authorizes the Secretary of the Interior to regulate the taking of migratory birds; the act provides that it shall be unlawful, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird…" (U.S. Code Title 16, Section 703). The current list of species protected by the MBTA includes 1,106 species and essentially includes all native birds (USFWS 2023). Permits for take of nongame migratory birds can be issued only for specific activities, such as scientific collecting, rehabilitation, propagation, education, taxidermy, and protection of human health, safety, and personal property.

Bald and Golden Eagle Protection Act of 1940 *(USC, Title 16, Section 668, enacted by 54 Statute 250)*

The Bald and Golden Eagle Protection Act of 1940 protects bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) by prohibiting the taking, possession, and commerce of these species, and establishes civil penalties for violation of this act. Take of bald and golden eagles is defined as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." To disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle; (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior (Federal Register, volume 72, page 31132; 50 CFR 22.3).

Federal Clean Water Act *(USC, Title 33, Sections 1251 through 1376)*

The federal Clean Water Act (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a federal license or permit for activities resulting in a discharge to waters of the United States. A project proponent would then obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S. Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the U.S., including wetlands. USACE implementing regulations are found at 33 CFR 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S.

Environmental Protection Agency (USEPA) in conjunction with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Draft Valley Floor Habitat Conservation Plan

The proposed project site is not located within an adopted HCP area; however, it is located within the Kern County Valley Floor HCP, which is still in First Public Draft form (dated 2006). Should this HCP be adopted, it would apply to the proposed project site.

State

California Endangered Species Act *(California Fish and Game Code Section 2050 et seq.)*

The CESA establishes the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that State agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no State agency consultation procedures under the CESA. For projects that would affect a listed species under both the CESA and the FESA, compliance with the FESA would satisfy the CESA if the CDFW determines that the federal incidental take authorization is "consistent" with the CESA under California Fish and Game Code Section 2080.1. For projects that would result in take of a species listed under the CESA only, the project proponent would have to apply for a take permit under Section 2081(b).

CEQA Guidelines, Section 15380

In addition to the protections provided by specific federal and State statutes, *CEQA Guidelines* Section 15380(d) provides that a species not listed on the federal or State list of protected species nonetheless may be considered rare or endangered for purposes of CEQA if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in the *CEQA Guidelines* primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either the USFWS or CDFW. Thus, the *CEQA Guidelines* provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not at present have legal protection of any kind, CEQA calls for an assessment of whether any such resources would be affected and requires findings of significance if there would be substantial losses. Natural communities listed by the CNDDB as sensitive are considered by the CDFW to be significant resources and fall under the *CEQA Guidelines* for addressing impacts. Local planning documents such as general plans often identify these resources, as well.

Regional Water Quality Control Board

Under Section 401 of the CWA, the RWQCB must certify that actions receiving authorization under Section 404 of the CWA also meet State water quality standards. The RWQCB also regulates waters of the State under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. The RWQCB typically requires compensatory mitigation for impacts to wetlands and/or waters of the State. The RWQCB also has jurisdiction over waters deemed 'isolated' or not subject to Section 404 jurisdiction under the Solid Waste Agency of Northern Cook County (SWANCC) v. USACE decision. Dredging, filling, or excavation of isolated waters constitutes a discharge of waste to waters of the State and prospective dischargers are required to obtain authorization through an Order of Waste Discharge or waiver thereof from the RWQCB and comply with other requirements of the Porter-Cologne Act.

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Act, waters of the State fall under the jurisdiction of the appropriate RWQCB. Under the Act, the RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Projects that affect wetlands or waters must meet waste discharge requirements of the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the CWA.

California State Fish and Game Code

Sections 1600 through 1616

Under these sections of the California Fish and Game Code, the project proponent is required to notify the CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the code, a "stream" is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. The CDFW also has jurisdiction over dry washes that carry water during storm events. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, the CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement, which becomes part of the plans, specifications, and bid documents for the project.

Sections 2080 and 2081

Section 2080 of the California Fish and Game Code states that "no person shall import into this state (California), export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission (State Fish and Game Commission) determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this

chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act." Pursuant to Section 2081 of the code, the CDFW may authorize individuals or public agencies to import, export, take, or possess State-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through permits or memoranda of understanding under the following conditions:

- The take is incidental to an otherwise lawful activity.
- Impacts of the authorized take are minimized and fully mitigated.
- The permit is consistent with any regulations adopted pursuant to any recovery plan for the species.
- The project proponent ensures adequate funding to implement the measures required by the CDFW, which makes this determination based on available scientific information and considers the ability of the species to survive and reproduce.

Sections 3503 3503.5, 3513, and 3800

Under these sections of the California Fish and Game Code, the project proponent is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey or their nests or eggs; the taking or possessing of any migratory nongame bird as designated in the MBTA; the taking, possessing, or needlessly destroying of the nest or eggs of any bird; or the taking of any nongame bird pursuant to California Fish and Game Code Section 3800.

Sections 3511, 4700, 5050 and 5515

Protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species. The CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species.

Sections 4000 through 4003

Under Section 4000 of the California Fish and Game Code, it is unlawful to conduct activities that would result in the taking, possessing, or destroying of any fur-bearing mammals, including kit foxes, without prior authorization from the CDFW.

Native Plant Protection Act *(California FGC Sections 1900 – 1913)*

California's Native Plant Protection Act (NPPA) requires all State agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification to the CDFW at least 10 days in advance of any change in land use. This allows the CDFW to salvage listed plant species that otherwise would be destroyed. The project applicant is required to conduct botanical inventories and consult with the CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

Local

Metropolitan Bakersfield Habitat Conservation Plan

The proposed project falls within the plan area boundary of the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP). The MBHCP, which expired on January 1, 2023, served as a Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the Endangered Species Act and Incidental Take Permit issued under Section 2081 of CESA by CDFW that focused on the conservation of species and habitats in the Metropolitan Bakersfield area. The MBHCP allowed permittees to obtain take of Threatened, Endangered, and Rare plant and animal species covered by the MBHCP. Regulation of take of species was authorized by the USFWS and the CDFW for lawful actions (e.g., public and private projects). The MBHCP covered take of 17 species of concern in the 261,120-acre plan area. Due to the expiration of the MBHCP as of January 1, 2023, the MBHCP will not apply to the proposed project.

Kern County General Plan (KCGP)

The proposed project site is located within the *Kern County General Plan* (KCGP). The KCGP identifies the local statutes, ordinances, or policies that govern the conservation of biological resources that must be considered by Kern County during the decision-making process for any project that could impact biological resources.

Chapter 1. Land Use, Open Space, and Conservation Element

The Land Use, Open Space, and Conservation Element of the KCGP states that the element provides for a variety of land uses for future economic growth while also assuring the conservation of the County's agricultural, natural, and resource attributes. Section 1.10, *General Provisions*, provides goals, policies, and implementation measures that apply to all types of discretionary projects.

Section 1.10 – General Provisions

Goals

Goal 1: Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving valuable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

Section 1.10.5 – Threatened and Endangered Species

Policies

Policy 27: Threatened or endangered plant and wildlife species should be protected in accordance with State and Federal laws.

Policy 28: County should work closely with State and Federal agencies to assure that discretionary projects avoid or minimize impacts to fish, wildlife, and botanical resources.

Policy 29: The County will seek cooperative efforts with local, State, and Federal agencies to protect listed threatened and endangered plant and wildlife species through the use of conservation plans and other methods promoting management and conservation of habitat lands.

Policy 30: The County will promote public awareness of endangered species laws to help educate property owners and the development community of local, State, and Federal programs concerning endangered species conservation issues.

Policy 31: Under the provisions of the California Environmental Quality Act (CEQA), the County, as lead agency, will solicit comments from the California Department of Fish and Game and the U.S. Fish and Wildlife Service when an environmental document (Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report) is prepared.

Policy 32: Riparian areas will be managed in accordance with United States Army Corps of Engineers, and the California Department of Fish and Game rules and regulations to enhance the drainage, flood control, biological, recreational, and other beneficial uses while acknowledging existing land use patterns.

Implementation Measures

Measure Q: Discretionary projects shall consider effects to biological resources as required by the California Environmental Quality Act.

Measure R: Consult and consider the comments from responsible and trustee wildlife agencies when reviewing a discretionary project subject to the California Environmental Quality Act.

Measure S: Pursue the development and implementation of conservation programs with State and Federal wildlife agencies for property owners desiring streamlined endangered species mitigation programs.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The Metropolitan Bakersfield General Plan provides guidance for reviewing agencies to review projects in the planning area. The plan includes a Conservation Element that guides decisions pertaining to protection of sensitive biological resources, including special-status plants and wildlife and sensitive habitats and vegetation communities. The element states goals for protecting these resources, including:

Chapter V - Conservation Element

A. Biological Resources

Goals

Goal 1: Conserve and enhance Bakerfield's biological resources in a manner which facilitates orderly development and reflects the sensitivities and constraints of these resources.

Goal 2: To conserve and enhance habitat areas for designated "sensitive" animal and plant species.

Policies

Policy 1: Direct development away from "sensitive biological resource" areas, unless effective mitigation measures can be implemented.

Policy 2: Discourage, where appropriate, the use of off-road vehicles to protect designated sensitive biological and natural resources.

Kern County Zoning Ordinance

Chapter 19.81, Dark Skies Ordinance (Outdoor Lighting)

In November 2011, Kern County approved a Dark Skies Ordinance. The purpose of this ordinance is to maintain the existing character of Kern County by requiring a minimal approach to outdoor lighting, recognizing that excessive illumination can create a glow that may obscure the night sky, and that excessive illumination or glare may constitute a nuisance. The ordinance provides requirements for outdoor lighting within specified unincorporated areas of Kern County in order to accomplish the following objectives:

Objective 1: Encourage a safe, secure, and less light-oriented night-time environment for residents, businesses and visitors.

Objective 2: Promote a reduction in unnecessary light intensity and glare, and to reduce light spillover onto adjacent properties.

Objective 3: Protect the ability to view the night sky by restricting unnecessary upward projections of light.

Objective 4: Promote a reduction in the generation of greenhouse gases by reducing wasted electricity that can result from excessive or unwanted outdoor lighting.

Kern County Development Standards

The Kern County Development Standards have specific regulations pertaining to lighting standards, including the requirement that lighting must be designed so that light is reflected away from surrounding land uses so as not to affect or interfere with vehicular traffic, pedestrians, or adjacent properties.

4.4.4 Impacts and Mitigation Measures

This section describes the impact analysis relating to biological resources for the proposed project. It describes the methods used to determine the impacts of the proposed project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, where applicable.

Methodology

Literature Search

Potential species of concern that may occur on the proposed project site, and the probability for occurrence of each species, are provided in **Table 4.4-1,** *Special-Status Plant Species with the Potential to Occur on the Proposed Project Site* and **Table 4.4-2,** *Special-Status Wildlife Species with the Potential to Occur on the Proposed Project Site*. These lists are based upon the results of a desktop database search of the CNDDB, USFWS, and CNPS for the Oildale U.S. USGS 7.5-minute topographic quadrangle and the eight surrounding quadrangles (CDFW 2023b). The biological screening and constraints analysis prepared by Mesa Biological, LLC (Mesa Biological, LLC, 2020) for the proposed project site was used as the basis for analysis provided in this section.

Field Evaluation

A biologist from Mesa Biological, LLC conducted a biological reconnaissance survey on the proposed project site from August 14th through 16th, 2019. The focus of the survey was to map the existing vegetative communities, document any rare plant or animal occurrences, and identify any other potential biological constraints that may affect future development of the proposed project site. A complete list of plant and wildlife species observed in the proposed project study area is included in Appendix F.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on biological resources if it would:

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 CDFW or USFWS;

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 CDFW or USFWS;

c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

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;

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or,

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.

Project Impacts

Impact 4.4-1: The Project Would 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 Wildlife or U.S. Fish and Wildlife Service.

Special-Status Plants

Based on the IPaC, CNDDB, and CNPS records searches, literature review, and Mesa Biological, LLC's survey of the area, 18 special-status plant species were evaluated for potential occurrence on the proposed project site (refer to **Table 4.4-1**, *Special-Status Plant Species with the Potential to Occur on the Proposed Project Site*). As discussed previously and shown on **Figure 4.4-1**, *Habitat Map*, no natural habitats exist within the project site, and the site consists of active vineyards and fallow fields. No listed plant species were observed during the survey. Due to the isolated nature of the project site, historical land use, lack of nearby source populations of native special-status species, and proximity to development, the potential for occurrence of many of the State or federally listed or special-status plant species is considered unlikely. The site is either actively managed agriculture or subject to regular disking to prevent overgrowth of weeds that minimizes the establishment of native plants. The existing conditions on the proposed project site do not provide suitable conditions for any of the evaluated special-status plant species, none were observed on the property, and none are expected to occur due to the absence of suitable habitat and ongoing level of disturbance at the proposed project site. Therefore, implementation of the proposed project would not result in impacts to special-status plant species under current conditions. Implementation of Mitigation Measure **MM 4.4-5** (which requires a pre-construction survey be conducted prior to construction and, if any special-status plants are identified as part of this survey, consultation with CDFW or USFW to occur if required by applicable law) would reduce this impact to be less than significant.

Special-Status Animals

The literature review identified 24 special-status wildlife species that have the potential to occur or have recorded occurrences in the vicinity of the proposed project site. Of the 24 special-status wildlife species identified in **Table 4.4-2,** *Special-Status Wildlife Species with the Potential to Occur on the Proposed Project Site*, the following six special-status animal species were determined to have the potential to occur on the proposed project site based on the presence of suitable habitat on the proposed project site and the proximity to known historical records: California glossy snake, San Joaquin coachwhip, burrowing owl, Swainson's hawk, American badger, and the San Joaquin kit fox. Implementation of the proposed project could result in direct and indirect impacts to these special-status animal species, if present, during the temporary construction and permanent operational phases of the proposed project.

No sign of occupation in the form of direct observation, sign of scat, track, nests, burrows (natural and atypical) was observed. Due to the level of human activity, isolated nature of the project site, historical land use, lack of nearby source populations of native special-status species, and proximity to development, the potential for occurrence of special-status species is low. However, the six special-status species with the potential to occur are highly mobile, and occasionally occur transiently in marginal or unsuitable habitats

during dispersal or far-ranging movements. Potential construction and operational impacts to special-status species are described below.

Construction

Construction of the proposed project could result in direct impacts to special-status animal species in the form of injury or mortality associated with the use and movement of construction equipment and materials, construction debris, vegetation removal, and worker foot traffic. Potential indirect impacts to these species include degradation of suitable habitat offsite resulting from ground disturbance, erosion, sedimentation, and modification of existing drainage patterns; and disturbance from construction activities, such as noise, vibration, and dust, which may irritate these species and cause them to leave burrows and/or nests and migrate to adjacent work areas where they may be more susceptible to predation and/or direct impacts from construction activities. Construction of the proposed project could result in potentially significant impacts to these special-status species, if present. Implementation of Mitigation Measures **MM 4.4-1 through MM 4.4-5**, included below, would reduce potential construction impacts to these species to be less than significant.

Operation

The developed project site would not support suitable habitat for any special-status species, with the exception of potential foraging and nesting habitat in landscaped trees and vegetation for migratory birds. The site would be surrounded by unchanged agricultural use, including vineyards and orchards, SR 99, and the Lerdo Canal. Operation of the proposed project would introduce a large number of employee vehicles and distribution trucks travelling to, within, and from the proposed project site on a daily basis in addition to other operational activities to be determined based on the end user of the site. Operation of the proposed project could result in indirect impacts to special-status animal species, if present, in the form of increased ambient noise levels, dust, and new sources of light and glare. Implementation of mitigation measures **MM 4.1-1 and MM 4.1-4** as described in Section 4.1 *Aesthetics* of this EIR, would require approval from Kern County Planning and Natural Resources Department for color schemes and treatments, as well as a lighting plan which would reduce impacts from new sources of light and glare. If present adjacent to the proposed project site, special-status species are expected to migrate away from the proposed project area if disturbed by proposed project operations. Therefore, operational impacts are expected to be less than significant.

Mitigation Measures

MM 4.4-1: Prior to the issuance of grading or building permits, the project operator shall retain a Lead Biologist(s) who meets the qualifications of an Authorized Biologist as defined by California Department of Fish and Wildlife (CDFW) Service to oversee compliance with protection measures for all listed and other special-status species that may be affected by the construction and operation of the project. The resume and contact information for the Lead Biologist(s) shall be provided in writing to the Planning and Natural Resources Department.

The following measures pertain to the Lead Biologist(s):

a. The Lead Biologist(s), or their designee, shall be on the project site during all construction activities which include, but are not limited to, installation of perimeter fencing, clearing of vegetation, grading activities, and facility construction.

b. The Lead Biologist(s) or their designee shall have the right to halt all activities that are in violation of the special-status species protection measures, as well as any regulatory permits from the U.S. Fish and Wildlife Service and/or the California Department of Fish and Wildlife, if applicable. Work shall proceed only after hazards to special-status species are removed and the species is no longer at risk.

MM 4.4-2: Prior to the issuance of grading or building permits, the Lead Biologist shall develop a Worker Environmental Awareness Training Program containing life history and identification information of special-status wildlife and plant species with potential to occur on site. The Worker Environmental Awareness Training Program shall review responsibilities for all on-site personnel including trash control, checking under and around vehicles and heavy equipment before starting, scanning for wildlife resources, contacting the Lead Biologist in the unanticipated instance of encountering special status wildlife species, and prohibition of pets and firearms. All on-site personnel shall be required to attend a worker environmental training. A sticker shall be placed on hard hats, indicating that the worker has completed the Worker Environmental Awareness Training. Copies of all prepared materials including, but not limited to, PowerPoint presentations, videos, information handouts and signed acknowledgement from each worker who has attended the required training shall be provided to the Planning and Natural Resources Department.

MM 4.4-3: During construction of the project site, the project proponent and/or contractor(s) shall implement the following general avoidance and protective measures:

a. Immediately prior to conducting vegetation clearing or similar activities, the Lead Biologist or their designee shall perform a pre-construction visual survey of the area to ensure that no special-status species are present. Daily reports of these inspections shall be retained by the Lead Biologist and provided to the Kern County Planning and Natural Resources Department, U.S. Fish and Wildlife Service, or California Department Fish and Wildlife upon request.

b. Within the vicinity of any construction activities, sensitive biological resources (i.e., special-status species, jurisdictional drainages, nesting birds, etc.) shall be delineated with stakes and/or flagging.

c. All construction activities shall be confined within the project construction area, which may include temporary access roads, haul roads, and staging areas specifically designated and marked for these purposes. At no time shall equipment or personnel be allowed to adversely affect areas outside the project site.

d. Any spoils shall be stockpiled in disturbed areas that lack native vegetation to the maximum extent practicable. Spoils that have been stockpiled and inactive for more than 24 hours shall be inspected by a qualified biologist for signs of special-status wildlife before moving or disturbing.

e. To prevent inadvertent entrapment of San Joaquin kit foxes, American badgers, or other animals during construction, all excavated steep-walled holes or trenches more than two (2) feet deep shall be covered with plywood or similar materials at the close of each working day. If holes or trenches cannot be covered, one or more escape ramps constructed of earthen fill or wooden planks, no less than 12 inches wide and secured at the top, shall be placed a minimum of every 100 feet within the open trench. Covered and non-covered holes or trenches shall be thoroughly inspected for trapped animals by a qualified biologist at the beginning and end of each working day. Immediately before such holes or trenches are filled, they shall again be thoroughly inspected by trained Staff approved by the Lead Biologist. If any trapped animals are observed, escape ramps or structures shall be installed immediately to allow for their escape. If a listed species is trapped, the Lead Biologist shall immediately confer with the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife.

f. All construction pipes, culverts, or similar structures with a diameter of four (4) inches or greater that are stored at the site for more than 24 hours and without endcaps shall be thoroughly inspected by a qualified biologist prior to being moved or capped. If a listed wildlife species is discovered inside a pipe, that section of pipe shall not be moved until a qualified biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated in conformance with appropriate wildlife agency guidelines.

g. No construction vehicle or equipment parked on the project site shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of listed wildlife species. If present, the animal shall be left to move on its own.

h. A speed limit of 15 miles per hour shall be enforced within the limits of the project site. If night work occurs on the project site, the speed limit will be 10 miles per hour.

i. Fueling of construction equipment shall take place within existing roads or disturbed areas. No refueling within or adjacent to drainages (within 150 feet) shall be permitted. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary.

j. Trash and food items shall be contained in closed containers to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs.

k. Workers shall be prohibited from bringing pets and firearms to the project site and from feeding wildlife.

l. Intentional killing or collection of any listed plant or wildlife species shall be prohibited.

m. Herbicides that may be used as vegetation control measures in project areas shall be applied in accordance with Mitigation Measure MM 4.2-4. All uses of such herbicidal compounds shall observe label and other restrictions mandated by the U.S Protection Agency, California Department of Food and Agriculture, and state/federal legislation as well as additional project related restrictions deemed necessary by the U.S. Fish and Wildlife Service or California Department of Fish and Wildlife.

MM 4.4-4: No more than (30) days prior to the issuance of any grading or building permits or the start of ground disturbance, a qualified biologist knowledgeable in the identification of all special-status wildlife species shall conduct a pre-construction survey of areas proposed for disturbance within the project site and 500-foot buffer (where legally accessible) to determine if any special-status species are present. If, as a result of this pre-construction survey it is determined that special-status wildlife species are present, the project proponent shall confer with the U.S. Fish and Wildlife Service or California Department of Fish and Wildlife, as required by applicable law, for proper avoidance measures or the need for take authorization through the acquisition of an incidental take permit, pursuant to Fish and Game Code section 2081 subdivision (d).

MM 4.4 5: No more than thirty (30) days prior to the start of ground disturbance activities or issuance of any grading or building permits, a qualified biologist knowledgeable on the identification of rare plant species shall conduct a pre-construction plant survey of areas of proposed disturbance within the project site and 100-foot buffer (where legally accessible) to determine if any special-status plant species are present. If special-status plants are identified on-site, their locations shall be mapped and the project proponent shall confer with CDFW or USFWS as required by applicable law to facilitate salvage or seed collection.

Level of Significance after Mitigation

Impacts would be less than significant with implementation of mitigation measures **MM 4.1-1**, **MM 4.1-4**, and **MM 4.4-1** through **MM 4.4-5**.

Impact 4.4-2: The Project Would 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 Wildlife or U.S. Fish and Wildlife Service.

A portion of the project site is in active agricultural production (table grapes/vineyard) and based on biological field surveys, no undisturbed habitat exists within the site. Based on the results of the CNDDB database query for the proposed project site, no sign of any bed, bank, channel, or constituent elements were present at the project site that would indicate wetlands or wetland features present. No evidence of potential wetland habitat was present on-site near the Lerdo Canal, which divides the project site. Based on the results of the USFWS NWI Mapper query for the proposed project site, a one-acre freshwater emergent wetland is mapped as occurring within the proposed project site; however, this feature is an agricultural irrigation pond (USFWS 2022). The proposed project site is not located within designated critical habitat.

Mesa Biological, LLC conducted a biological reconnaissance survey of the proposed project site from August 14th through 16th, 2019. The results of the reconnaissance survey concluded that no undisturbed habitat exists within the project site, and it currently exists as active grape vineyards and fallow fields subject to regular disturbance in the form of disking. The reconnaissance survey indicated that the area identified by the USFWS NWI Mapper did not support any indicators of hydrology or hydrophytic soil. Therefore, due to the absence of hydrologic indicators, hydrophytic soil, and dominant hydrophytic vegetation detected during the reconnaissance survey, Mesa Biological, LLC has concluded the proposed

project site does not support wetland habitat. The proposed project site does not support designated critical habitat, riparian habitat, wetland habitat, or other sensitive natural communities; therefore, the proposed project would have no impact on these resources and mitigation measures are not necessary.

Mitigation Measures

Mitigation measures are not required.

Level of Significance after Mitigation

Impacts would be less than significant.

Impact 4.4-3: The Project Would Have a Substantial Adverse Effect on State or Federally Protected Wetlands (Including, but not Limited to, Marsh, Vernal Pool, Coastal, Etc.) Through Direct Removal, Filling, Hydrological Interruption, or Other Means.

Refer to impact 4.4-2, above. Based on the results of the biological reconnaissance survey conducted by Mesa Biological, LLC on August 14th through 16th, 2019, the area identified by the USFWS NWI Mapper did not support any indicators of hydrology or hydrophytic soil. Therefore, due to the absence of hydrologic indicators, hydrophytic soil, and dominant hydrophytic vegetation detected during the reconnaissance survey, Mesa has concluded the proposed project site does not support wetland habitat. Implementation of the proposed project would have no impact on federally protected wetlands as defined by Section 404 of the Clean Water Act.

Mitigation Measures

Mitigation measures are not required.

Level of Significance after Mitigation

Less than significant.

Impact 4.4-4: The Project Would 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.

The California Essential Habitat Connectivity Project was queried for Essential Habitat Connectivity, which is the best available data describing important areas for maintaining connectivity between large blocks of land for wildlife corridor purposes (CDFW 2010). These important areas are referred to as ECAs. ECAs are only intended to be a broad scale representation of areas that provide essential connectivity. It is expected that additional linkages will be identified as new data becomes available for various species. According to the existing data, the proposed project site is not located within or adjacent to a designated ECA. Furthermore, no nursery, rookery, maternal colony, or any other representative important source of refuge for wildlife or fish are present on-site or in adjacent lands. Given the location, proximity to urban

development and predominantly developed lands in the region, no such wildlife or fish features exist on adjacent lands and migratory or natural movement is not likely to be impeded based on the development of this site (Mesa Biological, LLC, 2020). Therefore, based on the biological reconnaissance survey, there are no wildlife corridors or nursery sites present within the proposed project site; therefore, impacts would be less than significant.

Mitigation Measures

Mitigation measures are not required.

Level of Significance after Mitigation

Less than significant.

Impact 4.4-5: The Project Would Conflict with any Local Policies or Ordinances Protecting Biological Resources, Such as a Tree Preservation Policy or Ordinance.

There are no known local policies or ordinances protecting biological resources located within the project site and vicinity. The County tree protection requirements focus on street trees, which are not on the project site. Therefore, impacts would be less than significant.

Mitigation Measures

Mitigation measures are not required.

Level of Significance after Mitigation

Less than significant.

Impact 4.4-6: The Project Would Conflict With the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan.

The proposed project site is not located within an adopted Habitat Conservation Plan Area; however, it is located within the expired Metropolitan Bakersfield Habitat Conservation Plan (MBHCP). If the MBHCP is renewed, the project would abide by its requirements, including payment of a habitat mitigation fee (if required) and conducting a biological clearance survey. The project site is also within the Draft Kern County Valley Floor Habitat Conservation Plan area, which is still in "First Public Draft" form. The Draft Kern County Valley Floor Habitat Conservation Plan has not been adopted and has been in draft form for over ten years. Should this Habitat Conservation Plan be adopted prior to project approval, it would apply to the project site, but to assume adoption of this plan would be speculative. For all the reasons discussed above, the proposed project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, and impacts would be less than significant.

Mitigation Measures

Mitigation measures are not required.

Level of Significance after Mitigation

Less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts to biological resources includes all projects within a six-mile radius of the proposed project site. Analysis of cumulative impacts takes into consideration the entirety of impacts that the projects, zone changes, and the general plan amendments previously discussed would have on biological resources. This geographic scope of analysis is appropriate because, although impacts associated with the proposed project would primarily be localized to the disturbance areas, losses of vegetation or fragmentation of wildlife corridors could combine with similar impacts of other projects beyond these limited impact areas.

As noted above, no undisturbed habitat exists within the project site. No evidence of any sensitive vegetation community defined by State and/or federal regulatory agencies, nor undisturbed, native plant habitat was found on the proposed project site during field reconnaissance. Several sensitive animal species listed by federal and/or State regulatory agencies are considered to have the potential to occur in the vicinity of the proposed project site.

As discussed in Section 3.10, *Cumulative Projects*, of this EIR, cumulative projects within a six-mile radius of the proposed project site include commercial, industrial and residential uses. These developments would further reduce availability of potentially suitable habitat for special-status and common plants and wildlife, fragment wildlife corridors, and could contribute to construction-related impacts and displace special-status and common wildlife. When considered cumulatively on a regional scale, these impacts could be potentially significant. Based upon the foregoing information, impacts associated with the proposed project, in combination with impacts of past, present, and reasonably foreseeable projects, could result in a potentially significant cumulative impact.

However, with the implementation of proposed Mitigation Measures **MM 4.4-1** through **MM 4.4-5**, which include preconstruction biological surveys, species awareness training and other avoidance and minimization measures, proposed project impacts to biological resources would be reduced to less-than-significant levels. Additionally, Mitigation Measure **MM 4.4-4** and **MM 4.4-5** requires coordination with the CDFW and USFWS to obtain any necessary permits and to ensure any potential impacts to special-status biological resources will be effectively avoided and/or minimized. Implementation of mitigation measures **MM 4.1-1** and **MM 4.1-4** as described in Section 4.1 *Aesthetics* of this EIR, would reduce impacts from new sources of light and glare.

Implementation of Mitigation Measures **MM 4.1-1**, **MM 4.1-4** and **MM 4.4-1** through **MM 4.4-5** is anticipated to reduce the potential for impacts to biological resources that could occur as a result of the

proposed project to a less-than-significant level. Any other past, present, or future projects in the vicinity are also obligated to mitigate their own direct project effects to biological resources. Therefore, implementation of the proposed project is not expected to contribute to cumulative impacts to biological resources in the proposed project vicinity. The incremental effects of the proposed project in combination with other projects in the vicinity would not create cumulatively considerable impacts to biological resources.

Mitigation Measures

Implementation of mitigation measures **MM 4.4-1** through **MM 4.4-5** and mitigation measures **MM 4.1-1** and **MM 4.1-4** as described in Section 4.1, *Aesthetics* of this EIR, would be sufficient to reduce cumulative impacts to be less than significant. No additional mitigation measures are required.

Level of Significance after Mitigation

Impacts would be less than significant with implementation of mitigation measures **MM 4.1-1**, **MM 4.1-4** and **MM 4.4-1** through **MM 4.4-5**.

No additional mitigation measures are proposed.

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Section 4.5

Cultural Resources

Section 4.5

Cultural Resources

4.5.1 Introduction

This section of the Environmental Impact Report (EIR) provides contextual background information on cultural resources that may exist in the proposed project site, including the site's prehistoric, ethnographic, and historical settings of the region. This section also summarizes the results of cultural surveys of the proposed project area, analyzes the proposed project's potential impacts on cultural resources, and identifies mitigation measures, as necessary, to address adverse impacts.

The analysis in this section is based on the *Phase I Cultural Resource Survey, Malibu Vineyards GPA/ZC, Kern County, California* (Hudlow Cultural Resource Associates 2023; included in Appendix G of this EIR), and all citations included in this section can be referenced in the technical report. The evaluation was conducted in compliance with Section 5024.1 of the California Public Resources Code (PRC) and the California Environmental Quality Act (CEQA) to identify archaeological, historic built architectural, and other potential cultural resources in the proposed project area. Due to the confidential nature of the location of cultural resources, information regarding locations of cultural resources have been removed from the report and are not included in the appendix.

Cultural Resource Terminology

For the purposes of CEQA, "cultural resources" generally refer to prehistoric and historical archaeological sites and the built environment. Cultural resources can also include areas determined to be important to Native Americans. Below are definitions of key cultural resources terms used in this section.

- **Alluvium:** A fine-grained fertile soil consisting of mud, silt, and sand deposited by flowing water on flood plains, in riverbeds, and in estuaries.
- **Archaeological Site:** A place or places where the remnants of a past culture survive in a physical context that allows for the interpretation of these remains. Archaeological remains usually take the form of artifacts (e.g., fragments of tools, vestiges of utilitarian or non-utilitarian objects), features (e.g., remnants of walls, cooking hearths, or midden deposits), and ecological evidence (e.g., pollen remaining from plants that were in the area when the activities occurred). Prehistoric archaeological sites generally represent the material remains of Native American groups and their activities dating to the period before European contact. In some cases, prehistoric sites may contain evidence of trade contact with Europeans. Ethnohistoric archaeological sites are defined as Native American settlements occupied after the arrival of European settlers in California. Historic archaeological sites reflect activities during the Historic Period.
- **Artifact:** An object that has been made, modified, or used by a human being, typically of cultural or historical interest.

- **Cultural Resource:** A location of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. Cultural resources include archaeological resources and built environment resources (sometimes known as historic architectural resources), and may include sites, structures, buildings, objects, artifacts, works of art, architecture, and natural features that were important in past human events. They may consist of physical remains or areas where significant human events occurred, even though evidence of the events no longer remains. Cultural resources also include places that are considered to be of traditional cultural or religious importance to social or cultural groups.
- **Ethnographic:** Relating to the study of humans and cultures. "Ethnographic resources" represent the heritage resource of a particular ethnic or cultural group, such as Native Americans or African, European, Latino, or Asian immigrants. They may include traditional resource-collecting areas, ceremonial sites, value imbued landscape features, cemeteries, shrines, or ethnic neighborhoods and structures.
- **Historic Period:** The period that begins with the arrival of the first non-native population and thus varies by area. In 1772, Commander Don Pedro Fages was the first European to enter Kern County, initiating the historic period in the proposed project study area.
- **Historical Resource:** This term is used for the purposes of CEQA and is defined in the *CEQA Guidelines* (Section 15064.5) as: (1) a resource listed in, or determined to be eligible for listing in the California Register of Historical Resources (CRHR); (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.
- **Holocene:** Of, denoting, or formed in the second and most recent epoch of the Quaternary period, which began 10,000 years ago at the end of the Pleistocene.
- **Isolate:** An isolated artifact or small group of artifacts that appear to reflect a single event or activity. Since isolates may lack identifiable context and may not have the potential to add important information about a region, culture, or person, they are generally not considered under CEQA to be historical or unique archaeological resources (PRC Section 21083.2 and *CEQA Guidelines* Section 15064.5(c)(4)).
- **Lithic:** Of or pertaining to stone. Specifically, in archaeology lithic artifacts are chipped or flaked stone tools, and the stone debris resulting from their manufacture.
- **Pleistocene (Ice Age):** An epoch in the Quaternary period of geologic history lasting from 1.8 million to 10,000 years ago. The Pleistocene was an epoch of multiple glaciations, during which continental glaciers covered nearly one fifth of the earth's surface.
- **Prehistoric Period:** The era prior to 1772. The later part of the Prehistoric Period is also referred to as the Protohistoric Period in some areas, which marks a transitional period during which native populations began to be influenced by European presence resulting in gradual changes to their lifestyles.

- **Quaternary Age:** The most recent of the three periods of the Cenozoic Era in the geologic time scale of the International Commission on Stratigraphy (ICS). It follows the Tertiary Period, spanning 2.588 ± 0.005 million years ago to the present. The Quaternary includes two geologic epochs: the Pleistocene and the Holocene Epochs.
- **Stratigraphy:** The analysis of the order and position of natural and cultural layers of soil that make up an archaeological deposit, and the order in which they were deposited relative to other layers.
- **Tribal Cultural Resource (TCRs):** These are defined in AB 52 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either "included or determined to be eligible for inclusion in the CRHR or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1" (PRC Section 21074 (a)(1)). Refer to Section 4.16, *Tribal Cultural Resources*, of this Draft EIR for further discussion.
- **Unique Archaeological Resource:** This term is used for the purposes of CEQA and is defined in PRC Section 21083.2(g) as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it either contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; has a special and particular quality such as being the oldest of its type or the best available example of its type; or is directly associated with a scientifically recognized important prehistoric or historic event or person.

4.5.2 Environmental Setting

Natural Setting

The San Joaquin Valley is bounded by the Sacramento-San Joaquin River Delta to the north, the Sierra Nevada to the east, the Tehachapi Mountains to the south, and the Pacific Coast Range to the west. The western slope of the Sierra Nevada Mountains is the source for rivers and streams that cross the San Joaquin Valley.

Kern County is relatively dry, receiving approximately nine inches of rain annually, with the 52 percentile of annual rainfall occurring in spring. The project vicinity experiences high temperatures (85 degrees and up) for at least two months out of the year (July and August), with an average temperature of 86 degrees Fahrenheit during these months. The area experiences moderate average temperatures (65 to 85 degrees Fahrenheit) from April to June and September to October, and cooler average temperatures (below 65 degrees Fahrenheit) from November through March.

The surrounding vicinity is predominately utilized for agriculture. The proposed project site is located in a relatively flat portion of the valley floor, ranging in elevation from approximately 400 to 500 feet above mean sea level (msl). The proposed project site consists of vineyards and vacant, undeveloped land that has been disked. A review of historic aerial maps indicates the site has been used for grape vineyards

since at least 2003. Surrounding properties consist of agricultural uses, industrial uses, and vacant land. The proposed project area is entirely comprised of ruderal/disturbed land. The Lerdo Canal flows southeast to northwest along the western boundary of Phase 1 and eastern boundary of Phase 2, dividing the two phases of the project. SR 99 is located along the west side of the proposed project site. Surrounding roads are mostly dirt roads used for agriculture. The project site can be accessed from Saco Road, future Burbank Street and Imperial Avenue.

Ethnographic Setting

The proposed project area lies within the previous territory of the Southern Valley Yokuts. At the time of initial European contact, the Yokuts comprised 40 to 60 named subgroups, or tribelets, that inhabited all of the San Joaquin Valley and the foothills of the western slope of the Sierra Nevada (Arkush 1993:620). Ethnographers have traditionally divided the Yokuts culture into Northern Valley, Southern Valley, and Foothills divisions, based on geography. The majority of the following information is excerpted from Wallace (1978), except where otherwise noted.

The territory of the Southern Valley Yokuts included Tulare, Buena Vista, and Kern Lakes; their connecting sloughs; and the lower portion of the Kings, Kaweah, Tule, and Kern Rivers. The southern San Joaquin Valley received only 5 to 10 inches of rain annually, but drainages on the valley's eastern flank had consistent waterflow from snowmelt from the Sierra Nevada Mountains, which created extensive swamps and marshlands that provided an enormous variety and abundance of wildlife and aquatic flora. This abundance of subsistence resources allowed the Yokuts to enjoy greater material wealth such as fish, tule and sedentary lifestyle than most other ethnographically documented groups.

The Southern Valley Yokuts' diet was diverse and relied on fishing, hunting waterfowl, and collecting shellfish, roots, and seeds. Most of their region was treeless except for the cottonwoods, sycamores, and willows that lined the river channels and sloughs. Oaks did not extend very far onto the valley floor and, therefore, acorns were not readily available. Acorns and pine nuts, however, were obtained through trade with neighboring groups. Southern Valley Yokuts pursued small game but rarely ventured into the open country to capture antelope or elk. However, they did opportunistically hunt the larger mammals when they came to the lakes and sloughs for water. Arkush (1993) believes that the valley's abundant resources allowed some Yokuts groups to intermittently acquire food surpluses, which allowed them to develop simple surplus economies without the benefit of domesticated plants or animals.

The Yokuts were extremely active traders of alfilaria, shells, obsidian, animal skins, and baskets, and there is evidence that some Yokuts individuals were professional traders (Arkush 1993:623). Marine shells were secured via trade with coastal peoples and used for currency and personal adornment. This regular contact with neighboring and distant groups, along with relative sedentism, craft specialization, and a surplus economy, allowed the Yokuts political and social organization to become more complex than most other California native groups.

Single-family residences were constructed of stick frames that were covered with mats made from tule reeds. Some groups, using the same materials, built distinctive long, steep-roofed communal houses that could shelter ten or more individuals. Additionally, each village had a communally owned sweathouse. The men did their daily sweating and occasionally slept there.

Tule, which was abundant along the river channels, provided the basis for their highest technological skill—basket weaving. Yokut baskets varied in shape and use and included bowl-shaped cooking containers, conical burden baskets, flat winnowing trays, seed beaters, and a unique-necked water bottle. Canoe-shaped rafts that could hold six people and their belongings were constructed of dried tule, which enabled efficient travel and trade along waterways. In contrast, wood and stone crafts were relatively undistinguished, and finished items made from these materials were often obtained by trade.

The Yokuts were divided into self-governing local groups or tribelets, each with a distinct dialect and territory and averaging about 300 members in size (Kroeber 1925:474). In most cases, each tribelet occupied several settlements, one of which was a relatively large, dominant village led by a central chief. Captains or sub-chiefs often ruled the smaller satellite settlements. These offices were usually attainable only through patrilineal inheritance (Arkush 1993:622; Gayton 1945:417). Generally, Yokuts groups were peaceful, but occasional warfare did break out. Fighting occurred on a small scale and very little ritual was attached to warfare.

The initial contact between the Yokuts and the Spaniards occurred in the fall of 1772, when a small military party led by Captain Pedro Fages crossed the Tejon Pass into the southern San Joaquin Valley in search of Spanish deserters. At this time, Fages visited the village of Tulamniu, on the northwest shore of Buena Vista Lake (Arkush 1993:623). Over the next several decades, only a small number of Southern Valley Yokuts came under the control of the coastal Franciscan missionaries; however, significant impacts to their culture resulted from infiltration of natives who had escaped from the missions. Foreign practices introduced by these runaways contributed to the erosion of traditional Yokuts lifestyles. Complete cultural breakdown and near-total disappearance of native peoples from the San Joaquin Valley came with the annexation of California by the United States and the resulting rapid increase in Euro-American populations. Because of the early and rapid decimation of the Southern Valley Yokuts, and the rapid collapse of their culture, there is relatively little published literature that describes them, and ethnographic descriptions obtained from aged informants is incomplete. However, it is clear that some Yokuts remained in the area, as evidenced by limited information gleaned from multiple sources.

Today, some Southern Valley Yokuts continue to reside in the area, with reservations established in 1921 at Santa Rosa Rancheria and Table Mountain Rancheria in 1916. The Carrizo Plain contains sites of particular religious significance for the Southern Valley Yokuts and tribe members continue to visit the rock art sites located within the Carrizo Plain National Monument.

Prehistoric Setting

Despite decades of archaeological research in the San Joaquin Valley, the prehistory of the region remains poorly understood. Limited archaeological research has been conducted in the southern San Joaquin Valley. Consensus on a generally agreed upon regional cultural chronology has yet to be developed. Most cultural sequences can be summarized into several distinct time periods: Early, Middle, and Late. Sequences differ in their inclusion of various "horizons," "technologies," or "stages." A prehistoric archaeological summary of the southern San Joaquin Valley is available in Moratto (Moratto 1984). Despite the preoccupation with chronological issues in most of the previous research, most suggested chronological sequences are borrowed from other regions with minor modifications based on sparse local data. The following chronology is based on Parr and Osborne's Paleo-Indian, Proto-Archaic, Archaic, Post-Archaic periods (Parr and Osborne 1992:44-47). Most existing chronologies focus on stylistic

changes of time-sensitive artifacts such as projectile points and beads rather than addressing the socioeconomic factors, which produced the myriad variations. In doing so, these attempts have encountered similar difficulties. These cultural changes are implied as environmentally determined, rather than economically driven.

Paleo-Indian Period (12,000 Years Ago)

Human occupation in central California dates to at least the terminal Pleistocene, or almost 12,000 years ago, and some of the most substantial evidence from this period has been found in the southern portion of the San Joaquin Valley. The primary time marker for sites dating to this period is the fluted and basally thinned projectile point, which appears to be limited to late Pleistocene and very early Holocene sites. In the vicinity of the proposed project area, fluted points have been collected from surface sites on the Pleistocene shores of Buena Vista, Kern, and Tulare Lakes. Most Paleoindian period sites in California represent the remains of single-use encampments, and their assemblage of temporally diagnostic artifacts is generally limited to only one or two fluted points.

Proto-Archaic (11,000 to 8,000 Years Ago)

The Proto-Archaic period, which dates from approximately 11,000 to 8,000 years ago, was characterized by a reduction in mobility and conversely an increase in sedentism. This period is classified as the Western Pluvial Lake Tradition or the Proto-Archaic, of which the San Dieguito complex is a major aspect (Moratto 1984: 90-99; Warren 1967). An archaeological site along Buena Vista Lake in southwestern Kern County displays a similar assemblage to the San Dieguito type-site. Claude Warren proposes that a majority of Proto-Archaic southern California could be culturally classified as the San Dieguito Complex (Warren 1967). The Buena Vista Lake site yielded manos, millingstones, large stemmed and foliate points, a mortar, and red ochre. During this period, subsistence patterns began to change. Hunting focused on smaller game and plant collecting became more integral. Large stemmed, lancelote (foliate) projectile points represent lithic technology. Millingstones became more prevalent. The increased sedentism possibly began to create regional stylistic and cultural differences not evident in the paleo period.

Archaic (4,000 to 6,000 Years Ago)

The Archaic period persisted in California for the next 4000 years. In 1959, Warren and McKusiak proposed a three-phase chronological sequence based on a small sample of burial data for the Archaic period (Moratto 1984:189; Parr and Osborne 1992:47). It is distinguished by increased sedentism and extensive seed and plant exploitation. Millingstones, shaped through use, were abundant. Manos and metates were the most prevalent types of millingstones (Parr and Osborne 1992:45). The central valley began to develop distinct cultural variations, which can be distinguished by different regions throughout the valley, including Kern County.

Post-Archaic (1,000 to 3,000 Years Ago)

In the Post-Archaic period enormous cultural variations began manifesting themselves throughout the entire San Joaquin Valley. This period extends into the contact period in the seventeenth, eighteenth and nineteenth centuries. Sedentary village life was emblematic of the Post-Archaic period, although hunting

and gathering continued as the primary subsistence strategy. Agriculture was absent in California, partially due to the dense, predictable, and easily exploitable natural resources. The ancestral Yokuts have possibly been in the valley by the sixteenth or seventeenth century, and by the eighteenth century were the largest pre-contact population, approximately 40,000 individuals, in California (Moratto 1984).

Historic Context

Early Exploration

Post-contact history for the state of California is generally divided into three periods: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). Although there were brief visits by Spanish, Russian, and British explorers from 1529 to 1769, the beginning of Spanish settlement in California occurred in 1769 with a settlement at San Diego, Mission Basilica San Diego de Alcalá. This was the first of 21 missions that the Franciscans established in Alta California between 1769 and 1823. The Mexican period began in 1822 when word of the successful revolution against the Spanish crown reached California. The Mexican period is marked by extensive land grants, most of which were in the interior of the state, and exploration by American fur trappers west of the Sierra Nevada Mountains. With the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, California became a territory of the United States.

Kern County

The written history of Kern County began during the Spanish period. In 1772, Pedro Fages, acting governor of Alta California, became the first European to travel to the area. Beginning in today's Imperial Valley, Fages crossed Tejon Pass in the Tehachapi Mountains into Grapevine Canyon, and entered the San Joaquin Valley, all in pursuit of Spanish Army deserters (Hoover et al. 2002:126). Four years later, Francisco Garcés, a Franciscan friar, entered the area from the south. Garcés named a large river, Río de San Felipe, now known as the Kern River.

During the Mexican period, José Aguirre and Ignacio del Valle received a large land grant in 1843, the 97,616-acre Rancho Tejón. In the 1850s, General Edward Beale established a fort and reservation on Tejón ranch lands to protect local Native Americans from depredations by settlers. This outpost served as a military post and stage stop; it later housed a group of camels that Beale brought to the United States to serve in the Mojave Desert, known as the Camel Corps. Beale bought the Tejón Ranch in 1865 and retired there. The Tejon Ranch Company has since acquired many ranchos in the area, amassing in excess of a quarter million acres of land (Hoover et al. 2002:127). The buildings of Fort Tejón have been restored; the site is now Fort Tejon State Historic Park on I-5 in Grapevine Canyon.

John C. Fremont led an expedition into Kern County in 1845 and 1846. He brought an artist by the name of Edward Meyer Kern from Philadelphia to act as the topographer for the expedition. While crossing a river, Kern narrowly escaped drowning, and Fremont named the river after his colleague (Gudde 1998:192; Hoover et al. 2002:124).

Mining and Oil Production

Kern County was known for its gold production. Gold was discovered on the upper Kern River in 1853, bringing miners and settlers to the area. Kern County was established in 1866 with portions of Los Angeles and Tulare Counties being set aside to form the new county. It is California's third largest county, and the county seat was established at Havilah in 1866. Asbury Harpending, who made a fortune in gold mining along the Kern River, built a toll road from Bakersfield to Havilah. The county seat was moved from Havilah to Bakersfield in 1874 (Gudde 1998:161; Hoover et al. 2002:132).

Oil exploration, production, and use are inextricably woven into the history of California, and of Kern County in particular. The first known use of crude oil by the area's Euro-American population took place during the Spanish period. Large seeps along the west side of the San Joaquin Valley were known by travelers of El Camino Viejo, who used the oil to lubricate their wagon wheels (Hodgson 1993:7).

The first company to locate a producing oil well in the San Joaquin Valley was the Buena Vista Petroleum Company. The company was incorporated in February 1864 by Josiah Otis Lovejoy, an entrepreneur and former ship's captain from San Francisco, and began digging and drilling operations later that same year. The Buena Vista Company's headquarters were located at the old Temblor Ranch, and its first refinery (State Registered Landmark No. 504), located 7 miles from the headquarters and 10 miles west of present-day McKittrick, was designed to produce 5,000 gallons of "burning oil," or kerosene, per month (Burmeister 1972:1). During unusually wet years, the kerosene was transported by wagon to the shores of Tulare Lake and then sent by schooner down the San Joaquin River to Stockton and San Francisco. During dry years, the kerosene was hauled overland to the Port of San Luis Obispo and then transported by ship to San Francisco (Smith 2000:45).

Aside from the petroleum industry, which was first developed in the 1890s, agriculture remained the dominant industry in the southern San Joaquin Valley through the twentieth century. Post-World War II irrigation projects, including the Friant-Kern Canal, brought water to the San Joaquin Valley on an even larger scale, and continued to encourage the development of agriculture and related industries. Today, the San Joaquin Valley continues to be one of the most prominent agricultural and oil producing regions of the country.

Existing Cultural Resources

Methods Used to Identify Known Cultural Resources

To evaluate the proposed project's potential effects on significant cultural resources, Hudlow Cultural Resource Associates conducted a Phase I cultural resource survey study of the proposed project area, which included a pedestrian survey and a cultural resource record search (Hudlow Cultural Resource Associates 2023). The results of this study are included in the Cultural Resources Field Survey discussion below.

Southern San Joquin Valley Information Center Record Searches

A record search of the project area and the environs within one-half mile was conducted on July 29, 2019, at the Southern San Joaquin Archaeological Information Center (SSJVIC) (Hudlow Cultural Resource Associates 2023).

The archival records searches provided by the SSJVIC and a review of existing published and unpublished references on local prehistory and history revealed that six cultural resources studies have been conducted within a 0.5-mile radius of the proposed project area. No surveys overlapped the project area; however, four cultural resources have been recorded within one half-mile of the project area. Each of these resources is linear, and includes the Southern Pacific Rail line, and each of the three following canals: Beardsley, Friant-Kern, and Lerdo canals.

Sacred Lands File Search

The NAHC maintains a confidential Sacred Lands File, which contains sites of traditional, cultural, or religious value to the Native American community. The NAHC was contacted on September 21, 2021, to request a search of the Sacred Lands File. A response was received on October 14, 2021, indicating that no Native American cultural resources are located in close proximity to the project area. To ensure that all Native American knowledge and concerns over potential TCRs that may be affected by implementation of the proposed project are addressed, a letter containing project information and requesting additional information was sent to the NAHC provided list of 24 tribal representatives.

A total of two responses were received. On April 6, 2021, the Quechan Indian Tribe had no comments on the proposed project and deferred to a more local tribe. On April 13, 2021, the San Manuel Band of Mission Indians noted that the proposed project is located outside of Serrano ancestral territory and had no comments.

Cultural Resources Field Survey

An intensive pedestrian survey of the entire proposed project area was conducted during September 2019. All exposed ground surfaces were examined for evidence of artifacts, as well as soil discoloration which may indicate the presence of cultural midden, soils depressions, and features indicative of the former presence of structures, buildings, historic debris (e.g., chipped stone tools, production debris, and stone milling tools), or historic artifacts (e.g., metal, glass, and ceramics). The survey was conducted in east/west and north/south transects at 10-meter (33 feet) intervals across the entire parcel, depending on the vineyard's field patterns. The entire project area was accessible and visible at ground level. All archaeological material more than 50 years of age or earlier encountered during the inventory was recorded.

Results

The proposed project area was entirely accessible and ground visibility was clear at the time of the survey. The field survey identified four cultural resources (MV-1, MV-2, MV-3 and MV-4) within the proposed project area. Descriptions of each of these cultural resources are provided below.

MV-1

Site MV-1 is a pond and pumping complex for irrigating vineyards with a gypsum loading dock to the south.

MV-2

Site MV-2 is a single, abandoned gypsum loading dock.

MV-3

Site MV-3 is a pumping station complex with a gypsum loading dock.

MV-4

Site MV-4 is the primary work/storage/pond complex for the agricultural operations with a pair of irrigation ponds, a bathroom/eating area, various modern outbuildings, a large equipment yard, and a location for a fieldworker's house that is no longer standing. These complexes each pre-date 1968.

In general, sites MV-1 through MV-4 are not associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States. Criteria 1 of the California Register of Historic Resources does not apply. Sites MV-1 through MV-4 are not associated with the lives of persons important to local, California or national history. Criteria 2 of the California Register of Historic Resources does not apply. Sites MV-1 through MV-4 do not embody the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values. Criteria 3 of the California Register of Historic Resources does not apply. Sites MV-1 through MV-4 will not yield, or do not have the potential to yield, information important to the prehistory or history of the local area, California or the nation. Therefore, criteria 4 of the California Register of Historic Resources does not apply. Consequently, MV-1 through MV-4 are not considered historically significant under CEQA.

Potential for Unknown Buried Cultural Resources

As discussed in the Phase I cultural resource survey prepared by Hudlow Cultural Resource Associates (Hudlow Cultural Resource Associates 2023), the project area has low archaeological sensitivity based on current conditions, soil types, prehistoric environment, record search, and pedestrian survey results. Therefore, it is not anticipated that unknown buried cultural resources would be discovered. Nonetheless, as discussed below under Impact 4.5-1, if unanticipated archaeological resources are discovered, the project would be required to comply with Mitigation Measure MM 4.5-2 to assess and protect the discovery.

4.5.3 Regulatory Setting

Federal

Section 106 of the National Historic Preservation Act (NHPA) of 1966

Enacted in 1966, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at the federal, state, and local levels. The NHPA authorized the expansion and maintenance of the NRHP, established the position of State Historic Preservation Officer and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP). Section 106 of the NHPA states that federal agencies with direct or indirect jurisdiction over federally funded, assisted, or licensed undertakings must take into account the effect of the undertaking on any historic property that is included in, or eligible for inclusion in, the NRHP and that the ACHP must be afforded an opportunity to comment, through a process outlined in the ACHP regulations in Code of Federal Regulations (CFR) Title 36, Part 800, on such undertakings.

National Register of Historic Places (NRHP)

As presented in 36 CFR 60.2, the NRHP was established by the NHPA of 1966 as "an authoritative guide to be used by federal, State, and local governments, private groups, and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment." The NRHP recognizes properties that are significant at the national, State, and local levels.

To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

- **Criterion A:** It is associated with events that have made a significant contribution to the broad patterns of our history.
- **Criterion B:** It is associated with the lives of persons who are significant in our past.
- **Criterion C:** It embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction.
- **Criterion D:** It has yielded, or may be likely to yield, information important in prehistory or history.

Cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed

historic buildings; and properties that are primarily commemorative in nature are not considered eligible for the NRHP unless they satisfy certain conditions. In general, a resource must be at least 50 years of age to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

In addition to meeting the criteria of significance, property must have integrity. Integrity is defined as "the ability of a property to convey its significance" (U.S. Department of the Interior 1995). The NRHP recognizes seven qualities that, in various combinations, define integrity: location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.

Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State

California Environmental Quality Act (CEQA)

CEQA is the principal statute governing environmental review of projects occurring in the State and is codified at PRC Section 21000 et seq. CEQA requires a lead agency to determine whether a proposed project may have a significant effect on the environment, including significant effects on historical or archaeological resources.

The Statutes of CEQA (Sections 21083.2 and 21084.1), California PRC (Section 5024.1), and the *CEQA Guidelines* (Section 15064.5) were used as the guidelines for the cultural resources study (Governor's Office of Planning and Research 1998). PRC Section 5024.1 requires that any properties that can be expected to be directly or indirectly affected by a proposed project be evaluated for CRHR eligibility. The purpose of the register is to maintain listings of the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from material impairment and substantial adverse change. The term "historical resources" includes a resource listed in, or determined to be eligible for listing in, the CRHR; a resource included in a local register of historical resources; and any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5[a] of the *CEQA Guidelines*). The criteria for listing properties in the CRHR were expressly developed in accordance with previously established criteria developed for listing in the NRHP.

According to PRC Section 5024.1(c) (1–4), a resource may be considered historically significant if it retains integrity and meets at least one of the following criteria. A property may be listed in the CRHR if the resource:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(2) Is associated with the lives of persons important in our past;

(3) Embodies the distinctive characteristics of a type, period, region or method of installation, or represents the work of an important creative individual, or possesses high artistic values; or

(4) Has yielded, or may be likely to yield, information important in prehistory or history.

Under CEQA, if an archeological site does not meet the historical resource criteria contained in the *CEQA Guidelines*, then the site may be treated in accordance with the provisions of Section 21083, which is a unique archaeological resource. As defined in PRC (Section 21083.2), a "unique" archaeological resource is an archaeological artifact, object, or site for which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type; or

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site is to be treated in accordance with the provisions of Section 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (Section 21083.2[b]). If preservation in place is not feasible, mitigation measures shall be required.

Resources that neither meet any of these criteria for listing on the CRHR nor qualify as a "unique archaeological resource" under PRC Section 21083.2 are viewed as not significant. Under CEQA, "A nonunique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects" (PRC Section 21083.2[h]).

Impacts that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. Impacts to historical resources from the proposed project are thus considered significant if the proposed project physically destroys or damages all or part of a resource, changes the character of the use of the resource or physical feature within the setting of the resource which contribute to its significance or introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

California Register of Historical Resources (CRHR)

Under California PRC Section 5024.1(a), the CRHR was created in 1992 and implemented in 1998 as "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks (CHLs) numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

- **Criterion 1:** It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- **Criterion 2:** It is associated with the lives of persons important in our past.
- **Criterion 3:** It embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.
- **Criterion 4:** It has yielded, or may be likely to yield, information important in history or prehistory.

Furthermore, under PRC 5024.1, Title 14 California Code of Regulations, Section 4852(c), a cultural resource must retain integrity to be considered eligible for the CRHR. Specifically, it must retain sufficient character or appearance to be recognizable as a historical resource and convey reasons of significance. Integrity is evaluated with regard to retention of such factors as location, design, setting, materials, workmanship, feeling, and association. Cultural sites that have been affected by ground-disturbing activities, such as grazing and off-road vehicle use (both of which occur within the proposed project site), often lack integrity because they have been directly damaged or removed from their original location, among other changes.

Typically, a prehistoric archaeological site in California is recommended eligible for listing in the CRHR based on its potential to yield information important in prehistory or history (Criterion 4). Important information includes chronological markers such as projectile point styles or obsidian artifacts that can be subjected to dating methods or undisturbed deposits that retain their stratigraphic integrity. Sites such as these have the ability to address research questions.

California Historical Landmarks

CHLs are buildings, structures, sites, or places that have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value and that have been determined to have statewide historical significance by meeting at least one of the criteria listed below. The resource also must be approved for designation by the County Board of Supervisors (or the city or town council in whose jurisdiction it is located); be recommended by the State Historical Resources

Commission; and be officially designated by the Director of California State Parks. The specific standards now in use were first applied in the designation of CHL #770. CHLs #770 and above are automatically listed in the CRHR.

To be eligible for designation as a landmark, a resource must meet at least one of the following criteria:

- It is the first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California);
- It is associated with an individual or group having a profound influence on the history of California; or,
- It is a prototype of, or an outstanding example of, a period, style, architectural movement, or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer, or master builder.

California Points of Historical Interest

California Points of Historical Interest are sites, buildings, features, or events that are of local (City or County) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. Points of historical interest designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the CRHR. No historic resource may be designated as both a landmark and a point. If a point is later granted status as a landmark, the point designation will be retired. In practice, the point designation program is most often used in localities that do not have a locally enacted cultural heritage or preservation ordinance.

To be eligible for designation as a point of historical interest, a resource must meet at least one of the following criteria:

- It is the first, last, only, or most significant of its type within the local geographic region (City or County);
- It is associated with an individual or group having a profound influence on the history of the local area; or,
- It is a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder.

Native American Heritage Commission (NAHC)

California PRC Section 5097.91 established the NAHC, whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. PRC Section 5097.98 specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a County Coroner.

California Public Records Act

Sections 6254(r) and 6254.10 of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the NAHC, another State agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a State or local agency."

California Health and Safety Code, Sections 7050 and 7052

Health and Safety Code, Section 7050.5, declares that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease, and the County Coroner must be notified. Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

California Penal Code, Section 622.5

The California Penal Code, Section 622.5, provides misdemeanor penalties for injuring or destroying objects of historic or archaeological interest located on public or private lands, but specifically excludes the landowner.

Public Resources Code, Section 5097.5

PRC Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

Consultation with Native American Tribes

California State Senate Bill 18

Senate Bill (SB) 18, which went into effect January 1, 2005, requires that Cities and Counties notify and consult, at certain key points in the planning process, with California Native American Tribes about proposed local land use planning decisions for the purpose of protecting traditional tribal cultural sites. The intent is to "provide California native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places" (Governor's Office of Planning and Research 2005).

According to *State of California Tribal Consultation Guidelines: Supplement to General Plan Guidelines* (Governor's Office of Planning and Research 2005), the following are the contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving or mitigating impacts to cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3). If requested by the Native American Tribes, the City or County must also conduct consultations with the tribes prior to adopting or amending their general and specific plans.
- Prior to adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the City or County's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

California State Assembly Bill 52

Assembly Bill 52 (Chapter 532, Statues of 2014) (AB 52) requires lead agencies to consider the effects of projects on tribal cultural resources and to conduct consultation with federally and non-federally recognized Native American Tribes early in the environmental planning process. AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a notice of Negative Declaration or Mitigated Negative Declaration (MND) will be filed.

The goal of AB 52 is to include California Tribes in determining whether a project may result in a significant impact to tribal cultural resources that may be undocumented or known only to the Tribe and its members. This bill specifies that a project that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.

AB 52 defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the CRHR or included in a local register of historical resources (PRC Section 21074 (a)(1)).

AB 52 requires that prior to determining whether a Negative Declaration, MND, or EIR is prepared for a project, the lead agency must consult with California Native American Tribes, defined as those identified on the contact list maintained by the NAHC, who are traditionally and culturally affiliated with the geographic area of the proposed project, and who have requested such consultation in writing. Consultation must be initiated by a lead agency within 14 days of determining that an application for a project is complete or that a decision by a public agency to undertake a project. The lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American Tribes that have requested notice. At the very least, the notice should consist of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native

American Tribe has 30 days to request consultation pursuant to this section. The lead agency shall begin the consultation process within 30 days of receiving a California Native American Tribe's request for consultation. According to PRC Section 21080.3.2(b), consultation is considered concluded when either the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

Tribal Cultural Resources

Section 4 of AB 52 adds Sections 21074 (a) and (b) to the PRC, which address tribal cultural resources and cultural landscapes. Section 21074 (a) defines tribal cultural resources as one of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Section 1 (a)(9) of AB 52 establishes that "a substantial adverse change to a tribal cultural resource has a significant effect on the environment." Effects on tribal cultural resources should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to tribal cultural resources, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

Local

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the *Kern County General Plan* (KCGP) for cultural resources applicable to the proposed project are provided below. The KCGP identifies the federal, State, and local statutes, ordinances, or policies that govern the conservation of cultural resources that must be considered by Kern County during the decision-making process for any project that could impact

archaeological, historical, or paleontological resources. The KCGP contains additional policies, goals, and implementation measures that are more general in nature and are not specific to development such as the proposed project. Therefore, although they are not listed below, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Section 1.10.3 Archaeological, Paleontological, Cultural, and Historical Preservation

Policy

Policy 25: The County will promote the preservation of cultural and historic resources that provide ties with the past and constitute a heritage value to residents and visitors.

Implementation Measures

Measure K: Coordinate with the California State University, Bakersfield's Archaeology Inventory Center.

Measure L: The County shall address archaeological and historical resources for discretionary projects in accordance with CEQA.

Measure M: In areas of known paleontological resources, the County should address the preservation of these resources where feasible.

Measure N: The County shall develop a list of Native American organizations and individuals who desire to be notified of proposed discretionary projects. This notification will be accomplished through the established procedures for discretionary projects and CEQA documents.

Measure O: On a project specific basis, the County Planning Department shall evaluate the necessity for the involvement of a qualified Native American monitor for grading or other construction activities on discretionary projects that are subject to a CEQA document.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

Policies

Policy 5: Provide for streetscape improvements, landscape, and signage which uniquely identify major and/or historic residential neighborhoods (I-8).

Policy 7: Provide for the retention of historic residential neighborhoods as identified in the Historical Resources Element if adopted by the City of Bakersfield (I-1, I-6, I-8).

Policy 27: Require that new commercial uses maintain visual compatibility with single-family residences in areas designated for historic preservation (I-1, I-6, I-8).

Policy 72: Promote the creation of both residential and commercial historic districts, and encourage the upgrading of historic structures (I-1, I-6, I-8).

Policy 104: As part of the environmental review procedure, an evaluation of the significance of paleontological, archaeological, and historical resources and the impact of proposed

development on those resources shall be conducted and appropriate mitigation and monitoring included for development projects.

Policy 106: The preservation of significant historical resources as identified on Table 4.10-1 shall be encouraged by developing and implementing incentives such as building and planning application permit fee waivers, Mills Act contracts, grants and loans, implementing the State Historic Building Code and other incentives as identified in the City's Historic Preservation Ordinance.

Policy 107: The preservation of significant historical resources shall be promoted and other public agencies or private organizations shall be encouraged to assist in the purchase and/or relocation of sites, buildings, and structures deemed to be of historical significance.

4.5.4 Impacts and Mitigation Measures

This section of the document describes the impact analysis relating to cultural resources for the proposed project. It describes the methods used to determine the impacts of the proposed project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, where appropriate.

Methodology

To evaluate the proposed project's potential effects on significant archaeological and historic built environment resources, Hudlow Cultural Resource Associates prepared the *Phase I Cultural Resource Survey* (Hudlow Cultural Resource Associates 2023) for the proposed project area, which included archival research, and field surveys. Between September 9, 2019, and October 2, 2019, Scott M. Hudlow conducted a pedestrian survey of the proposed project area. Mr. Hudlow surveyed in east/west and north/south transects at 10-meter intervals across the entire parcels, depending on the vineyard's field patterns. All archaeological material more than fifty years of age or earlier encountered during the inventory was recorded.

Impacts on cultural resources (including paleontological resources) could result from ground-disturbing activities and/or damage, destruction, or alteration of historic structures. Ground-disturbing activities include project-related excavation, grading, trenching, and vegetation clearance; the operation of heavy equipment; or other surface and sub-surface disturbance that could damage or destroy surficial or buried cultural resources, including prehistoric or historic-period archaeological resources, paleontological resources, or human burials.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the *CEQA Guidelines*, to determine if a project could potentially have a significant adverse effect on cultural resources.

A project would have a significant adverse effect on cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource, as defined in *CEQA Guidelines* Section 15064.5
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to *CEQA Guidelines* Section 15064.5 or
- Disturb any human remains, including those interred outside of dedicated cemeteries.

All of the above impact thresholds are addressed in the Project Impacts section below. Impacts to tribal cultural resources have been addressed in **Section 4.17**, *Tribal Cultural Resources*, of this EIR.

Project Impacts

Impact 4.5-1: The Project Would Cause a Substantial Adverse Change in the Significance of a Historical Resource Pursuant CEQA Guidelines Section 15064.5.

As discussed in the Environmental Setting section above, the records search conducted by the Hudlow Cultural Resource Associates identified six previously conducted cultural resources studies within 0.5 miles of the proposed project area that revealed four linear historical cultural resources identified as the Southern Pacific Rail Line and the Beardsley, Friant-Kern, and Lerdo canals. None of these studies overlapped with the proposed project area. The pedestrian survey conducted by Hudlow Cultural Resource Associates for the proposed project resulted in the identification of four cultural resources. Site MV-1 is a pond complex located west of the Lerdo Canal. Two ponds have been breeched to create one large pond to irrigate the adjacent vineyards to the west. An equipment yard is located to the south of the ponds. While the pods are historic, a majority of the tanks and pumping equipment is new and modern. Adjacent to the ponds to the south is a gypsum loading dock, which has been repurposed as an eating area for fieldworkers. Gypsum was formerly used as a fertilizer; it was also used to neutralize the underlying clay soils. The loading dock has a thick poured-in-place concrete foundation with low, approximately 18 inches in height, walls on the east and west elevations. Although a gable roof is currently present, the dock would have been open on all sides to provide space for a skip loader to access the gypsum on the dock. Wide plank side walls are present on the east and west elevations to house the gypsum. An abandoned tank stand is also present east of the ponds. It housed a tank laid horizontally, possibly gravity-feed into the pond to provide fertilizers or pesticides.

Site MV-2 is an abandoned, gypsum loading platform. Gypsum was formerly used as a fertilizer; it was also used to neutralize the underlying clay soils. The loading dock has a thick poured-in-place concrete foundation with low, approximately eighteen inches in height, walls on the north and south elevations. The dock is open on all sides to provide space for a skip loader to access the gypsum on the dock. Wide plank side walls are present on the north and south elevations to house the gypsum. Site MV-3 is a small pump station complex. Primarily, this complex has two large standpipes and pumps to irrigate the adjacent vineyards. In addition, it has a gypsum loading dock, and an abandoned concrete horizonal tank stand. The tank stand is a pair of large concrete blocks which would have raised the tank off the ground. A modern plastic, cylindrical tank probably replaces this older tank. The current tank is attached to a water heater. Beavertail cactus and two bollards protect this small work complex. Site MV-4 is the largest

work/storage/pond complex on the property. The entire complex is surrounded by a barbed wire edged, chain link fence. A large set of irrigation ponds are located in the northeast corner. Sites MV-1 through MV-4 are highly modified agricultural uses and not associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States. No additional historical resources were observed during the pedestrian survey of the proposed project site and the proposed project would not have an adverse impact on historic era built environment resources.

Although no "unique" or "historic" cultural resources (as per CEQA definitions) have been documented on the proposed project site, there is a potential that unrecorded cultural resources could be unearthed or otherwise discovered at the proposed project site during ground-disturbing and construction activities. Subsurface construction activities always have the potential to damage or destroy previously undiscovered historic resources such as wood, stone, foundations, and other structural remains; debris filled wells or privies; and deposits of wood, glass, ceramic, and other refuse, if encountered. This would represent a potentially significant impact related to historic resources. However, implementation of Mitigation Measures MM 4.5-1 and MM 4.5-2, would reduce potential direct and indirect impacts to historic resources that may be discovered during project construction to less than significant.

Mitigation Measures

MM 4.5-1: Prior to ground disturbance or the issuance of grading or building permits, the project proponent shall retain a qualified Lead Archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior 2011), to carry out all mitigation measures related to archaeological during ground-disturbing activities.

The contact information for this Lead Archaeologist shall be provided to the Kern County Planning and Natural Resources Department prior to the commencement of any construction activities on-site. Further, the Lead Archaeologist shall be responsible for ensuring the following employee training provisions are implemented during implementation of the project:

a. Prior to commencement of any ground disturbing activities, the Lead Archaeologist shall prepare Cultural Resources Sensitivity Training materials, including a Cultural Resources Sensitivity Training Guide, to be used in an orientation program given to all personnel working on the project. The training guide may be presented in video form. A copy of the proposed training materials, including the Cultural Resources Sensitivity Training Guide, shall be provided to the Planning and Natural Resources Department prior to the issuance of any grading or building permit.

b. The project proponent/operator shall ensure all new employees or onsite workers who have not participated in earlier Cultural Resources Sensitivity Trainings shall meet provisions specified above.

c. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the Lead Archaeologist for

further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources.

d. A copy of the Cultural Resources Sensitivity Training Guide/Materials shall be kept on-site and available for all personnel to review and be familiar with as necessary. It is the responsibility of the Lead Archaeologist to ensure all employees receive appropriate training before commencing work on-site.

MM 4.5-2: During implementation of the project, in the event that archaeological materials are encountered during the course of grading or construction, the project contractor shall cease any ground-disturbing activities within 50 feet of the find. The area of the discovery shall be marked off by temporary fencing that encloses a 50-foot radius from the location of the discovery. Signs shall be posted that establish it as an Environmentally Sensitive Area, and all entrance into the area shall be avoided until the discovery is assessed by the Lead Archaeologist. The Lead Archaeologist, in consultation with any appropriate Native American tribes, shall evaluate the significance of the resources and recommend appropriate treatment measures. If further treatment of the discovery is necessary, the Environmentally Sensitive Area shall remain in place until all work is completed. Per California Environmental Quality Act (CEQA) Guidelines Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means to avoid impacts to significant historical resources.

Consistent with *CEQA Guidelines* Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the Lead Archaeologist shall develop additional treatment measures in consultation with the County of Kern (County), which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. Diagnostic archaeological materials with research potential recovered during any investigation shall be curated at an accredited curation facility. The Lead Archaeologist shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the Kern County Planning and Natural Resources Department and to the Southern San Joaquin Valley Information Center at California State University, Bakersfield.

Level of Significance after Mitigation

Impacts would be less than significant with implementation of Mitigation Measures MM 4.5-1 and MM 4.5-2.

Impact 4.5-2: The Project Would Cause a Substantial Adverse Change in the Significance of an Archaeological Resource Pursuant to CEQA Guidelines Section 15064.5.

As discussed above, the pedestrian survey resulted in the identification of four cultural resources and no additional archaeological resources were observed during the pedestrian survey of the proposed project site. Although no “unique” or “historic” cultural resources (as per CEQA definitions) have been documented on the proposed project site, there is a potential that unrecorded cultural resources could be unearthed or otherwise discovered at the proposed project site during ground-disturbing and construction

activities. The isolated prehistoric artifacts may indicate that buried archaeological deposits are present within the proposed project area and either represent a surface manifestation of the upper levels of the deposit(s), or rather, were exposed (i.e., unburied) during historic and modern ground-disturbing activities. Due to the elevated sensitivity for the potential presence of buried prehistoric archaeological deposits in the proposed project area, the proposed project could impact previously unknown, buried archaeological resources. Therefore, impacts are considered potentially significant and mitigation measures would be required.

Mitigation Measures

Implement Mitigation Measures MM 4.5-1 and MM 4.5-2, as described above.

MM 4.5-3: During implementation of the project, the services of an Archaeological Monitor, working under the supervision of the Lead Archaeologist, shall be retained by the project proponent/operator to monitor, on a full-time basis, during initial ground-disturbing activities associated with project-related construction activities, as follows:

a. During implementation of the project, Archaeological monitoring shall be conducted for all initial excavation or ground-disturbing activities.

b. The Lead Archaeologist shall be provided all project documentation related to cultural resources within the project site prior to commencement of ground disturbance activities. Should the services of any additional individuals be retained subsequent to commencement of ground disturbing activities, such individuals shall be provided all proposed project documentation related to cultural resources within the project area, prior to beginning work. Documentation shall include but not be limited to previous cultural studies, surveys, maps, drawings, etc. Any modifications or updates to project documentation, including construction plans and schedules, shall immediately be provided to the Lead Archaeologist and Archaeological Monitor.

Level of Significance after Mitigation

Impacts would be less than significant with implementation of Mitigation Measures MM 4.5-1 through MM 4.5-3.

Impact 4.5-3: The Project Would Disturb Human Remains, Including Those Interred Outside of Formal Cemeteries.

There is no indication, either from the archival research results or the archaeological survey, that any particular location within the proposed project site has been used for human burial purposes in the recent or distant past. However, in the event that human remains are inadvertently discovered during proposed project ground-disturbance or construction activities, the human remains could be inadvertently damaged, which could be a significant impact. Therefore, impacts are considered potentially significant and the following mitigation measure would be required.

Mitigation Measures

MM 4.5-4: If human remains are uncovered during project construction, the project proponent shall immediately halt work within 100 feet of the find, contact the Kern County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.4 (e) of the *California Environmental Quality Act Guidelines*. If the County Coroner determines that the remains are Native American, the coroner shall contact the Native American Heritage Commission, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by Assembly Bill 2641). The Native American Heritage Commission shall designate a Most Likely Descendent for the remains per Public Resources Code 5097.98. Per Public Resources Code 5097.98, and in accordance with generally accepted cultural or archeological standards or practices, the landowner shall ensure that the immediate vicinity of the Native American human remains is not damaged or disturbed by further development activity until the landowner has conferred with the most likely descendent regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. If the remains are determined to be neither of forensic value to the Coroner, nor of Native American origin, provisions of the California Health and Safety Code (7100 et. seq.) directing identification of the next-of-kin will apply.

Level of Significance after Mitigation

Impacts would be less than significant with implementation of Mitigation Measure MM 4.5-4.

Cumulative Setting, Impacts, and Mitigation Measures

The geographic scope for cumulative impacts to cultural resources for the proposed project includes the San Joaquin Valley in unincorporated Kern County. This geographic scope of analysis is appropriate because the cultural resources within this area are expected to be similar to those that occur on the project stie because of their proximity, and because the similar environments, landforms, and hydrology out result in similar land-use and thus, resource types. Further, this a large enough area to encompass any effects of the proposed project on cultural resources that may combine with similar effects cause by other past, current, and reasonably foreseeable future projects, and provides a reasonable context wherein cumulative actions could affect cultural resources.

There could be a cumulative impact in the County, with respect to historical, archaeological, and cultural resources, as a result of future development and related construction activities in the region. However, potential cumulative impacts would be mitigated to below a level of significance at an individual project level by adherence to applicable current State and federal laws and regulations, as well as other applicable laws, regulations and mitigations, such as adherence to standard conditions of approval that require monitoring of construction sites in proximity to known resources, immediate cessation of construction activity upon discovery of unidentified human remains, and the protection of cultural resources that are discovered. Moreover, the proposed project's incremental contribution to less than significant cumulative impacts would not be cumulatively considerable or significant. The combination of the above-mentioned and described efforts, standard construction conditions and Mitigation Measures MM 4.5-1 through MM

4.5-4 would reduce potential cumulative impacts related to historical, archaeological, and cultural resources to a less than significant level. Mitigation Measures

Implement Mitigation Measures MM 4.5-1 through MM 4.5-4.

Level of Significance after Mitigation

Cumulative impacts would be less than significant with implementation of Mitigation Measures MM 4.5-1 through MM 45.-4.

Section 4.6

Energy

4.6.1 Introduction

This section of the EIR analyzes the energy implications of the proposed project, focusing on the following energy resources: electricity, natural gas, and transportation-related energy (petroleum-based fuels). This section includes a summary of the proposed project's anticipated energy needs and conservation measures.

Information in this section is based primarily on the *Energy Study Report* prepared by McIntosh & Associates (April 2020, revised April 2022), which is located in Appendix H of this EIR. The information found herein, as well as other aspects of the proposed project's environmental-related energy impacts, are discussed in greater detail elsewhere in this EIR, including in Chapter 3, *Project Description*, Section 4.3, *Air Quality*, and Section 4.8, *Greenhouse Gas Emissions*.

Since the preparation of the initial *Energy Study Report*, the proposed project footprint has been reduced from approximately 746 acres to approximately 739 acres. The reduction in the footprint of the proposed project would result in a reduction of land disturbed during construction, and a potentially commensurate reduction of fuel consumption during construction and operations. Therefore, the followingdiscussion that is based on the previous, larger footprint represents the worst-case potential impacts related to energy.

This section provides the content and analysis required by Public Resources Code, Section 21100(b)(3), and described in Appendix F to the *CEQA Guidelines [*Association of Environmental Planners (AEP) 2023]. Public Resources Code Section 21100(b) and Section 15126.4 of the *CEQA Guidelines* require that an EIR identify mitigation measures to minimize a project's significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy. Appendix F states that the potential energy implications of a project shall be considered in an EIR, to the extent relevant and applicable to the proposed project. Appendix F further states that a project's energy consumption and proposed conservation measures may be addressed, as relevant and applicable, in the Project Description, Environmental Setting and Impact Analysis portions of technical sections, as well as through mitigation measures and alternatives.

4.6.2 Environmental Setting

Electricity

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources—including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources—into energy. The delivery of electricity involves a number of system components for distribution and use. The electricity generated is distributed through a network of transmission and distribution lines, commonly called a power grid.

Energy capacity, or electrical power, is generally measured in watts (W), while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100 W bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts, or MW, which is one million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is one billion watt-hours.

The proposed project is located in PG&E's retail electric service territory. Accordingly, electric power for project operation would be brought to the site through a new PG&E electrical substation and service connection.

PG&E is an investor-owned utility company that provides electricity and natural gas services throughout a 70,000 square mile service area (PG&E 2020a) serving approximately 16 million people through 5.43 million electric distribution accounts and 4.4 million natural gas distribution accounts, including western Kern County (PG&E 2020b). The company's southernmost service territory, referred to as its Kern Division, covers a large area of western Kern County (including the cities of Arvin, Bakersfield, Maricopa, McFarland, Ridgecrest, Shafter, Taft, and Wasco) and almost all of Kings County (including the cities of Avenal, Hanford, Kettleman City, and Lemoore). Other portions of Santa Barbara, and San Luis Obispo counties are also within the PG&E Kern Division (PG&E, 2022b).

PG&E's electricity is approximately two-thirds cleaner than the industry average, as measured by PG&E's carbon dioxide emissions rate. About 85 percent of the electricity delivered is a combination of renewable and greenhouse gas-free (including nuclear) resources. As required by the CEC's Power Source Disclosure program, PG&E's 2021 electric power mix provided in its Power Content Label is detailed in **Table 4.6-1**, *PG&E and State of California 2021 Power Mix,* below.

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs and delivered through high-pressure transmission pipelines. Natural gas provides almost one-third of the state's total energy requirements. Natural gas is measured in terms of cubic feet (cf). Southern California Gas Company (SoCal Gas) is a natural gas provider in Kern County and is the natural gas provider for the proposed project.

Table 4.6-1: PG&E and the State of California 2021 Power Mix

Energy Resource	PG&E Power Mix	2021 CA Power Mix(for comparison)
Eligible Renewable[a]	44.7%	33.6%
Biomass & bio-waste	4.2%	2.3%
Geothermal	5.2%	4.8%
Eligible hydroelectric	1.8%	1.0%
Solar	25.7%	14.2%
Wind	10.9%	11.4%
Coal	0.0%	3.0%
Large Hydroelectric	4.0%	9.2%
Natural Gas	8.9%	37.9%
Nuclear	39.3%	9.3%

Energy Resource	PG&E Power Mix	2021 CA Power Mix(for comparison)
Other	0.0%	0.2%
Unspecified sources of power[b]	0.0%	6.8%
Total	**100%**	**100%**

Source: Southern California Edison, 2021 Power Content Label https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure/power-content-label/annual-power-content-2.

Notes:

a The eligible renewable percentage above does not reflect RPS compliance, which is determined using a differentmethodology.

b Unspecified sources of power is electricity that has been purchased through open market transactions and is not traceableto a specific generation source.

c Renewable energy credits (RECs) are tracking instruments issued for renewable generation. Unbundled RECs representrenewable generation that was not delivered to serve retail sales. Unbundles RECs are not reflected in power mix or GHG emissions intensities above.

Transportation

Transportation dominates California's energy consumption profile. California's transportation sector uses just over 40 percent of the energy consumed in the state. In 2020, Californians consumed approximately 12.5 billion gallons of gasoline and 3 billion gallons of diesel fuel (California Department of Tax and Fee Administration, 2022a and 2022b). Petroleum-based fuels currentlyaccount for 89 percent of California's ground transportation fuel use (CEC 2020). However, the State is now working on developing flexible strategies to reduce petroleum use. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase thedevelopment and use of alternative fuels, reduce air pollutants and greenhouse gas (GHG) from the transportation sector, and reduce vehicle miles traveled (CEC 2020). The CEC predicts that the demand forgasoline will continue to decline over the next 10 years, and there will be an increase in the use of alternativefuels (CEC 2020). According to California Air Resources Board's (CARB's) EMFAC2017 Web Database, Kern County's on-road transportation sources consumed approximately 445 million gallons of gasoline and311 million gallons of diesel fuel in 2019 (CARB 2021).

4.6.3 Regulatory Setting

Federal

Energy Policy and Conservation Act of 1975 and Corporate Average Fuel Standards

The Energy Policy and Conservation Act of 1975 established the first fuel economy standards for on-road motor vehicles sold in the United States. The National Highway Traffic and Safety Administration (NHTSA) is responsible for establishing vehicle standards and revising existing standards. NHTSA's Corporate Average Fuel Economy (CAFE) was created to determine vehicle manufacturers' compliance with the fuel economy standards. The U.S. Environmental Protection Agency (USEPA) administers the testing program that generates the fuel economy data. The CAFE standards must be set at the "maximum feasible level" with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) the need for the nation to conserve energy.

The NHTSA and USEPA are currently attempting to remove California's waiver of preemption under Section 209 of the Clean Air Act to set fuel consumption standards for light duty vehicles, but this study is prepared using the current California standard.

Current fuel efficiency standards (NHTSA 2019) for medium- and heavy-duty trucks have been jointly developed by USEPA and NHSTA. Depending on the vehicle type, the Phase 1 heavy-duty truck standards for model years 2014-2018 resulted in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline. Model years 2021-2027 covered under the Phase 2 heavy-duty standards will require a fuel consumption reduction of 5 to 25 percent over the 2017 baseline.

Energy Policy Act of 2005

The Energy Policy Act of 2005 was intended to establish a comprehensive, long-term energy policy and is implemented by the U.S. Department of Energy. This act addressed energy production in the U.S., including oil, natural gas, coal and alternative forms of energy, and energy efficiency and tax incentives. The energy efficiency and tax incentive programs include credits for the construction of new energy-efficient homes, production or purchase of energy-efficient appliances, and loan guarantees for entities that develop or use innovative technologies that avoid production of GHGs. Some of these programs have expired. Solar tax credits for residential and commercial systems are 26 percent in 2020, 22 percent in 2021, and 10 percent for commercial systems only from 2022 onwards.

Energy Independence and Security Act of 2007

Signed into law in December 2007, the Energy Independence and Security Act was passed to increase the production of clean renewable fuels; increase the efficiency of products, buildings, and vehicles; improve the energy performance of the federal government; and increase U.S. energy security, develop renewable fuel production, and improve vehicle fuel economy. The act included the first increase in fuel economy standards for passenger cars since 1975, and also included a new energy grant program for use by local governments in implementing energy-efficiency initiatives, as well as a variety of green building incentives and programs.

State

Senate Bill 1389

Senate Bill (SB) 1389 (PRC Sections 25300–25323; SB 1389) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (PRC Section 25301(a)). The 2021 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California including electricity resource plans, electricity and gas demand forecast, energy reliability, natural gas outlook and assessments, building decarbonization and energy efficiency, and clean transportation benefits (CEC, 2022b).

Assembly Bill (AB) 32 & Senate Bill (SB) 32

Assembly Bill 32 (AB 32) is California's major initiative for reducing GHG and is referred to as the "California Global Warming Solutions Act of 2006." AB 32 codified the statewide goals of Executive Order S-3-05 requiring that GHG emissions be reduced to 2000 levels by 2010, to 1990 levels by 2020 (a 15 percent reduction below "business as usual" 2005 emissions), and to 80 percent below 1990 levels by 2050. AB 32 also required that the California Air Resources Board (CARB) prepare a Scoping Plan that outlined the main strategies for reducing GHGs to meet the 2020 deadline. In December 2008, CARB approved the initial Scoping Plan which included a list of measures to cut GHGs. After comments, a Final Supplement-Functional Equivalent Document was issued in August 2011. In 2014, CARB approved the First Update to the Climate Change Scoping Plan to establish a broad framework for continued emission reductions beyond 2020-on the path to 80 percent below 1990 levels by 2050. In September 2016, Senate Bill 32 (SB 32) was signed into legislation, this law expands AB 32 and requires that California cut GHG emissions to 40 percent below 1990 levels by 2030. In November 2017, a second update was issued to outline the strategies to meet the SB 32 2030 GHG target. This update includes the continuation of the Cap-and-Trade Program through 2030, incorporated a Mobile source Strategy that is intended to increase zero emission vehicle fleet penetration, and proposed a more stringent Low Carbon Fuel Standard target by 2030.

2008 California Energy Action Plan Update

In 2003, the California Energy Action Plan (EAP) was adopted by the CPUC, CEC and the Consumer Power and Conservation Financing authority (CPA) with the goal to ensure that adequate, reliable, and reasonably-priced electrical power and natural gas supplies, including prudent reserves, are achieved and provided through policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers. The Energy Action Plan is the State's principal energy planning and policy document. In 2005, EAP II was adopted to highlight the importance of taking actions in the near term to mitigate California's contributions to climate change from the electrical and natural gas sectors. EAP II promoted infrastructure enhancements and electric efficiency programs and standards to reduce the reliance on natural gas for various end uses.

The 2008 EAP Update provides a status update to the 2008 EAP II and identifies specific action areas to ensure that California's energy is adequate, affordable, technologically advanced and environmentally sound. A new EAP was not prepared, rather simply updated due to the passage of AB 32 (see above), which significantly influenced the state's energy policies, as included in the CEC's 2007 Integrated Energy Policy Report, as required by SB 1389 (2002). To address California's increasing energy demands, the Plan's first priority actions include energy efficiency, demand response, the use of renewable sources of power, electricity adequacy, natural gas supply and demand, transportation fuels supply and demand and climate change. The intent is to lower GHG emissions from the use of energy and to adapt the energy sectors to the impacts of climate change already occurring. If the actions are unable to satisfy the increasing energy and capacity needs, the plan supports clean and efficient fossil-fueled generation.

SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety.

An Integrated Energy Policy Report is adopted every two years, with an update every other year.

California Building Standards Codes

With certain exceptions, all residential and non-residential building design, construction, use and occupancy within California is required to be performed according to the California Building Standards Codes (CCR, Title 24, Parts 1 through 12), the most recent update was adopted in 2019 and went into effect January 1, 2020. State agencies and local jurisdictions may adopt amendments to the various codes, as Kern County has done with their "2019 Code of Building Regulations", also effective January 1, 2020.

California Green Building Standards Code

The California Green Building Standards Code (CCR, Title 24, Part 11), also known as the CALGreen Code, requires new residential and non-residential buildings to comply with mandatory measures under five topical areas: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. Voluntary measures are included as appendices, but are not enforced unless adopted by the local agency.

Among the key mandatory energy related provisions are requirements that new buildings:

- Reduce indoor potable water use by at least 20 percent below current standards;
- Recycle or salvage at least 50 percent of construction waste;
- Install separate water meters tracking non-residential buildings' indoor and outdoor water use;
- Receive mandatory inspections by local officials of building energy systems, such as heating, ventilation, air conditioning (HVAC), and mechanical equipment, to verify performance in accordance with specifications in non-residential buildings exceeding 10,000 square feet; and
- Earmark parking for fuel-efficient and carpool vehicles.

Building Energy Efficiency Standards (Title 24)

CCR, Title 24, part 6, the Energy Efficiency Standards for Residential and Nonresidential Buildings, regulates the design of building shells and building components. The standards contain energy and water efficiency requirements for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Standards have been adopted and became effective on January 1, 2020. Under the 2019 Standards, homes will use approximately 53 percent less energy and nonresidential building will use approximately 30 percent less energy than building under the 2016 Standards. The primary residential update included requiring a solar photovoltaic (PV) system on newly permitted (2020 and beyond) certain building types, including single-family detached homes that are capable of providing 100 percent of the dwelling's annual usage per equation 150.1-C of the 2019 Energy Code. For example, a 2,000 square foot home in Bakersfield will require a solar PV system capable of producing 3.3 kWdc, which will cost approximately $15,040 (GoSolarCalifornia.org). The non-residential usage reduction is expected primarily because of revised lighting standards (LED), water conservation and hot water pipes shall be required to have insulation installed.

The California Public Utilities Commission, CEC, and CARB also have a shared, established goal of achieving Zero Net Energy (ZNE) for new construction in California. The ZNE goal generally means that new buildings must use a combination of improved efficiency and renewable energy generation to meet 100 percent of their annual energy need, as specifically defined by the CEC: "A ZNE Code Building is one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building, at the level of a single 'project' seeking development entitlements and building code permits, measured using the CEC's Time Dependent Valuation (TDV) metric. A ZNE Code building meets an Energy Use Intensity value designated in the Building Energy Efficiency Standards by building type and climate zone that reflect best practices for highly efficient buildings." The key policy timelines include: (1) all new residential construction in California will be ZNE beginning in 2020, and (2) all new commercial construction in California will be ZNE beginning in 2030.

Although solar equipment (PV panels, conduit, piping, and mounting hardware) is not required to be installed on or with new non-residential structures less than three stories, the building must be designed be Solar Ready, which includes a solar zone where solar panels can be installed at a future date, if the owner elects to install or is mandated in further code revisions. The solar zone can be located on the roof of the building, overhang of the building, covered parking installed with the building project, roof or overhang of other structure(s) within 250 feet. The solar zone must have a total area of at least 15 percent of the total roof area, less skylights area, meeting the following size specifications: each subarea dimension must be at least five feet, If the total roof area is less than 10,000 square feet (sf), each subarea must be at least 80 sf, if the total roof area is greater than 10,000 sf, each subarea must be at least 160 sf. Exceptions to the solar zone are provided in the code, including reduction of the solar area by non-project obstructions to determine the potential solar zone for the project building requirement, i.e., the solar zone may be reduced to 50 percent of the potential solar area, and also if the roof is designed for a heliport or vehicle parking.

2006 Appliance Efficiency Standards (Title 20)

The CEC periodically amends and enforces Appliance Efficiency Regulations contained in Title 20 of the California Code of Regulations. The regulations establish water and energy efficiency standards for both federally-regulated appliances and non-federally regulated appliances. The most current Appliance Efficiency Regulations, effective October 1, 2018, cover 23 categories of appliances (e.g., refrigerators; plumbing fixtures; dishwashers; clothes washer and dryers; televisions) and apply to appliances offered for sale in California. These regulations are currently being updated to ensure consistency with federal law.

Senate Bills 1078 and 107; Executive Order S-14-08, S-21-09 and SB 2X

SB 1078 (2002) required retail sellers of electricity to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (2006) accelerated the target date of 20 percent to 2010 for investor-owned utilities instead of 2017. In November 2008, Governor Executive Order S-14-08 expanded the state's Renewable Portfolio Standard (RPS described below) to 33 percent renewable by 2020. In September 2009, Executive Order S-21-09 directed CARB under its AB 32 authority (Section 2.2.1) to enact regulations to enable the state to meet its RPS goad of 33 percent by 2030. CARB approved the Renewable Electricity Standard September 2010 by Resolution 10-23, and SB1X-2 (SB2X) was codified March 2011.

Senate Bill 375; Sustainable Communities Strategy (SCS)

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), coordinates land use planning, regional transportation plans (RTP), and funding priorities to help California meet it GHG emissions mandates. SB 375 requires metropolitan regional planning organizations (i.e., KernCOG) to include a Sustainable Communities Strategy (SCS) in its RTP. The primary focus of the SCS is to plan for growth in a fashion that will ultimately reduce GHG emissions from passenger vehicles and light-duty trucks, but the strategy is also part of a larger effort to address other development issues, including transit and vehicle miles traveled (VMT), which influence the consumption of petroleum-based fuels. California law (GC Section 65080(b)(2)(K)) specifically, states that neither a sustainable communities strategy nor an alternative planning strategy regulates the use of land, nor is it subject to any state approval. Nothing in an SCS supersedes the exercise of the land use authority of cities and counties within the region, and a city's or county's land use policies and regulations, including its general plan, are not required to be consistent with the RTP. KernCOG updated its RTP and SCS in August 2018 (KernCOG 2020a).

Assembly Bill 1257; Natural Gas Act (2013)

In November 2015, CEC issued a Staff Report, AB 1257 Natural Gas Act Report Strategies to Maximize the Benefits Obtained from Natural Gas as an Energy Source. In this report the gas supply and distribution system was described, focusing on safety issues, costs of improving the transmission and distribution systems and the release of methane emissions from the pipeline system as a potential significant source of GHG, lack of natural gas and RNG fueling infrastructure for automobiles. During preparation of this report, SB 350 was passed increasing the RPS to 50 percent by 2030, and to electrify California's transportation sector. Since SB 350, the CEC, although not mandated, is favoring a single-source energy system to decarbonize California's economy (SoCal Gas 2020a), through all-electric buildings and electric transportation modes, and is supporting research calling for the elimination of the natural gas system. SoCalGas, maybe for its own interests, has provided the CEC many comment letters, reports, and studies leading up to the adoption of the 2019 IEPR update highlighting the benefits of natural gas and RNG, including affordability, reliability, resiliency, customer choice, and GHG and criteria air pollutant emissions reduction. It is SoCal Gas' opinion that the CEC's all-electric approach and failure to fully comply with AB 1257 is a violation of what the CEC was mandated to do by the Legislature since its inception: develop balanced energy policy (SoCal Gas 2020a), making the best use of natural gas as a transportation fuel, and identifying methods to develop natural gas refueling infrastructure. In February 2020, SoCal Gas continues "Natural gas and renewable gases (such as hydrogen, synthetic natural gas, and biomethane/renewable natural gas (RNG)) are clean, reliable, affordable, and resilient sources of energy that should be part of the solution to California's energy concerns. Instead of pursuing an all-electrification approach and strategizing how to eliminate the natural gas system, the CEC must explore how the benefits of the natural gas system can be maximized in a changing energy landscape" (SoCal Gas 2020b).

Executive Order S-30-15; Senate Bills 100 (2018) and 350 (Clean Energy and Pollution Reduction Act of 2015)

SB 350, the Clean Energy and Pollution Reduction Act of 2015 increased the amount of renewable energy that must be delivered by most load-serving entities, i.e. IOU's and Public Owned Utilities (POU's), to their customers from 33 percent of total annual retail sales by the end of the 2017-2020 compliance period, to 50 percent of their total annual retail sales by the end of the 2028-2030 compliance period, and the

doubling of energy efficiency savings in electricity and natural gas end uses for existing buildings. SB 350 also directed state agencies to identify and assess barriers and opportunities of low-income customers to renewable energy, energy efficiency and weatherization investments, zero- and near zero-emission transportation options (guidance issued February 2018), including those in DAC's. In September 2018, SB 100, the California Renewables Portfolio Standard Program: emissions of greenhouse gasses, was signed into law, increasing from 50 to 60 percent of California's electricity portfolio that must come from renewable by 2030, and established state policy that 100 percent of retail electricity sales must come from RPS-eligible or carbon-free resources by 2045. Renewable Portfolio Standard (RPS) is discussed below. Renewable generation resources, for purposes of the RPS requirement, include bioenergy such as biogas and biomass, certain hydroelectric facilities (30 MW or less), wind, solar and geothermal energy.

Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen, and other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles

In 2004, CARB adopted an Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling in order to reduce public exposure to diesel particulate matter emissions (Title 13 California Code of Regulations [CCR] Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

State Vehicle Standards (AB 1493, Pavley I Standards)

In response to the transportation sector accounting for more than half of California's CO_2 emissions, Assembly Bill (AB) 1493 (commonly referred to as CARB's Pavley regulations), enacted in 2002, requires CARB to set GHG emission standards for new passenger vehicles, light-duty trucks, and other vehicles manufactured in and after 2009 whose primary use is non-commercial personal transportation. Phase I of the legislation established standards for model years 2009–2016 and Phase II established standards for model years 2017–2025 (CARB, 2017b). Refer to Section 4.8, *Greenhouse Gas Emissions*, of this EIR for additional details regarding this regulation.

Low Carbon Fuel Standard

Carbon intensity is a measure of the GHG emissions associated with the various production, distribution and use steps in the "lifecycle" of a transportation fuel. Executive Order S-1-07 requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB by 2010. In 2009, CARB approved the Low Carbon Fuel Standard (LCFS) regulations, which became fully effective in April 2010. The LCFS is designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits. The regulations were subsequently readopted in September 2015 in response to related litigation. In 2018, CARB adopted an update to the regulations that requires a 20 percent reduction in the carbon intensity of transportation fuels by 2030. This standard (along with SB 350 (2015) and AB 345 (2019)) is one of the primary reasons international crude oil imports to California have as the carbon intensity of most OPEC crude oils is less than Kern County's Midway–Sunset and Kern River benchmarks and Canada's oil sands based crude oil. Support and import

of domestic production from North Dakota and Texas shale reservoirs would complement LCFS, as well as imports.

Advanced Clean Cars Program (Pavley II Standards)

In 2012, the CARB approved the Advanced Clean Cars (ACC) program, a new emissions-control program for model years 2017–2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs.

Zero Emission Vehicles

Zero emission vehicles (ZEVs) include plug-in electric vehicles, such as battery electric vehicles and plug-in hybrid electric vehicles, and hydrogen fuel cell electric vehicles. In 2012, Executive Order B-16-2012 was issued, which called for the increased penetration of ZEVs into California's vehicle fleet in order to help California achieve a reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. In furtherance of that statewide target for the transportation sector, the Executive Order also required the CARB, CEC and the California Public Utilities Commission to establish benchmarks that will: (1) allow over 1.5 million ZEVs to be on California roadways by 2025, and (2) provide the State's residents with easy access to ZEV infrastructure.

In its First Update, CARB recognized that the light-duty vehicle fleet "will need to become largely electrified by 2050 in order to meet California's emission reduction goals." Accordingly, CARB's ACC program – summarized above – requires about 15 percent of new cars sold in California in 2025 to be a plug-in hybrid, battery electric or fuel cell vehicle. Further, one of the elements of SB 350 (2015) establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the State's 2030 and 2050 reduction. CARB's 2017 Scoping Plan also identified, as an element of its framework to achieve the statewide 2030 emissions reduction target codified by SB 32, the objective to put 4.2 million zero emission and plug-in hybrid light-duty electric vehicles on the road by 2030.

In 2018, Executive Order B-48-18 was issued, which served to launch an eight-year initiative to accelerate the sale of ZEVs through a mix of rebate programs and infrastructure improvements. The Executive Order also sets a new ZEV target of five million EVs in California by 2030 and includes funding for multiple state agencies, including the CEC (in order to increase charging infrastructure) and CARB (in order to provide rebates for the purchase of new ZEVs and incentives for low-income customers). Southern California Edison Company (SCE) indicates that current policies are expected to result in only 3.6 million EV's by 2030, and that to meet California's decarbonization goal will require 8 million EV's by 2030, and to reach carbon neutrality by 2045, will require 27 million EV's (SCE 2020a).

The proliferation of zero emission vehicles is being supported in multiple ways. For example, California is incentivizing the purchase of ZEVs through implementation of the Clean Vehicle Rebate Project (CVRP), which is administered by a non-profit organization (The Center for Sustainable Energy, CSE) for CARB and currently subsidizes the purchase of passenger near-zero and zero emission vehicles. Additionally, CALGreen requires new residential and non-residential construction to be pre-wired to facilitate the future installation and use of electric vehicle chargers (see Section 4.106.4 and Section 5.106.5.3 of 2016 CALGreen Standards for the residential and non-residential pre-wiring requirements, respectively). The

State has a target of 250,000 installed charging stations by 2025 (CSE 2020a).

Also of note is AB 1236 (2015), as enacted in California's Planning and Zoning Law, which requires local land use jurisdictions to approve applications for the installation of electric vehicle charging stations (EVCS) , as defined, through the issuance of specified permits unless there is substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill requires local land use jurisdictions with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that creates an expedited and streamlined permitting process for electric vehicle charging stations, as specified. On December 6, 2016, the Kern County Board of Supervisors (BOS) enacted Ordinance G-8675 adding a section 17.58 to the County Code related to the expedited permitting procedures for electric vehicle charging stations consistent with AB 1236. A checklist for non-residential EVCS is available on the Kern County Public Works Building Inspection website. In May 2019, KernCOG provided an Electric Vehicle Charging Station Blueprint to address EV vehicles and parking/charging in Kern County (KernCOG 2020c), including guidelines for adopting a streamlined permitting process and various Electric Vehicle Infrastructure toolkits to implement the blueprint. KernCOG estimates the permitting process to be two months.

According to the 2018 ZEV Action Plan-Priorities Update issued in September 2018 by the Governor's Interagency Working Group on ZEV, CARB is to prepare a technical and cost analysis to determine the need for a change in building standards supporting an increase in electric vehicle charging infrastructure in new and existing commercial buildings (currently six percent of parking spaces in new buildings must be electric vehicle-capable) to realize infrastructure needs in 2025 and beyond.

Renewable Portfolio Standard

The Renewable Portfolio Standard (RPS) was adopted in 2011 as a requirement of SB X1-2, and set a three-stage compliance schedule for all California utilities to generate 33 percent of their electricity from eligible renewable resources by 2020. The first stage required 20 percent of their electricity from eligible renewable resources by 2013, then 25 percent of their electricity from eligible renewable resources by 2016, and the final stage required 33 percent of their electricity from eligible renewable resources by December 31, 2020.

As described above, SB 350 requires IOU's & POU's to procure 50 percent of their electricity sales from renewables by 2030, then SB 100 accelerated the 50 percent renewable resources requirement to 2026, to 60 percent by 2030, and to 100 percent by 2045.

Local

Kern County General Plan, Energy Element

The Kern County General Plan was originally adopted June 15, 2004, and last amended on September 22, 2009. The General Plan is currently being updated, and will be expected to include additional energy goals, policies, and implementation measures in the Energy Element to reflect California's current goal to a fossil fuel free economy and the reduction of GHG's. The current Energy Element primarily discusses the County's wealth of existing and potential energy sources which includes oil, natural gas, and renewable electricity production, including wind, geothermal, transformational (waste to energy) development, hydropower and solar. The Energy Element has three objectives: resource management and protection;

establishing development standards provide for the protection of the environment, public health, and safety; and promoting and facilitating energy development. In general, the policies listed in the Energy Element are primarily directed at the County and are municipal policies rather than project specific.

The current Energy Element includes the following with respect to solar energy development, primarily commercial, but since solar (rooftop and/or common field arrays) will be required to be included in the development of the proposed project, it is included in this discussion.

Goal

Encourage safe and orderly commercial solar development.

Policies

Policy 1: The County shall encourage domestic and commercial solar energy uses to conserve fossil fuel and improve air quality.

Policy 2: The County should attempt to identify and remove disincentives to domestic and commercial solar energy development.

Policy 3: The County should permit solar energy development in the desert and valley planning regions that does not pose significant environmental or public health and safety hazards.

Policy 4: The County should encourage solar development in the desert and valley regions previously disturbed, and discourage development of energy projects on undisturbed land supporting State or federally protected plant and wildlife species.

Implementation Measures

A: The County shall continue to maintain, and update as necessary, provisions in the Kern County Zoning Ordinance to provide adequate development standards for commercial solar energy development.

B: The County should work with affected State and federal agencies and interest groups to establish consistent policies for solar energy development.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

All of Phase 1 and the portion of Phase 2 east of Verdugo Lane are included in the Metropolitan Bakersfield General Plan (MBGP). There are currently no energy-related policies included in the MBGP.

4.6.4 Impacts and Mitigation Measures

Methodology

This analysis addresses the proposed project's potential energy usage, including electricity, natural gas, and transportation fuel for vehicle trips. Energy consumption during both construction and operation was assessed and specific analysis methodologies are discussed below. The assessment presented herein is based in part on the Energy Study Report for Malibu Vineyards Industrial Park (McIntosh & Assoc., 2022) prepared for the proposed project. A full copy of the report is provided in **Appendix H** of this EIR.

The analysis below generally follows Appendix F of the *CEQA Guidelines*, which states that the goal of conserving energy includes decreasing overall per capita energy consumption, decreasing reliance on fossil fuels such as coal, natural gas, and oil, and increasing reliance on renewable energy.

In determining whether implementation of the project would result in the inefficient, wasteful or unnecessary consumption of fuel or energy, this analysis considers the recommendations of Appendix F, which states that environmental impact analyses of energy conservation may include:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
2. The degree to which the project complies with existing energy standards.
3. The effects of the project on energy resources.
4. The project's projected transportation energy use requirements and its overall use of
5. Efficient transportation alternatives.

This section analyzes energy consumption on three sources of energy that are relevant to the proposed project: electricity, natural gas, and transportation fuel for vehicle trips associated with new development, as well as the fuel necessary for project construction.

- The analysis of the proposed project's electricity/natural gas usage is based on California Emission Estimator Model (CalEEMod) modeling, which quantifies energy use for occupancy. The results of the CalEEMod modeling are included in the Air Quality Impact Analysis (AQIA) prepared for the proposed project, including GHG construction and operation emissions.
- Modeling related to transportation fuel consumption was based primarily on the default settings in the computer program for Kern County, which results in very conservative consumption values. The amount of operational fuel use was estimated using CalEEMod outputs for the proposed project and the CARB's Emissions Factor 2017 (EMFAC2017) computer program for typical daily fuel usage in Kern County and the SJV portion of Kern County. Construction fuel consumption was calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry. The results of EMFAC2017 modeling and construction fuel estimates are included in the AQIA.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify, per Appendix G of the *CEQA Guidelines*, a project would have a significant impact on energy and energy resources if it would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- Conflict with or obstruct state or local plan for renewable energy or energy efficiency.

Project Impacts

Impact 4.6-1: The Project would result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation.

Construction (Short-term)

The energy consumption associated with buildout of the proposed project includes electricity usage, fuel consumption for construction diesel and gasoline powered equipment, and fuel consumption from on-road worker commute and vendor trips. Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers, and heating, ventilation, and air conditioning) would be powered by a generator or temporary electricity connection. The amount of electricity used during construction would be minimal; typical demand would stem from the use of electrically powered hand tools and several construction trailers by managerial staff during the hours of construction activities. The majority of the energy used during construction would be from petroleum. The methodology for each category is discussed below. This analysis relies in part on the construction equipment list and operational characteristics, as stated in the Air Quality Impact Analysis, included as Appendix D of the DEIR. Quantifications of energy consumption are provided for the proposed project, followed by an analysis of impacts based on those quantifications.

Electricity Usage

Water Consumption for Construction Dust Control

Electricity use associated with water use for construction dust control is calculated based on total water use and the energy intensity for supply, distribution, and treatment of water.

The total number of gallons of water usage is calculated based on acreage disturbed during grading and site preparation, as well as the daily water consumption rate per acre disturbed.

- The total acres disturbed are calculated using the methodology described in Chapter 4.2 of Appendix A of the CalEEMod® User's Guide (Grading Equipment Passes).
- The water application rate of 3,020 gallons per acre per day is from Air and Waste Management Association's Air Pollution Engineering Manual.

The energy intensity value is based on the CalEEMod® default energy intensity per gallon of water for Kern County. As summarized in **Table 4.6-2,** *Project Energy Consumption during Construction (Phase 1, 2 and Combined)* the annual electricity consumption associated with water consumption for site preparation and construction dust control would be approximately 82,001 kWh/yr (82 megawatt hours [MWh] per year) for Phase 1,35,363 kWh/yr (35.4 MWh per year) for Phase 2, and 79,951 kWh/yr (80 MWh per year) average for the years both phases are under construction.

Petroleum-Diesel Fuel Usage

On-Road Diesel Construction Trips

The diesel usage associated with on-road construction mobile trips is calculated based on VMT from vehicle trips (i.e., worker, vendor, and hauling), the CalEEMod default diesel fleet percentage, and vehicle fuel efficiency in miles per gallon. Fuel consumption is based on VMT for the entire construction period. Construction fuel consumption was calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry. The CalEEMod emissions are specific to construction year and include fleet adjustments based on current regulations and equipment turnover.

As summarized in **Table 4.6-2**, *Project Energy Consumption during Construction (Phase 1, 2 and Combined)* during Construction, the annual diesel consumption associated with on-road construction trips would be approximately 1,626,144 gallons for Phase 1,701,075 gallons for Phase 2, or 1,585,418 gallons average for the years both phases are under construction. A specific construction schedule has not been identified for the project, and the schedule is likely to be driven by market demand. Project construction is anticipated to begin as early as 2025, with initial grading and infrastructure for the development of Phases 1 and 2. Each future parcel has the potential to be individually developed with buildout of Phase 1 anticipated by 2050. Phase 2 is expected to be developed concurrently beginning as early as 2025, with buildout by 2031. The construction dates are estimates and subject to change with market volatility. The modeled construction timing and phasing is conservative but represents a realistic worst-case scenario. As such, the analysis accounts for minor modifications as project plans evolve from conceptual planning to final mapping. If construction phases start at a later time, or phases have a longer duration, construction fuel consumption would be lower on an annual basis because the intensity of construction activities would be lower and spread out over a longer period of time. Construction equipment in future years would also be required to comply with more stringent fuel efficiency standards. Proposed project construction fuel demand would have a lower effect on regional energy supplies.

Off-Road Diesel Construction Equipment

The construction diesel usage associated with the off-road construction equipment is calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry. As summarized in **Table 4.6-2**, *Project Energy Consumption during Construction (Phase 1, 2 and Combined)* the annual diesel consumption associated with off-road construction equipment is approximately 83,080 gallons for Phase 1; 93,465 gallons for Phase 2; or 101,962 gallons average for the years both phases are under construction.

Petroleum-Gasoline Fuel Usage

On-Road Gasoline Construction Trips

The gasoline usage associated with on-road construction mobile trips is calculated based on VMT from vehicle trips (i.e., worker, vendor, and hauling), the CalEEMod default gasoline fleet percentage, and vehicle fuel efficiency in miles per gallon using the same methodology as the construction on-road trip diesel usage calculation discussed above. As summarized in **Table 4.6-2**, *Project Energy Consumption during Construction (Phase 1, 2 and Combined)* the total gasoline consumption associated with on-road construction trips would be approximately 4,305,064 gallons for Phase 1; 1,857,262 gallons for Phase 2; or 4,197,693 gallons average for the years both phases are under construction.

Table 4.6-2: Project Energy Consumption during Construction (Phases 1, 2 and Combined)

Source	Vehicle Miles Travelled (VMT) Total Annual	Project Construction Usage Total Annual	Kern County Annual Energy Consumption	Percentage Increase Countywide Total Annual
Electricity Use		**Megawatt Hours (MWH)**		
Water Consumption-Phase 1 [a]		1,476.0	15,942,398	-
		82.0		0.00051%
Water Consumption-Phase 2 [a]		282.9		-
		35.4		0.00022%
Construction Electricity Total-Combined		**1,758.9**		**-**
		80.0		**0.00050%**
Diesel Use	**Miles**	**Gallons**		
Phase 1: On-Road Construction Trips [b]	6,546,540	29,270,588	312,996,641	-
	363,697	1,626,144		0.5195%
Off-Road Construction Equipment [c]	943,800	1,495,440		-
	52,433	83,080		0.0265%
Phase 1 Construction Diesel Total	**7,490,340**	**30,766,028**		-
	416,130	**1,709,224**		**0.5461%**
Phase 2: On-Road Construction Trips [b]	2,508,792	5,608,598		-
	313,599	701,075		0.2240%
Off-Road Construction Equipment [c]	876,600	747,720		-
	109,575	93,465		0.0299%
Phase 2 Construction Diesel Total	**3,385,392**	**6,356,318**		-
	423,174	**794,540**		**0.2538%**
Combined: On-Road Construction Trips [b]	9,055,332	34,879,185		-
	503,074	1,585,418		0.5065%
Off-Road Construction Equipment [c]	1,820,400	2,243,160		-
	101,133	101,962		0.0326%
Combined Construction Diesel Total	**10,875,732**	**37,122,345**		-
	604,207	**1,687,379**		**0.5391%**
Gasoline Use	**Miles**	**Gallons**		

Source	Vehicle Miles Travelled (VMT) Total Annual	Project Construction Usage Total Annual	Kern County Annual Energy Consumption	Percentage Increase Countywide Total Annual
On-Road Construction Trips-Phase 1 [b]	51,476,880	77,491,159	437,374,947	-
	3,431,792	4,305,064		0.9843%
On-Road Construction Trips-Phase 2 [b]	19,845,840	14,858,096		-
	2,480,730	1,857,262		0.4246%
Construction Gasoline Total-Combined	**71,322,720**	**92,349,256**		-
	3,962375	**4,197,693**		**0.9597%**

Source: McIntosh & Associates 2022; see Appendix H

Notes:

a. Construction water use estimated based on acres disturbed per day per construction sequencing and estimated water use per acre (AWMA 1992).

b. On-road mobile source fuel use based on VMT from CalEEMod and fleet-average fuel consumption in gallons per mile from EMFAC2017. Electricity demand based on VMT and calculated average electric vehicle fuel economy for 2015 models (in kWh per mile) from the Department of Energy (DOE) Fuel Economy Guide.

c. Construction fuel consumption was calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry.

Abbreviations:

CalEEMod: California Emission Estimation Model; EMFAC: Emission Factor Model 2017; kWh: kilowatt-hour; MWh: megawatt-hour.

Construction Analysis

Construction activities for the proposed project are needed to grade and modify the approximate 739 acre site for the development of an industrial park would occur over several phases over a twenty-five year period and energy use is shown in **Table 4.6-2**, *Project Energy Consumption during Construction (Phase 1, 2 and Combined)* during Construction. The approximately 534-acre Phase 1 of the proposed project is planned to be developed in phases over a 25-year period. The approximately 205-acre Phase 2 will be developed over a 6-year period. Phase 1 and Phase 2 are expected to be developed concurrently, as described in the *Construction* section of Chapter 3, *Project Description* of this EIR. Although the specific layout for the proposed uses are unknown, the uses would be as listed above and the approximate construction period used for analysis purposes represents the most conservative construction phasing impacts. Construction would include the use of fuels and electricity to operate equipment and machinery including graders, scrapers, and other earthmoving equipment, employee vehicles needed for transportation to and from the project site, operation of hand tools, and other common equipment used on construction sites.

Large-scale construction activities can consume a substantial amount of electricity, but the exact level of consumption would vary on a case-by-case basis depending on the nature and extent of the activities. While smaller scale projects would typically incur fewer construction related energy costs, due to increasing transportation costs and fuel prices and the overall increase in expense of energy needed to run machinery and perform necessary tasks, these larger-scale construction activities strive to be energy efficient, in part, because contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials. Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially

less energy to produce than non-recycled materials. The incremental increase in the use of energy from the proposed project for construction materials such as asphalt, steel, concrete, pipes, and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all available and reasonable energy conservation practices in the interest in minimizing the cost of doing business.

Kern County consumed 15,942,398 MWh of electricity in 2018 (CEC, 2020c). The proposed project is estimated to annually consume 82 MWh of electricity in Phase 1, 35.4 MWh of electricity in Phase 2, and an 80 MWh average of electricity for the years both phases are under construction through water consumption which would represent approximately 0.00051 percent, 0.00022 percent, and 0.00050 percent of the County's electricity use, respectively. This consumption would cease upon completion of construction activities. Therefore, it is anticipated that construction electricity consumption associated with the proposed project would not be inefficient, wasteful, or unnecessary.

Additionally, in 2020, Kern County was projected to consume approximately 437,374,947 gallons of gasoline and 312,996,641 gallons of diesel fuel. Kern County occupies approximately 8,161 square miles and has an estimated population of 927,500 people (KCOG 2020b). The proposed project would require the annual consumption of approximately 1,709,224 gallons of diesel in Phase 1; 794,540 gallons of diesel in Phase 2; and 1,687,379 gallons average of diesel for the years both phases are under construction. The proposed project would require the annual consumption of approximately 4,305,064 gallons of gasoline in Phase 1; 1,857,262 gallons of gasoline in Phase 2; and average 4,197,693 gallons of gasoline for the years both phases are under construction. As described above, the proposed project's fuel use from the entire construction period would increase fuel use in Kern County by approximately 0.55, 0.25 and 0.54 percent for diesel and 0.98, 0.42 and 0.96 percent for gasoline. Based on the total proposed project's relatively low construction fuel use proportional to annual State and County use, the proposed project would not substantially affect existing energy fuel supplies or resources. As noted above, fuel consumption is based on a conservative construction phasing and conservative estimates for annual construction fuel consumption. Longer phases would result in lower construction intensity and a lower annual fuel consumption, resulting in lower annual demand on energy supplies. Additionally, use of construction fuel would cease once the proposed project is fully developed. Additionally, it can be expected that over the 25-year Phase 1 and Phase 2 combined build-out scenario that equipment and machinery would become more fuel and energy efficient thereby reducing energy consumption over the long term. As such, construction of the proposed project would have a nominal effect on the local and regional energy supplies, but would not be inefficient, wasteful, or unnecessary.

Furthermore, there are no unusual proposed project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Proposed project construction equipment would also be required to comply with the latest USEPA and CARB engine emissions standards. These engines use highly efficient combustion engines to minimize unnecessary fuel consumption. Contractors would be required to maintain construction equipment and limit idle/operation time in accordance with Mitigation Measure **MM 4.3-3**, as described in Section *4.3, Air Quality* of this EIR.

Therefore, it is anticipated that construction fuel consumption associated with the proposed project would

not be inefficient, wasteful, or unnecessary. The proposed project would not substantially affect existing energy or fuel supplies, or resources, and new capacity would not be required. With the implementation of Mitigation Measure **MM 4.3-3**, impacts would be less than significant in this regard.

Operations (Long-Term)

The energy consumption associated with operation of uses pursuant to the proposed project would include building electricity and water, natural gas usage, as well as fuel usage from on-road vehicles. The methodology for each category is discussed below. The values of this energy resources analysis is consistent with the analysis presented in the AQIA prepared for the proposed project, including GHG emissions. Quantifications of operational energy consumption are provided for the complete buildout of each phases of the proposed project; 7,242,106 sf in Phase 1 and 1,544,628 sf in Phase 2. All facilities are conservatively assumed to operate 365 days per year, realistically, some may operate only 260 days per year. The proposed project's energy consumption would not be wasteful, inefficient or unnecessary. Proposed project-related emissions would be necessary for operations and would meet all of the current California Green Code and Building Code requirements at the time of development.

Electricity Usage

The electricity usage associated with operation of the proposed project is based on CalEEMod defaults for the 739-acre light to medium industrial park (SI/M-2/PD) site. The proposed project would occur over two phases over a 25- year period. As summarized in **Table 4.6-3**, *Project Annual Energy Consumption during Operations* the buildings would increase electrical demand approximately 76,056 MWh per year for Phase 1; 23,182 MWh per year for Phase 2; and 99,238 MWh per year for both phases.

Natural Gas Usage

The methodology used to calculate the natural gas usage associated with the building envelopes constructed pursuant to the proposed project is based on CalEEMod default usage rates. As summarized **Table 4.6-3**, *Project Annual Energy Consumption during Operations*, the Phase 1 building area would use 158,227,500 thousand British Thermal Units (kBTU) (1,582,653,254 therms) of natural gas per year, the Phase 2 building area would use 47,292,500 kBTUs (473,038,056 therms) of natural gas per year, and the total proposed project building area would use 205,520,000 kBTU (2,055,691,310 therms) of natural gas per year.

Petroleum Fuel

The gasoline and diesel usage associated with on-road vehicular trips is calculated based on total VMT from the CalEEMod analyses, as well as the average fuel efficiency from EMFAC2017 model. The EMFAC2017 fuel efficiency data incorporates the Pavley Clean Car Standards and the Advanced Clean Cars Program. As summarized in **Table 4.6-3**, *Project Annual Energy Consumption during Operations*, the total gasoline and diesel consumption associated with on-road trips would be approximately 2,798,377 gallons per year and 3,273,594 gallons per year for Phase 1, respectively, approximately 814,148 gallons per year and 1,122,843 gallons per year for Phase 2, respectively, and approximately 3,612,524 gallons per year and 4,396,436 gallons per year for total proposed project, respectively.

Table 4.6-3: Project Annual Energy Consumption during Operations

Source	Vehicle Miles Travelled (VMT)	Project Operational Usage	Kern County Annual Energy Consumption	Percentage Increase Countywide
Electricity Use		**Megawatt Hours (MWH)**		
Buildings Phase 1[a]		76,056	15,942,398	0.4771%
Phase 2[a]		23,182		0.1454%
Total Electricity Use		**99,238**		**0.6225%**
Natural Gas Use		**MM BTUs/year**		
Buildings Phase 1[a]		158,227.5	245,494,392	0.0645%
Phase 2[a]		47,292.5		0.0193%
Total Natural Gas Use		**205,520.0**		**0.0837%**
Diesel Use - Distribution	**Miles**	**Gallons**		
Phase 1[b]	26,188,750	3,273,594	312,996,641	1.0459%
Phase 2[b]	8,982,741	1,122,843		0.3587%
Total Project Diesel Use:	**35,171,491**	**4,396,436**		**1.4046%**
Gasoline Use	**Miles**	**Gallons**		
Phase 1: Distribution[b]	28,168,875	1,408,444	437,374,947	0.3220%
Warehouse [b]	27,798,656	1,389,933		0.3178%
Total Phase 1	**55,967,531**	**2,798,377**		**0.6398%**
Phase 2: Distribution[b]	9,924,834	496,242		0.1135%
Warehouse [b]	6,358,118	317,906		0.0727%
Total Phase 2	**16,282,952**	**814,148**		**0.1861%**
Total Gasoline Use: Distribution[b]	**38,093,709**	**1,904,685**		**0.4355%**
Warehouse [b]	**34,156,774**	**1,707,839**		**0.3904%**
Total Project Gasoline Use [b]	**72,250,483**	**3,612,524**		**0.8260%**

Source: McIntosh & Associates 2022; see Appendix H

Notes:

a. The electricity and natural gas usage are based on project-specific estimates and CalEEMod defaults.

b. Calculated based on the mobile source fuel use based on VMT and fleet-average fuel consumption (in gallons per mile) from EMFAC2017. For electric vehicles, model year 2015 electric vehicle fuel economy is used from the DOE Fuel Economy Guide. 365 days per year operations assumed.

Operations Analysis

Operation of uses implemented pursuant to the proposed project would consume approximately 76,056 MWh of electricity annually in Phase 1, 23,182 MWh of electricity in Phase 2 and 99,238 MWh of electricity for the total proposed project. The proposed project would annually consume approximately 158,227.5 MM BTUs of natural gas in Phase 1, 47,292.5 MM BTUs of natural gas in Phase 2, and 205,520 MM BTUs of natural gas for the total proposed project. Proposed project operations would annually consume approximately 3,273,594 gallons of diesel and 2,798,377 gallons of gasoline in Phase 1; 1,122,843 gallons of diesel and 814,148 gallons of gasoline in Phase 2; and 4,396,436 gallons of diesel and 3,612,524 gallons of gasoline for the total proposed project.

Kern County consumed 15,942.4 MWh of electricity in 2018 (CEC, 2020c). The proposed project's operational electricity consumption would represent 0.48, 0.15 and 0.62 percent of the electrical energy

consumption in Kern County for Phase 1, Phase 2 and the total project, respectively. Regarding natural gas, Kern County consumed 2,455.5 million therms (or 245,494 million kBTUs) of natural gas in 2018. Therefore, the proposed project's operational natural gas consumption would represent 0.065, 0.019 and 0.084 percent of the natural gas consumption in the County for Phase 1, Phase 2 and the total project, respectively, and not posing an inefficient, wasteful or unnecessary energy consumption comparatively. Off-site energy-related improvements would be required such as a natural gas pressure reducing station, gas main and laterals, and a new PG&E electrical substation with distribution. The new energy infrastructure designed and built with these improvements would be sufficient in supporting the proposed project's energy capacity needs. Additional energy capacity would not be necessary with the improvements, based upon the energy consumption required for the proposed project.

In 2019, Californians consumed approximately 15,380,304,831 gallons of gasoline and approximately 3,048,057,463 gallons of diesel fuel. Kern County's projected annual gasoline fuel use in 2020 is 437,374,947 gallons and the projected diesel fuel use is 312,996,641 gallons. Expected proposed project operational use of gasoline and diesel would represent 0.64, 0.19 and 0.83 percent of current gasoline use and 1.05, 0.36 and 1.40 percent of current diesel use in the County.

The proposed project's non-transportation energy uses do not exceed one percent of current Kern County energy uses. Therefore, the proposed project operations of the buildings would not substantially affect existing energy supplies or resources. The buildings and operations within the buildings of the proposed project would comply with applicable energy standards and new capacity would not be required. Impacts would be less than significant in this regard.

With respect to the proposed project's transportation energy uses, the gasoline fuel uses associated with the proposed project do not exceed one percent of Kern County's current use. Impacts would be less than significant in this regard. However, the diesel fuel uses associated with the proposed project do exceed one percent of Kern County's current use, and without mitigation, the impacts would be potentially significant.

The proposed project would be required to implement Mitigation Measure **MM 4.3-3** as provided in Section 4.3, *Air Quality*, of this EIR, which requires all equipment be maintained in accordance with specifications and limit idle/operation time. Mitigation Measures **MM 4.6-1** and **MM 4.6-2** will also be required which require energy efficient building design and green building standards, including EV capable parking spaces.

Mitigation Measures

Implement Mitigation Measure **MM 4.3-3** as provided in Section 4.3, *Air Quality*, of this EIR.

The following mitigation measures are required to reduce energy impacts during operation of the proposed project.

MM 4.6-1: Prior to the issuance of grading or building permits, the project proponent shall provide a report and summary of all energy efficient building design standards incorporated into the project design and operations to reduce the level of energy consumption of the project. The following measures shall be included in the project design, as applicable:

a. Within one year of the first day of project operations, solar photovoltaics mounted on proposed structure's roofs to provide a portion of the future electrical demand and

offset emissions from fossil fuel fired power plants;

b. Incorporated green building measures that contribute to reducing energy use by at least 10 percent and up to 25 percent less than Title 24 requirements;

c. Provide solar water heating for non-industrial water heating;

d. If needed, in addition to roof mounted solar, provide ground mounted solar photovoltaics arrays to provide a portion of the estimated electrical demand for the project;

e. Commercial buildings shall be designed to meet LEED certification standards;

f. Roofs on all buildings shall be of a light color to reduce heat generation;

g. Portions of parking lots (drive aisles) may be paved with concrete versus asphalt, based on structural determinations, to reduce initial solar reflectance;

h. Within two years of the first day of project operations, up to 20 percent of employee parking stalls shall be covered. If feasible for electrical demand, the parking stall roofs shall contain solar photovoltaics;

i. LED lighting fixtures shall be used on all indoor and exterior site lighting;

j. LED lighting fixtures shall be used on all public streets and site lighting;

k. Electric forklifts and other material handling vehicles to reduce usage of fossil fuels shall be implemented, based on feasibility of operations;

l. Consult with Kern County Public Works Department and Golden Empire Transit (GET) on feasible design circulation features for transit related public street improvements adjacent to the project;

m. Provide bicycle friendly features, such as onsite bike lanes, bike racks, and bike lockers, to reduce vehicle miles traveled and to encourage non-vehicular transportation;

n. Where feasible, design operations to incorporate the usage of high efficiency electric motors for industrial uses.

MM 4.6-2: Prior to the issuance of grading or building permits, the project proponent shall provide evidence that the project is designed to include the green building measures specified as mandatory in the application checklists contained in the current California Green Building Standards. In addition to the number of electric vehicle capable spaces provided with electric vehicle supply equipment required by the current California Green Building Standards, the project shall provide an additional two percent of electrical vehicle capable spaces with electrical vehicle supply equipment.

Level of Significance after Mitigation

With implementation of Mitigation Measures **MM 4.3-3**, **MM 4.6-1** and **MM 4.6-2**, impacts would be less than significant.

Impact 4.6-2: The Project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

At of the time of this writing, the Kern County does not have an adopted Energy Plan. Kern County does have an Energy Element in the Kern County General Plan but focuses primarily on the County's energy resources and municipal measures such as encouraging the County to seek State and federal energy grants, have discussions with various energy industries, and developing long-term compensation for wildlife habitat to name a few. The proposed project design conforms to, and operation would comply with, State Building Energy Efficiency Standards, appliance efficiency regulations, and green building standards. Conformance to the State requirements would substantially reduce the energy consumption from fossil fuels and shift consumption to renewable sources. Mitigation measures may require design features such as incorporating passive solar design, heat island mitigation, energy efficient low voltage lighting, and encouraging electric trucks, forklifts and other material handling vehicles to name a few. Additionally, with implementation of the various mitigation measures, including Mitigation Measure **MM 4.8.1**, requiring the applicant to submit an additional GHG report, detailing how the proposed project would reduce GHG emissions to at least 29 percent of operational emissions of the proposed project's mobile CO_2e emissions, as quantified in this EIR. Thus, mitigation measures applied to the proposed project would further reduce energy consumption and cumulative contribution impacts to less than significant levels (Trinity Consultants, 2023).

The proposed project would not conflict with or obstruct the implementation of any state or local plan for renewable or energy efficiency. Implementation of the proposed project would not conflict with existing energy standards, including standards for energy conservation. For example, the California Energy Commission's Renewables Portfolio Standard program will continuously set escalating renewable energy procurement requirements in place for the State's load-serving entities. This program will also ensure the proposed project would meet the required goals for conservation. However, approval of and future implementation of the proposed project would increase electricity demand over baseline conditions in Kern County. Electric and natural gas services are provided upon demand from consumers and consistent with local, State, and federal regulations, these services are expanded based on demand. As discussed above in Impact Criteria 1, development of the proposed project would not cause inefficient, wasteful or unnecessary energy use, and impacts would be less than significant with mitigation. Therefore, the proposed project would not conflict with or obstruct state or regional plans and impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measure **MM 4.8-1** as provided in Section 4.8, *Greenhouse Gas Emissions*, of this EIR.

Level of Significance after Mitigation

Impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

Construction associated with implementation of the proposed project would result in the consumption of fuel and energy, but it would not do so in a wasteful manner, as discussed above. The consumption of fuel

and energy would not be substantial in comparison to statewide electricity, natural gas, gasoline, and diesel demand. Initial years of operation associated with implementation of the proposed project would result in the consumption of fuel and energy, but it would not do so in a wasteful manner, as discussed above. The consumption of fuel and energy would not be substantial in comparison to statewide electricity, natural gas, and gasoline demand. Vehicle manufacturers are required to achieve increased miles per gallon rates and annual efficiency gains for light-duty trucks and passenger cars, in accordance with the federal CAFE fleet standards. Additionally, CARB's Advanced Clean Cars program adopted in 2012, requires automakers to control and regulate GHG and criteria pollutant emissions from new passenger vehicles. A reduction in overall smog-forming pollution will be achieved through this program, to reduce wasteful consumption. New capacity or supplies of these energy resources would not be required. As the completed development approaches 7,650,000 sf of installed and operating building space, the consumption of diesel fuel for distribution may cross the one percent threshold used for consideration as wasteful. New capacity or supplies of energy resources would not be required as new technology (i.e., electric trucks) and increased fuel efficiencies for diesel engines will assist in the reduction of the California truck fleet. Additionally, the proposed project would be subject to compliance with all Federal, State, and local requirements for energy efficiency. Furthermore, implementation of Mitigation Measures **MM 4.3-3**, **MM 4.6-1**, **MM 4.6-2**, **and MM 4.8-1** would further increase energy efficiency for the proposed project.

The anticipated impacts of the proposed project, in conjunction with cumulative development in the site vicinity, would increase urbanization and result in increased energy consumption. Potential land use impacts are site-specific and require evaluation on a case-by-case basis. Each cumulative project would require separate discretionary approval and CEQA assessment, which would address potential energy consumption impacts and identify necessary mitigation measures, where appropriate.

As noted above, except for on the road diesel distribution fuel usage as the proposed project nears 75 percent buildout, the proposed project would not result in significant energy consumption impacts. The proposed project would not be considered inefficient, wasteful, or unnecessary with regard to energy. Thus, the proposed project and identified cumulative projects are not anticipated to result in a significant cumulative impact.

Mitigation Measures

Implement Mitigation Measure **MM 4.3-3**, as provided in Section 4.3, *Air Quality*, of this EIR, Mitigation Measures **MM 4.6-1** and **MM 4.6-2** as described above, and **MM 4.8.1**, as provided in Section 4.8, *Greenhouse Gas Emissions*, within this EIR.

Level of Significance after Mitigation

With implementation of Mitigation Measures **MM 4.3-3**, **MM 4.6-1, MM 4.6-2, and MM 4.8-1** impacts would be less than significant.

Section 4.7

Geology and Soils

Section 4.7
Geology and Soils

4.7.1 Introduction

This section of the Environmental Impact Report (EIR) includes a description of the geologic, seismic, and soil characteristics of the proposed project site; potential impacts to geology and soils associated with construction and operation of the proposed project; and mitigation measures that would reduce these impacts, if applicable. The issues addressed in this section include risks associated with faults; strong seismic ground shaking; seismic-related ground failure such as liquefaction, landslides, erosion, subsidence and earthquake-induced dam failure; and flooding. The analysis in this section is based, in part, on the following references: the Soil Survey of Kern County, California, Northwestern Part (Natural Resources Conservation Service [NRCS] Custom Soil Report (NRCS 2014); the *Hazardous Material Evaluation Report* prepared for the proposed project (McIntosh & Associates 2021; included as Appendix J to this EIR); and the *Geotechnical Feasibility Study* prepared for the proposed project (Krazan & Associates, Inc. 2021; included as Appendix I to this EIR).

4.7.2 Environmental Setting

Regional Geologic Conditions

The proposed project site is located near the southeastern corner of the Great Valley Geomorphic Province, one of 11 provinces recognized in California. The Great Valley Geomorphic Province, which lies within the central portion of California, is approximately 430 miles long and 50 miles wide. It extends from Redding in the north to Bakersfield in the south, is surrounded by mountain ranges on all sides, and consists of a large depositional trough. The province contains predominantly sedimentary rocks and recent alluvial deposits, with limited amounts of volcanic rock located in the Sutter Buttes area near Sacramento. In general, coarser sediments are found in recent, terrestrial sedimentary deposits near the margins of the Great Valley Geomorphic Province (U.S. Bureau of Reclamation 2019).

Faults

Kern County is located in one of the more seismically active areas of California and may at any time be subject to moderate to severe ground shaking. This hazard exists because elastic strains accumulate deep within the earth, resulting in movement along a fracture zone that intermittently releases large amounts of energy during earthquakes.

The proposed project site is situated in the vicinity of active and potentially active faults (dormant), consistent with the majority of central and southern California. Active faults present a variety of potential risks including strong ground shaking, dynamic densification, soil liquefaction, mass wasting, and surface

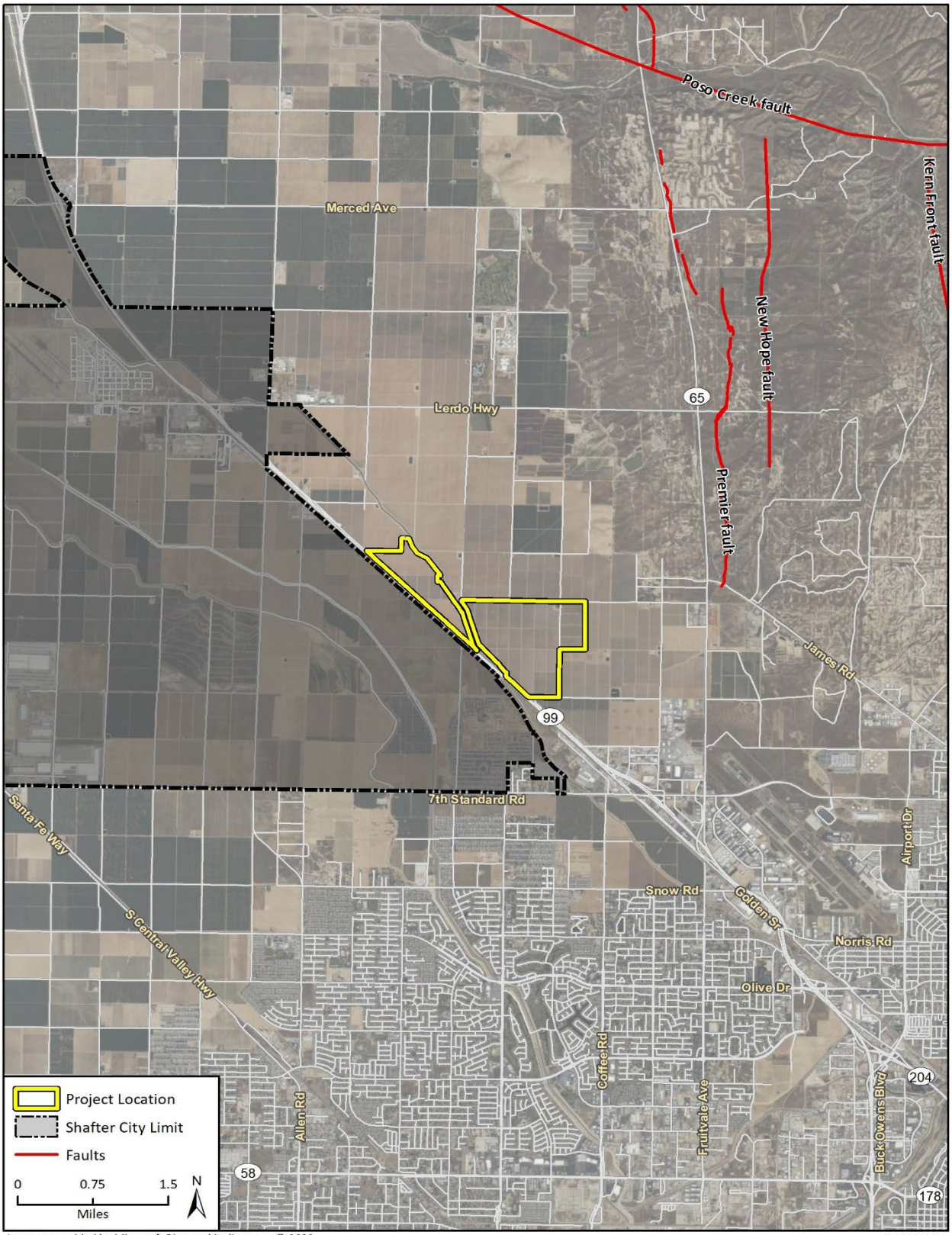
rupture at the fault plane. Generally speaking, the following four factors are the principal determinants of seismic risk at a given location:

- Distance to potential seismically capable faults;
- The maximum or "characteristic" magnitude earthquake for a capable fault;
- Seismic recurrence interval, in turn related to tectonic slip rates; and,
- Nature of earth materials underlying the site.

As shown on **Figure 4.7-1**, *Fault Map*, the proposed project site is located in a historically seismic area. The primary seismic hazard throughout the proposed project area is ground shaking from regionally significant active faults located 27 to 43 miles away from the proposed project site. The nearest active fault is the Premier Fault, located approximately 1.3 miles east of the northeast corner of the site. The Kern Front Fault, the largest fault in the area, is located approximately 3.7 miles east-southeast of the site. Other known faults within the site vicinity are the New Hope Fault (5.5 miles northeast), Poso Creek Fault (6 miles north), Mt. Poso Fault (11 miles northeast), Kern Gorge Fault (13 miles northeast), Pond Fault (17 miles northwest), Breckenridge Fault (33 miles east), and Kern Canyon Fault (34 miles east). The most well-known instances of historical fault rupture in the region are several unnamed faults, associated with ground breaks of the 1952 Kern County earthquake near Wheeler Ridge, located approximately 12 miles east-southeast of the site. The largest faults in the region are the White Wolf Fault (27 miles southeast), the San Andreas Fault (38 miles southwest), and the Garlock Fault (43 miles southeast). (Krazan & Associates, Inc. 2021)

There are no known instances of historical fault rupture at or in the immediate vicinity of the site (Krazan & Associates, Inc. 2021).

Figure 4.7-1: Fault Map



Imagery provided by Microsoft Bing and its licensors © 2022.
Additional sources provided by City of Shafter, 2019; USGS, 2020.

Geological Seismic Hazards

Seismicity is the geographic and historical distribution of earthquakes, including their frequency, intensity, and distribution. Seismic hazards include surface rupture, ground shaking, soil liquefaction, landslides, subsidence, expansive soils, and soil erosion. The *Kern County General Plan* (KCGP) provides fault locations and policies and implementation measures for seismic hazards. The proposed project site is not located within a mapped seismic hazard area; however, due to proximity to a major fault system, the proposed project area and its vicinity is considered susceptible to seismic hazards.

Fault Rupture

Ground surface rupture along an earthquake fault may cause damage to aboveground infrastructure and other features and occurs when movement on a fault deep within the earth breaks through to the surface. Fault ruptures almost always follow pre-existing faults that are zones of weakness. Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Sudden displacements are more damaging to structures because they are accompanied by shaking. Fault creep is the slow, continuous surface displacement along an aseismic fault slip. Fault rupture is considered to be most likely to occur along the identified traces of active faults. Fault (surface) ruptures are generally considered to be more likely along active faults (faults with observed displacement in the last 11,000 years). Alquist-Priolo Fault Zones are buffers around historically active faults that have been determined to be especially prone to surface fault rupture.

The Oildale and Rosedale USGS Topographic Quadrangle maps, which include the proposed project site, are not located within an Alquist-Priolo Fault Zone. As described above, the nearest fault is the Premier Fault Zone, and is located 1.3 miles east of the northeast corner or the proposed project site. The largest significant fault in the area, the Kern Front Fault, is located 3.7 miles east of the eastern boundary of the proposed project. Based on the distance between the proposed project site and nearby faults, the risk of fault rupture within the proposed project site is expected to be low (McIntosh & Associates 2021).

Ground Shaking

Strong ground shaking from an earthquake can result in damage associated with landslides, ground lurching, structural damage, and liquefaction. The southern California region is characterized by, and has a history of, fault stress and associated seismic activity. Earthquakes are classified by their magnitude, a measure of the amount of energy released during an event. During a seismic event, the proposed project site may be subjected to high levels of ground shaking due to proximity to active faults in the area. The San Andreas Fault, which is considered active, is located 38 miles southwest of the site. Within the proposed project vicinity, the San Andreas Fault's most recent seismic event occurred in 1906. This magnitude 7.9 earthquake resulted in nearly 280 feet of horizontal movement along the main trace of the fault. Geologists consider this fault as having the potential to generate an earthquake in magnitude of approximately 8.3 on the Richter scale, as the earthquake preceded the development of the scale.

Expansive Soils

Expansive soils are characterized by their potential "shrink-swell" behavior. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in certain fine-grained clay sediments from the

process of wetting and drying. Clay minerals such as smectite, bentonite, montmorillonite, beidellite, vermiculite, and others are known to expand with changes in moisture content. The higher the percentage of expansive minerals present in near surface soils, the higher the potential for significant expansion. The greatest effects occur when there are significant or repeated moisture content changes. Expansions of 10 percent or more in volume are not uncommon. This change in volume can exert enough force on a building or other structure to cause cracked foundations, floors, and basement walls. Damage to the upper floors of the building can also occur when movement in the foundation is significant. Structural damage typically occurs over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils.

In Kern County, expansive soils have been identified in the southeastern portion of the City of Bakersfield. The clayey soils on the proposed project site were found to have a very low to low expansion potential.

Liquefaction

Soil liquefaction is a state of soil particle suspension, caused by a complete loss of strength when the effective stress drops to zero. Liquefaction normally occurs in soils, such as sands, in which the strength is purely frictional. However, liquefaction has occurred in soils other than clean sands. Liquefaction usually occurs under vibratory conditions, such as those induced by seismic events.

Based on the Geotechnical Feasibility Study prepared for the proposed project, the predominant soils within the project site consist of alternating layers of silty sand, silty sand/sandy silt, clayey sand, and sandy clay. Groundwater was not encountered within the project site during the subsurface exploratory drilling. Historical groundwater depth is typically greater than 50 feet within the project site and vicinity. Due to the depth of groundwater and moderate penetration resistance of the soils below a depth of five feet, liquefaction potential at the site is very low. However, within the vicinity of the canal, shallow groundwater may be encountered during periods of significant precipitation. (Krazan & Associates, Inc. 2021)

Seismically Induced Landslides and Rockfalls

According to the KCGP, the areas of Kern County with slopes subject to failure are predominantly found along the river terraces, bluffs, and foothills, all located to the south, southeast, and east of the proposed project site. The proposed project site is located on relatively flat topography (0 to 1 percent slope) and is not located adjacent to any steep slopes or areas that would otherwise be subject to landslides, debris flow, and/or rockfalls.

Subsidence

Subsidence is occurring within the San Joaquin Valley and has been identified in portions of northern and western Kern County, northwest of the intersection of State Route 99 (SR 99) and SR 166, and in the vicinity of the City of Visalia. There are four types of subsidence occurring in the County: tectonic subsidence, subsidence from extraction of oil and gas, subsidence from groundwater withdrawal, and subsidence caused by hydro-compaction of moisture-deficient alluvial deposits. The KCGP has indicated that, although subsidence is not a significant hazard, damage to wells, foundations, and underground utilities may occur.

Due to the petroleum and groundwater withdrawal activities throughout Kern County, subsistence has the potential to occur; however, the limited amount of petroleum withdrawal occurring in Kern County is not expected to be sufficient to result in serious subsidence. The California Department of Conservation, Geologic Energy Management Division (CalGEM) monitors subsidence in oil and gas fields and regulates oil and gas withdrawal and pressurizing activities in the field. If subsidence is noted, remediation is accomplished by raising the water table by injecting water or reducing the volume of groundwater being pumped. The remediation activities ensure that no significant impacts from subsidence would occur. The proposed project site is surrounded by agricultural land uses and is not located in an area of significant petroleum extraction activities.

Dam Failure

The Kern County inundation mapping program includes the Isabella Lake Dam, the Brite Valley Dam, and the Haiwee Reservoir. The nearest dam to the proposed project site is the Isabella Dam, located approximately 37 miles northeast of the proposed project site and developed near the Kern Canyon Fault. The Isabella Dam is earth-filled and is approximately 185 feet high, 1,725 feet long, and has a capacity of 570,000 acre-feet of water.

If an earthquake were to occur near the Isabella Dam, it could damage the dam to an extent that could cause the entire lake storage to be released, which would flood 60 square miles of the City of Bakersfield (City of Bakersfield 2007). The KCGP indicates the probability of the dam failing entirely, with the lake at capacity, is approximately 1 day in 10,000 years. The proposed project site is located outside of the area of potential flooding due to inundation from dam collapse.

Flooding

The proposed project site is located within the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Zone X (Map Number 06029C1825F; FEMA 2021). Refer to **Figure 4.7-2**, *Flood Zone Map*. This zone designation indicates the proposed project site is located in a moderate- to low-risk area outside the 0.2 percent annual chance (100-year) flood zone.

Local Geologic and Soils Setting

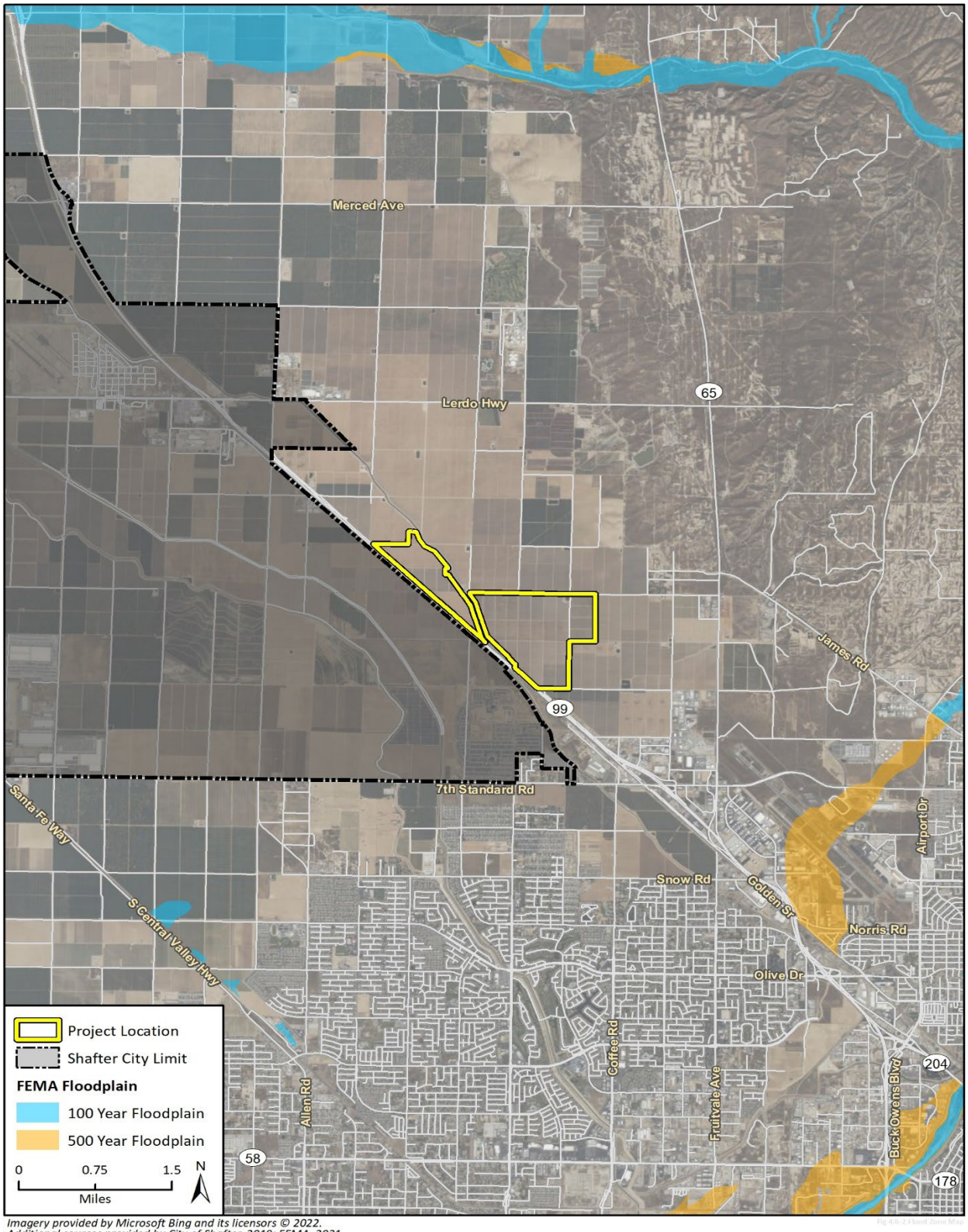
Geology

The project site is located in a relatively flat-lying plain at approximately 440 feet above sea level and is composed of alluvial soils derived from igneous and sedimentary rock. The proposed project site is not within the 100-year flood zone.

Soils

The soil types present within the proposed project site have been analyzed in the Soil Survey of Kern County, California, Northwestern Part, Custom Soil Report (NRCS 2020). Soil types listed as being present within the proposed project site include: (138) Delano sandy loam, (145) Driver coarse sandy loam, (146ne) Delano sandy loam, (174) Kimberlina fine sandy loam, and (184) Lewkalb sandy loam. Each of these soil types are shown in **Figure 4.7-3**, *Soils* Map, and described below.

Figure 4.7-2: Flood Zone Map



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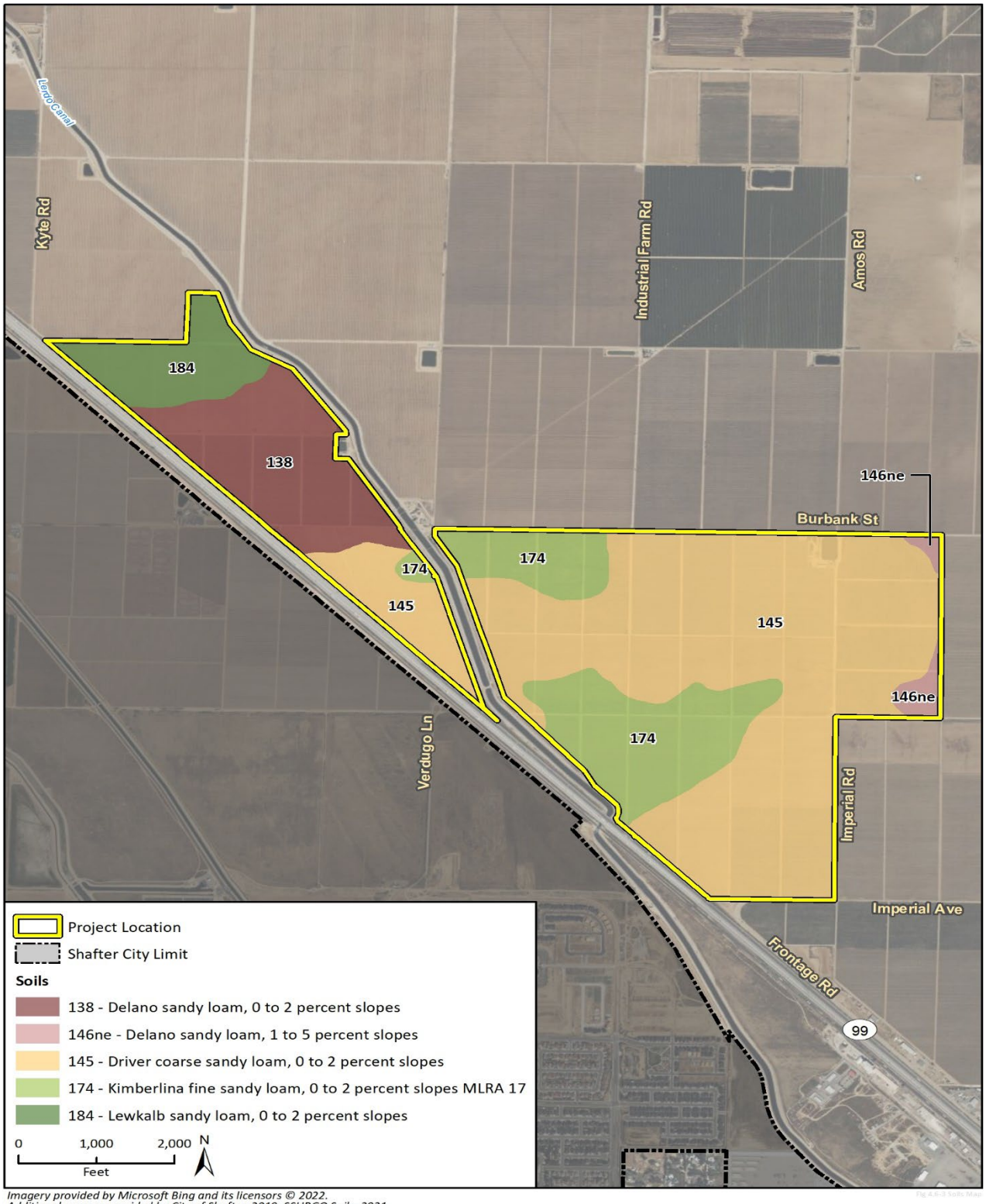
Additional sources provided by City of Shafter, 2019; FEMA, 2021.

Figure 4.7-3: Soils Map



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Additional sources provided by City of Shafter, 2019; SSURGO Soils, 2021.

- **Delano sandy loam 0 to 2 percent slopes.** This deep, well-drained soil is found on alluvial plains and terraces. It is formed in alluvium derived from granitic rock. Runoff is slow, erosion is slight. Permeability is moderately slow.
- **Driver coarse sandy loam**. This deep, well-drained soil is found on terraces, formed in alluvium derived dominantly from granitic rock. The average frost-free season is 250-300 days. Runoff is very slow, erosion is slight. Permeability is moderately slow.
- **Delano sandy loam 1 to 5 percent slopes**. This deep well drained soil is found on alluvial fan remnants. It is formed in alluvium derived from granitoid rock. Runoff is slow, erosion is slight. Permeability is moderately slow.
- **Kimberlina fine sandy loam.** This deep well drained soil is found on alluvial fans and plains. It is formed in alluvium derived from granitic and sedimentary rock. Runoff is slow, erosion is slight. Permeability is moderate.
- **Lewkalb sandy loam.** This deep, well-drained soil is on low terraces, formed in alluvium derived dominantly from granitic rock. Runoff is very slow, erosion is slight. Permeability is moderately rapid in the surface layer and slow in the underlying cemented layer.

Existing Paleontological Resources

Rincon performed a literature review through the University of California, Museum of Paleontology (UCMP), and 40,373 paleontological resources have been recorded in Kern County, generally consisting of vertebrate and plant fossils and microfossils (UCMP 2022). However, no records of fossil localities were identified within the proposed project area or surrounding area as a result of the UCMP online paleontological database review.

Based on a literature and geologic map review, the proposed project site is located in an area underlain by surficial deposits of recent Pleistocene age Quaternary deposits (Qoa) of the Great Valley. Recent Pleistocene age basin deposits within the Great Valley consist of silt, sand, and gravel deposited during flood stages of major fluvial systems. This geologic unit is considered potentially paleontologically sensitive.

4.7.3 Regulatory Setting

Geologic resources and geotechnical hazards are governed primarily by local jurisdictions. The conservation elements and seismic safety elements of county general plans contain policies for the protection of geologic features and avoidance of hazards.

The California Environmental Quality Act (CEQA) is the major environmental statute that guides the quality environment, design, and construction of projects on nonfederal lands in California. This statute establishes a specific process for environmental impact analysis and public review. In addition, the project proponent must comply with other applicable federal, State, and local statutes, regulations, and policies. Relevant and potentially relevant statutes, regulations, and policies are discussed below.

Federal

Uniform Building Code

Development standards would require the proposed project to comply with the seismic design criteria found in the Uniform Building Code (UBC) and its successor the International Building Code (IBC). The UBC was replaced in 2000 by the new (at the time) IBC published by the International Code Council (ICC). In addition, an adequate design for drainage facilities and pre-construction soil and grading studies would be required. Although seismic design standards have been established to reduce many of the structural problems that occur during major earthquakes, the UBC was revised in 1997 as follows:

- Upgrade the level of ground motion used in the seismic design of buildings;
- Add site amplification factors based on local soil conditions; and,
- Improve the way ground motion is applied in detailed design.

The California Building Code (CBC) which is based on the UBC and IBC, is described in the *State* section below.

Clean Water Act (Erosion Control)

The Federal Clean Water Act (CWA; United States Code [U.S.C.] Title 33, Section 1251 et seq.), formally the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point-source and certain non-point-source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). Projects that disturb one or more acres of land are required to obtain NPDES coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) administered by the State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ. In the event that a facility results in discharges, the Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which includes best management practices (BMPs) to protect stormwater runoff, including measures to prevent soil erosion.

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act was enacted in 1997 to "reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program." To accomplish this, the act established the National Earthquake Hazards Reduction Program (NEHRP). This program was significantly amended in November 1990 by the NEHRP, which refined the description of agency responsibilities, program goals, and objectives. Public Law No 115-307 was passed in December 2018 to amend the Earthquake Hazards Reduction Act to reauthorize through FY 2023, and to expand activities under the NEHRP (Congress 2018).

The NEHRP's mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. The NEHRP designates FEMA as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Programs under the NEHRP help inform and guide planning and building code requirements (e.g., emergency evacuation responsibilities and seismic code standards), such as those to which the proposed project would be required to adhere.

State

Alquist-Priolo Earthquake Fault Zoning Act of 1972

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (formerly the Special Studies Zoning Act) regulates development and construction of buildings intended for human occupancy to avoid the hazards associated with surface fault rupture. In accordance with this law, the CGS maps active faults and designates Earthquake Fault Zones along mapped faults. This act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive. These classifications are qualified by the conditions that a fault must be shown to be "sufficiently active" and "well defined" by detailed site-specific geologic explorations in order to determine whether building setbacks should be established.

Any project that involves the construction of buildings or structures for human occupancy, such as the proposed warehouse project, is subject to review under the Alquist-Priolo Earthquake Fault Zoning Act, and any structures for human occupancy must be located at least 50 feet from any active fault. As stated previously, the site is not located within a defined Alquist-Priolo fault zone.

Seismic Hazards Mapping Act of 1990

In accordance with Public Resources Code (PRC) Chapter 7.8, Division 2, CDMG (now CGS) is directed to delineate Seismic Hazard Zones through the Seismic Hazards Zonation Program. The purpose of the act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards, such as those associated with strong ground shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes.

Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land use planning and permitting processes. In accordance with the Seismic Hazards Mapping Act, site-specific geotechnical investigations must be performed prior to permitting most urban development projects within seismic hazard zones.

California Building Code

The State of California provides minimum standards for building design through the California Building Code (CBC) of Regulations as Title 24, Part 2 (California Building Standards Commission [CBSC] 2016). Title 24 is administered by the CBSC, which, by law, is responsible for coordinating all building standards.

The CBC is based on the UBC and IBC, which are used widely throughout the United States (generally adopted on a state-by-state or district-by-district basis), and have been modified for conditions within California. In 2022, a revised version of the CBC took effect. In accordance with the CBC, a grading permit is required if more than 50 cubic yards of soil is moved during implementation of a project. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures.

The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures within its jurisdiction. The 2022 CBC is based on the 2019 International Building Code published by the International Code Conference. In addition, the CBC contains necessary California amendments, which are based on reference standards obtained from various technical committees and organizations such as the American Society of Civil Engineers (ASCE), the American Institute of Steel Construction, and the American Concrete Institute. ASCE Minimum Design Standards 7-05 provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (flood, snow, wind, etc.) for inclusion into building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure, or any appurtenances connected or attached to such buildings or structures throughout California.

The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients which are used to determine a Seismic Design Category (SDC) for a project as described in Chapter 16 of the CBC. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site and ranges from SDC A (very small seismic vulnerability) to SDC E (very high seismic vulnerability and near a major fault). Design specifications are then determined according to the SDC in accordance with Chapter 16 of the CBC. Chapter 16, Section 1613 provides earthquake loading specifications for every structure, and portion thereof, including nonstructural components that are permanently attached to structures and their supports and attachments, which shall be designed and constructed to resist the effects of earthquake motions in accordance with ASCE 7-05. Chapter 18 of the CBC covers the requirements of geotechnical investigations (Section 1803); excavation, grading, and fills (Section 1804); and load bearing of soils (1805), as well as foundations (Section 1808), shallow foundations (Section 1809), and deep foundations (Section 1810). Chapter 18 also describes analysis of expansive soils and the determination of the depth to groundwater table. For SDCs D, E, and F, Chapter 18 requires analysis of slope instability, liquefaction, and surface rupture attributable to faulting or lateral spreading, plus an evaluation of lateral pressures on basement and retaining walls, liquefaction and soil strength loss, and lateral movement or reduction in foundation soil-bearing capacity. It also addresses mitigation measures to be considered in structural design, which may include ground stabilization, selecting appropriate foundation type and depths, selecting appropriate structural systems to accommodate anticipated displacements, or any combination of these measures. The potential for liquefaction and soil strength loss must be evaluated for site-specific peak ground acceleration magnitudes and source characteristics consistent with the design earthquake ground motions.

Local

Kern County General Plan (KCGP)

The proposed project site is located within the KCGP, and the policies, goals, and implementation measures in the KCGP applicable to geology and soils as related to the proposed project are provided below. The KCGP also contains additional policies, goals, and implementation measures that are more general in nature and not specific to development. These additional policies, goals and implementation measures are not listed below, but are incorporated herein by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.3 Physical and Environmental Constraints

Goal

Goal 1: To strive to prevent loss of life, reduce personal injuries, and property damage, minimize economic and social diseconomies resulting from natural disaster by directing development to areas which are not hazardous.

Policies

Policy 1: Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained ([KCGP] Map Code 2.1 [Seismic Hazard], Map Code 2.2 [Landslide], Map Code 2.3 [Shallow Groundwater], Map Code 2.5 [Flood Hazard], Map Codes from 2.6 – 2.9, Map Code 2.10 [Nearby Waste Facility], and Map Code 2.11 [Burn Dump Hazard]) to support such development unless appropriate studies establish that such development will not result in unmitigated significant impact.

Implementation Measures

Measure D: Review and revise the County's current Grading Ordinance as needed to ensure that its standards minimize permitted topographic alteration and soil erosion while maintaining soil stability.

Measure N: Applicants for new discretionary development should consult with the appropriate Resource Conservation District and the California Regional Water Quality Control Board regarding soil disturbances issues.

Chapter 4. Safety Element

Section 4.1 Introduction

Goal

Goal 1: Minimize injuries and loss of life and reduce property damage.

Section 4.3 Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure

Policy

Policy 1: The County shall require development for human occupancy to be placed in a location away from an active earthquake fault in order to minimize safety concerns.

Implementation Measures

Measure B: Require geological and soils engineering investigations in identifying significant geologic hazard areas in accordance with the Kern County Code of Building Regulations.

Measure C: The fault zones designated in the Kern County Seismic Hazard Atlas should be considered significant geologic hazard areas. Proper precautions should be instituted to reduce seismic hazard, whenever possible in accordance with State and County regulations.

Section 4.5 Landslides, Subsidence, Seiche, and Liquefaction

Policies

Policy 1: Determine the liquefaction potential at sites in areas of shallow groundwater (Map Code 2.3) prior to discretionary development and determine specific mitigation to be incorporated into the foundation design, as necessary, to prevent or reduce damage from liquefaction in an earthquake.

Policy 3: Reduce potential for exposure of residential, commercial, and industrial development to hazards of landslide, land subsidence, liquefaction, and erosion.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

A portion of the proposed project site is located within the MBGP, and the policies, goals, and implementation measures in the MBGP applicable to geology and soils as related to the proposed project are provided below. The MBGP also contains additional policies, goals, and implementation measures that are more general in nature and not specific to development. These additional policies, goals and implementation measures are not listed below, but are incorporated herein by reference.

Chapter V. Conservation/Soils and Agriculture Element

Policies

Policy 7: Land use patterns, grading, and landscaping practices shall be designed to prevent soil erosion while retaining natural watercourses when possible.

Policy 12: Prohibit premature removal of ground cover in advance of development and require measures to prevent soil erosion during and immediately after construction.

Policy 13: Minimize the alteration of natural drainage and require development plans to include necessary construction to stabilize runoff and silt deposition through enforcement of grading and flood protection ordinances.

Implementation Measures

Measure 4: Periodically review and update grading ordinances to take into account the potential of soil erosion.

Measure 7: Coordinate with the Soil Conservation Service to provide technical assistance on improving or preserving soil conditions.

Chapter VII. Safety/Public Safety Element

Goal

Goal 1: Substantially reduce the level of death, injury, property damage, economic, and social dislocation and disruption of vital services that would result from earthquake damage.

Goal 2: Ensure the availability and effective response of emergency services following an earthquake.

Goal 3: Prepare the planning area for effective response to, and rapid, beneficial recovery from, an earthquake.

Goal 4: Prevent loss of life from the failure of critical facilities in an earthquake and ensure the continued functioning of essential facilities following a disaster.

Goal 5: Protect essential lifelines and prevent casualties and major social and economic disruption due to liquefaction in an earthquake.

Goal 7: Protect land uses from the risk of dam failure inundation including the assurances that: the functional capabilities of essential facilities are available in the event of a flood; hazardous materials are not released; effective measures for mitigation of dam failure inundation are incorporated into the design of critical facilities; and the rapid and orderly evacuation of populations in the inundation area will occur.

Policies

Policy 9: Adopt and maintain high standards for seismic performance of buildings, through prompt adoption and careful enforcement of the most current seismic standards of the Uniform Building Code.

Policy 10: Prohibit development designed for human occupancy within 50 feet of a known active fault and prohibit any building from being placed astride an active fault.

Policy 11: Require site-specific studies to locate and characterize specific fault traces within an Alquist-Priolo Earthquake Fault Zone for all construction designed for human occupancy.

Policy 13: Determine the liquefaction potential at sites in areas of high groundwater prior to development and determine specific mitigation to be incorporated into the foundation design, as necessary to prevent or reduce damage from liquefaction in an earthquake.

Implementation Measures

Measure 3: Require structures that are within the plan area and are subject to Building Department review to adhere to the most current seismic standards adopted as part of the Uniform Building Code.

Measure 11: Review the current code enforcement procedures for concrete tilt-up and composite pre-stressed concrete construction for consistency with effective principles of seismic design, and revised as appropriate to maintain seismic integrity of new construction.

Measure 13: Detailed geologic investigations shall be conducted, in conformance with design guidelines of the California Division of Mines and Geology, for all construction designed for human occupancy in an Alquist-Priolo Earthquake Fault Study Zone.

Measure 14: Revise city and county zoning and building codes to prohibit construction for buildings for human occupancy within 50 feet of the trace of an active fault. For critical facilities the set-back shall be at least 300 feet.

Measure 17: Require liquefaction investigations in all areas of high groundwater potential and appropriate foundation designs to mitigate potential damage to buildings on sites with liquefaction potential.

Kern County Code of Building Regulations (Title 17 of the Ordinance Code of Kern County)

All construction in Kern County is required to conform to the Kern County Building Code (Chapter 17.08, Building Code, of the Kern County Code of Regulations). Kern County has adopted the CBC, 2022 Edition, with some modifications and amendments. The entire County is in Seismic Zone 4, a designation previously used in the UBC to denote the areas of highest risk for earthquake ground motion. California has an unreinforced masonry program that details seismic safety requirements for Zone 4. Seismic provisions associated with Seismic Zone 4 have been adopted.

Chapter 17.28. Kern County Grading Code

The purpose of the Kern County Grading Code is to safeguard life, limb, property, and the public welfare by regulating grading on private property. All requirements of the Kern County Grading Code would be applied during implementation of the proposed project. All required grading permit(s) would be obtained prior to commencement of construction activities. Sections of the Grading Code that are particularly relevant to geology and soils are provided below.

Section 17.28.140 Erosion Control

A. Slopes. The faces of cut-and-fill slopes shall be prepared and maintained to control erosion. This control may consist of effective planting. Protection for the slopes shall be installed as soon as practicable and prior to calling for final approval. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted.

B. Other Devices. Where necessary, check dams, cribbing, riprap, or other devices or methods shall be employed to control erosion and provide safety.

C. Temporary Devices. Temporary drainage and erosion control shall be provided as needed at the end of each work day during grading operations, such that existing drainage channels would not be blocked. Dust control shall be applied to all graded areas and materials and shall consist of applying water or another approved dust palliative for the alleviation or prevention of dust nuisance. Deposition of rocks, earth materials or debris onto adjacent property, public roads or drainage channels shall not be allowed.

Section 17.28.170 Grading Inspection

A. General. All grading operations for which a permit is required shall be subject to inspection by the building official. Professional inspection of grading operations and testing shall be provided by the civil engineer, soils engineer, and the engineering geologist retained to provide such services in accordance with Subsection 17.28.170(E) for engineered grading and as required by the building official for regular grading.

B. Civil Engineer. The civil engineer shall provide professional inspection within such engineer's area of technical specialty, which shall consist of observation and review as to the establishment of line, grade and surface drainage of the development area. If revised plans are required during the course of the work, they shall be prepared by the civil engineer.

C. Soils Engineer. The soils engineer shall provide professional inspection within such engineer's area of technical specialty, which shall include observation during grading and testing for required compaction. The soils engineer shall provide sufficient observation during the preparation of the natural ground and placement and compaction of the fill to verify that such work is being performed in accordance with the conditions of the approved plan and the appropriate requirements of this chapter. Revised recommendations relating to conditions differing from the approved soils engineering and engineering geology reports shall be submitted to the permittee, the building official and the civil engineer.

D. Engineering Geologist. The engineering geologist shall provide professional inspection within such engineer's area of technical specialty, which shall include professional inspection of the bedrock excavation to determine if conditions encountered are in conformance with the approved report. Revised recommendations relating to conditions differing from the approved engineering geology report shall be submitted to the soils engineer.

E. Permittee. The permittee shall be responsible for the work to be performed in accordance with the approved plans and specifications and in conformance with the provisions of this Code, and the permittee shall engage consultants, if required, to provide professional inspections on a timely basis. The permittee shall act as a coordinator between the consultants, the contractor and the building official. In the event of changed conditions, the permittee shall be responsible for informing the building official of such change and shall provide revised plans for approval.

F. Building Official. The building official may inspect the project at the various stages of the work requiring approval to determine that adequate control is being exercised by the professional consultants.

G. Notification of Noncompliance. If, in the course of fulfilling their responsibility under this chapter, the civil engineer, the soils engineer, or the engineering geologist finds that the work is not being

done in conformance with this chapter or the approved grading plans, the discrepancies shall be reported immediately in writing to the permittee and to the building official. Recommendations for corrective measures, if necessary, shall also be submitted.

H. Transfer of Responsibility. If the civil engineer, the soils engineer, or the engineering geologist of record is changed during the course of the work, the work shall be stopped until:

I. The civil engineer, soils engineer, or engineering geologist, has notified the building official in writing that they will no longer be responsible for the work and that a qualified replacement has been found who will assume responsibility.

J. The replacement civil engineer, soils engineer, or engineering geologist notifies the building official in writing that they have agreed to accept responsibility for the work.

Kern County National Pollutant Discharge Elimination System Program

As closed systems never contact the ocean, many of the waters within Kern County are technically not subject to protective regulations under the federal NPDES Program. The Kern County NPDES Program serves as a regulatory substitute to ensure water quality within the county is maintained during all construction activities, regardless of discharge location. The Kern County NPDES program applies to all projects that would disturb more than one acre. The Kern County Public Works Department Development Division, Floodplain Management Division requires the completion of an NPDES applicability form for projects with construction disturbing one or more acres within Kern County. This form requires the project proponent to provide background information on construction activities and to identify whether stormwater runoff has the potential of discharging into waters of the United States, be contained on-site, or discharge indirectly off-site to a river, lake, stream, or off-site drainage facility. Should stormwater runoff be contained on-site and not discharged into any waters, no special actions are required. Should stormwater runoff discharge into waters of the United States, compliance with the SWRCB Construction General Permit is required, which requires preparation of a SWPPP. Should stormwater runoff not drain to waters of the United States (e.g., drains to a terminal drainage facility), the project proponent would be required to develop a SWPPP and BMPs.

Projects disturbing at least 1 acre of soil in Kern County are required to apply for a County NPDES Storm Water Program Permit. Prior to issuance of the permit, Kern County Public Works Department Development Division, Floodplain Management Division must verify the project proponent's stormwater plans. Project proponents must apply for the permit under one of the following four conditions:

1. All stormwater is retained on-site and no stormwater runoff, sediment, or pollutants from on-site construction activity can discharge directly or indirectly off-site or to a river, lake, stream, municipal storm drain, or off-site drainage facilities.
2. All stormwater runoff is not retained on-site but does not discharge to a water of the United States (i.e., drains to a terminal drainage facility). Therefore, a SWPPP has been developed and BMPs must be implemented.
3. All stormwater runoff is not retained on-site, and the discharge is to a water of the United States. Therefore, a Notice of Intent must be filed with the SWRCB prior to issuance of the building permit. Also, a SWPPP has been developed and BMPs must be implemented.
4. Construction activity is between 1 to 5 acres and an Erosivity Waiver was granted by SWRCB. BMPs must be implemented.

4.7.4 Impacts and Mitigation Measures

This section describes the impact analysis relating to geology and soils for the proposed project. It describes the methods used to determine the impacts of the proposed project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Methodology

The potential impacts associated with the proposed project are evaluated through a comparison of the anticipated proposed project effects on geologic and soil resources. The evaluation of proposed project impacts is based on analysis of KCGP safety polices, and the significance criteria established by Appendix G of the *CEQA Guidelines*, which Kern County has determined to be appropriate criteria for this EIR. The evaluation presents findings, conclusions, and recommendations concerning development of the proposed project based on an engineering analysis of geotechnical properties of the subsurface conditions and evaluation of the underlying soils.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established by Appendix G of the *CEQA Guidelines*, to determine whether a project would have a significant adverse impact with regard to Geology and Soils if it would:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

   - 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);
   - Strong seismic ground shaking;
   - Seismic-related ground failure, including liquefaction; or,
   - Landslides;

b. Result in substantial soil erosion or loss of topsoil;

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;

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (ICBO 1994), creating substantial direct or indirect risks to life or property;

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater; or

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The lead agency determined in the Notice of Preparation/Initial Study (NOP/IS) that the following environmental issue areas would result in no impacts or less than significant impacts and were therefore scoped out of requiring further review in this EIR. Please refer to Appendix A of this EIR for a copy of the NOP/IS and additional information regarding these issue areas.

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Landslides.

- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater.

Project Impacts

Impact 4.7-1: The Project Would Directly or Indirectly Cause Potential Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving 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

According to the Hazardous Materials Evaluation Report prepared by McIntosh & Associates, Inc. (2021), there are no mapped areas that have Fault Zones on the proposed project site. In addition, no known surface or subsurface faults have been mapped transecting any of the parcels comprising the proposed project. The nearest fault zone is the Premier Fault Zone and it is located approximately 1.3 miles east of the northeast corner or the proposed project (on James Road 150 feet east of SR 65). The largest fault in the area, the Kern Front fault, is located approximately 3.7 miles east of the east boundary of the proposed project.

Implementation of the proposed project would include the construction and operation of an industrial park with approximately 8,907,446 square feet of industrial warehouse and office use space on approximately 739 acres of currently undeveloped land; therefore, implementation of the proposed project has the potential to expose people and structures to potential adverse effects involving ground shaking. However, construction of the project would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08), which include standards related to seismic hazards. Kern County has adopted the California Building Standards Code (CBC), which imposes substantially the same requirements as the IBC. Therefore, the proposed structures would be required to comply with the Kern County Building Code and CBC to ensure structural design can withstand anticipated ground shaking. Therefore, impacts are considered less than significant.

Mitigation Measures

Mitigation measures are not required.

Level of Significance After Mitigation

Impacts would be less than significant.

Impact 4.7-2: The Project Would Directly Or Indirectly Cause Potential Substantial Adverse Effects, Including The Risk Of Loss, Injury, Or Death Involving: Strong Seismic Ground Shaking Or Liquefaction.

Seismically induced liquefaction occurs when loose, water-saturated sediments of relatively low density are subjected to cyclic shaking that causes soils to lose strength or stiffness because of increased pore water pressure. Liquefaction generally occurs when the depth to groundwater is less than 50 feet. Based on the Geotechnical Feasibility Study prepared by Krazan & Associates, Inc. (2021), historical groundwater depth is typically greater than 50 feet within the project site and vicinity. Due to the depth of groundwater and moderate penetration resistance of the soils below a depth of five feet, liquefaction potential at the site is very low.

However, within the vicinity of the canal, shallow groundwater may be encountered during periods of significant precipitation. Accordingly, soil liquefaction potential should be evaluated during site specific analysis for structures planned to be located within close proximity of the canal. While existing canal easements exist preventing development within the easement limits, impacts would be potentially significant and Mitigation Measure 4.7-1 would be required to reduce impacts to a less than significant level.

Furthermore, according to the Hazardous Materials Evaluation Report prepared by McIntosh & Associates, Inc. (2021), there are no mapped areas that have Fault Zones on the proposed project. No known surface or subsurface faults have been mapped transecting any of the parcels comprising the proposed project. The nearest fault zone is the Premier Fault Zone and is located 6,770 feet (1.3 miles) east of the northeast corner or the proposed project on James Road, 150 feet east of SR 65. The largest significant fault in the area, the Kern Front Fault, is located 19,700 feet (3.7 miles) east of the eastern boundary of the proposed project, with a maximum estimated earthquake magnitude of 6.3 (Mw). Structures constructed as part of the project would be required by State law to be constructed in accordance with all applicable IBC and CBC earthquake construction standards, including those relating to soil characteristics. In addition, pursuant to Mitigation Measure **MM 4.7-2**, the project would be required to prepare a geotechnical study showing compliance with all applicable ordinances of the Kern County Building Code and the CBC, and would be required to include recommended construction procedures, which would further reduce impacts related to seismic ground shaking or liquefaction.

Mitigation Measures

MM 4.7-1: Building locations shall be stabilized against the occurrence of liquefaction by dynamic compaction, or other accepted soil stabilization method approved by the County Building

official. Implement Mitigation Measures MM 4.10-1 and MM 4.10-2, described in *Hydrology and Water Quality*.

MM 4.7-2: Prior to the issuance of building or grading permits, the project proponent shall submit to the Kern County Public Works Department, for review and approval, a final engineering design specific geotechnical study in accordance with all applicable ordinances of the Kern County Building Code (Chapter 17.08) and the California Building Code. The final study shall include recommended construction procedures regarding existing soils.

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM 4.7-1**, **MM 4.7-2**, impacts would be less than significant.

Impact 4.7-3: The Project Would Result in Substantial Soil Erosion or the Loss of Topsoil.

Construction

Construction of the proposed project would result in 739 acres of grading and ground disturbance for the development of the proposed warehouse distribution facility. Grading activities associated with the proposed project have the potential to cause increased runoff, erosion, and sedimentation that would not otherwise occur at the proposed project site. All of the soil types present within the proposed project site are identified as having a slight erosion hazard, which indicates that erosion is unlikely under ordinary climatic conditions and existing topography (McIntosh & Associates 2021). However, proposed grading activities would remove or cover existing topsoil and may expose underlying soils to wind and water erosion during construction activities on the proposed project site. Impacts are considered potentially significant and mitigation measures would be required.

Operation

Operation of the proposed project would result in the creation of new impervious surfaces, which would result in increased, displaced stormwater runoff and modified drainage patterns on-site and in the immediate vicinity of the proposed project site. Nonetheless, the stormwater system for the project would drain into sumps, which would not result in increased soil erosion. Additionally, the project would be required to comply with Mitigation Measures **MM 4.10-1** and **MM 4.10-2** which would require preparation of a SWPPP and a hydrologic study and drainage plan, which would ensure minimization of soil erosion and sedimentation.

CWA Section 402(p) requires that operators of "discharges associated with industrial activity" obtain a NPDES permit. Therefore, implementation of the proposed project would require the project proponent to prepare a SWPPP. The SWPPP would include erosion control measures in order to comply with the NPDES requirements of the Federal CWA. In addition to its NPDES and CWA obligations, the proposed project would also be subject to Kern County ordinances and standards related to soils and geology. All earthwork is required to be performed in accordance with applicable Kern County requirements as stipulated in the Kern County Ordinance Code. Therefore, impacts are considered potentially significant and mitigation measures would be required. The project would be required to implement Mitigation Measure **MM 4.7-3**

by preparing a Soil Erosion and Sedimentation Plan and incorporating BMPs to minimize soil erosion and the loss of topsoil, which would reduce impacts to a less than significant level.

Mitigation Measures Implement Mitigation Measures **MM 4.10-1** and **MM 4.10-2** (see Section 4.10, *Hydrology and Water Quality,* of this EIR for the full mitigation measure text).

MM 4.7-3: The project proponent shall prepare a Soil Erosion and Sedimentation Control Plan to mitigate potential loss of soil and erosion. The plan shall be prepared by a California-registered licensed civil engineer or other authorized professional and submitted for review and approval by the Kern County Public Works Department. The Soil Erosion and Sedimentation Control Plan shall include, but is not limited to, the following:

a. Best Management Practices to minimize soil erosion consistent with Kern County grading requirements and the California Regional Water Quality Control Board requirements pertaining to the preparation and approval of a Stormwater Pollution Prevention Plan (Best Management Practices recommended by the Kern County Public Works Department shall be reviewed for applicability);

b. Sediment collection facilities as may be required by the Kern County Public Works Department; and

c. Provisions to comply with local and State codes relating to drainage and runoff, including use of pervious pavements, and/or other methods to the extent feasible, to increase stormwater infiltration and reduce runoff onto agricultural lands.

Level of Significance after Mitigation

With implementation of Mitigation Measures **MM 4.7-3**, **MM 4.10-1**, and **MM 4.10-2** (See Section 4.10 *Hydrology and Water Quality* of this EIR for the full mitigation measure text), impacts would be less than significant.

Impact 4.7-4: The Project Would 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.

Lateral spreading is the horizontal movement or spreading of soil toward an open face. Lateral spreading may occur when soils liquefy during an earthquake event, and the liquefied soils with overlying soils move laterally to unconfined spaces. Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal movement. Subsidence is caused by a variety of activities, which include, but are not limited to, withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydro-compaction.

As stated above under *Impact 4.7-2,* based on the Geotechnical Feasibility Study prepared by Krazan & Associates, Inc. (2021), historical groundwater depth is typically greater than 50 feet within the project site and vicinity. Due to the depth of groundwater and moderate penetration resistance of the soils below a depth of five feet, liquefaction potential at the site is very low. However, within the vicinity of the canal, shallow groundwater may be encountered during periods of significant precipitation. Accordingly, liquefaction

potential should be evaluated during site specific analysis for structures planned to be located within close proximity of the canal. The project would be required to adhere to applicable policies and recommendations outlined in applicable ordinances of the Kern County Building Code (Chapter 17.08). Structures constructed as part of the proposed project would be required by State law to be constructed in accordance with all applicable IBC and CBC earthquake construction standards, including those relating to soil characteristics. However, the Geotechnical Feasibility Study also found that soils are moderately compressible and/or collapsible under saturated conditions and structures within the general vicinity have experienced excessive post-construction settlement when the foundation soils become near-saturated. Accordingly, mitigation measures are recommended to reduce the potential of excessive soil settlement (Krazan & Associates, Inc. 2021). Therefore, impacts would be potentially significant and mitigation measures would be required. The project would be required to implement Mitigation Measures **MM 4.7-1** through **MM 4.7-3**, which would require building stabilization by dynamic compaction; preparation of an engineeringdesign-specific geotechnical study; and preparation of a Soil Erosion and Sedimentation Control Plan, which would reduce impacts related to unstable soils, landslides, lateral spreading, subsidence, and liquefaction to a less than significant level.

Mitigation Measures

Implement Mitigation Measures **MM 4.7-1** through **MM 4.7-3**, as described above.

Level of Significance after Mitigation

With implementation of Mitigation Measures **MM 4.7-1** through **MM 4.7-3**, impacts would be less than significant.

Impact 4.7-5: The Project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

Expansive soils are fine-grained soils (generally high plasticity clays) that can undergo a significant increase in volume with an increase in water content and a significant decrease in volume with a decrease in water content. Changes in the water content of a highly expansive soil can result in severe distress to structures constructed on or against the soil.

The Geotechnical Feasibility Study concluded that the clayey soils on the proposed project site have a very low to low expansion potential. However, it was recommended that expansive soils should not be used for backfilling against walls. In addition, the proposed project would be designed to comply with applicable building codes and structural improvement requirements to withstand the effects of expansive soils. Furthermore, the project would be required to comply with Mitigation Measures **MM 4.7-1** through **MM 4.7-3**, which would require building stabilization by dynamic compaction; preparation of an engineering design specific geotechnical study; and preparation of a Soil Erosion and Sedimentation Control Plan, which would address expansive soils and reduce impacts to a less than significant level.

Mitigation Measures

Implement Mitigation Measures **MM 4.7-1** through **MM 4.7-3**, as described above.

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM 4.7-1** through **MM 4.7-3**, impacts would be less than significant.

Impact 4.7-6: The Project Would Directly Or Indirectly Destroy A Unique Paleontological Resource Or Site Or Unique Geologic Feature.

Kern County is rich in paleontological resources. As such, ground-disturbing activities in previously undisturbed portions of the project area could potentially result in significant impacts to paleontological resources. Impacts would be significant if construction activities result in the destruction, damage, or loss of scientifically important paleontological resources and associated stratigraphic and paleontological data. Activities may include grading, excavation, drilling, or any other activity that disturbs the surface or subsurface geologic formations with a high paleontological sensitivity. However, with implementation of Mitigation Measures **MM 4.7-4** through **MM 4.7-6**, which would require the project proponent to retain the services of a qualified paleontologist, the preparation and implementation of a Paleontological Resources Awareness Training program for construction workers, use of a qualified paleontological monitor during construction activities, and appropriate measures to take in the event of accidentally uncovered paleontological resources, impacts to paleontological resources would be reduced to less than significant.

Mitigation Measures

MM 4.7-4: Prior to the issuance of grading or building permits, the project proponent shall retain a qualified paleontologist, defined as a paleontologist meeting the Society for Vertebrate Paleontology's Professional Standards (SVP 2010), to carry out all mitigation measures related to paleontological resources. The qualified paleontologist and lead archaeologist may be the same individual.

a. Prior to the start of any ground disturbing activities, the qualified paleontologist shall prepare a Paleontological Resources Awareness Training program for all construction personnel working on the project. A Paleontological Resources Awareness Training Guide approved by the qualified paleontologist shall be provided to all personnel. A copy of the Paleontological Resources Awareness Training Guide shall be submitted to the Kern County Planning and Natural Resources Department. The training guide may be presented in video form.

b. Paleontological Resources Awareness Training may be conducted in conjunction with other awareness training requirements.

c. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of paleontological resources.

d. The project operator shall ensure all new employees who have not participated in earlier Paleontological Resources Sensitivity Trainings shall meet the provisions specified above.

e. The Paleontological Resources Awareness Training Guides shall be kept on-site and available for all personnel to review and be familiar with as necessary.

MM 4.7-5: A qualified paleontologist or designated monitor shall be onsite initially to spot-check excavations below a depth of one-foot below the ground surface in a given area. If it is determined that sediments consist of older alluvium, then full-time paleontological monitoring shall ensue. If sediments are determined to consist of Holocene Quaternary Alluvium, paleontological monitoring shall be suspended until an excavation depth of five feet below the ground surface is reached in the area.

a. The duration and timing of monitoring shall be determined by the qualified paleontologist in consultation with the Kern County Planning and Natural Resources Department and shall be based on a review of geologic maps and grading plans.

    1. During the course of monitoring, if the paleontologist can demonstrate based on observations of subsurface conditions that the level of monitoring should be reduced, the paleontologist, in consultation with the Kern County Planning and Natural Resources Department, may adjust the level of monitoring to circumstances, as warranted.

b. Paleontological monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The qualified paleontologist shall have authority to temporarily divert excavation operations away from exposed fossils to collect associated data and recover the fossil specimens if deemed necessary.

c. Following the completion of construction, the paleontologist shall prepare a report documenting the absence or discovery of fossil resources onsite. If fossils are found, the report shall summarize the results of the inspection program, identify those fossils encountered, recovery and curation efforts, and the methods used in these efforts, as well as describe the fossils collected and their significance. A copy of the report shall be provided to the Kern County Planning and Natural Resources Department and to an appropriate repository such as the Natural History Museum of Los Angeles County.

MM 4.7-6: If a paleontological resource is found, the project contractor shall cease ground-disturbing activities within 50 feet of the find. The qualified paleontologist shall evaluate the significance of the resources and recommend appropriate treatment measures. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any fossils encountered and recovered shall be catalogued and donated to a public, non-profit institution with a research interest in the materials. Accompanying notes, maps, and photographs shall also be filed at the repository.

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM 4.7-4** through **MM 4.7-6**, impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The proposed project site is located in the vicinity of a seismically active area. New development projects are required to comply with Kern County standards as well as the CBC and the IBC to minimize the potential for cumulative impacts associated with seismic hazards. Cumulative development of planned and proposed projects in Kern County is not anticipated to result in cumulative impacts associated with geology and soils. Risks associated with seismic events and soil conditions, such as ground shaking, would be site-specific and are not anticipated to increase on a cumulative level.

Impacts regarding erosion and sediment deposition can be cumulative in nature if affecting a watershed. Cumulative impacts to water quality are addressed in Section 4.10, *Hydrology and Water Quality*, of this EIR. Buildout of approved and planned uses in Kern County has the potential to result in erosion and the loss of topsoil; however, individual projects are required to comply with applicable codes, standards, and permitting requirements (i.e., preparation of a SWPPP or approval of a Notice of Non-Applicability [NONA]) to mitigate erosion impacts. In the event that the proposed project discharges stormwater, the proposed project would mitigate associated erosion impacts through the implementation of a SWPPP and associated BMPs. Impacts associated with erosion are mitigated on a project-by-project basis, which would reduce the overall cumulative impact to a less than significant level.

Implementation of Mitigation Measures **MM 4.7-1** through **MM 4.7-3** outlined in this section would require building stabilization by dynamic compaction; preparation of an engineering design specific geotechnical study; and preparation of a Soil Erosion and Sedimentation Control Plan, which would reduce impacts related to seismic ground shaking, liquefaction, landslides, soil erosion, and unstable topsoil to a less than significant level. Implementation of Mitigation Measures **MM 4.7-4** through **MM 4.7-6** would require the project proponent to retain the services of a qualified paleontologist; preparation and implementation of a Paleontological Resources Awareness Training program for construction workers; use of a qualified paleontological monitor during construction activities; and implementation of appropriate measures to take in the event of accidentally uncovered paleontological resources, which would reduce impacts related to paleontological resources to a less than significant level. Therefore, cumulative geology and soil-related impacts are not considered cumulatively considerable.

Mitigation Measures

Implement Mitigation Measures **MM 4.7-1** through **MM 4.7-6**, **MM 4.10-1** and **MM 4.10-2**.

Level of Significance after Mitigation

With implementation of Mitigation Measure **MM 4.7-1** through **MM 4.7-6**, **MM 4.10-1**, and **MM 4.10-2**, impacts would be less than significant.

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Section 4.8

Greenhouse Gas Emissions

Section 4.8

Greenhouse Gas Emissions

4.8.1 Introduction

This section of the Environmental Impact Report (EIR) describes the affected environment and regulatory setting relating to greenhouse gas (GHG) emissions for the proposed project. It also describes the impacts associated with GHG emissions that would result from implementation of the proposed project and, as necessary, mitigation measures that would reduce these impacts.

Information in this section is based primarily on the *Air Quality Impact Analysis* prepared by Trinity Consultants (Trinity 2023). The complete report is presented in Appendix D of this EIR. The impact analysis is also based on a review of relevant literature and technical reports that include, but are not limited to, information and guidelines by the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (USEPA), and the applicable provisions of the California Environmental Quality Act (CEQA).

4.8.2 Environmental Setting

GHG emissions and climate change are cumulative global issues. The CARB and USEPA regulate GHG emissions within the State of California and the United States, respectively. While the CARB has the primary regulatory responsibility within California for GHG emissions, local agencies can also adopt policies for GHG emission reduction. CARB has divided California into regional air basins. The proposed project site is located in the San Joaquin Valley Air Basin (SJVAB) and is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD).

Greenhouse Gases

Constituent gases that trap heat in the earth's atmosphere are called GHGs, analogous to the way a greenhouse retains heat. GHGs play a critical role in earth's radiation budget by trapping infrared radiation emitted from the earth's surface, which would otherwise escape into space. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 34°F cooler (CAT 2006). This natural phenomenon, known as the "greenhouse effect," is therefore responsible for maintaining a habitable climate.

The standard definition of GHGs includes six substances identified in the Kyoto Protocol – CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—plus chlorofluorocarbons (CFCs) and other chlorine or bromine- containing gases phased out under the Montreal Protocol.

Some GHGs, including CO_2, CH_4, and N_2O, are present in the atmosphere naturally, released by natural sources, or formed from secondary reactions taking place in the atmosphere. In the last 200 years, substantial quantities of GHGs have been released into the atmosphere, primarily from fossil fuel combustion. These

human-induced emissions are increasing GHG concentrations in the atmosphere; therefore, enhancing the natural greenhouse effect. The GHGs resulting from human activity are believed to be causing global climate change. From the pre-industrial era (i.e., ending about 1750) to 2021, concentrations of CO_2, CH_4, and N_2O have increased globally by 48.1, 170.8, and 23.8 percent, respectively (EPA 2023a). While human made GHGs include naturally present substances like CO_2, CH_4, and N_2O, some (like CFCs) are completely new to the atmosphere.

GHGs vary considerably in terms of global warming potential (GWP), which is the comparative ability of each GHG to trap heat in the atmosphere. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

The principal GHGs resulting from human activity that enter and accumulate in the atmosphere are described below.

- **Carbon Dioxide (CO_2)** is a colorless, odorless gas consisting of molecules made up of two oxygen atoms and one carbon atom. CO_2 is produced when an organic carbon compound (such as wood) or fossilized organic matter (such as coal, oil, or natural gas) is burned in the presence of oxygen. CO_2 is removed from the atmosphere by CO_2 "sinks," such as absorption by seawater and photosynthesis by ocean-dwelling plankton and land plants, including forests and grasslands. However, seawater is also a source of CO_2 in the atmosphere, along with land plants, animals, and soils, when CO_2 is released during respiration. Whereas the natural production and absorption of CO_2 is achieved through the terrestrial biosphere and the ocean, humankind has altered the natural carbon cycle by burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid- 1700s, each of these activities has increased in scale and distribution.
- **Methane (CH_4)** is a colorless, odorless nontoxic gas consisting of molecules made up of four hydrogen atoms and one carbon atom. CH_4 is combustible, and it is the main constituent of natural gas—a fossil fuel. CH_4 is also released when organic matter decomposes in low oxygen environments. Natural sources include wetlands, swamps and marshes, termites, and oceans. Human sources include the mining of fossil fuels and transportation of natural gas, digestive processes in ruminant animals such as cattle, rice paddies, and the buried waste in landfills. Over the last 50 years, human activities, such as growing rice, raising cattle, using natural gas, and mining coal, have added to the atmospheric concentration of CH_4. Other anthropogenic sources include fossil-fuel combustion and biomass burning.
- **Nitrous Oxide (N_2O)** is a colorless, non-flammable gas with a sweetish odor, commonly known as "laughing gas," and sometimes used as an anesthetic. N_2O is naturally produced in the oceans and in rainforests. Man-made sources of N_2O include the use of fertilizers in agriculture, nylon and nitric acid production, cars with catalytic converters, and the burning of organic matter. Increased concentrations of N_2O began to rise at the beginning of the industrial revolution.
- **Chlorofluorocarbons (CFCs)** are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at the earth's surface). CFCs have no

natural source but were first synthesized in 1928 for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, an ongoing global effort to halt their production was undertaken and has been extremely successful, so much so, that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetime means that some of the CFCs will remain in the atmosphere for over 100 years.

- **Sulfur Hexafluoride (SF_6)** is an extremely potent GHG. SF_6 is very persistent, with an atmospheric lifetime of more than a thousand years. Thus, a relatively small amount of SF_6 can have a significant long-term impact on global climate change. SF_6 is human-made, and the primary user of SF_6 is the electric power industry. Due to its inertness and dielectric properties, it is the industry's preferred gas for electrical insulation, current interruption, and arc quenching (to prevent fires) in the transmission and distribution of electricity. SF_6 is used extensively in high-voltage circuit breakers, switchgears, and in the magnesium metal casting industry.
- **Hydrofluorocarbons (HFCs)** are synthesized chemicals that are used as a substitute for CFCs. Out of all of the GHGs, HFCs are one of three groups with the highest GWP. HFCs are synthesized for applications such as automobile air conditioners and refrigerants.
- **Perfluorocarbons (PFCs)** have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. Due to their molecular stability, PFCs have very long lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primarily aluminum production and semiconductor manufacture.

Sources of GHG Emissions

On a global scale, GHG emissions are predominantly associated with activities related to energy production; changes in land use, such as deforestation and land clearing; industrial sources; agricultural activities; transportation; waste and wastewater generation; and commercial and residential land uses. Worldwide, energy production including the burning of coal, natural gas, and oil for electricity and heat is the largest single source of global GHG emissions.

In 2021, GHG emissions within California totaled 5,586 million metric tons of carbon dioxide equivalent (MMT CO2 Eq.). Within California, the transportation sector is the largest contributor, accounting for approximately 40 percent of the total statewide GHG emissions. Emissions associated with electricity generation are the second largest contributor, totaling roughly 20 percent. Industrial emissions totaled roughly 15 percent (CARB 2022).

Effects of Global Climate Change

GHGs are gases in the atmosphere that trap heat. The major concern with GHGs is that increases in GHG concentrations in the atmosphere are causing global climate change, which is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to GHGs from human activities, most in the world-wide scientific community agree that there is a direct link between increased emissions of GHGs and long-term global temperature increases (i.e., global warming).

Changes in the global climate are assessed using historical records of temperature changes that have occurred in the past to extrapolate a level of statistical significance specifically focusing on temperature

records from the last 150 years (the Industrial Age) that differ from past climate changes in rate and magnitude.

Several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts were constructed by the Intergovernmental Panel on Climate Change (IPCC). In the IPCC's Fifth Assessment Report, it was predicted that the global mean temperature change from 1990 to 2100 could range from 1.1 degree Celsius (°C) to 6.4°C (8 to 10.4°Fahrenheit). Under all scenarios, global average temperatures and sea levels are expected to rise. It was concluded that global climate change was largely the result of human activity, mainly the burning of fossil fuels.

According to CARB, the potential impacts in California due to global climate change may include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems. (CARB, 2018a). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2023):

- Higher maximum temperatures and more hot days over nearly all land areas
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas
- Reduced diurnal temperature range over most land areas
- Increase of heat index over land areas
- More-intense precipitation events

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, ocean acidification (including coral bleaching), impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood, the potential for substantial environmental, social, and economic consequences over the long-term may be great.

There are uncertainties as to exactly what the climate changes will be in various local areas of the Earth. Other uncertainties associated with the magnitude and timing of consequences of a warmer planet include: sea level rise, spread of certain diseases outside of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, increased air pollution episodes, and the consequences of these effects on the economy.

4.8.3 Regulatory Setting

Federal

U.S. Environmental Protection Agency

The principal air quality regulatory mechanism at the federal level is the Clean Air Act (CAA) and in particular, the 1990 amendments to the CAA and the National Ambient Air Quality Standards that it establishes. The EPA is responsible for implementing federal policy to address GHGs. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA. The EPA adopted a Final Endangerment Finding for the six defined GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6), which was required before the EPA could regulate GHG emissions under Section 202(a)(1) of the CAA. The EPA also adopted a Cause or Contribute Finding in which the EPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering the public health and welfare. These findings do not themselves impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles. There are currently no federal regulations that set ambient air quality standards for GHGs.

Mandatory Reporting of Greenhouse Gases Rule (40 CFR Part 98)

This rule requires mandatory reporting of GHG emissions for facilities that emit more than 25,000 MT CO_2e emissions per year [40 Code of Federal Regulations (CFR) Part 98].

Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule (40 CFR Part 52)

GHG emissions from the largest stationary sources were, for the first time, covered by the Prevention of Significant Deterioration (PSD) and Title V Operating Permit Programs beginning on January 2, 2011. The EPA's GHG Tailoring Rule, issued in May 2010, established a commonsense approach to permitting GHG emissions under PSD and Title V. In June 2014, the U.S. Supreme Court ruled that the EPA cannot classify a facility as a major PSD or Title V source based solely on its GHG emissions meeting the major source threshold. However, the Supreme Court said that the EPA could continue to require that PSD permits, required due to criteria pollutant emissions, contain limitations on GHG emissions based on the application of Best Available Control Technology (EPA 2023b).

National Climate Action Plan

In 2021, the EPA released its "US EPA's Climate Action Plan: October 2021" in response to Executive Order (EO) 14008 (EPA 2021). EO 14008, entitled "Tackling the Climate Crisis at Home and Abroad" (January 2021), calls for a government-wide approach to the climate crisis that reduces the following: climate pollution in every sector of the economy; increases resilience to the impacts of climate change; protects public health; conserves our lands, waters, and biodiversity; delivers environmental justice; and spurs well-paying jobs and economic growth, especially through innovation, commercialization, and

deployment of clean energy technologies and infrastructure. The EPA intends to formalize its policy on adaptation with the revision of Department Manual Part 523 – Climate Change Adaptation. The policy will provide guidance to Bureaus and Offices for addressing climate change impacts on the EPA's mission, programs, operations, and personnel.

Fuel Efficiency Standards for Construction Equipment

The federal government sets fuel efficiency standards for non-road diesel engines that are used in construction equipment. The regulations, contained in 40 CFR Parts 1039, 1065, and 1068, include multiple tiers of emission standards. Most recently, the EPA adopted a comprehensive national program to reduce emissions from non-road diesel engines by integrating engine and fuel controls as a system to gain the greatest reductions. To meet these Tier 4 emission standards, engine manufacturers will produce new engines with advanced control technologies (EPA 2023b).

State

A variety of statewide rules and regulations have been implemented or are in development in California that mandate the quantification or reduction of GHGs. Several gubernatorial EOs establish statewide GHG reduction goals. As a result of Senate Bill (SB) 97, the California Environmental Quality Act (CEQA) requires an analysis and mitigation of emissions of GHGs and climate change in relation to a proposed project, where a project will result in a significant increase of GHG emissions. Certain Air Pollution Control Districts have proposed their own levels of significance. See the discussion of SJVAPCD significance thresholds in Section 4.8.4, *Impacts and Mitigation Measures*.

Executive Order S-1-07

EO S-1-07 recognizes that the main source of GHG emissions in California is from the transportation sector and established a goal to reduce the carbon intensity of transportation fuels sold in California by at least 10 percent by 2020. As a result of EO S-1-07, CARB approved a proposed regulation to implement the Low Carbon Fuel Standard (LCFS) to reduce GHG emissions from the transportation sector in California by approximately 16 MMT CO_2e by 2020. The LCFS was designed to reduce California's dependence on petroleum, create a lasting market for clean transportation technology, and stimulate the production and use of alternative, low-carbon fuels in California. It provides a durable framework that established performance standards that fuel producers and importers must meet each year beginning in 2011.

The LCFS includes a protocol for select carbon management projects to become certified and generate LCFS credits. The Carbon Capture and Sequestration Protocol applies to carbon capture and sequestration projects that capture CO_2 and sequester it onshore, in either saline or depleted oil and gas reservoirs, or oil and gas reservoirs used for CO_2-enhanced oil recovery. The Carbon Capture and Sequestration Protocol applies to both new and existing carbon capture and sequestration projects, provided the projects meet the requirements for permanence pursuant to Section C of the protocol. Certified projects must successfully demonstrate adherence to rigorous pre-construction, operational, and site closure standards designed to strengthen environmental performance. The Carbon Capture and Sequestration Protocol is designed to layer on top of existing federal carbon sequestration regulations designed to protect the environment (CARB 2018).

Executive Orders S-3-05 and B-30-15 – Statewide Emission Reduction Targets

EO S-3-05 was established in June 2005 which set statewide emission reduction targets through the year 2050:

- by 2010, reduce GHG emissions to 2000 levels;
- by 2020, reduce GHG emissions to 1990 levels; and
- by 2050, reduce GHG emissions to 80 percent below 1990 levels.

EO B-30-15 sets a target date of 2030 to reduce GHG emissions to 40 percent below 1990 levels. EOs S-3-05 and B-30-15 are only applicable to "State agencies with jurisdiction over sources of greenhouse gas emissions" (Order 4-29-2015 Section 2), and Kern County is not a State agency. Furthermore, there is currently no implementation strategy for these EOs (i.e., a plan, which apportions GHG reductions by economic sector/activity/region, similar to CARB's Climate Change Scoping Plan).

Senate Bill 97

SB 97 was enacted requiring the Office of Planning and Research (OPR) to develop guidelines for the mitigation of GHG emissions, or the effects related to releases of GHG emissions. OPR submitted proposed amendments to the Natural Resources Agency in accordance with SB 97 regarding analysis and mitigation of GHG emissions. As directed by SB 97, the Natural Resources Agency adopted Amendments to the *CEQA Guidelines* for GHG emissions, which became effective in 2010.

Senate Bill 375

SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. CARB adopted the vehicular GHG emissions reduction targets, in consultation with the metropolitan planning organizations (MPOs), which requires a 7 to 8 percent reduction by 2020 and a 13 to 16 percent reduction by 2035, for each MPO. SB 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs, such as the Kern Council of Governments (KernCOG), will work with local jurisdictions in the development of sustainable community strategies (SCS) designed to integrate development patterns and the transportation network in a way that reduces GHG emissions while meeting housing needs and other regional planning objectives. KCOG's current reduction target for per capita vehicular emissions from passenger vehicles and light-duty trucks was 9 percent by 2020 and 15 percent by 2035 compared to 2005 (KCOG 2022).

KCOG most recently adopted the 2022 Regional Transportation Plan (RTP), which includes an SCS component in accordance with SB 375. The 2022 RTP is a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. The SCS component strives to reduce polluting tailpipe emissions from passenger vehicle and light duty truck travel by better coordinating transportation expenditures with forecasted development patterns to help meet CARB GHG targets for the region.

Assembly Bill 32 and Senate Bill 32

In 2006, the California State Legislature adopted AB 32 [codified in the California Health and Safety Code (HSC), Division 25.5 – California Global Warming Solutions Act of 2006], which focused on reducing GHG emissions in California to 1990 levels by 2020. HSC Division 25.5 defines GHGs as CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6 and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under HSC Division 25.5, CARB has the primary responsibility for reducing GHG emissions. CARB was required to adopt rules and regulations directing State actions that would achieve GHG emissions reductions equivalent to 1990 statewide levels by 2020.

While acknowledging that national and international actions will be necessary to fully address the issue of global warming, AB 32 lays out a program to inventory and reduce GHG emissions in California and from power generation facilities located outside the state that serve California residents and businesses. CARB adopted a list of discrete early action measures for implementation to reduce GHG emissions in accordance with its responsibility per AB 32. The 1990 baseline emissions inventory for California was also adopted for the 2020 statewide emissions cap.

Subsequent legislation has included SB 32, which expanded upon AB 32 to reduce GHG emissions to 40 percent below the 1990 levels by 2030; AB 197 which increased CARB's legislative oversight by adding two legislatively appointed non-voting members to the CARB Board and provided additional protection to disadvantaged communities; SB 350, which increased California's renewable energy electricity procurement goal; and SB 100, which established a landmark policy requiring renewable energy and zero-carbon resources to supply 100 percent of electrical retail sales to end use customers and 100 percent of electricity procured to serve state agencies by 2045.

Assembly Bill 1279

The California Climate Crisis Act (AB 1279) establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045, to maintain net negative GHG emissions thereafter, and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. AB 1279 requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage (CCUS) technologies.

Climate Change Scoping Plan

In November 2022, CARB published its Climate Change Proposed Scoping Plan, which is the State's plan to achieve carbon neutrality by 2045 or earlier. The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The largest proposed GHG reduction recommendations are from achieving 100 percent zero emission vehicles (ZEV) sales of light-duty vehicles by 2035 and medium heavy-duty vehicles by 2040, achieving a 20 percent zero emission target for the aviation sector, and promoting private investment in the transition to ZEV technology, by regulatory certainty such as infrastructure credits in the Low Carbon Fuel Standard for hydrogen and electricity and hydrogen station grants from the CEC's Clean Transportation Program pursuant to Executive Order B-48-18. The 2017 Scoping Plan assessed the progress toward achieving the 2020 limit and provided

a technologically feasible and cost-effective path to achieving the Senate Bill 32 target of reducing GHGs by at least 40 percent below 1990 levels by 2030. The local equivalent of AB 32 targets as a 15 percent reduction below baseline GHG emissions level, with baseline interpreted as GHG emissions levels between 2003 and 2008.

A key component of the Scoping Plan is the Renewable Portfolio Standard, which is intended to increase the percentage of renewables in California's electricity mix to 60 percent by year 2030, and for California to provide 100 percent of its retail sales of electricity from renewable and zero-carbon resources by 2045. Sources of renewable energy include, but are not limited to, biomass, wind, solar, geothermal, hydroelectric, and anaerobic digestion. Increasing the use of renewables will decrease California's reliance on fossil fuels, thus reducing GHG emissions.

The First Update to the *Climate Change Scoping Plan* was approved by CARB on May 22, 2014.

Mandatory Greenhouse Gas Reporting Regulation (17 CCR 95100-95158)

Statewide reporting of GHG emissions by major sources is required by AB 32. The Regulation for the Mandatory Reporting of Greenhouse Gas Emissions is applicable to industrial facilities, fuel suppliers, and electricity importers.

Cap-and-Trade Program (17 CCR 95800 to 96022)

On October 20, 2011, CARB approved the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation (Cap-and-Trade Program) as part of the AB 32 implementation measures. The final regulation order was updated in 2018 and became effective as of April 1, 2019.

Cap-and-trade is a market-based regulation that is designed to reduce GHGs from multiple sources. Cap-and-trade sets a firm limit, or cap, on GHG emissions from all sources in the Cap-and-Trade Program, which declines approximately 3 percent each year. In the market, a price on carbon is established for GHGs. Trading and market forces create incentives to reduce GHGs below allowable levels through investments in technological innovation in clean technologies.

Short-Lived Climate Pollutants – Senate Bill 605 and Senate Bill 1383

Short-lived climate pollutants (SLCP) (i.e., black carbon, fluorinated gases, and CH_4) are powerful climate forcers that remain in the atmosphere for a much shorter period of time than longer-lived climate pollutants. Their relative potency, when measured in terms of how they heat the atmosphere, can be tens, hundreds, or even thousands of times greater than that of CO_2. The impacts of SLCP are especially strong over the short term. Reducing these emissions can make an immediate beneficial impact on climate change.

SLCP emissions reductions will support achieving AB 32 and SB 32 GHG emission reduction targets. SB 605 directed CARB, in coordination with other State agencies and local air districts, to develop a comprehensive SLCP reduction strategy, and SB 1383 directed CARB to approve and begin implementing this strategy. This legislation also set statewide emissions reduction targets specifying a 40 percent reduction in CH_4, a 40 percent reduction in HFCs, and a 50 percent reduction in anthropogenic black carbon

below 2013 levels by 2030. The bill also established specific targets for reducing organic waste in landfills and provided specific direction for CH_4 emissions reductions from dairy and livestock operations.

The SLCP Reduction Strategy, approved by the Board in March 2017, lays out a range of options to reduce SLCP emissions in California, including regulations, incentives, and other market-supporting activities. The SLCP Strategy also informed the CARB 2022 Scoping Plan.

Other Mobile Source Reduction Requirements

Several other State provisions address the GHG emissions reduction targets set by CARB for mobile sources, including trucks, passenger vehicles, trains, and ships. These measures include:

- Low Carbon Fuel Standard (EO S-01-07)
- Advanced Clean Cars Program
- SmartWay Truck Efficiency Regulation
- AB 32 Cap-and-Trade Program as applicable to transportation fuel suppliers (beginning January 1, 2015)
- SB 375 (Land Use Planning) including the development of a Sustainable Communities Strategy as part of a Metropolitan Planning Organization's Regional Transportation Plan.

SB 375 requires the California Air Resources Board to set regional targets for GHG emission reductions from passenger vehicles and light duty trucks and requires each regional MPO to adopt an (SCS) into its regional transportation plan that would allow the region to meet its GHG emission reduction target. The KCOG adopted the SCS for Kern County as part of its RTP in 2014. The RTP and SCS incorporate forecasted development patterns, modeling and measures designed to integrate land use and transportation planning to reduce local and regional GHG emissions. Oil and gas resources, as well as other land uses, are components of the SCS. While SB 375 does not require local governments to amend their general plans to implement the SCS, it provides incentives for them to do so. Implementation of SB 375 is expected to substantially reduce GHG emissions in the County and throughout the state.

Local

San Joaquin Valley Air Pollution Control District

The project area is located within Kern County's portion of the SJVAB. Kern County is included among the eight counties that comprise the SJVAPCD. The SJVAPCD acts as the regulatory agency for air pollution control in the SJVAB and is the local agency empowered to regulate emissions for the project area.

In August 2008, the SJVAPCD adopted its Climate Change Action Plan (CCAP). The CCAP directed the SJVAPCD to develop guidance to assist CEQA lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project GHG emissions on global climate change (SJVAPCD 2008).

On December 17, 2009, the SJVAPCD adopted Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for new projects under CEQA (SJVAPCD 2009), which outlined the SJVAPCD's methodology for assessing a project's significance for GHGs under CEQA. The following criteria was outlined in the document to determine whether a project could have a significant impact:

- Projects determined to be exempt from the requirements of CEQA would be determined to have a less than significant individual and cumulative impact for GHG emissions and would not require further environmental review, including analysis of project specific GHG emissions. Projects exempt under CEQA would be evaluated consistent with established rules and regulations governing project approval and would not be required to implement Best Performance Standards (BPS).
- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the lead agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement BPS.
- Projects implementing BPS would not require quantification of project specific GHG emissions. Consistent with *CEQA Guidelines*, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.
- Projects not implementing BPS would require quantification of project specific GHG emissions and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29 percent, compared to business as usual (BAU), including GHG emission reductions achieved since the 2002–2004 baseline period. Projects achieving at least a 29 percent GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.
- Notwithstanding any of the above provisions, projects requiring preparation of an EIR for any other reason would require quantification of project specific GHG emissions. Projects implementing BPS or achieving at least a 29 percent GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.

The SJVAPCD determined BAU and baseline emissions were established based on the years 2002–2004 and 2020, respectively. The 2020 projected baseline has passed, and, at this time, no new guidance has been approved for determining BAU and projected baseline for the next target year. Therefore, the 29 percent reduction from BAU cannot be applied to the project to determine significance. Additionally, a BPS threshold has not been established.

Kern County General Plan

The project area is located within the Kern County General Plan (KCGP) area and, therefore, would be subject to applicable policies and measures of the KCGP. The Land Use, Conservation, and Open Space Element of the KCGP includes goals, policies, and implementation measures applicable to the

project that would indirectly impact GHG emissions through the reduction of fossil fuel use, as described below.

Chapter 1. Land Use, Conservation, and Open Space Element

General Provisions

1.10.2. Air Quality Policies

Policy 19. In considering discretionary projects for which an Environmental Impact Report must be prepared pursuant to the California Environmental Quality Act, the appropriate decision-making body, as part of its deliberations, will ensure that:

a. All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and

b. The benefits of the proposed Project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the California Environmental Quality Act.

Policy 22. Kern County shall continue to work with the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District toward air quality attainment with federal, state, and local standards.

Policy 23. The County shall continue to implement the local government control measures in coordination with the Kern Council of Governments and the San Joaquin Valley Unified Air Pollution Control District.

Implementation Measures

Implementation Measure F. All discretionary permits shall be referred to the appropriate air district for review and comment.

Implementation Measure G. Discretionary development projects involving the use of tractor trailer rigs shall incorporate diesel exhaust reduction strategies including, but not limited to:

a. Minimizing idling time.

b. Electrical overnight plug-ins.

Implementation Measure H. Discretionary projects may use one or more of the following to reduce air quality effects:

a. Pave dirt roads within the development.

b. Pave outside storage areas.

c. Provide additional low Volatile Organic Compounds (VOC) producing trees on landscape plans.

d. Use of alternative fuel fleet vehicles or hybrid vehicles.

e. Use of emission control devices on diesel equipment.

f. Develop residential neighborhoods without fireplaces or with the use of Environmental Protection Agency certified, low emission natural gas fireplaces.

g. Provide bicycle lockers and shower facilities on site.

h. Increasing the amount of landscaping beyond what is required in the Zoning Ordinance (Chapter 19.86).

i. The use and development of park and ride facilities in outlying areas.

j. Other strategies that may be recommended by the local Air Pollution Control Districts.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The Metropolitan Bakersfield General Plan (Unincorporated Area) includes the following relevant goals and policies with respect to GHGs:

Chapter 5: Conservation/Air Quality

Goals

Goal 1: Promote air quality that is compatible with health, wellbeing, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.

Goal 2: Continue working toward attainment of federal, State, and local standards as enforced by the San Joaquin Valley Air Pollution Control District.

Goal 3: Reduce the amount of vehicular emissions in the planning area.

Policies

Policy 4: Consider air pollution impacts when evaluating discretionary permits for land use proposals. Considerations should include:

a. Alternative access routes to reduce traffic congestion.

b. Development phasing the match road capacities.

c. Buffers including increasing vegetation to increase emission dispersion and reduce impacts of gaseous or particulate matter on sensitive uses.

Policy 10: Implement the Transportation System Management Program (July 1984) for Metropolitan Bakersfield to improve traffic flow, reduce vehicle trips, and increase street capacity.

Policy 12: Encourage the use of mass transit, carpooling and other transportation options to reduce vehicle miles traveled.

Policy 13: Consider establishing priority parking areas for carpoolers in projects with relatively large numbers of employees to reduce vehicle miles traveled and improve air quality.

Policy 14: Establish park and ride facilities to encourage carpooling and the use of mass transit.

Policy 15: Promote the use of bicycles by providing attractive bicycle paths and requiring provision of storage facilities in commercial and industrial projects.

Policy 18: Encourage walking for short distance trips through the creation of pedestrian friendly sidewalks and street crossings.

Policy 19: Promote a pattern of land uses which locates residential uses in close proximity to employment and commercial services to minimize vehicular travel.

Policy 22: Require the provision of secure, convenient bike storage racks at shopping centers, office buildings, and other places of employment in the Bakersfield Metropolitan area.

Policy 23: Encourage the provision of shower and locker facilities by employers, for employees who bicycle or jog to work.

Policy 25: Require design of parking structures and ramps to provide adequate off- street storage for entering vehicles to minimize on-street congestion and avoid internal backup and idling of vehicles.

Policy 29: Encourage the use of alternative fuel and low or zero-emission vehicles.

Implementation Measures

Measure 1: Amend as needed the City and County Zoning Ordinances to:

a. Incorporate the provisions of the Air Quality Management Plan.

b. Incorporate measures identified under the Transportation System Management Plan for Metropolitan Bakersfield.

c. Limit intrusions into the pedestrian right-of-way.

d. Require air quality design considerations indicated in Policies 22 and 25.

Measure 5: Expand the use of alternative fuel and low or zero-emission vehicles in the metropolitan area for public and private use to achieve 10 percent usage.

Measure 6: Create the private and public infrastructure necessary to support alternative fuel vehicles.

4.8.4 Impacts and Mitigation Measures

The analysis presented within this section is based on both qualitative and quantitative approaches for determining GHG impacts associated with construction, operation, and maintenance of the proposed project. The findings in the Air Quality Impact Analysis prepared for the proposed project (see Appendix D of this EIR) were used to assess the proposed project's impacts related to GHG emissions.

Methodology

Short-Term Construction-Generated Emissions

Short-term construction emissions associated with the proposed project, including emissions associated with the operation of off-road equipment, haul-truck trips, and on-road worker vehicle trips were calculated using the California Emissions Estimator Model (CalEEMod), version 2022.1. Construction emissions were, based on the default CalEEMod equipment list for the proposed project's land use type and development intensity and applying model defaults as well as a conservative analysis approach. Construction emissions were estimated under the assumption that both phases would begin construction as early as January 2024. The dates entered into the CalEEMod program represent the earliest construction timeline, which would estimate the worst-case emissions as construction equipment technology and emissions improve over time; therefore, all estimated emission totals are conservative and reflect a reasonable and legally sufficient estimate of potential impacts. All construction equipment activity levels assumed were based on the applicant-specified values for type and number of equipment and CalEEMod adjusted hours per day and horsepower. Emissions modeling assumptions and output files are included in Appendix D.

Long-Term Operational Emissions

The CalEEMod computer program, version 2022.1, was used to estimate emissions associated with long-term operation of the proposed project. Long-term emissions are caused by operational mobile, area, and energy sources. Long-term emissions would consist of the following components:

Fugitive Dust Emissions

Operation of the project site at full build-out is not expected to present a substantial source of fugitive dust (PM_{10}) emissions. The main source of PM_{10} emissions would be from vehicular traffic associated with the project site. PM_{10}, on its own as well as in combination with other pollutants, creates a health hazard. The SJVAPCD's Regulation VIII establishes required controls to reduce and minimizing fugitive dust emissions. The following SJVAPCD Rules and Regulations apply to the proposed project (and all projects):

- Rule 4102 – Nuisance – prohibits a facility from posing as a nuisance to surrounding receptors and can impose penalties for nuisance issues such as dust, smoke, excess emissions, etc. Compliance with this rule ensures that the area around the project site will not be adversely impacted by such issues.

- Regulation VIII – Fugitive PM_{10} Prohibitions – a series of regulations to reduce and/or eliminate generation of particulate matter (PM) that can adversely impact visibility as well as the health and safety of people on-site or in the vicinity of the project.
    - Rule 8011 - General Requirements – this rule is to reduce ambient concentrations of fine particulate matter (PM_{10}) by requiring actions to prevent, reduce or mitigate anthropogenic (human-caused) fugitive dust emissions.
    - Rule 8021 - Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities – restricts generation of airborne dust and visibility impacts from these activities. Places limits on opacity and equipment operation under certain adverse weather conditions.
    - Rule 8041 - Carryout and Trackout – requires that equipment and vehicles leaving the construction site control the amount of dirt, soil or mud that is tracked offsite and onto public roadways. This helps eliminate or minimize dust generation and opacity degradation.
    - Rule 8051 - Open Areas – limits fugitive dust from open areas, i.e., areas on a construction site that are not actively being constructed upon but may generate wind-blown dust.

The proposed project would comply with applicable SJVAPCD Rules and Regulations, the local zoning codes, and additional emissions reduction measures recommended later in this analysis, in Section 7, Mitigation and Other Recommended Measures.

Exhaust Emissions

Project-related transportation activities from employees and consumers would generate mobile source ROG, NO_x, SO_x, CO, PM_{10}, and $PM_{2.5}$ exhaust emissions. Exhaust emissions would vary substantially from day to day but would average out over the course of an operational year. The variables factored into estimating total project emissions include: level of activity, site characteristics, weather conditions, and number of visitors. As the project is not expected to generate an adverse change in current activity levels, substantial emissions are not anticipated.

The fleet mix used in CalEEMod was adjusted to reflect project-specific estimates. The traffic study (Ruettgers and Schuler 2022) provided daily trip rates for trucks and passenger vehicles, broken down by phase. Based on traffic estimates, 62 percent of the truck trips are expected to be heavy heavy-duty (HHD) trucks. HHD truck trips were entered into CalEEMod as 62 percent, with the remaining 38 percent of truck trips distributed across the remaining truck types. The fleet mix for the passenger vehicles was also adjusted in CalEEMod to use a weighted ratio across the three passenger vehicle types. The trip rate adjustment is provided in Appendix D.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in the "Environmental Checklist Form," Appendix G to the *CEQA Guidelines* to determine if a project could potentially have a significant impact on GHGs.

A project would have significant impacts on GHG emissions if it would:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or,

b. Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

San Joaquin Valley Air Pollution Control District

In accordance with the SJVAPCD's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA (SJVAPCD 2009), a project would be considered to have a less-than-significant impact on climate change if it would comply with at least one of the following criteria:

- Comply with an approved GHG emission reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located. Such plans or programs must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the lead agency;
- Implement approved best performance standards; or,
- Quantify project GHG emissions and reduce those emissions by at least 29 percent compared to BAU.

Kern County has not developed a quantitative significance threshold for the evaluation of project-generated GHG emissions. Kern County currently recommends use of the above-referenced GHG significance thresholds, as recommended by the SJVAPCD.

Although CARB developed statewide interim thresholds of significance in 2008 and, for industrial projects, CARB proposed a quantitative threshold of 7,000 $MTCO_2e$ per year, the SJVAPCD has incorporated best performance standards to determine a less than significant individual and cumulative impact on global climate change and does not require project specific quantification of GHG emissions. Emissions from the proposed project will be compared with the proposed CARB thresholds, since they are more stringent.

Project Impacts

Impact 4.8-1: The Proposed Project Would Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment.

The SJVAPCD and Kern County have not adopted guidance that would apply to proposed project-generated construction emissions. In the decade after South Coast AQMD adopted the Interim GHG Significance Threshold, several new laws and executive orders were adopted that require additional reductions in years after 2020. For instance, Senate Bill 32 (Lara, 2016) requires that GHG emissions be 40 percent less than 1990 levels by 2030. More drastic still, Senate Bill 100 (de Leon, 2018) which was signed by the Governor recently requires 100 percent zero-carbon electricity by 2045. On the day SB 100 was signed into law, the Governor also signed Executive Order B-55-18 which commits California to total, economy-wide carbon neutrality by 2045. Clearly, the 2008 Guidance may be somewhat inadequate in producing a meaningful comparison by today's standards which propose a grand vision that, if achieved, would fundamentally

change how business is conducted and citizens live in the State. Thus, as discussed in the most recent updates to the Scoping Plan, objectives of the Scoping Plan affect entire sectors of the economy and it no longer makes sense to evaluate GHG emissions on a project level.

For these reasons, the proposed project's GHG emissions presented in **Table 4.8-1**, *Estimated Annual GHG Emissions (MT/Year)*, are primarily for disclosure purposes because impact analysis for the proposed project follows the approach certified by South Coast Air Quality Management District (SCAQMD) in the Final Negative Declaration for the Phillips 66 Los Angeles Refinery Carson Plant – Crude Oil Storage Capacity Project on December 12, 2014 (SCAQMD 2014). The approach used by SCAQMD to assess GHG impacts from that project recognizes that consumers of electricity and transportation fuels are, in effect, regulated by requiring providers and importers of electricity and fuel to participate in the GHG Cap-and-Trade Program and other Programs (e.g., low carbon fuel standard, renewable portfolio standard, etc.). Each such sector-wide program exists within the framework of AB 32 and its descendant laws the purpose of which is to achieve GHG emissions reductions consistent with the AB 32 Scoping Plan.

Construction of the proposed project would result in the temporary generation of emissions associated with various activities, including site preparation, grading, paving, building construction, and the application of architectural coatings. GHG emissions would be largely associated with off-road equipment use, as well as on-road vehicle operations associated with workers commuting to and from the proposed project site and haul-truck trips.

Estimated increases in GHG emissions associated with construction of the proposed project are summarized in **Table 4.8-1**, *Estimated Annual GHG Emissions (MT/Year)*. As depicted, annual emissions of GHGs associated with construction and operation of the proposed project would total approximately 77,974 metric tons of CO_2e ($MTCO_2e$). Annualized construction emissions would total approximately 779 $MTCO_2e$ per year.

The project would generate GHGs from electricity use and combustion of gasoline/diesel fuels, each of which is regulated near the top of the supply-chain. As such, each citizen of California (including the operator of the project) would have no choice but to purchase electricity and fuels produced in a way that is acceptable to the California market. Thus, project GHG emissions would be consistent with the relevant plan (i.e., AB 32 Scoping Plan). The project would meet its fair share of the cost to mitigate the cumulative impact of global climate change because SHP is purchasing energy from the California market. Thus, the project would have a less than significant impact on applicable GHG reduction plans.

Nonetheless, GHG emissions impacts from implementing the project were calculated at the project-specific level for construction and operations as explained in the previous paragraphs. Impact analysis for the project follows the approach certified by SCAQMD in the Final Negative Declaration for the Phillips 66 Los Angeles Refinery Carson Plant – Crude Oil Storage Capacity Project on December 12, 2014 (SCAQMD 2014). In summary, this approach takes into account the cumulative nature of the energy industry and recognizes that consumers of electricity and diesel fuel are in effect regulated by higher level emissions restrictions on the producers of these energy sources. Therefore, the project's contribution to cumulative global climate change impacts would not be cumulatively considerable.

Table 4.8-1: Estimated Annual GHG Emissions (MT/Year)

Source	Pollutant (tons/year)			
	CO_2	CH_4	N_2O	CO_2e
Mitigated Construction Emissions				
Total	23,021	0.53	1.15	23,383
Mitigated Operational Emissions				
Mobile Emissions	56,919	0.43	6.51	58,880
Area Emissions	130	0.01	0.00	131
Energy Emissions	11,879	1.74	0.19	11,978
Water Emissions	1,435	67.13	1.61	3,592
Waste Emissions	747	74.67	0.00	2,614
Total Project Operational Emissions	71,110	143.98	8.31	77,195
Annualized Construction Emissions	767	0.02	0.04	779
Project Emissions	**71,877**	**144.00**	**8.35**	**77,974**

*Note: 0.000 could represent <0.000 Per South Coast AQMD's Methodology
Source: Trinity Consultants 2024

The proposed project would not result in the emissions of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), or sulfur hexafluoride (SF6), the other gases identified as GHG in AB32. The proposed project would be subject to any regulations developed under AB 32 as determined by CARB.

The strategies currently being implemented by CARB may help in reducing the project's GHG emissions and are summarized in **Table 4.8-2**, *Select CARB GHG Emission Reduction Strategies,* below.

Table 4.8-2: Select CARB GHG Emission Reduction Strategies

Strategy Name	Description of Strategy
Vehicle Climate Change Standards	AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by CARB in September 2004.
Diesel Anti-Idling	In July 2004, CARB adopted a measure to limit diesel-fueled retail motor vehicle idling to five minutes or less.
Other Light-Duty Vehicle Technology	New standards were be adopted to phase in beginning in the 2017 model year.
Alternative Fuels: Biodiesel Blends	CARB would develop regulations to require the use of one to four percent biodiesel displacement of California diesel fuel.
Alternative Fuels: Ethanol	Increased use of ethanol fuel.
Heavy-Duty Vehicle Emission Reduction Measures	Increased efficiency in the design of heavy-duty vehicles and an educational program for the heavy-duty vehicle sector.

These measures do not apply at the level of individual projects such as the proposed project; rather, they are state-wide strategies that in some cases have resulted in legislation that would apply to the proposed project but in other cases have not. While future legislation could further reduce the proposed project's GHG footprint, it would be speculative to try to analyze how unknown and/or currently unadopted future legislation might reduce GHG emissions, especially at the level of an individual project. Therefore, in

accordance with *CEQA Guidelines* Section 15145 (which states that if, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact), the impact of potential future legislation will not be further evaluated in this EIR.

CEQA Guidelines Section 15130 notes that sometimes the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis. Global climate change is this type of issue. The causes and effects may not be just regional or statewide, they may also be worldwide. Given the uncertainties in identifying, let alone quantifying the impact of any single project on global warming and climate change; the efforts made to reduce emissions of GHGs from the proposed project through design; and implementation of Mitigation Measure MM 4.8-1 and MM 4.8-2 listed below and mitigation measures MM 4.3-1, MM 4.3-3, and MM 4.3-4 in Section 4.3, *Air Quality* of this EIR; in accordance with *CEQA Guidelines* Section 15130, any further feasible emissions reductions would be accomplished through CARB regulations adopted pursuant to AB 32.

Mitigation Measures

In addition to implementing Mitigation Measures **MM 4.3-1**, **MM 4.3-3**, and **MM 4.3-4**, as described in Section 4.3 *Air Quality*, the following measures shall be implemented.

MM 4.8-1: Prior to the issuance of grading or building permits, the project proponent shall submit a focused Greenhouse Gas report that identifies the measures (regulatory or applicant implemented) for a target reduction of 29 percent of operational emissions of the project's mobile CO_2e emissions as quantified in this EIR. The focused air analysis shall be submitted to the San Joaquin Valley Air Pollution Control District for review and comment regarding the methodology used to quantify the reductions. Any mitigation program for the reduction of greenhouse gases adopted by Kern County that can be implemented for the specific project site and that provides equal or more effective mitigation than this mitigation measure, may be utilized as a replacement for the requirements of this mitigation measure.

MM 4.8-2:

a. Prior to issuance of occupancy permits, the project developer shall disclose to all tenants/business entities that only electric-powered off-road equipment (e.g. forklifts, indoor material handling equipment, etc.) shall be utilized on-site for daily warehouse and business operations. The limitation on using only electric-powered off-road equipment shall be included in all leasing/sale agreements.

b. Prior to issuance of grading or building permits, the project construction's General Contractor shall target a construction waste diversion rate of 80 percent. A monthly construction report shall be provided to the County documenting total waste generated, types of waste streams, and total waste recycled.

c. During operation and to the extent feasible for safe warehouse operations, automatic light switches shall be incorporated into the project.

d. During operation, any equipment containing greater than five pounds of refrigerant, procured or installed, shall be tagged so that project applicant and tenant can identify and verify all installed equipment.

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM 4.3-1**, **MM 4.3-3**, **MM 4.3-4**, **MM 4.8-1** and **MM 4.8-2**, impacts would be less than significant.

Impact 4.8-2: The Proposed Project Would Conflict with an Applicable Plan, Policy or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases.

In accordance with SJVAPCD's CEQA thresholds for the evaluation of GHG impacts, a project would not have a significant GHG impact if it is consistent with an applicable GHG-reduction plan. Applicable GHG-reduction plans include Kern COG's *2022 RTP/SCS*, which was approved by the CARB in 2023, and the CARB's *Climate Change Scoping Plan*. Consistency with these plans is discussed in greater detail as follows:

2022 RTP/SCS

The *2022 RTP/SCS* identifies Quality Transit Areas as being located within half of a mile of fixed route transit service along the length of existing and planned routes. The RTP/SCS also identifies illustrative Transit Priority and Strategic Employment Place Types, which are primarily strategic employment areas characterized by concentrations of residential uses and jobs in close proximity to transit stations to minimize transportation costs and the carbon footprint. Transit Priority Areas (TPAs) combine these two concepts. TPAs are locations within half of a mile of transit stations where urban uses exist or may be planned. The RTP/SCS's Long-Range Transit Plan provides for an expansion of TPAs that are eligible for expansion under SB 375. The intent of these measures is to reduce future GHG emissions associated with mobile sources. The proposed project is consistent with the projected land use development patterns and transit priority employment place types identified in the *2022 RTP/SCS*.

Climate Change Scoping Plan

The *Climate Change Scoping Plan* describes the approach California will take to reduce GHGs to achieve the goal to meet its AB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030. The Scoping Plan was first approved by the CARB in 2008 and is updated at least every five years. The 2022 Scoping Plan Update assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045.

The *Climate Change Scoping Plan* identifies strategies to reduce California's GHG emissions in support of AB 32. Many of the strategies identified in the Scoping Plan are more programmatic and are not applicable to individual development projects. These strategies are grouped into 18 categories, as follows in **Table 4.8-3**, *Recommended Strategies of Climate Change Scoping Plan,* below.

Table 4.8-3: Recommended Strategies of Climate Change Scoping Plan

Strategy Name	Strategy
California Cap and Trade Program Linked to Western Climate initiative Partner Jurisdictions	Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap–and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.
California Light Duty Vehicle Greenhouse Gas Standards	Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicles, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.
Energy Efficiency	Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).
Renewables Portfolio Standards	Achieve 33 percent renewable energy mix Statewide.
Low Carbon Fuel Standard	Develop and adopt the Low Carbon Fuel Standard.
Regional Transportation-Related Greenhouse Gas Targets	Develop regional GHG emissions reduction targets for passenger vehicles.
Vehicle Efficiency Measures	Implement light-duty vehicle efficiency measures.
Goods Movement	Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.
Million Solar Roofs Program	Install 3,000 megawatts of solar-electric capacity under California's existing solar programs.
Medium- and Heavy-Duty Vehicles	Adopt medium- and heavy-duty vehicle efficiencies. Aerodynamic efficiency measures for heavy-duty trucks pulling trailers 53 feet or longer that include improvements in trailer aerodynamics and use of rolling resistance tires were adopted in 2008 and went into effect in 2010. Future, yet to be determined, improvements include hybridization of medium- and heavy-duty transport trucks.
Industrial Emissions	Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce GHG emissions and provide other pollution reduction co-benefits. Reduce GHG emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
High-Speed Rail	Support implementation of a high-speed rail system.
Green Building Strategy	Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
High Global Warming Potential Gases	Adopt measures to reduce high warming global potential gases.
Recycling and Waste	Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling. Move toward zero-waste.
Sustainable Forests	Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The 2020 target for carbon sequestration is 5 $MMTCO_2e$ per year.
Water	Continue efficiency programs and use cleaner energy sources to move and treat water.

The proposed project's consistency with the action items contained in the *Climate Change Scoping Plan* is summarized in **Table 4.8-4**, *Summary of Project Consistency with Climate Change Scoping Plan*. As noted, the proposed project would not conflict with any of the provisions of the *Climate Change Scoping Plan*. It is also important to note that the Scoping Plan identifies a Cap-and-Trade program as one of the strategies to be employed to reduce GHG emissions. The Cap-and-Trade program is implemented by the CARB and places a cap on GHG emissions from industrial, utility, and transportation fuels sectors. The Cap-and-Trade regulation was adopted by the CARB on October 20, 2011. In accordance with SJVAPCD CEQA policy (APR 2025), the CARB's Cap-and-Trade program is considered to be an adopted Statewide plan for reducing or mitigating GHG emissions, which includes emissions from the transportation fuel and energy sectors. As such, the SJVAPCD considers GHG emissions resulting from the combustion of fuels at the project level, either for energy use or transportation, to be mitigated under the Cap-and-Trade program and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. As noted in **Table 4.8-1**, *Estimated Annual GHG Emissions (MT/Year)* nearly all GHG emissions (roughly 82 percent) would be associated with mobile emissions and approximately one percent would be associated with the generation of solid waste, which would be subject to the California's solid waste requirements (AB 939). The proposed project would comply with Kern County requirements for the recycling of solid waste. As the proposed project would not conflict with either the *2022 RTP/SCS* or the *Climate Change Scoping Plan*, there would be a less than significant impact related to a conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

The proposed project's consistency with the action items contained in the *Climate Change Scoping Plan* is summarized in **Table 4.8-4,** *Summary of Project Consistency with Climate Change Scoping Plan***.** As noted, the proposed project would not conflict with any of the provisions of the *Climate Change Scoping Plan* and would therefore, not conflict with either the *2022 RTP/SCS* or the *Climate Change Scoping Plan*. The proposed project would not have a potentially significant impact related to any conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Implementation of Mitigation Measures **MM 4.3-1, MM 4.3-2, MM 4.3-3, MM 4.3-4**, as described in Section 4.3, *Air Quality,* and **MM 4.8-1** would reduce GHG impacts, but these measures are not required to reduce Impact 4.8-2 to a less than significant level.

Table 4.8-4: Summary of Project Consistency with Climate Change Scoping Plan

Action Item	Project Consistency
Cap-and-Trade Program	**Not Applicable.** The Cap-and-Trade Program applies to emissions associated with electricity generation, large industrial facilities, and fuels. This action item does not directly apply to the proposed project.
Light-Duty Vehicle Standards	**Not Applicable.** This is a statewide measure to reduce vehicle emissions standards. This action item does not directly apply to the proposed project.
Energy Efficiency	**Consistent.** The proposed project will comply with CALGREEN building standards. These standards include requirements to improve energy efficiency, as well as to reduce water use and solid waste generation. In addition, mitigation measures have been included that would improve the proposed project's energy efficiency.
Renewables Portfolio Standard	**Not Applicable.** This standard requires increasing amounts of electricity provided within the State to be derived from renewable sources. This action item does not directly apply to the proposed project.
Low Carbon Fuel Standard	**Not Applicable.** Establishes reduced carbon intensity of transportation fuels. This action item does not directly apply to the proposed project.

Action Item	Project Consistency
Regional Transportation-Related Greenhouse Gas Targets	**Not Applicable.** This is a Statewide measure and is not within the purview of this proposed project.
Vehicle Efficiency Measures	**Not Applicable.** Identifies measures such as minimum tire-fuel efficiency, lower friction oil, and reduction in air conditioning use. This action item does not directly apply to the proposed project.
Goods Movement	**Not applicable.** Identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories. While these measures are yet to be implemented and will be voluntary, the proposed project would not interfere with their implementation.
Million Solar Roofs (MSR) Program	**Consistent.** The Million Solar Roofs (MSR) program sets a goal for increased implementation and use of solar photovoltaic systems. While the proposed project currently does not include solar energy generation, California's Building Energy Efficiency Standards (Title 24) require the building roof structure to be designed to support the future installation of solar panels (see Section 4.6, *Energy* of this EIR).
Medium & Heavy-duty Vehicles	**Consistent.** On-road haul trucks and trailers associated with the proposed project would be subject to aerodynamic and hybridization requirements as established by the CARB; no feature of the proposed project would interfere with implementation of these requirements and programs.
Industrial Emissions	**Not Applicable.** These measures are applicable to large industrial facilities (> 500,000 $MTCO_{2e}$/YR) and other intensive uses such as refineries. This action item does not directly apply to the proposed project.
Green Building Strategy	**Consistent.** The proposed project will include a variety of building, water, and solid waste efficiencies consistent with CALGREEN building standards.
High Global Warming Potential	**Not Applicable.** This action item includes various measures related to the manufacture, use, and sale of high GWPs, including refrigerants, and perfluorocarbons in semiconductor manufacturing. Use of refrigerants in air conditioning equipment for other structures would comply with applicable regulatory requirements.
Recycling and Waste	**Consistent.** The proposed project would be required to recycle a minimum of 50 percent of waste from construction activities and warehouse operations per State and County requirements.
Sustainable Forests	**Consistent.** The proposed project would increase carbon sequestration by increasing on-site trees per the proposed project landscaping plan.
Water	**Consistent.** The proposed project would include use of low-flow fixtures and efficient landscaping per CALGREEN building standards.
Agriculture	**Not Applicable.** The proposed project is not an agricultural use. This action item does not directly apply to the proposed project.
Source: CARB 2022.	

Mitigation Measures

Implement Mitigation Measures **MM 4.3-1**, **MM 4.3-3**, **MM 4.3-4**, **MM 4.8-1** and **MM 4.8-2**.

Level of Significance After Mitigation

Impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

As discussed previously, impacts associated with GHG emissions are cumulative in nature, rather than project specific. Refer to Section 4.8.2, *Environmental Setting,* for a discussion of the cumulative setting for GHG emissions.

Under AB 32, the CARB, which is the agency in charge of regulating sources of emissions of GHG emissions in California, has been tasked with adopting regulations for the reduction of GHG emissions. The effects of this proposed project are evaluated based not on the quantity of emissions, but rather on whether the proposed project is consistent with reduction strategies identified in AB 32, the Governor's Executive Orders S-3-05 and B-30-15, or other strategies to help toward reducing GHGs to the proposed levels. If so, it could reasonably follow that the proposed project would not result in a significant contribution to the cumulative impact of global climate change.

The geographic scope for cumulative impacts for GHG emissions includes the area within a six-mile radius of the proposed project site. While projects in the region and the larger area affect the volume of GHG in the atmosphere, by focusing on plans scheduled to be implemented within the proposed project site and vicinity, the analysis of cumulative impacts can be given a regional context.

Global climate change occurs as the result of global emissions of GHGs. An individual project such as the proposed project does not have the potential to result in direct and significant global climate change. The *CEQA Guidelines* also emphasize that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (see *CEQA Guidelines* Section 15130[f]). Accordingly, the project-specific impact analysis provided under Impacts 4.8-1 and 4.8-2 reflects a cumulative impact analysis of the proposed project's GHG emissions. As noted in these impact discussions, the proposed project would result in a significant increase in GHG emissions, but this potential project level impact could be mitigated to a less than significant level; and the proposed project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs.

Without the necessary science and analytical tools, it is not possible to assess, with certainty, whether the proposed project's contribution would be cumulatively considerable within the meaning of *CEQA Guidelines* Sections 15065(a)(3) and 15130. CEQA, however, does note that more severe environmental problems have lower thresholds for determining that a project's contribution to cumulative impacts is significant. Given the position of the legislature in AB 32, which states that global warming poses serious detrimental effects, and the requirements of CEQA for the lead agency to determine that a project not have a cumulatively considerable contribution, the effect of 77,974 $MTCO_2e$ could be considered cumulatively considerable. This determination is based on the lack of clear scientific or other criteria for determining the significance of the proposed project's contribution to global climate change. This impact is therefore considered cumulatively potentially significant.

Mitigation Measures

Implement Mitigation Measures **MM 4.3-1**, **MM 4.3-3**, **MM 4.3-4**, **MM 4.8-1**, and **MM 4.8-2**.

Level of Significance After Mitigation

Despite implementation of Mitigation Measures **MM 4.3-1**, **MM 4.3-3**, **MM 4.3-4**, **MM 4.8-1**, and **MM 4.8-2** cumulative impacts would be significant and unavoidable.

Section 4.9

Hazards and Hazardous Materials

Section 4.9

Hazards and Hazardous Materials

4.9.1 Introduction

This section of the Environmental Impact Report (EIR) describes the affected environment and regulatory setting for hazards and hazardous materials at the project site and within the project vicinity. It also describes the project's potential impacts on residents and other sensitive receptors that could be exposed to potential hazards and/or hazardous materials and identifies mitigation measures where applicable. Information in this section is based primarily on the *Hazardous Materials Evaluation Report* (McIntosh and Associates [McIntosh] 2021) included as Appendix J of this EIR, and the *Farmland Conversion Study Report* (McIntosh 2021). Additional information was obtained from publicly available databases including the Department of Toxic Substances Control's (DTSC) EnviroStor and State Water Resources Control Board's (SWRCB) GeoTracker.

4.9.2 Environmental Setting

This section discusses the existing conditions related to hazards and hazardous materials in the proposed project area and describes the environmental setting for hazardous materials and waste, airports, noise, vectors, wildlife hazards, and pesticide and herbicide use involved in agricultural activities. Residences and other sensitive receptors, such as schools, are also described as their proximate location to the project site affects their exposure to the potential hazards described below. A description of the project site relative to hazards and hazardous materials can also be found below.

Existing Setting

The project site is located within unincorporated Kern County, north of Imperial Avenue and generally east of State Route 99 (SR 99), with site access from Saco Road and Imperial Avenue. The project site is just east of the City of Shafter, which is located west of SR 99, and approximately one mile north of the City of Bakersfield. The project consists of two phases located on 21 parcels, totaling approximately 739 acres. The Lerdo Canal trends northwest to southeast though Phase 2 of the project site.

The project site is bounded by agricultural land to the north; the Lerdo Canal, vacant land, and agricultural, residential, and industrial uses to the east; industrial uses to the south; and the City of Shafter industrial, residential, and agricultural uses to the west. The Union Pacific Railroad tracks, located approximately 180 feet west of the project site, run along the western side of SR 99.

Elevations within the project site range from approximately 499 feet above mean sea level (amsl) in the northeast corner, 462 feet amsl in the southeast corner, 440 feet amsl in the southwest corner, and 410 feet amsl in the northwest corner. The project site is relatively flat with one percent slopes from the northeast to the southwest and 0.2 to 0.4 percent slopes from the southeast to the northwest. No steep slopes or

hillsides are present on-site. The subject property is presently and has historically been used for agriculture (McIntosh 2021).

The property is mostly vacant with structures located in the eastern portion of Phase 1, with one additional structure located near the west boundary of the Lerdo Canal in Phase 2. The Phase 1 structures are associated with agricultural activities and are currently used as an office, restroom, and maintenance and storage buildings. Dry bulk chemicals are stored in silos and wet chemicals are stored in vertical poly tanks and poly intermediate bulk containers (IBCs). An irrigation pond and associated well(s) are located within each project phase (McIntosh 2021).

The Environmental Data Resources, Inc. (EDR) Corridor Report dated February 12, 2020, indicates that Malibu Vineyards (a.k.a. Malibu Vineyards Ranch 20) is registered (California Environmental Protection Agency Environmental Reporting System [CERS] ID 10233580) to be a small quantity hazardous waste generator that stores chemicals on-site and has an aboveground storage tank (AST) located at 34344 Imperial Road (McIntosh 2021).

Hazardous Materials and Waste

A hazardous material is any substance that, because of its quantity, concentration, or physical or chemical properties, may pose a hazard to human health and the environment. Under Title 22 of the California Code of Regulations (CCR), the term "hazardous substance" refers to both hazardous materials and hazardous wastes. Both of these are classified according to four properties: (1) toxicity; (2) ignitability; (3) corrosiveness; and (4) reactivity (22 CCR 11, Article 3). A hazardous material is defined as:

> *A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed (22 CCR 66260.10).*

Various forms of hazardous materials can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Hazards to human health and the environment can occur during production, storage, transportation, use, or disposal of hazardous materials.

Recognized Environmental Conditions

A Recognized Environmental Condition (REC) is a term used to identify environmental liability within the context of a Phase I Environmental Site Assessment (ESA). The American Society for Testing and Materials (ASTM) defines an REC as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." "De minimis" conditions are minor occurrences of contamination that generally do not present a material risk to human health and would not likely be subject to enforcement action if brought to the attention of governmental agencies (ASTM 2021).

A Hazardous Materials Evaluation Report, which is similar to and includes the required data for a Phase I ESA, was conducted for the project to review, evaluate, and document present and past land uses and

practices, and visually examine site conditions in order to identify RECs. Based on the results of the Hazardous Materials Evaluation Report conducted, the following is a list of RECs identified in connection with the project site.

Leaking Underground Storage Tank Cleanup Site

On August 18, 1989, the 1,000-gallon underground gasoline tank was tested and found to be leaking due to a crack in the fill pipe. The Leaking Underground Storage Tank (LUST) and contents were removed December 4, 1989, by Calpi, Inc. The tank was transported to A.M.R. of Ontario, California to be destroyed on December 11, 1989, and the tank contents (1,600 gallons gasoline, water and sludge) were transported to Gibson Oil & Refining Co. of Bakersfield to be recycled on December 5, 1989. Soil samples below the UST indicated the presence of and gasoline including 3,600 to 9,600 ppm of total petroleum hydrocarbons (TPH) and 1,317 to 3,175 ppm of benzene, toluene and xylene (BTX&E) at two feet, six inches below the north end of the tank. Numerous investigations, groundwater monitoring, and assessments of the leak were performed. 1990 assessments using three test holes in the vicinity of the tank determined that a gasoline plume of 46 feet in diameter by 110 feet deep existed below the tank. The assessments also determined that the base of the plume was at the top of a perched water table at 110 to 122 feet, created by leakage of the adjacent irrigation pond. The primary groundwater aquifer depth was estimated at 323 feet for spring of 1989. The pond was drained and lined in the first quarter of 1991 to verify that the pond was the source of the perched water. By June 12, 1996, TPH was significantly reduced below the tank and BTX&E were close to non-detectable (McIntosh 2021).

The case was closed by Kern County Environmental Health Services Department (KCEHS) with approval of the Central Valley Regional Water Quality Control Board on November 27, 1996, and is classified as a Controlled Recognized Environmental Condition (CREC). The LUST is recorded on the Historic Cortese List. As noted in the November 27, 1996, Remedial Action Completion Certification, if a change in land use is proposed, the owner must promptly notify the KCEHS (McIntosh 2021).

Aboveground Storage Tanks

In 1989, a 1,000-gallon aboveground gasoline storage tank (AST) with a three-course block wall containment was installed to replace the LUST on-site. This tank is included on the CERS Tanks List (CERES ID: 10233580, EDR A2). A Spill Prevention, Control, and Countermeasures (SPCC) Plan dated September 2009 was prepared and filed per regulations at that time. Per the Water Resources Reform and Development Act (WDDRA) of 2014, a SPCC Plan is not required for farms if the aggregated capacity of oil tanks (petroleum, mineral, etc.) is between 2,500 and 6,000 gallons and with no reportable discharge history for the past three years. In addition, oil containers less than 55 gallons in size do not need to be included. With California Senate Bill 612 of 2015, the Aboveground Petroleum Storage Act (APSA) was amended such that a farm is conditionally exempt to prepare an SPCC plan if no tank is larger than 20,000 gallons, the aggregate facility capacity is less than 100,000 gallons, daily inspections of each tank is performed, periodic Certified Unified Program Agency (CUPA) inspections are allowed, and secondary containment is installed if required. Other requirements for APSA remain. As such, Malibu Vineyards is not required to prepare or update an existing SPCC Plan but must continue to prepare an annual tank facility statement, or a Hazardous Materials Business Plan (HMBP), and report quantities into the statewide information management system. The CUPA inspection on March 11, 2015, indicated a violation as daily inspections were not performed as an exempt facility. The inspection on April 16, 2016 indicated that eight

ASTs, comprised of a 1,000-gallon diesel tank, 500-gallon diesel tank, an empty 3,000-gallon tank, 200-gallon waste oil tank, 100-gallon pump oil tank, 100-gallon hydraulic oil tank, 100-gallon motor oil tank, and 1,000-gallon gasoline tank, were on-site and was referred to the Kern County Fire Department for compliance follow-up, but was not considered a violation. All noted violations on-site were mitigated within the allowed compliance period. The ASTs and quantities on-site are reported. An updated Hazardous Materials Business Inventory (CERS ID 397028) was provided to KCEHS via CERS on March 14, 2019, for permitted inventory on the property. No violations were reported during the March 5, 2018, and April 15, 2019, inspections (McIntosh 2021).

Hazardous Waste Generator (Small Quantity)

As a user of petroleum and lubrication products in the agricultural business, hazardous materials are generated during oil and filter changes and storage of empty containers at the project site. During various routine KCEHS/CUPA inspections, the following violations shown in **Table 4.9-1** have been observed, recorded and mitigated. No Hazardous Waste Generator violations have occurred in the most recent five years for which information was available when preparing the Hazardous Materials Evaluation Report (McIntosh 2021).

Table 4.9-1: Malibu Vineyards - Hazardous Materials Generator Inspections

Inspection Date	Violation Type	Corrective Action Required
2009-03-30	GL01/Minor	Observation: The facility shall clearly mark all containers with the following: (1) the words "Hazardous Waste", (2) composition and physical state, (3) hazard property, (4) name and address of the generator, and (5) accumulation start date. Corrective Action: Mark accumulation start date on containers of waste oil, drained used oil filters, and used antifreeze.
2012-03-05	GC02/Class II	Observation: The facility shall immediately close/seal containers and ensure that containers remain closed except when adding or removing hazardous waste. Corrective Action: Please always cover drained, used oil filter drums and waste oil tanks with their lids, except when adding or removing wastes.
2013-02-27	No Violations	
2015-03-11	H260/Class II	Observed: The steel drums containing "WASTE OIL" and "DRAINED USED OIL FILTERS" were not properly labeled at the time of inspection. The starting accumulation date has faded on both labels. Corrective Action: Contact an authorized hazardous waste hauler to pick up the "WASTE OIL" and "DRAINED USED OIL FILTERS." Take photos of the properly labeled hazardous waste containers with a starting accumulation date. Email the photos and manifest from your authorized hazardous waste hauler to: yimr@co.kern.ca.us. Returned to compliance on April 8, 2015.
2016-04-04	No Violations	
2018-03-05	No Violations	
2019-04-15	No Violations	
Source: McIntosh 2021		

Kern County Department of Agriculture and Measurement Standards (Agricultural Commissioner)

The Kern County Department of Agriculture and Measurement Standards (Agricultural Commissioner) has been tracking annually permitted crop boundaries since the year 1994. The proposed project has been utilized for agricultural purposes from the late 1930's to the present, and a review of the historical aerial photographs helps to support the findings *(*Refer to Figures B-1 thru B-20 of the Hazardous Materials Evaluation Report, included as Appendix J*).* Information was obtained from the Kern County Agricultural Department online website for the permit numbers and the grower on the proposed project. Malibu Vineyards, Permit Number 1500419, was the grower (Lucich Farms was the manager) from years 1994 through 2010; Lucich Farms, Permit Number 1504245, was the grower in 2011 through mid-April 2011; and Grape Man Farms, LP, Permit Number 1505134, has been the grower for the years mid-April 2011 through 2020. The project site has historically been cultivated for grapes.

The use of pesticides, herbicides, fertilizers, and general soil amendments has been licensed for application to the proposed project from the years 1994 through 2020. Table 3-5, *Restricted Materials Permitted Usage on Proposed Project*, in the Hazardous Materials Evaluation Report (see Appendix J) lists the pesticides, herbicides, fertilizers, and general soil amendment that have been licensed for application to the proposed project from 2011 through March 30, 2020 (McIntosh 2021).

Organochlorine pesticides are defined as persistent because they are stable in the environment and resist decay with time. The ability of organochlorine pesticides to persist in the environment made them highly effective and therefore, widely used in agricultural insect control efforts from the 1940s through the 1970s. Most organochlorine pesticides were banned for use in the United States by the mid-1980s. Those that remain in legal use are the active, low concentration ingredients of some home and garden products and some agricultural and environmental pest control products. The pesticides and herbicides permitted since the year 1994 for application to the crops grown on the proposed project do not include organochlorine pesticides (McIntosh 2021). Agricultural fertilizers and chemicals in use currently are sold in concentrated volumes that are mixed and applied in dilute concentrations, degrading relatively quickly. However, some environmentally persistent, organochlorine pesticides can linger in the soil for numerous years. It is not known if environmentally persistent pesticides and herbicides were ever applied to the proposed project. The potential for elevated concentrations of environmentally persistent pesticides to exist in the near-surface soils, which would require regulatory action, is low (McIntosh 2021).

Increased Noise

Noise from project construction would be temporary and would occur over a period of approximately 22 years. The ambient noise regime in the project vicinity consists of traffic traveling along SR 99, aircraft travel associated with the Meadows Field Airport and train traffic operating along local railways. Sensitive receivers located in the project area consist of a rural, single-family residence located approximately 350 feet west of the project site, south of SR 99, and a rural, single-family residence located approximately 2,100 east feet from the project site (Bollard Acoustical Consultants, Inc. 2023). The nearest residential community is Gossamer Grove, located approximately 0.2 miles southwest of the project site, consisting of single-family residences.

As discussed in Section 4.12, *Noise*, of this EIR, construction activities could cause periodic increases in ambient noise levels at the nearest sensitive receptors when compared to the relatively quiet environment in the project area. However, such increases would be temporary and would not substantially disrupt or otherwise adversely affect residential uses.

Hazardous Materials Transportation

SR 99 is the nearest highway, located adjacent west of the project site. The transportation of hazardous materials within the State of California is subject to various federal, State, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway that is not designated for that purpose, unless the use of a highway is required to permit delivery or the loading of such materials (California Vehicle Code, Sections 31602 (b) and 32104(a)). The California Highway Patrol (CHP) designates through routes to be used for the transportation of hazardous materials. Information on CHP requirements and regulatory authority is provided in Section 4.9.3, *Regulatory Setting*, below. The Kern County and Incorporated Cities Hazardous Waste Management Plan designates State and federally maintained roads as candidate Commercial Hazardous Waste Shipping Routes through the County, including SR 99. According to Section 2.5.4 of the Kern County General Plan Circulation Element, SR 99 is designated as an adopted commercial hazardous materials shipping route.

Airports

The nearest public airport to the project site is the Meadows Field Airport, located approximately 1.5 miles southeast of the project site. As shown in **Figure 4.9-1** *Airport Land User Compatibility Map***,** a portion of the project site is located within the Extended Approach/Departure Zone (B-2) and Common Traffic Pattern Zone (C) of the Meadows Field Airport according to the Kern County Airport Land Use Compatibility Plan (ALUCP). The ALUCP provides restrictions and criteria for development of land within each of the Compatibility Zones including density limits, height limits, and restrictions on uses which may be inappropriate due to the types of users normally associated with each use such as schools, hospitals, and nursing homes. Additionally, storage of fuels and other hazardous materials are restricted from Compatibility Zones A and B. Projects located within an Airport Influence Area must also meet the requirements of Federal Aviation Regulation 14 CFR Part 77, described below. Table 4.9-2, *ALUCP Compatibility Criteria,* describes the Compatibility Criteria for each zone.

Figure 4.9-1: Airport Land Use Compatibility Plan Map

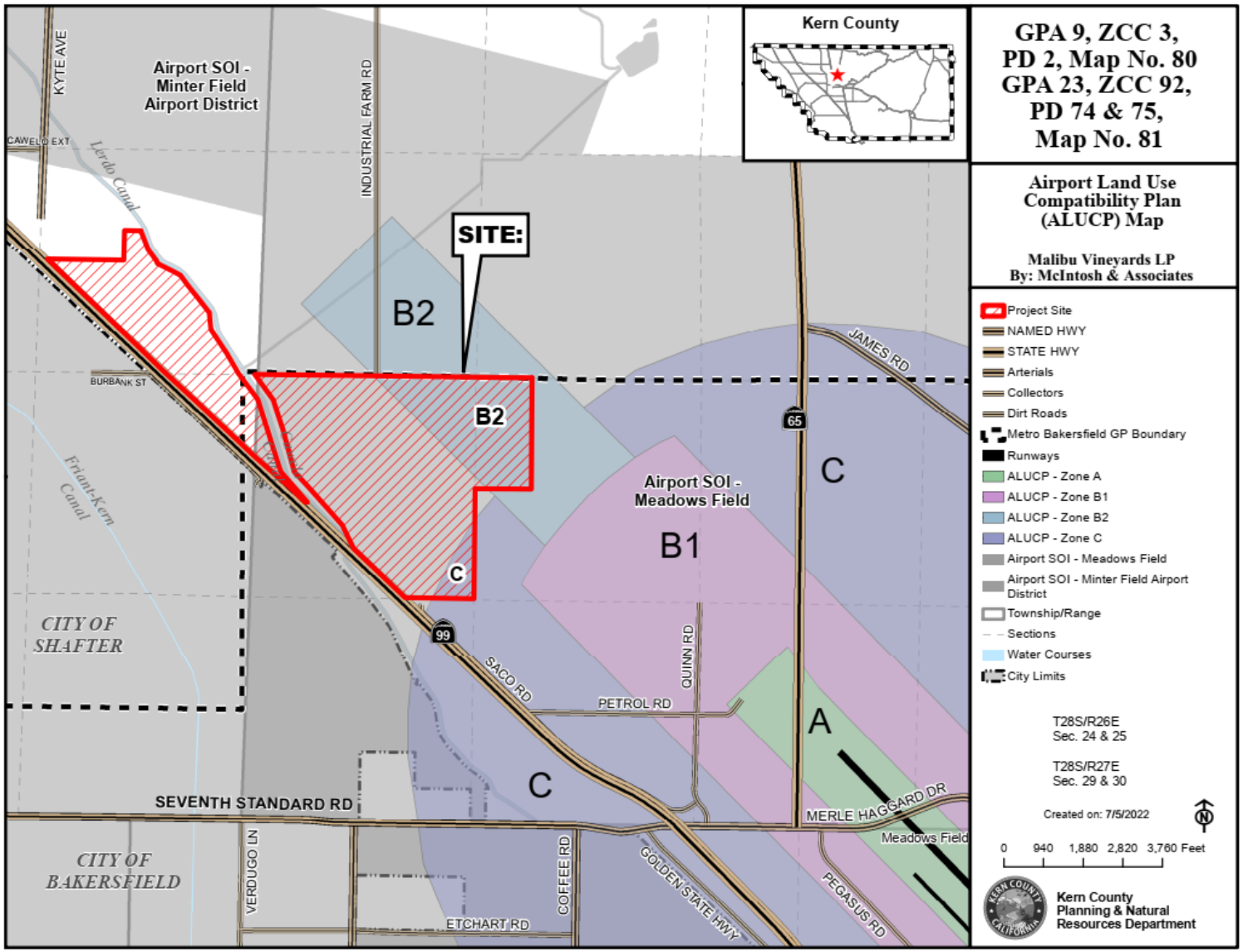


Table 4.9-2: ALUCP Compatibility Criteria

Zone	Location	Impact Elements	Maximum Densities		Required Open Land
			Residential (du/ac)	Other Uses (people/ac)	
A	Runway Protection Zone or within Building Restriction Line	1. High risk 2. High noise level	0	10	All Remaining
B1	Approach/Departure Zone and Adjacent to Runway	3. Substantial risk – aircraft commonly below 400 feet AGL or within 1,000 feet of runway. 4. Significant noise	0.1	60	30%
B2	Extended Approach/Departure Zone	5. Significant risk – aircraft commonly below 800 feet AGL. 6. Significant noise	0.5	60	30%
C	Common Traffic Pattern	7. Limited risk – aircraft at or below 1,000 feet AGL. 8. Frequent noise intrusion	15	150	15%
D	Other Airport Environs	9. Negligible risk 10. Potential for annoyance from overflights	No Limit	No Limit	No Requirement
E	Special Land Use	11. Compatibility issues	15	150	No Requirement
Note: Additional criteria are provided in Table 2A of the Kern County Airport Land Use Compatibility Plan.					

Fire Hazard Areas

The California Department of Forestry and Fire Prevention (CAL FIRE) identifies Fire Hazard Severity Zones (FHSZ) based on factors such as fuel, slope, and weather to identify the degree of fire hazard throughout the State (i.e., moderate, high, or very high). According to the Fire Hazard Severity Zone maps published by CAL FIRE, the project site is not located within or near a State Responsibility Area or lands classified as very high fire hazard severity zones (CAL FIRE 2024). The project site is located outside of areas identified by CAL FIRE as having a substantial or very high risk for wildfire to occur. The project site is located within a local responsibility area (LRA) and is designated as LRA Agricultural, Non-Wildland (Kern County Fire Department 2009). Given this designation, the project site is outside of areas identified by CAL FIRE as having substantial or very high wildfire risk. The County's Community Wildfire Protection Plan (CWPP), adopted in March 2022, addresses hazards and risks of wildfire throughout the County in an effort to protect human life and reduce property loss due to wildfire.

4.9.3 Regulatory Setting

Federal

U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (USEPA) was established in 1970 to consolidate in one agency a variety of federal research, monitoring, standard-setting, and enforcement activities to ensure environmental protection. The USEPA's mission is to protect human health and to safeguard the natural environment – air, water, and land – upon which life depends. The USEPA works to develop and enforce regulations that implement environmental laws enacted by Congress, is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for using permits and for monitoring and enforcing compliance. Where national standards are not met, the USEPA can issue sanctions and take other steps to assist the states and tribes in reaching the desired levels of environmental quality.

Federal Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established a program administered by the USEPA to regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle to grave" system of regulating hazardous wastes.

Comprehensive Environmental Response, Compensation, and Liability Act/Superfund Amendments and Reauthorization Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as "Superfund," was enacted by Congress on December 11, 1980. This law (42 United States Code [USC] 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA also enables revision of the National Contingency Plan (NCP). The NCP (Title 40, Code of Federal Regulations [CFR], Part 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List (NPL). CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

Clean Water Act/Spill Prevention, Control, and Countermeasure Rule

The Clean Water Act (CWA) (33 USC 1251 et seq., formerly known as the Federal Water Pollution Control Act of 1972) was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of waters of the United States. As part of the CWA, the USEPA oversees and enforces the Oil Pollution Prevention regulation contained in 40 CFR 112, which is often referred to as the "SPCC rule" because the regulations describe the requirements for facilities to prepare, amend, and implement spill prevention, control, and countermeasure (SPCC) plans. A facility is subject to SPCC regulations if a single oil storage tank has a capacity greater than 660 gallons, the total aboveground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons, and if, due to its location, the facility could reasonably be expected to discharge oil into or upon the "Navigable Waters" of the United States.

Other Regulations

Other federal regulations overseen by the USEPA relevant to hazardous materials and environmental contamination include 40 CFR Parts 100 to 149 – Water Programs, 40 CFR Parts 239 to 259 – Solid Wastes, and 40 CFR Parts 260 to 279 – Hazardous Waste. These regulations designate hazardous substances under the CWA; determine the reportable quantity for each substance that is designated as hazardous; and establish quantities of designated substances equal to or greater than the reportable quantities that may be discharged into waters of the United States.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration's (OSHA) mission is to ensure the safety and health of U.S. workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. The OSHA staff establish and enforce protective standards and reach out to employers and employees through technical assistance and consultation programs. OSHA standards are listed in 29 CFR 1910 and include requirements for the preparation of Health and Safety Plans (HASPs). HASPs identify potential hazards associated with a proposed land use and may identify appropriate mitigation measures, if required. 29 CFR Section 1910.120(e) requires all employees working on sites potentially exposed to hazardous substances, health hazards, or safety hazards, as well as the supervisors and management responsible for the site to receive training meeting the requirements stated in this paragraph before they are permitted to engage in hazardous waste operations that could expose them to hazardous substances, safety, or health hazards.

Federal Aviation Administration

The Federal Aviation Administration (FAA) regulates aviation at regional, public, private, and military airports. The FAA regulates objects affecting navigable airspace and structures greater than 200 feet in height according to Federal Aviation Regulations 14 CFR Part 77.13. The U.S. and California Departments of Transportation also require the operator to submit FAA Form 7460-1, Notice of Proposed Construction or Alteration. According to 14 CFR Part 77.17, notification allows the FAA to identify potential aeronautical hazards in advance, thus preventing or minimizing any adverse impacts on the safe and efficient use of navigable airspace. Any structure that would constitute a hazard to air navigation, as defined

in FAA Part 77, requires issuance of a permit from the California Department of Transportation's Aeronautics Program. The permit is not required if the FAA aeronautical study determines that a structure would have no impact on air navigation.

As described in 14 CFR 77.13 (Construction or Alteration Requiring Notice), each sponsor who proposes any of the following construction or alteration scenarios shall notify the FAA in the form and manner prescribed in 14 CFR 77.17: (1) any construction or alteration of more than 200 feet in height above the ground level at its site; or (2) any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:

- 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport. These airports and heliports include: an airport that is available for public use and is listed in the Airport Directory of the current Airman's Informational Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement; an airport under construction, that is the subject of a notice or proposal on file with the FAA, and, except for military airports, it is clearly indicated that the airport will be available for public use; an airport that is operated by an armed force of the United States;
- 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport, with its longest runway no more than 3,200 feet in actual length, excluding heliports; and,
- 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport.

Per 14 CFR 77.17, notification requirements including sending one executed form set (four copies) of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office, having jurisdiction over the area within which the construction or alteration will be located. The notice required must be submitted at least 30 days before the earlier of the following dates: (1) the date the proposed construction or alteration is to begin, or (2) the date an application for a construction permit is filed.

State

California Department of Conservation, Geologic Energy Management Division

The State of California Department of Conservation, Geologic Energy Management Division (CalGEM) is the agency responsible for supervising the drilling, operation, maintenance, plugging, and abandonment of oil, gas, and geothermal wells. CalGEM's regulatory program promotes the sensitive development of oil, natural gas, and geothermal resources in California through sound engineering practices, pollution prevention, and the implementation of public safety programs. CalGEM requires any construction above or near plugged or abandoned oil and gas wells to be avoided and remediation of wells to meet current CalGEM standards, including wells discovered during excavation or grading. According to CalGEM, no exploratory wells have been drilled on any of the parcels that encompass the proposed project.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories,

emergency response plans, and training programs. Hazardous materials are defined as unsafe raw or unused materials that are part of a process or manufacturing step. They are not considered hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those relating to hazardous waste.

A HMBP must be submitted to the local Certified Unified Program Agency (the Kern County Public Health Services Department/Environmental Health Services Division) if the facility handles, uses, or stores a hazardous material or mixture containing a hazardous material that has a quantity equal to or greater than 55 gallons of liquid, 500 pounds of a solid substance, or 200 cubic feet of compressed gas, a hazardous compressed gas in any amount, or hazardous waste in any amount. A HMBP must include the following:

- Inventory of hazardous materials at a facility;
- Emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material; and
- Training for all new employees and annual training for all employees in safety procedures in the event of a release or threatened release of a hazardous material (California Governor's Office of Emergency Services 2021)

Hazardous Waste Control Act

The Hazardous Waste Control Act created the State Hazardous Waste Management Program, which is similar to but more stringent than the federal RCRA program. The act is implemented by regulations contained in Title 26 of the CCR, which describes the following required aspects for the proper management of hazardous waste:

- Identification and classification;
- Generation and transportation;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and,
- Closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with the DTSC.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

Senate Bill (SB) 1082 (1993) created the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), which requires the administrative consolidation of six hazardous materials and waste programs (Program Elements) under one agency, a CUPA. The Program Elements consolidated under the Unified Program are as follows:

- Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs (i.e., Tiered Permitting);
- Aboveground Petroleum Storage Tank Program;
- Hazardous Materials Release Response Plans and Inventory Program (i.e., Hazardous Materials Disclosure or "Community-Right-To-Know");
- California Accidental Release Prevention Program (Cal ARP);
- UST Program; and,
- Uniform Fire Code Plans and Inventory Requirements.

The Unified Program is intended to provide relief to businesses in complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs. The Unified Program is implemented at the local government level by CUPAs. Most CUPAs have been established as a function of a local environmental health or fire department. Some CUPAs have contractual agreements with another local agency, a participating agency, which implements one or more Program Elements in coordination with the CUPA. The CUPA in Kern County is the Environmental Health Division of the Kern County Public Services Department.

California Environmental Protection Agency

The California Environmental Protection Agency (Cal/EPA) was created in 1991 and unified California's environmental authority in a single cabinet-level agency and brought the California Air Resources Board (CARB), SWRCB, RWQCB, California Department of Resources Recycling and Recovery (CalRecycle), DTSC, California Office of Environmental Health Hazard Assessment (OEHHA), and Department of Pesticide Regulation under one agency. These agencies were placed within the Cal/EPA "umbrella" for the protection of human health and the environment and to ensure the coordinated deployment of State resources. Their mission is to restore, protect, and enhance the environment and to ensure public health, environmental quality, and economic vitality.

California Department of Toxic Substances and Control

DTSC, a department of Cal/EPA, is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in the State. DTSC regulates hazardous waste primarily under the authority of the federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division

4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

USC 65962.5 (commonly referred to as the Cortese List) includes DTSC-listed hazardous waste facilities and sites, Department of Health Services (DHS) lists of contaminated drinking water wells, sites listed by SWRCB as having UST leaks or a discharge of hazardous wastes or materials into the water or groundwater and lists from local regulatory agencies of sites with a known migration of hazardous waste/material.

California Office of Emergency Services

In order to protect public health and safety, and the environment, the California Office of Emergency Services (OES) is responsible for establishing and managing Statewide standards for business and area plans relating to the handling and release, or threatened release, of hazardous materials. The OES requires that basic information on hazardous materials handled, used, stored, or disposed of (including location, type, quantity, and health risks) be available on-site to firefighters, public safety officers, and regulatory agencies. Typically, this information is included in business plans in order to prevent or mitigate damage to the health and safety of persons and the environment from the release or threatened release of such materials into the workplace and environment. These regulations are covered under Chapter 6.95 of the California Health and Safety Code, Article 1 – Hazardous Materials Release Response and Inventory Program (Sections 25500 to 25520) and Article 2 – Hazardous Materials Management (Sections 25531 to 25543.3).

Title 19 of the CCR, Public Safety, Division 2, Office of Emergency Services, Chapter 4 – Hazardous Material Release Reporting, Inventory, and Response Plans, Article 4 (Minimum Standards for Business Plans) establishes minimum Statewide standards for hazardous materials business plans. These plans must include the following: (1) a hazardous material inventory in accordance with Sections 2729.2 to 2729.7; (2) emergency response plans and procedures in accordance with Section 2731; and (3) training program information in accordance with Section 2732. Business plans contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the State. Each business is required to prepare a hazardous materials business plan if that business uses, handles, or stores a hazardous material or an extremely hazardous material in quantities greater than or equal to the following:

- 500 pounds of a solid substance;
- 55 gallons of a liquid;
- 200 cubic feet of compressed gas;
- A hazardous compressed gas in any amount; or,
- Hazardous waste in any quantity.

California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 337–340). The regulations specify

requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings.

California Highway Patrol

A valid Hazardous Materials Transportation License, issued by the CHP, is required by the laws and regulations of State of California Vehicle Code Section 3200.5 for transportation of either:

- Hazardous materials shipments for which the display of placards is required by State regulations; or,
- Hazardous materials shipments of more than 500 pounds, which would require placards if shipping greater amounts in the same manner.

Additional requirements on the transportation of explosives, inhalation hazards, and radioactive materials are enforced by the CHP under the authority of the State Vehicle Code. Transportation of explosives generally requires consistency with additional rules and regulations for routing, safe stopping distances, and inspection stops (14 CCR 6 [1] [1150–1152.10]). Inhalation hazards face similar, more restrictive rules and regulations (13 CCR 6 [2.5] [1157–1157.8]). Transportation of radioactive materials is restricted to specific safe routes.

Local

Construction and operation of the proposed project would be subject to policies and regulations contained within the general and specific plans, including the Kern County General Plan, Metropolitan Bakersfield General Plan, Kern County Zoning Ordinance, the Kern County Code of Building Regulations, and the Malibu Vineyards Industrial Parkway Specific Plan, which include policies pertaining to the avoidance of hazards and adverse effects related to hazardous materials. The policies, goals, and implementation measures in the Kern County General Plan and the Metropolitan Bakersfield General Plan related to hazards and hazardous materials that are applicable to the project are provided below. The Kern County General Plan and Metropolitan Bakersfield General Plan contain additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Kern County General Plan and Metropolitan Bakersfield General Plan are incorporated by reference.

Kern County General Plan

The goals, policies, and implementation measures in the Kern County General Plan for hazards and hazardous materials applicable to the project are provided below.

Chapter 1. Land Use, Open Space and Conservation Element

Section 1.3 Physical and Environmental Constraints

Goals

Goal 1: To strive to prevent loss of life, reduce personal injuries, and property damage, minimize economic and social diseconomies resulting from natural disaster by directing development to areas which are not hazardous.

Policies

Policy 1: Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained (Map Code 2.1 [Seismic Hazard], Map Code 2.2 [Landslide], Map Code 2.3 [Shallow Groundwater], Map Code 2.5 [Flood Hazard], Map Codes 2.6–2.9 and Map Code 2.10 [Nearby Waste Facility], and Map Code 2.11 [Burn Dump Hazard]) to support such development unless appropriate studies establish that such development will not result in an unmitigated significant impact.

Chapter 2. Circulation Element

Section 2.5.4 Transportation of Hazardous Materials

Transportation-related accidents and spills of hazardous materials pose a serious threat to the traveling public and nearby sensitive land uses. Transportation of hazardous materials poses a short-term threat to public health.

Goals

Goal 1: Reduce risk to public health from transportation of hazardous materials.

Policies

Policy 1: The commercial transportation of hazardous material, identification and designation of appropriate shipping routes will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.

Policy 2: Kern County and affected cities should reduce use of County-maintained roads and city-maintained streets for transportation of hazardous materials.

Implementation Measures

Measure A: Roads and highways utilized for commercial shipping of hazardous waste destined for disposal will be designated as such pursuant to Vehicle Code Sections 31303 et seq. Permit applications shall identify commercial shipping routes they propose to utilize for particular waste streams.

Measure D: Require seismic review prior to major addition, renovation, or increase in occupancy of buildings.

Chapter 4. Safety Element

Section 4.2 General Policies and Implementation Measures, Which Apply to More Than One Safety Constraint

Policies

Policy 2: Those hazardous areas, identified as unsuitable for human occupancy, are guided toward open space uses, such as agriculture, wildlife habitat, and limited recreation.

Policy 5: The adopted Kern County, California Multi-Hazard Mitigation Plan is incorporated by reference. This multi-jurisdictional plan, approved in compliance with the Disaster Mitigation Act of 2000, provides long-term planning to reduce the impacts of future disasters.

Implementation Measures

Measure B: The Safety Element should be reviewed and comprehensively revised every five years, or whenever substantially new scientific evidence becomes available.

Measure E: Maintain adequate setbacks between oil/gas wells and development through the use of the zone districts DI (Drilling Island) or PE (Petroleum Extraction) and implementation of the uniform Fire Code 7904.32.3

Measure F: The adopted multi-jurisdictional Kern County, California Multi-Hazard Mitigation Plan, as approved by the Federal Emergency Management Agency (FEMA), shall be used as a source document for preparation of environmental documents pursuant to the California Environmental Quality Act (CEQA), evaluation of project proposals, formulation of potential mitigation, and identification of specific actions that could, if implemented, mitigate impacts from future disasters and other threats to public safety.

Section 4.9 Hazardous Materials

Policies

Policy 2: Innovative technologies to manage hazardous waste streams generated in Kern County will be encouraged.

Implementation Measures

Measure A: Facilities used to manufacture, store, and use of hazardous materials shall comply with the Uniform Fire Code, with requirements for siting or design to prevent on-site hazards from affecting surrounding communities in the event of inundation.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The goals, policies, and implementation measures in the Metropolitan Bakersfield General Plan for hazards and hazardous materials applicable to the project are provided below.

Chapter VIII: Safety/Public Safety

Goals

Goal 4: Assure that fire, hazardous substance regulation and emergency medical service problems are continuously identified and addressed in a proactive way, in order to optimize safety and efficiency.

Policies

Policy 7: Enforce ordinances regulating the use/manufacture/sale/ transport/disposal of hazardous substances, and require compliance with state and federal laws regulating such substances (I-4).

Policy 8: The Kern County and Incorporated Cities Hazardous Waste Management Plan and Final Environmental Impact Report serves as the policy document guiding all facets of hazardous waste (I-7).

Policy 12: Where recommended by appropriate local, State or Federal agencies for discretionary projects, soils shall be tested for concentrations of agricultural chemicals prior to grading permit approval, whenever feasible. Contaminated soils shall be excavated and disposed of at a certified hazardous waste disposal facility whenever necessary.

Policy 13: Fugitive dust emissions shall be controlled through applicable requirements (Regulation VIII) set forth by the San Joaquin Valley Unified Air Pollution Control District, including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects resulting from the development of agricultural property.

Policy 14: Establish buffer zones adjacent to urban development proposals located adjacent to agricultural areas, as recommended by the Kern County Agricultural Commission.

Policy 15: Fugitive dust emissions shall be controlled through applicable requirements set forth by the San Joaquin Valley Unified Air Pollution Control District (Regulation VIII), including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects as a result of exposure to Coccidioidomycosis.

Policy 16: All new discretionary development projects shall be subject to environmental and design review on a site-specific, project-by-project basis, including but not limited to, an assessment to determine whether hazardous materials present potential health affects to human health as required by the Department of Environmental Services.

Implementation Measures

Measure 7: Coordinate City and County efforts during review of proposed hazardous waste facilities, transportation rates, household and small business collection programs and public education programs.

Kern County Multi-Hazard Mitigation Plan

The 2020 update to the Kern County Multi-Jurisdictional Hazard Mitigation Plan (Kern MJHMP) was approved by the Federal Emergency Management Agency (FEMA) on April 9, 2021. The purpose of the Kern MJHMP is to guide County and City officials, Special District Managers, School District Administrators, and Water and Wastewater District Managers in protecting people and property within the County from the impacts of natural disasters and hazard events. In compliance with the Disaster Mitigation Act of 2000 (DMA 2000), the MJHMP must be updated every 5 years (KCFD Office of Emergency Services 2020).

Kern County Emergency Operations Plan

The Kern County Emergency Operations Plan (EOP), adopted May 1, 2022, is an all-hazards document that provides for the integration and coordination of planning efforts of the County with those of its cities, special districts, and the State region. The purpose of the EOP is to provide the basis for a coordinated response before, during and after a disaster affecting the County or other jurisdictions in the EOP's Operational Area. The EOP establishes policies, an emergency management organization, and assigns roles and responsibilities to ensure the effective management of emergency operations. The EOP also identifies sources of external support which might be provided through mutual aid and specific statutory authorities by other jurisdictions, State and federal agencies, and the private sector (County OES 2022).

Kern County Community Wildfire Protection Plan

The Kern County CWPP was developed in response to the federal Healthy Forests Restoration Act (HFRA). The CWPP addresses hazards and risks of wildland fire throughout the County and makes recommendations for fuel reduction projects, public outreach and education, structural ignitability reduction, and fire response capabilities. The goal of the CWPP, adopted in March 2022, is to enable local communities to improve their wildfire-mitigation capacity, identify high fire risk areas, and prioritize areas for mitigation, fire suppression, and emergency preparedness. The CWPP enhances public awareness by helping residents better understand the natural- and human-caused risk of wildland fires (SWCA 2022).

Kern County Fire Code

Chapter 17.32 of the Kern County Municipal Code details the Kern County Fire Code, which is an adoption of the 2022 California Fire Code and the 2021 International Fire Code with some amendments. The purpose of the Kern County Fire Code is to regulate the safeguarding of life, property, and public welfare to a reasonable degree from the hazards of fire, hazardous materials release, and/or explosion due to handling of dangerous and hazardous materials; conditions hazardous to life or property in the occupancy and use of buildings and premises; the operation, installation, construction, and location of attendant equipment; and the installation and maintenance of adequate means of egress and to provide for the issuance of permits and collection of fees.

Kern County Fire Department 2021 Strategic Fire Plan

The Kern County Fire Department Unit Strategic Fire Plan, updated in April 2022, is the most current document that assesses the wildland fire situation throughout the State Responsibility Area (SRA) within the County. Similar to other plans, this document includes stakeholder contributions and priorities and identifies strategic targets for pre-fire solutions as defined by the people who live and work within areas susceptible to fire hazards. The plan provides for a comprehensive analysis of fire hazards, assets at risk, and level of services to systematically assess the existing levels of wildland protection services and identifies high-risk and high-value areas that are potential locations for costly and damaging wildfires. The plan gives an overview of KCFD Battalions, ranks these areas in terms of priority needs, and identifies the areas of SRA. According to the plan, the project site is not located within a SRA, but is located in a Local Responsibility Area. The County is broken up into six different fuel management areas: Tehachapi, Western Kern, North Kern, Mt. Pinos Communities, Valley/Foothill, and Kern River Valley. The project site is located within Battalion 4 & 6 (Valley/Foothill), which lies within a moderate fire hazard severity zone within the 2021 Strategic Fire Plan management area (Kern County Fire Department 2022).

Kern County Public Health Services Department/Environmental Health Services Division

The Kern County Public Health Services Department/Environmental Health Services Division/Hazardous Materials Section is the CUPA for the project area, which provides site inspections of hazardous materials programs (ASTs, USTs, hazardous waste treatment, hazardous waste generators, hazardous materials management and response plans, and the California Fire Code). This Department also provides emergency response to hazardous materials events, performing health and environmental risk assessment and substance identification.

Kern County and Incorporated Cities Hazardous Waste Management Plan

In response to the growing public concern regarding hazardous waste management, State Assembly Bill 2948 enacted legislation authorizing local governments to develop comprehensive hazardous waste management plans. The intent of each plan is to ensure that adequate treatment and disposal capacity is available to manage the hazardous wastes generated within the local government's jurisdiction.

The Kern County and Incorporated Cities Hazardous Waste Management Plan (Hazardous Waste Plan) was first adopted by Kern County and each incorporated city before September 1988 and was subsequently approved by the State Department of Health Services. The Hazardous Waste Plan was updated and incorporated by reference into the Kern County General Plan in 2004 as permitted by Health and Safety Code Section 25135.7(b), and thus must be consistent with all other aspects of the Kern County General Plan.

The Hazardous Waste Plan provides policy direction and action programs to address current and future hazardous waste management issues that require local responsibility and involvement in Kern County. In addition, the Hazardous Waste Plan discusses hazardous waste issues and analyzes current and future waste generation in the incorporated cities, county, State, and federal lands. The purpose of the Hazardous Waste Plan is to coordinate local implementation of a regional action to effect comprehensive hazardous waste management throughout Kern County. The action program focuses on development of programs to

equitably site needed hazardous waste management facilities; to promote on-site source reduction, treatment, and recycling; and to provide for the collection and treatment of hazardous waste from small-quantity generators. An important component of the Hazardous Waste Plan is the monitoring of hazardous waste management facilities to ensure compliance with federal and State hazardous waste regulations.

Kern County Airport Land Use Compatibility Plan

The Kern County Airport Land Use Compatibility Plan (ALUCP) establishes procedures and criteria by which the County can address compatibility issues when making planning decisions concerning airports and military aviation operations. The ALUCP maps airport influence areas as zones as A, B1, B2, C, D, E1 and E2, ranging from the most restrictive Zone A to the least restrictive Zone E, and identifies polices and compatibility criteria within each of those zones.

Proposals for public or private land use developments that occur within defined airport influence areas are subject to compatibility review. The principal airport land use compatibility concerns addressed by the ALUCP are (1) exposure to aircraft noise; (2) land use safety with respect to both people and property on the ground and the occupants of the aircraft; (3) protection of airport air apace; and (4) general concerns related to aircraft overflights.

The proposed project would be located within the Airport Influence Area of Meadows Field Airport. Section 4.8 of the ALUCP addresses the Meadows Field Airport, and land uses and procedures relative to its aviation and includes height restrictions, and other compatibility criteria.

4.9.4 Impacts and Mitigation Measures

Methodology

The methodology for determining impacts related to hazardous materials focuses on (1) potentially significant impacts related to the routine transport, use, or disposal of hazardous materials and the release of hazardous materials into the environment; and (2) project components that could result in environmental contamination.

The proposed project's potential impacts to hazards and hazardous materials have been evaluated using a variety of resources, including the Hazardous Materials Evaluation Report and public records and databases maintained by DTSC, State Water Board, and CalGEM. The proposed project was evaluated for adequate accessibility for emergency responders based on the project location, site plans, and any potential alterations to existing evacuation routes and plans. The methodology for determining impacts relating to wildland fires focuses on the fire severity at the project site and the surrounding areas based on existing State and local maps and land characteristics. Using the aforementioned resources, impacts were analyzed according to CEQA significance criteria described below.

Thresholds of Significance

As established in Appendix G of the CEQA Guidelines, the Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria to determine if a project would potentially have a significant adverse effect related to hazards and hazardous materials.

The project could have a significant impact related to hazards and hazardous materials if it would:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

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;

c. Emit hazardous emissions or involves handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school;

d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;

e. For a project located within the adopted Kern County Airport Land Use Compatibility Plan and would result in a safety hazard for people residing or working in the project area;

f. Impair implementation of, or physically interferes with, an adopted emergency response plan or emergency evacuation plan;

g. 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; or

h. Generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste. Specifically, would the project exceed the following qualitative threshold:

   The presence of domestic flies, mosquitoes, cockroaches, rodents, and/or any other vectors associated with the project is significant when the applicable enforcement agency determines that any of the vectors:

   i. Occur as immature stages and adults in numbers considerably in excess of those found in the surrounding environment; and

   ii. Are associated with design, layout, and management of project operations; and

   iii. Disseminate widely from the property; and

   iv. Cause detrimental effects on the public health or well-being of the majority of the surrounding population.

The lead agency determined in the Notice of Preparation/Initial Study (NOP/IS), located in Appendix A of this EIR, that the proposed project would not result in significant impacts to some of these environmental issue areas, and that no further analysis would be required in the EIR. Thus, the following issue areas are scoped out of further analysis in this EIR:

- Emit hazardous emissions or involves handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school;
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or environment; and
- 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.

Please refer to Appendix A of this EIR for a copy of the NOP/IS and additional information regarding these issue areas.

Project Impacts

Impact 4.9-1: The Project Would Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials.

Construction

Construction of the proposed project (warehouse buildings and associated improvements) would not involve the routine transport, use, or disposal of substantive quantities of hazardous materials, as defined by the Hazardous Materials Transportation Uniform Safety Act. Most of the hazardous materials used and hazardous waste generated by the proposed project would occur during the temporary construction period. Likely uses during construction would include cleaning fluids, solvents, petroleum products, and dust palliative. Some solid hazardous waste, such as welding materials and dried paint, may also be generated during construction. These materials would be transported to the project site during construction, and any hazardous wastes that are produced as a result of the construction of the project would be collected and transported away from the site. During construction of the project, material safety data sheets for all applicable materials present at the site would be made readily available to on-site personnel in accordance with **Mitigation Measure MM 4.9-2**. Workers would be trained to properly identify and handle all hazardous materials, and hazardous waste would either be recycled or disposed of at a permitted and licensed treatment and/or disposal facility. All hazardous waste shipped off-site for recycling or disposal would be transported by a licensed and permitted hazardous waste hauler and disposed of at an approved location. The project proponent may participate in the Kern County Public Works Department's Conditionally Exempt Small Quantity Generator (CESQG) Program, if qualifying. Any qualifying hazardous waste would be transported to the Kern County Special Waste Facility in Bakersfield, California, a fully permitted hazardous waste facility, licensed to receive, store, and transport a variety of hazardous streams for disposal.

Hazardous materials such as petroleum fuels and lubricants used on field equipment would be subject to **Mitigation Measures MM 4.9-1**, which requires the development of a Spill Prevision Control and Countermeasures (SPCC) Response Plan. The disposal of any oils or lubricants, would be in accordance with all applicable regulations, including the requirements of licensed receiving facilities. Overall, the relatively limited use and small quantities of hazardous materials, and subsequently transport and disposal of such

materials, during construction would be controlled through compliance with applicable regulations and mitigation measures. As such, impacts during construction would be less than significant.

Operation

Operations and maintenance activities associated with distribution facilities would require very limited use of hazardous materials and generation of hazardous waste, such as paint, solvents, cleaners, and waste oil. As discussed, workers would be trained to properly identify and handle all hazardous waste used at the project site. Fuels and lubricants used in operations would be subject to the SPCC Plan prepared in response to **Mitigation Measure MM 4.9-1** for the proposed project. Furthermore, any hazardous materials that would be used would be stored on-site and in designated areas inaccessible to the public and in accordance with **Mitigation Measure MM 4.9-3** which requires a Hazardous Material Business Plan.

Primary operations and maintenance activities that would occur on the project site during operation would consist of warehouse distribution processing for packages and orders but would also include, without limitation: administration and reporting; semi-annual and annual services; site security and management; and periodic repair and maintenance of warehouse facilities.

Vehicles used during standard operations and maintenance would include delivery vehicles, trucks (pickup, flatbed), forklifts, pallet jacks, and loaders for routine and unscheduled maintenance. Large heavy-haul transport equipment and cranes may be brought to the project site infrequently for equipment repair or replacement. Long-term maintenance and equipment replacement would be scheduled in accordance with manufacturer recommendations. **Mitigation Measures MM 4.9-1** and **MM 4.9-3**, which require the preparation of an SPCC and HMBP that would describe proper handling, storage, transport, and disposal techniques and methods to be used to avoid spills and minimize impacts in the event of a spill, would ensure that all handling, storage, and disposal of hazardous materials would be conducted in accordance with proven practices to minimize exposure to workers or the public.

Small quantities of dust palliatives and herbicides, if used during operations to control landscaping vegetation, may be transported to the project site. These materials would be regulated and stored in appropriate containers in accordance with the HMBP required by **Mitigation Measure MM 4.9-3**.

As a result, operation of the proposed project would not create a significant hazard to the public or the environment through the use, storage, and transport of hazardous materials and impacts would be less than significant. Implementation of **Mitigation Measures MM 4.9-1** and **MM 4.9-3** would further reduce impacts related to hazards.

Mitigation Measures

MM 4.9-1: Prior to the issuance of grading or building permits related to facilities requiring a Spill Prevention Control and Countermeasures Response Plan, the project proponent shall prepare and submit a Spill Prevention Control and Countermeasures Response Plan to the Kern County Public Health Services Department. Environmental Health Division, and the California Department of Water Resources, for review and approval by those agencies. The project proponent shall ensure the project is implemented in compliance with the approved Spill Prevention Control and Countermeasures Response Plan.

MM 4.9-2: Prior to the issuance of building permits, the project proponent shall ensure any hazardous materials be stored properly and Material Safety Data Sheets shall be on site. Hazardous waste shall be managed properly. Training shall be provided to all personnel involved in handling of any hazardous materials or waste.

MM 4.9-3: Prior to the issuance of grading or building permits, and during the life of the project, the project operator shall prepare and maintain a Hazardous Materials Business Plan (HMBP), as applicable, pursuant to Article 1 and Article 2 of California Health and Safety Code 6.95 and in accordance with Kern County Ordinance Code 8.04.030, by submitting all the required information to the California Environmental Reporting System (CERS) at http://cers.calepa.ca.gov/ for review and approval. The HMBP shall:

a. Delineate hazardous material and hazardous waste storage areas.

b. Describe proper handling, storage, transport, and disposal techniques.

c. Describe methods to be used to avoid spills and minimize impacts in the event of a spill.

d. Describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction.

e. Establish public and agency notification procedures for spills and other emergencies including fires.

f. Describe federal, state, or local agency coordination, as applicable, and clean-up efforts that would occur in the event of an accidental release.

g. Include procedures to avoid or minimize dust from existing residual pesticides and herbicides that may be present on the site.

The project proponent shall ensure that all contractors working on the project are familiar with the facility's HMBP as well as ensure that one copy is available at the project site at all times. In addition, a copy of the approved HMBP from CERS shall be submitted to the Kern County Planning and Natural Resources Department for inclusion in the projects permanent record.

Level of Significance After Mitigation

With implementation of Mitigation Measures MM 4.9-1 through MM 4.9-3, impacts would be less than significant.

Impact 4.9-2: The Project Would 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.

Construction

The routine transport, use, or disposal of hazardous materials during construction activities would be subject to guidelines established by federal, State, and local agencies, including the Kern County Public Health Services Department, Environmental Health Division, to prevent the accidental release of hazardous materials into the environment. Grading and construction activities could involve the temporary and limited transport, storage, use, or disposal of hazardous materials, such as the fueling and servicing of construction vehicles and equipment. As with any such activity, there is the potential for an accidental release. Strict compliance with regulations and cooperation with agencies would reduce this potential impact to less than significant. However, the routine transport, use, or disposal of hazardous materials during construction activities is temporary.

Based on the results of the regulatory agency database query and the results of the Hazardous Materials Evaluation Report, there is evidence of RECs on or near the proposed project site, including TPH, BTX&E, AST, Hazardous Waste Generators, and agricultural chemicals (McIntosh 2021). These RECs could create Hazard to the Public or the Environment if not handled properly. Therefore, **Mitigation Measure MM 4.9 4** would require that if suspect materials or wastes of unknown origin is found on-site that proper protocol would be followed to decrease the potential for hazard to the public or the environment. Furthermore, **Mitigation Measures MM 4.9-5** through **MM 4.9-11** would require that prior to the issuance of any grading permits, proper protocols have been followed to minimize risk of hazards to the public or the environment. Therefore, adherence to regulations and standard protocols during the storage, transportation, and usage of any hazardous materials and implementation of **Mitigation Measures MM 4.9-4** through **MM 4.9-11** would minimize or reduce potential impacts related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials to a less than significant level.

Operation

The proposed project would produce a small amount of hazardous waste associated with maintenance activities during operation, which would include typical refuse generated by office and warehouse uses.

The hazardous materials that would be present in the proposed warehouse facilities would be contained within specifications that follow applicable federal, State, and local requirements. OSHA requirements call for the inclusion of appropriate ventilation, acid resistant materials, and presence of spill protection supplies.

Removal and/or maintenance of vegetation may require herbicide use during both construction and operation. If not handled properly, use of these products could create a hazard to the public (construction workers, maintenance employees, and nearby residences), resulting in a potentially significant impact. **Mitigation Measure MM 4.2-4** (see Section 4.2 *Agricultural Resources*) would reduce impacts related to use of herbicides to a less than significant level.

As noted above, the proposed project would not involve the routine transport, use, or disposal of substantive quantities of hazardous materials as defined by the Hazardous Materials Transportation Uniform Safety Act. SR 99, which is located adjacent west of the project site, is a designated route for the transport of hazardous materials. Adherence to regulations and standard protocols during the storage, transportation, and usage of any hazardous materials would minimize and avoid the potential for significant impacts related to upset and accident conditions.

Overall, adherence to regulations and standard protocols during the storage, transportation, and usage of any hazardous materials and implementation of **Mitigation Measures MM 4.9-1** through **MM 4.9-11** would minimize or reduce potential impacts related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials to a less than significant level.

Mitigation Measures

Implementation of Mitigation Measures MM 4.2-4, as described in Section 4.2 *Agricultural Resources,* and MM 4.9-1 through MM 4.9-3, listed above, shall be implemented.

MM 4.9-4: The project proponent shall continuously comply with the following:

If suspect materials or wastes of unknown origin are discovered during construction on the project site, which is thought to include hazardous waste materials the following shall occur:

a. All work shall immediately stop in the vicinity of the suspected contaminant;

b. Project Construction Manager shall be notified;

c. Area(s) shall be secured as directed by the Project Construction Manager;

d. Notification shall be made to the Kern County Public Health Services Department, Environmental Health Division for consultation, assessment, and appropriate actions; and,

e. Copies of all notifications and correspondence shall be submitted to the Kern County Planning and Natural Resources Department.

MM 4.9-5: Prior to issuance of grading permits, a qualified hazardous materials specialist shall inspect each power pole on-site with a transformer. Those containing polychlorinated biphenyls shall be removed by the hazardous specialist and disposed of at an appropriate hazardous materials disposal site to the satisfaction of Department of Toxic Substances Control. The hazardous materials specialist shall provide a short report to the Kern County Planning and Natural Resources Department and the Kern County Environmental Health Services Division/Hazardous Materials Section for review and approval.

Prior to construction, Pacific Gas and Electric Company (PG&E) shall be contacted regarding the disposition of pole-mounted transformers. In the event of a future release or leak of insulating fluids from any of the pole-mounted transformers, PG&E shall be contacted for their removal or replacement.

MM 4.9-6: Prior to the issuance of grading or building permits, the following note shall appear on all final maps and grading plans: "If during grading or construction, any plugged and abandoned or unrecorded wells are uncovered or damaged, the Department of Oil, Gas and Geothermal Resources will be contacted to inspect and approve any remediation required."

MM 4.9-7: Prior to the issuance of grading permits, the Underground Service Alert One-call center shall be contacted at (800) 227-2600. The proposed excavation area shall be delineated with white marking paint or with other suitable markers such as flags or stakes at least two days prior to commencing any excavation work. A "Dig Alert" ticket number would be issued at the time Underground Service Alert is contacted. Excavating is not permitted without this ticket number and is valid for twenty-eight days. Underground Service Alert would notify its member utilities having underground facilities in the area. Underground Service Alert does not notify nonmember utilities or energy companies, or Caltrans.

MM 4.9-8: Prior to the issuance grading and building permits, the project proponent shall prepare notification requirements should the rupturing of a pipeline occur during excavation and construction activities, the Kern County Fire Department and Pacific Gas and Electric Company should be contacted immediately. Natural gas transmission pipeline rupture most often indicates an emergency situation and 9-1-1 should be dialed. If an emergency is not indicated, the Kern County Fire Department Meadows Field Station 62, located at 1652 Sunnyside Court, should be contacted at (661) 393-9311. Or at the non- Emergency telephone number (661) 324-6551. The project proponent shall follow all safety and cleanup regulations.

MM 4.9-9: Prior to the issuance of grading or building permits, on-site water wells not to be used for irrigation or industrial purposes shall be destroyed in accordance with California Well Standards as governed by the California Department of Water Resources and permit requirements of the Kern County Environmental Health Services Division.

MM 4.9-10: Prior to the issuance of grading permits, the Project Applicant shall obtain a qualified specialist to conduct limited soil sampling for Total Petroleum Hydrocarbons, organic pesticides, and arsenic. Remedial activities, if necessary, may be required prior to development. In addition, if soil is to be excavated and exported as part of development activities, then the presence of pesticides and/or metals may result in the soil being considered a regulated or hazardous waste and the soil may need to be properly characterized and disposed of at an appropriate receiving facility.

MM 4.9-11: Prior to the issuance grading and building permits, the project proponent shall prepare notification requirements should asbestos containing materials be identified during construction (particularly in the concrete irrigation (transite) pipe located on-site). The San Joaquin Valley Air Pollution Control District shall be contacted for removal and disposal procedures. These procedures shall be followed in order to eliminate asbestos exposure to construction workers and surrounding workers and residents.

Level of Significance After Mitigation

With implementation of Mitigation Measures MM 4.2-4 **(**see Section 4.2, *Agricultural Resources* for full mitigation measure**)**, and MM 4.9-1 to MM 4.9-11, impacts would be less than significant.

Impact 4.9-3: The Project Would Be Located Within an Adopted Kern County Airport Land Use Compatibility Plan Resulting in a Safety Hazard for People Residing or Working in the Project Area.

The County's ALUCP requires that projects located within the planning boundary or Airport Influence Area for each airport comply with the height restriction standards and procedures set forth in FAA Part 77. As described above under Section 4.9.2, *Environmental Setting*, a portion of the project site is located within the Extended Approach/Departure Zone (B-2) and Common Traffic Pattern Zone (C) of the Meadows Field Airport. Zone B-2 is categorized as having significant noise and risk impacts, as aircraft are commonly below 800 feet, and Zone C is categorized as limited risk with frequent noise intrusion. Pursuant to the Meadows Field Plan, future parcels within Compatibility Zone B-2 may need to dedicate an avigation easement, possibly including height restrictions, and the southeast corner of Phase 1, which includes Compatibility Zone C, may would also require an avigation easement with a 35-foot object height restriction (McIntosh 2021). Therefore, impacts are considered potentially significant.

The project would be required to comply with the County's ALUCP and applicable FAA regulations regarding project approval to ensure that there is no conflict with airport operations and no safety hazards are presented. The project would also be required to execute an avigation easement, per **Mitigation Measure MM 4.11-2**, for the benefit of the Meadows Field Airport.

Furthermore, the proposed project would not result in an increase in air traffic levels or a change in location of air traffic patterns that would result in a substantial safety risk, as air traffic patterns would not be affected (the only mode of transport affected by the proposed project is automobile/truck operations). As previously discussed, and further detailed in Section 4.1, *Aesthetics*, the proposed buildings would be required to have a non-glossy or non-reflective treatment plan, as well as a lighting plan that complies with the provisions of the Outdoor Lighting – Dark Skies Ordinance; therefore, glare resulting from the project is not expected to be a concern for pilots. For the reasons described above the proposed project would not result in safety or operational hazards to aircraft that would represent a safety hazard to people residing or working in the area.

Implementation of **Mitigation Measure MM 4.9-3** would ensure the proposed project would be consistent with the ALUCP and General Plan policies of Kern County by requiring the developer to coordinate with and obtain approval from FAA and the public airports in the area. Impacts would be less than significant.

See also Section 4.1, *Aesthetics*, for analysis of glare impacts and Section 4.13, *Noise*, for analysis of noise impacts.

Mitigation Measures

Implementation of Mitigation Measure MM 4.11-2 described in Section 4.11, *Land Use and Planning*, would be required. In addition, the following mitigation would be implemented.

MM 4.9-12: Prior to issuance of building and grading permits for portions of the project that meet the Federal Aviation Administration's noticing requirements, the project proponent/operator shall comply with the following:

a. Submit Form 7460-1 (Notification of Proposed Construction or Alteration) to the Federal Aviation Administration, in the form and manner prescribed in Code of Federal Regulation 77.17.

b. Obtain a Federal Aviation Administration issued "Determination of No Hazard to Air Navigation" or make the Federal Aviation Administration's recommended changes to the project.

c. Provide documentation to the Kern County Planning and Natural Resources Department demonstrating the project would comply with the Kern County Zoning Ordinance Figure 19.08.160 that all project components in the flight area would create no significant military mission impact and a copy of the site plan has been provided to the appropriate military authority responsible for operations in the flight area.

d. Provide documentation to the Kern County Planning and Natural Resources Department demonstrating that a copy of the final site plan has been provided to the operators of Meadows Field Airport.

Level of Significance After Mitigation

With implementation of Mitigation Measures MM 4.11-2 (see Section 4.11, *Land Use and Planning* for full mitigation measure), and MM 4.9-12, impacts would be less than significant.

Impact 4.9-4: The Project Would Impair Implementation of, or Physically Interfere With, an Adopted Emergency Response Plan or Emergency Evacuation Plan.

The Kern County Emergency Operations Plan (KCEOP) establishes an emergency management organization and assigns functions and tasks consistent with the California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). The KCEOP provides for the integration and coordination of the planning efforts of Kern County with those of its cities, towns, and unincorporated areas. The intent of the KCEOP is to facilitate emergency response and short-term recovery by providing a framework for response to all significant emergencies, regardless of the nature of the event.

The proposed project would not physically impede an existing emergency response plan, emergency vehicle access, or personnel access to the project site. The project site is located in an area with several alternative roadways allowing access in the event of an emergency. As required by routine and standard construction specifications administered by Kern County, access would be maintained throughout construction, operation, and decommissioning phase and appropriate detours would be provided in the event of potential road closures. However, as discussed in Section 4.16, *Transportation and Traffic*, of this EIR, implementation of the proposed project has the potential to significantly impact the level of service along the Seventh Standard Road/Merle Haggard Corridor to the extent that emergency response and emergency evacuation plans could be impaired. Therefore, impacts are considered potentially significant.

Mitigation Measure MM 4.16-1 would provide further assurances for emergency access. **Mitigation Measure MM 4.16-1** requires the preparation of a Construction Traffic Control Plan that considers access for emergency vehicles to the project site. During project operation, **Mitigation Measure MM 4.16-1** requires the project operator obtain Kern County approval of all proposed access road designs prior to construction, further ensuring on-site emergency access is adequate. **Mitigation Measure MM 4.9-13** requires a Fire Safety Plan be prepared and provided to the Kern County Fire Department that demonstrates site access roads to be used in the event of an emergency.

Mitigation Measures

Implementation of MM 4.16-1, as described in Section 4.16, *Transportation and Traffic.* In addition, the following mitigation would be implemented.

MM 4.9-13: Prior to the issuance of grading or building permits, the project proponent shall develop and implement a Fire Safety Plan for use during construction and operation. The project proponent shall submit the plan, along with maps of the project site and access roads, to the Kern County Fire Department for review and approval. The Fire Safety Plan shall contain notification procedures and emergency fire precautions, including the following:

a. All internal combustion engines, both stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order.

b. Light trucks and cars with factory-installed (type) mufflers shall be used only on roads where the roadway is cleared of vegetation. These vehicle types shall maintain their factory-installed (type) mufflers in good condition.

c. Fire rules shall be posted on the project bulletin board at the contractor's field office and in areas visible to employees.

d. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials.

e. Personnel shall be trained in the practices of the fire safety plan relevant to their duties. Construction and maintenance personnel shall be trained and equipped to extinguish small fires to prevent them from growing into more serious threats.

f. The project proponent shall make an effort to restrict the use of chainsaws, chippers, vegetation masticators, grinders, drill rigs, tractors, torches, and explosives to periods outside of the official fire season. When the above tools are used, water tanks equipped with hoses, fire rakes, and axes shall be easily accessible to personnel.

Level of Significance After Mitigation

With implementation of Mitigation Measures MM 4.16-1 (see Section 4.16, *Transportation and Traffic,* for full mitigation measure) and MM 4.9-13, impacts would be less than significant.

Impact 4.9-5: The Project Would Generate Vectors (Flies, Mosquitoes, Rodents, etc.) or Have a Component That Includes Agricultural Waste.

The proposed project includes a request for land use entitlements and the development and operation of a future warehouse distribution facility. Since the end user of the site is not currently known, the potential for generation of vectors or agricultural waste is not known. Project-related infrastructure is not expected to result in features or conditions that could potentially provide habitat for vectors such as mosquitoes, flies, cockroaches, or rodents (such as standing water, agricultural products, or agricultural waste). The project site would produce an insignificant amount of solid waste from construction activities. This may include paper, wood, glass, plastics from packing material, waste lumber, insulation, scrap metal and concrete, empty non-hazardous containers, and vegetation waste. During construction, the building contractor would arrange to have trash, construction recycling, and regular recycling bins delivered to the project site in accordance with Kern County Building Code requirements and guidelines. Construction recycling, regular recycling, and non-recyclable trash would be regularly removed from the project site by a certified waste-handling contractor for disposal at a Class III landfill.

Although construction and operation personnel and the project proponent would be required to follow the goals, policies, and implementation measures set forth by the Kern County Public Health Services Department, Environmental Health Division Vector Control Program, impacts could be potentially significant.

Mitigation Measures

MM 4.9-14: **Trash Abatement.** Prior to issuance of grading or building permits, a long-term trash abatement program shall be established for construction, operations and maintenance. Trash and food items shall be contained in closed containers and removed daily.

MM 4.9-15: Prior to the issuance of grading or building permits, the project proponent shall prepare a Vector Control Plan and submit it to the Kern County Environmental Health Services Department and Kern Mosquito Abatement District for review and approval. The Plan shall include best management practices such as: good housekeeping measures to minimize harborage for vectors. Further controls may include the use of traps or other abatement controls, and/or the use of a licensed pest management service if needed.

Level of Significance After Mitigation

With implementation of Mitigation Measures MM 4.9-14 and MM 4.9-15, impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

Based on the results of the regulatory agency database query and the results of the Hazardous Materials Evaluation Report, there is evidence of RECs on or near the proposed project site, including TPH, BTX&E, AST, Hazardous Waste Generators, and agricultural chemicals. Thus, future clearing, grading, and

development activities that involve soil disturbance could result in the disturbance or release of known hazardous materials. According to State Water Resources Control Board's (SWRCB) GeoTracker there are 157 known hazardous materials sites within a 6-mile radius of the proposed project site. It is also possible for the cumulative planned or proposed projects within a 6-mile radius of the proposed project site, identified in Chapter 3, *Project Description*, of this EIR, to contain or release other hazardous substances associated with their operation and maintenance. It is anticipated that these other projects will also comply with all required rules and regulations concerning the use of hazardous substances. Impacts associated with hazardous materials are generally site-specific and each individual project is responsible for mitigating its specific risks through compliance with a Hazardous Materials Business Plan (if required) and existing regulations.

As discussed in Section 3.10, *Cumulative Projects*, of this EIR, cumulative projects within a six-mile radius of the proposed project site include agricultural, residential, commercial and industrial uses. The proposed and cumulative projects would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. For both the proposed and cumulative projects, construction activities and associated transport, use, and disposal of hazardous materials would be temporary in nature. Adherence to federal, State, and local regulations would be required of the proposed and cumulative projects to reduce the probability of a hazard to the public or environment.

Once all projects become operational, an increase in the quantities of common hazardous materials such as cleaners, landscaping products, paint products, batteries, and automotive products and fluids and other hazardous wastes being transported, used, and disposed of throughout the community should be expected. However, continued compliance with federal, State, and local regulations, as well as annual submittal of a Hazardous Materials Business Plan, would individually reduce the cumulative contributions of the proposed and cumulative projects to less than significant levels. Therefore, the proposed project's cumulative impacts associated with the transport, use, and disposal of hazardous wastes would not be deemed cumulatively considerable, and is therefore considered to be less than significant.

The proposed project and cumulative projects would not create a significant public or environmental hazard involving the release of hazardous materials into the environment. Impacts associated with an accidental release of hazardous materials are primarily site-specific in nature and would not contribute to a greater cumulative impact. Although the end use of the proposed project site could include the routine use and/or transport of hazardous materials, the proposed project site's 739 acre size is expansive enough that the probability of an accidental release affecting adjacent properties is unlikely. Likewise, the closest cumulative project to the proposed project site is located approximately 0.9 miles southeast of the proposed project site; therefore, the probability of contamination from an accidental release occurring at cumulative project sites affecting the proposed project site is low. Moreover, these cumulative projects are not anticipated to use hazardous materials that are substantially more hazardous than those used by the proposed project. Therefore, the proposed project's cumulative impacts associated with the accidental release of hazardous materials would not be deemed cumulatively considerable, and is therefore considered to be less than significant.

Development of the proposed project in conjunction with cumulative projects could increase traffic flow in the area and affect level of service, as discussed in Section 4.16, *Transportation and Traffic*. However, the resulting level of service along SR 99 would remain acceptable with the implementation of the proposed traffic improvements, as discussed in Section 4.16, *Transportation and Traffic*. Therefore, the proposed project's cumulative impacts associated with emergency response and emergency evacuation plans would

not be deemed cumulatively considerable and are therefore considered to be less than significant with mitigation.

Mitigation Measures

Implement Mitigation Measures MM 4.9-1 through MM 4.9-15.

Level of Significance After Mitigation

With implementation of Mitigation Measures MM 4.9-1through MM 4.9-15, impacts would be less than significant.

Section 4.10
Hydrology and Water Quality

Section 4.10

Hydrology and Water Quality

4.10.1 Introduction

This section of the EIR describes the affected environment and regulatory setting relating to hydrology and water quality for the proposed project. It also describes the impacts associated with hydrology and water quality that would result from the implementation of the proposed project, and includes mitigation measures that would reduce these impacts, where applicable. The information in this section is based, in part, on the *Water Supply Assessment* (Oildale Mutual Water Company 2023) prepared for the proposed project, provided in Appendix M of this Draft EIR, as well as the Kern Groundwater Authority Groundwater Sustainability Plan (Kern Groundwater Authority [KGA] 2022), Central Valley Regional Water Quality Control Board (RWQCB) Water Quality Control Plan for the Central Valley Region (Basin Plan) (RWQCB 2019), the California Water Plan Tulare Lake Hydrologic Region Report (California Department of Water Resources [DWR] 2013), and other online sources and published documents.

4.10.2 Environmental Setting

Regional Setting

The project site is located in the southern end of the Central Valley. The southern portion of the Central Valley, known as the San Joaquin Valley, is drained by the San Joaquin River. The San Joaquin Valley is divided into the San Joaquin River and the Tulare Lake regions by the San Joaquin River, with the Tulare Lake Region comprising the southern portion. Historically, the valley floor in this region consisted of a complex series of interconnecting natural sloughs, canals, and marshes. The southern portion of the region contains significant geographic features like the lakebeds of the former Buena Vista/Kern and Tulare lakes, the Coast Ranges to the west, and the southern Sierra Nevada to the east. The Tulare Lake region is divided into several main hydraulic subareas: the alluvial fans from the Sierra foothills and the basin subarea (in the vicinity of the Kings, Tule, and Kaweah Rivers and their tributaries); the Tulare Lake lakebed; and the southwestern uplands. The largest river in terms of runoff is the Kings River, which originates in the Kings Canyon National Park and trends southwest into Pine Flat Lake. The Kern River has the largest drainage basin area and produces the second highest amount of runoff, originating in the Inyo and Sequoia national forests and flowing southward to Lake Isabella (see **Figure 4.10-1** and **Figure 4.10-2**).

The Tulare Lake Hydrologic Region covers approximately 10.9 million acres and includes all of Kings and Tulare counties and most of Fresno and Kern counties. The economic development of the region is highly dependent on the surface water and groundwater resources of the Tulare Lake Hydrologic Region, with the region operating as one of the nation's leading agricultural production areas (DWR 2013).

The proposed project site is located within the Tulare-Buena Vista Lakes Watershed in Kern County (Hydrologic Unit Code [HUC]: 18030012). The primary human-made surface water resource in the vicinity of the proposed project site is the Lerdo Canal that trends northwest to southeast through the center of the

project site, dividing the two phases of the proposed project. The irrigation canal originates at the Kern River.

The Kern River, at the closest point to the proposed project, is approximately 6 miles southeast of the project site. The Kern River originates in the Sierra Nevada Mountain Range on the eastern side of Tulare County, northeast of the City of Bakersfield. The Kern River is the southern-most of the four major rivers in the Tulare Lake Basin with the largest drainage basin area and conveys the second largest amount of runoff in the basin, after the Kings River. Isabella Dam is located approximately 33 miles (53 kilometers) east of the foothill boundary in a valley formed by the junction of the mainstem and south fork of the Kern River. Downstream from the dam, the Kern River flows southwesterly, distributing water into relatively small diversions. The river flows through the Bakersfield-Oildale area to a series of three weirs where much of the water is diverted into canals. Downstream of the major weirs, flows are present during wetter conditions when high river flow exceeds the canal demands and are primarily utilized for groundwater recharge operations. Flows are also present in the Bakersfield area in May through September for recreation purposes and groundwater recharge. Peak Kern River flows that are not used for groundwater recharge flow either into the Buena Vista Lakebed, into the Kern River Intertie and the California Aqueduct, or north toward Tulare Lake via the Kern River Flood Canals (U.S. Environmental Protection Agency [USEPA] 2007). The Buena Vista Lakebed is normally dry and intensely farmed.

From an elevation of 775 feet above mean sea level (msl) at the mouth of the Kern River Canyon westward to an elevation of 325 feet at Interstate 5 (I-5), the Kern River presents a unique water resource in the arid southern San Joaquin Valley. Man-made channelization, irrigation facilities, and other developments have formed the Kern River system as it appears today. The Kern River is a landmark resource and is one of the major rivers of California (Kern County 1985). According to the California State Water Resources Control Board (SWRCB) *Final 2022 Integrated Report*, the Kern River is not considered a Clean Water Act (CWA) Section 303(d) listed impaired waterbody (SWRCB 2022).

As discussed in Chapter 3, *Project Description*, the project site contains approximately 193 acres (approximately 26 percent of the project site) within the Kern County General Plan (KCGP) and approximately 545 acres (approximately 74 percent of the project site) within the Metropolitan Bakersfield General Plan (MBGP). The proposed project would be developed in two phases. Phase 1 of the proposed project would be within the Cawelo Water District (CWD) and Phase 2 would be within the North Kern Water Services District (North Kern WSD). Water service would be provided to the proposed project site by Oildale Mutual Water Company (OMWC) (Appendix M). Off-site improvements would include extension of OMWC's six-inch domestic water line and 12-inch non potable water line, from approximately one mile west of Quinn Road along Imperial Avenue, to the southeast corner of the proposed project. See **Figure 4.10-3**, *Offsite Improvements.*

Figure 4.10-1: Tulare Lake Hydrologic Region

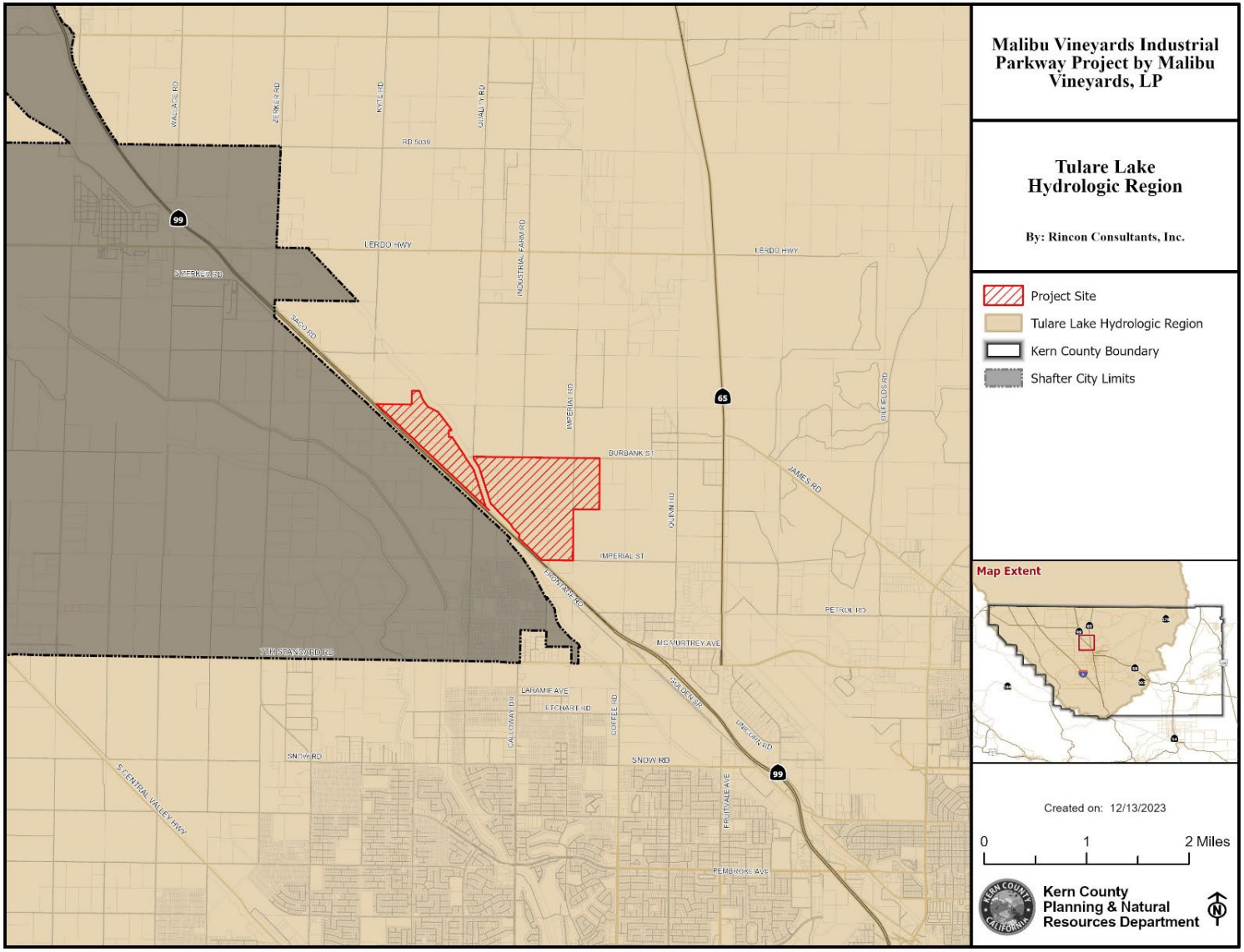


Figure 4.10-2: Alluvial Groundwater Basins and Subbasins

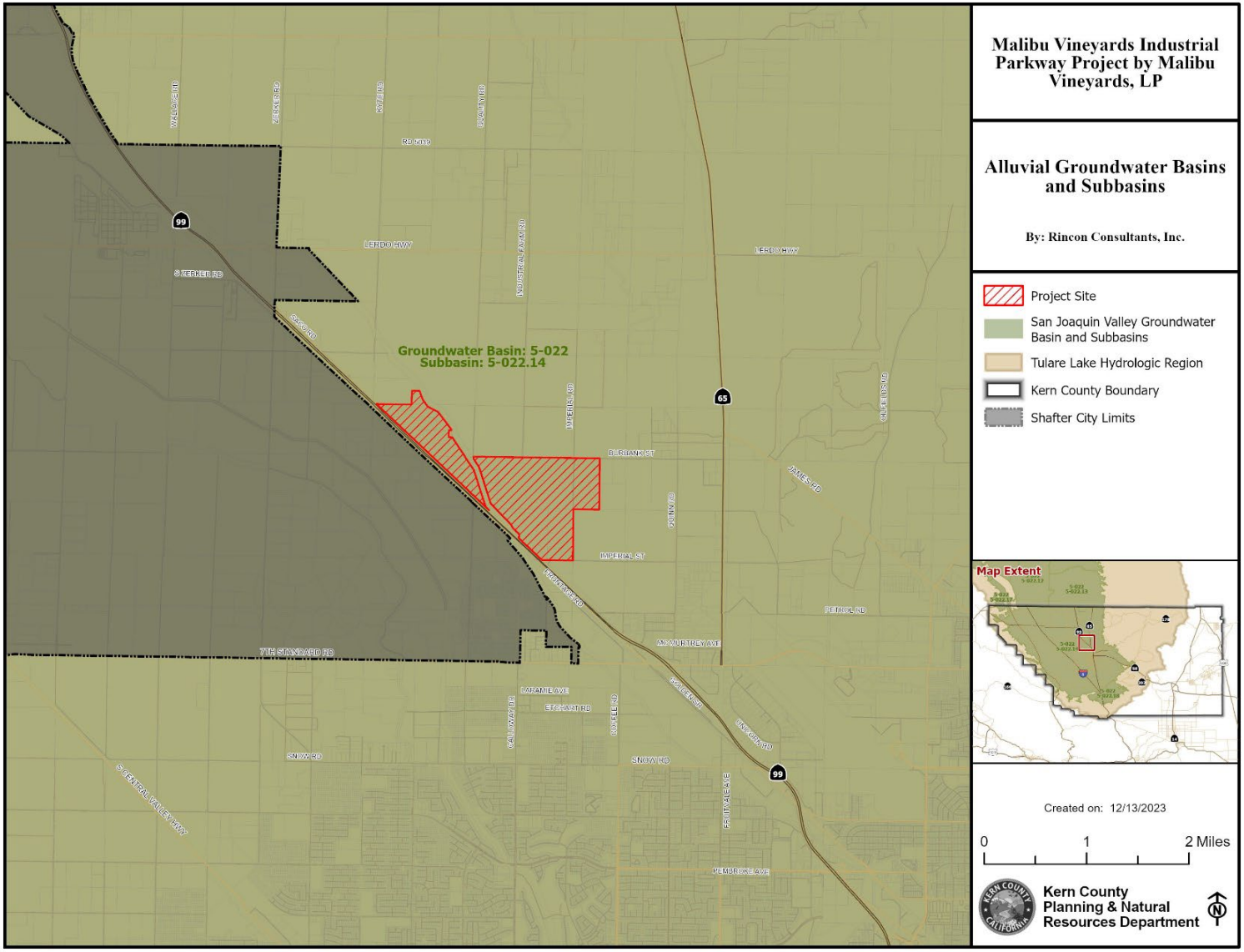
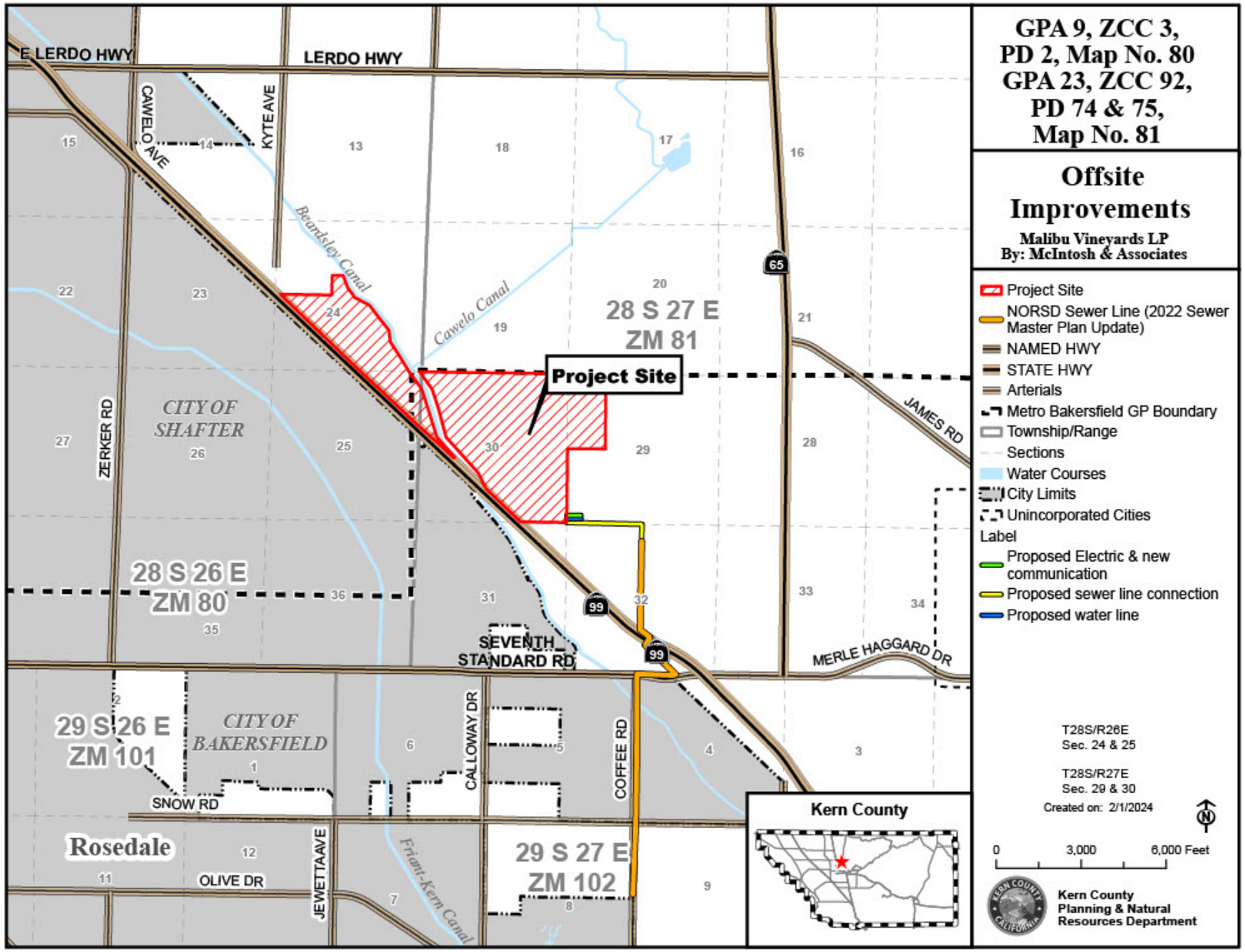


Figure 4.10-3: Offsite Improvements



Climate

The southern Central Valley of California has rainy winters and dry summers characteristic of a Mediterranean climate. The Central Valley has greater temperature extremes than the coastal areas because it is less affected by the moderating influence of the Pacific Ocean. Most of the rainfall in the project area occurs between November and April when the jet stream shifts southward from northern latitudes. This shift creates a quasi-permanent low-pressure zone over southern California and feeds moisture originating over the Pacific Ocean into the region.

The Western Regional Climate Center (WRCC) provides climate data derived from stationary weather stations throughout the western United States. WRCC has developed historic data sets for monthly climate for the project area. The data set nearest to the project site is based on weather readings taken from a stationary weather station at the Meadows Field Airport in Bakerfield, CA, COOP ID 040442. Although the average annual precipitation can vary from year to year, the project site received, on average, 6.17 inches per year between 1937 and 2016 (the latest data set available). Average temperatures recorded at the Meadows Field Airport weather station from 1937 to 2016 range from an average minimum of 38.5º Fahrenheit (F) in January to an average maximum of 98.6º F in July (WRCC, 2016). There has been no snowfall recorded at the station.

Site Hydrology

The proposed project site is located in a relatively flat area of the county, ranging in elevation from approximately 440 to 550 feet above msl. A portion of the proposed project site is currently utilized for growing table grapes. Currently 313 acres are being utilized for agricultural purposes, while the remaining 426 acres are fallow. The Lerdo Canal flows southeast to northwest along the eastern boundary of the Phase 2 portion of the proposed project and the western boundary of the Phase 1 portion of the proposed project, effectively dividing the two phases of the proposed project.

Groundwater

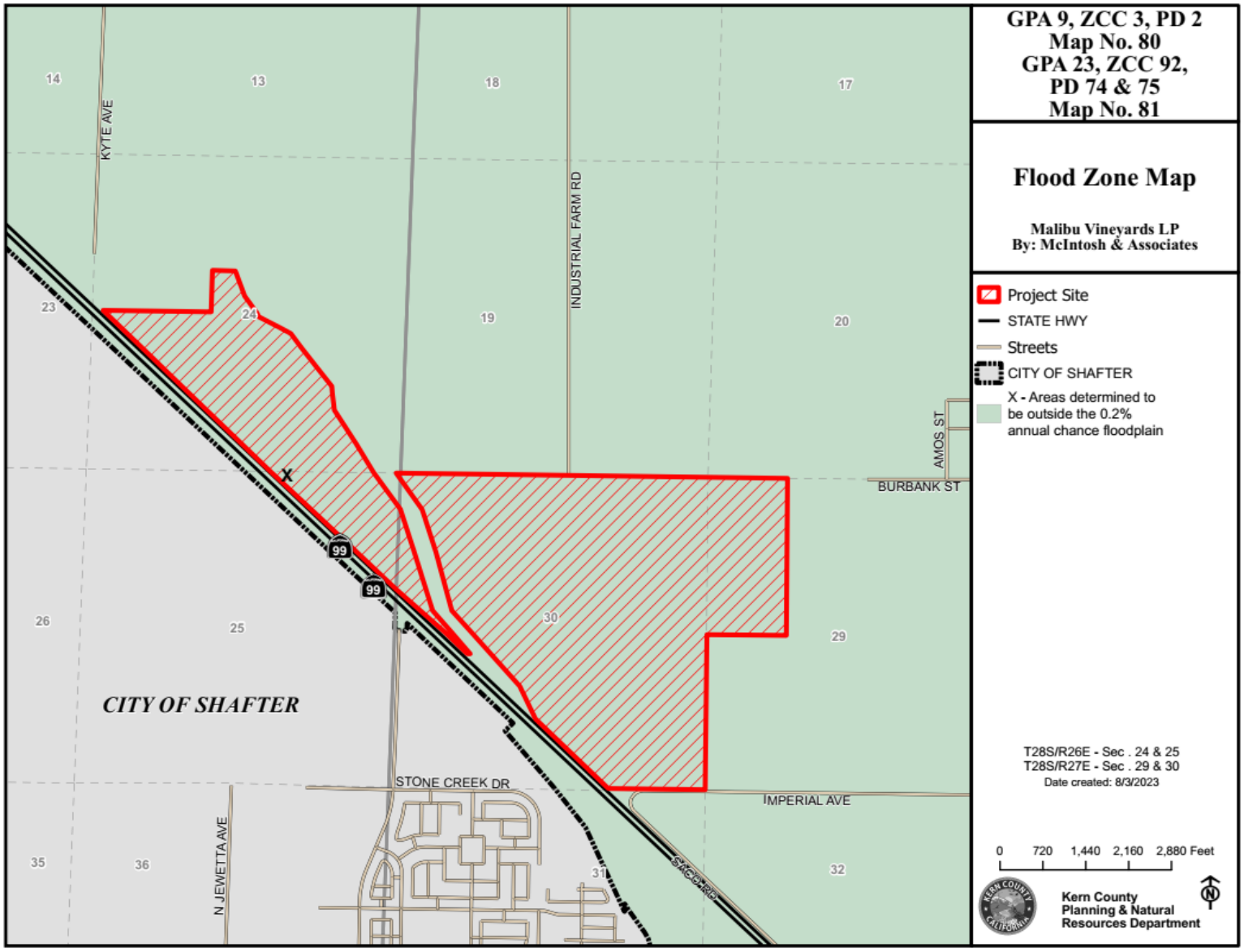
The project site is located within the Kern County Subbasin of the San Joaquin Valley Groundwater Basin. The Subbasin encompasses a surface area of 1,792,000 acres (approximately 2,800 square miles) and contains approximately 6 miles of marine and continental sediments. The Subbasin has approximately 40,000,000 acre-feet of groundwater storage and an additional 10,000,000 acre-feet of dewatered aquifer storage capacity. The Subbasin is bounded by the Sierra Nevada on the east; the Tehachapi Mountains, San Emigdio Mountains, and White Wolf Subbasin to the south; and the Coast Range to the west. The Kettleman Plain, Tulare Lake, and Tule Subbasins lie to the north.

The DWR has identified the Subbasin as a “critically overdrafted basin.” There are no Adjudicated Areas within the Subbasin. The Subbasin was determined or classified to be a “high” priority basin, which triggers the requirement of submittal of a Groundwater Supply Plan (GSP) under the Sustainable Groundwater Management Act (SGMA). According to the GSP prepared by the KGA, the Subbasin, as a whole, has an overdraft of 324,326 acre-feet per year over the baseline conditions. However, it is forecasted that the Subbasin will achieve sustainability by 2040 with an estimated 42,144 acre-feet of annual surplus (KGA 2022).

Floodplain

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM Number: 06029C1825F, October 21, 2021), the project site is not located within a 100-year floodplain (refer to **Figure 4.10-4**, *Flood Zone Map*) (FEMA 2021). The project site is located within an area designated as Zone X (areas of 0.2 percent annual chance of flood; areas of 1 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1 percent annual chance of flood).

Figure 4.10-4: Flood Zone Map



Dam Inundation

Isabella Dam is located approximately 40 miles northeast of the City of Bakersfield, approximately 37 miles northeast of the project site. Isabella Dam is earth-filled and is approximately 185 feet high and 1,725 feet long and can hold 570,000 acre-feet of water.

Isabella Dam is built near a major earthquake fault and the potential for seismic activity to cause dam failure exists. If the dam fails, the entire lake storage would be released and approximately 60 square miles of the Metropolitan Bakersfield area would be flooded. The Kern County General Plan (KCGP) indicates the chances of the dam failing entirely, with the lake at capacity, was judged as 1 day in 10,000 years (Kern County 2009). The project site is located outside of the area of potential flooding due to inundation from dam collapse (Kern County 2022c).

Soil Types and Erosion

The soil types present within the project site have been analyzed in the Soil Survey of Kern County, California, Northwestern Part, Custom Soil Report (NRCS 2020). Soil types listed as being present within the project site include: (138) Delano sandy loam, (145) Driver coarse sandy loam, (146ne) Delano sandy loam, (174) Kimberlina fine sandy loam, and (184) Lewkalb sandy loam. All of these soil types have slight erosion potential. Soil types are described further in Section 4.7, *Geology and Soils*.

4.10.3 Regulatory Setting

Federal

Clean Water Act

The Clean Water Act (CWA) (33 United States Code [USC] Section 1251 *et seq*.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point-source and certain nonpoint source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). In California, NPDES permitting authority is delegated to, and administered by, the nine RWQCBs. The project site is within the Central Valley RWQCB. Projects that disturb one or more acres, including the proposed project, are required to obtain NPDES coverage under the Construction General Permits.

Section 401, Certification and Wetlands Program

CWA Section 401 (33 USC Section 1341) requires that, prior to the issuance of any federal permit or license, any activity, including river or stream crossing during road, pipeline, or transmission line construction, which may result in discharges into waters of the U.S., must be certified by the State, as administered by the RWQCB. This certification ensures that the proposed activity does not violate state

and/or federal water quality standards. Section 401 certification is required prior to final issuance of Section 404 permits from U.S. Army Corps of Engineers.

Section 402, National Pollutant Discharge Elimination System

Section 402 of the CWA authorizes the California State Water Resources Control Board (State Water Board) to issue a NPDES General Construction Stormwater Permit (Water Quality Order 2009-0009-DWQ), referred to as the "General Construction Permit." Construction activities must comply with and be covered under the General Construction Permit provided that they:

- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving off-site into receiving waters;
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation; and.
- Perform inspections of all BMPs.

NPDES regulations are administered by the Central Valley RWQCB at the project site.

Section 404, Discharge of Dredged or Fill Materials

Section 404 of the CWA establishes programs to regulate the discharge of dredged and fill material in waters of the U.S., including wetlands. For purposes of Section 404 of the CWA, the limits of non-tidal waters extend to the ordinary high-water line, defined as the line on the shore established by the fluctuation of water and indicated by physical characteristics, such as natural line impressed on the bank, changes in the character of the soil, and presence of debris. When an application for a Section 404 permit is made the applicant must show it has:

- Taken steps to avoid impacts to wetlands or waters of the U.S. where practicable;
- Minimized unavoidable impacts on waters of the U.S. and wetlands; and
- Provided mitigation for unavoidable impacts.

Section 404 of the CWA requires a permit for construction activities involving placement of any kind of fill material into waters of the U.S. or wetlands. A water quality certification pursuant to Section 401 of the CWA is required for Section 404 permit actions. If applicable, construction would also require a request for water quality certification (or waiver thereof) from the Central Valley RWQCB. Proposed project activities would adhere to state and federal water quality standards and would be in compliance with Sections 401 and 404 of the CWA.

National Flood Insurance Act

FEMA is responsible for managing the National Flood Insurance Program (NFIP), which makes federally backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. The NFIP, established in 1968 under the National Flood

Insurance Act, requires that participating communities adopt certain minimum floodplain management standards, including restrictions on new development in designated floodways, a requirement that new structures in the 100-year flood zone be elevated to or above the 100-year flood level (known as base flood elevation), and a requirement that subdivisions be designed to minimize exposure to flood hazards.

To facilitate identifying areas with flood potential, FEMA has developed FIRMs that can be used for planning purposes, including floodplain management, flood insurance, and enforcement of mandatory flood insurance purchase requirements. Kern County is a participating jurisdiction in the NFIP and, therefore, all new development must comply with the minimum requirements of the NFIP.

State

California Department of Water Resources

The major responsibilities of the California Department of Water Resources (DWR) include preparing and updating the California Water Plan to guide development and management of the State's water resources; planning, designing, constructing, operating, and maintaining the State Water Resources Development System; regulating dams; providing flood protection; assisting in emergency management to safeguard life and property; educating the public; and serving local water needs by providing technical assistance. In addition, the DWR cooperates with local agencies on water resources investigations; supports watershed and river restoration programs; encourages water conservation; explores conjunctive use of ground and surface water; facilitates voluntary water transfers; and, when needed, operates a State drought water bank.

State Water Resources Control Board

The SWRCB and its nine Regional Water Quality Control Boards (RWQCBs) are the principal State agencies with primary responsibility for the coordination and control of water quality. The SWRCB enforces the water quality standards set forth in the CWA for the State of California on behalf of the USEPA. Most SWRCB objectives are based on the California Code of Regulations (CCR) Title 22 State Drinking Water Standards.

Central Valley Regional Water Quality Control Board

The primary responsibility for the protection of water quality in California rests with the SWRCB and the nine RWQCBs. The SWRCB sets Statewide policy for the implementation of State and federal laws and regulations. The RWQCBs adopt and implement water quality control plans (basin plans), which recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities.

On the regional level, the proposed project falls under the jurisdiction of the Central Valley RWQCB, which is responsible for the implementation of State and federal water quality protection statutes, regulations, and guidelines within the Central Valley Region. The jurisdiction of the California RWQCB, Central Valley Region is the largest in the State of California.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act; Water Code Sections 13000 et seq.), passed in 1969, requires protection of water quality by appropriate designing, sizing, and construction of erosion and sediment controls. The Porter-Cologne Act established the SWRCB and divided California into nine regions, each overseen by a RWQCB. The SWRCB is the primary State agency responsible for protecting the quality of the State's surface and groundwater supplies and has delegated primary implementation authority to the nine RWQCBs. The Porter-Cologne Act assigns responsibility for implementing the CWA Sections 401 through 402 and 303(d) to the SWRCB and the nine RWQCBs.

The Porter-Cologne Act requires the development and periodic review of basin plans that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters, provide the technical basis for determining waste discharge requirements, identify enforcement actions, and evaluate clean water grant proposals. The basin plans are updated every 3 years. Compliance with basin plans is primarily achieved through implementation of the NPDES, which regulates waste discharges as discussed above.

The Porter-Cologne Act requires that any person discharging waste or proposing to discharge waste within any region, other than to a community sewer system, which could affect the quality of the "waters of the State," file a report of waste discharge. Absent a potential effect on the quality of "waters of the State," no notification is required. However, the RWQCB encourages implementation of best management practices (BMPs) similar to those required for NPDES stormwater permits to protect the water quality objectives and beneficial uses of local surface waters as provided in the Central Valley Water Quality Control Plan (Basin Plan) (RWQCB 2019).

Streambed Alteration Agreement (California Department of Fish and Game Code)

Section 1602 of the California Fish and Game Code protects the natural flow, bed, channel, and bank of any river, stream, or lake designated by the California Department of Fish and Wildlife (CDFW) in which there are, at any time, any existing fish or wildlife resources, or benefit for the resources. Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State, and requires any person, State or local governmental agency, or public utility to notify CDFW before beginning any activity that will:

- Substantially divert or obstruct the natural flow of any river, stream, or lake;
- Substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or,
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

A Streambed Alteration Agreement is required if CDFW determines the activity could substantially adversely affect an existing fish and wildlife resource. The agreement includes measures to protect fish and wildlife resources while developing the project. CDFW must comply with the California Environmental Quality Act (CEQA) before it may issue a final Lake or Streambed Alteration Agreement; therefore, CDFW

must wait for the lead agency to fully comply with CEQA before it may sign the draft Lake or Streambed Alteration Agreement, thereby making it final. There are no streambeds or waters of the state on or near the project site.

Safe Drinking Water and Toxic Enforcement Act of 1986

The Safe Drinking Water and Toxic Enforcement Act of 1986 provides two ways to administratively list chemicals known to the State to cause cancer or reproductive toxicity. A chemical can be listed if a body considered to be authoritative by the State's qualified experts, such as USEPA or the Food and Drug Administration, formally identifies the chemical as causing cancer or reproductive toxicity. A chemical can also be listed if a State or federal agency has formally required labeling or identified that chemical as causing cancer or reproductive toxicity. The criteria for listing these chemicals are outlined in 22 California Code of Regulations Division 2 Section 12902.

Groundwater Management Act of 1992

The Groundwater Management Act of 1992, commonly referred to as Assembly Bill (AB) 3030, is designed to provide local public agencies with increased management authority over groundwater resources. Groundwater is a valuable natural resource within California and AB 3030 ensures safe production and quality by encouraging local agencies to work cooperatively to manage groundwater resources within their jurisdictions (California Water Code Section 10750).

Senate Bill 610

SB 610 was passed on January 1, 2002, amending California law to require detailed analysis of water supply availability for large development projects. An SB 610 Water Supply Assessment (WSA) must be prepared if the following three conditions are met:

- The project is subject to CEQA under the California Water Code 10910;
- The project meets criteria to be defined as a "Project" under California Water Code Section 10912; and
- The applicable water agency's current Urban Water Management Plan does not account for the water supply demand associated with the project.

A project would meet the definition of "Project" per California Water Code Section 10912(a) if it is:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;

- A proposed industrial, manufacturing, or processing plant or industrial part planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of the projects specified in this subdivision; or
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) requires the formation of local-controlled groundwater sustainable agencies in high- and medium-priority groundwater basins. These groundwater sustainability agencies are responsible for developing and implementing a Groundwater Sustainability Plan (GSP) to ensure the basin is operated within its sustainable yield without causing undesirable results. The Kern Subbasin is currently designated a High Priority Basin by DWR due to the historic levels of overdraft from agricultural use, resulting in subsidence and, in some cases, complete disconnection between groundwater and overlying surface water systems. Thus, the Kern County Subbasin's 14 Groundwater Sustainability Agencies (GSAs) (including: Buena Vista Water Storage District GSA, Henry Miller Water District GSA, Cawelo Water District GSA, KGA GSA, City of McFarland GSA, Pioneer GSA, Semitropic Water Storage District GSA, West Kern Water District GSA, Greenfield County Water District GSA, Kern River GSA, Olcese Water District GSA, Arvin GSA, Wheeler Ridge-Maricopa GSA, and the Tejon-Castaic Water District GSA) must submit a GSP. The 14 GSAs have collaborated in the adoption of a Coordination Agreement, as required under SGMA, for the coordinated management and implementation of the six GSPs prepared in the Subbasin (KGA 2022).

The GSA for the portion of the Kern Subbasin in which the proposed project is located is a member agency of the KGA, which functions as the GSA for the overall Kern Subbasin.

SGMA allows for multiple GSPs to be implemented by multiple GSAs and executed pursuant to a single Coordination Agreement that covers the entire basin to be an acceptable planning scenario (Water Code § 10727). In the San Joaquin Valley Kern County Subbasin (Subbasin), six GSPs were prepared by GSAs for the various management areas established in the Subbasin pursuant to the Coordination Agreement and submitted to the California Department of Water Resources for review. Collectively, the six GSPs and the Coordination Agreement are referred to as the Plan for the Subbasin. Individually, the GSPs include the following:

- Kern Groundwater Authority Groundwater Sustainability Plan – Amended July 2022 (KGA GSP) – prepared by the Kern Groundwater Authority (KGA) GSA, Semitropic Water Storage District (SWSD) GSA, Cawelo Water District (CWD) GSA, City of McFarland GSA, Pioneer GSA, West Kern Water District (WKWD) GSA, and Westside District Water Authority GSA.
- Amended Kern River Groundwater Sustainability Plan – July 2022 (Kern River GSP) – prepared by the Kern River GSA and Greenfield County Water District GSA.
- Buena Vista Water Storage District GSA Groundwater Sustainability Plan – July 2022 (Buena Vista GSP) – prepared by the Buena Vista Water Storage District (Buena Vista) GSA.

- Olcese Groundwater Sustainability Agency Groundwater Sustainability Plan – July 2022 (Olcese GSP) – prepared by the Olcese Water District (OWD) GSA.
- Henry Miller Water District Groundwater Sustainability Plan – July 2022 (Henry Miller GSP) – prepared by the Henry Miller Water District (HMWD) GSA.
- South of Kern River Groundwater Sustainability Plan – July 2022 (SOKR GSP) – prepared by the Arvin GSA, Tejon-Castaic Water District (TCWD) GSA, the Wheeler Ridge-Maricopa GSA

On March 2, 2023, the Department of Water Resources (DWR) deemed the above six GSPs inadequate for the following deficiencies:

- Deficiency 1: involved how the Plan established and justified undesirable results that represent effects caused by groundwater conditions occurring throughout the Subbasin.
- Deficiency 2: involved the establishment of minimum thresholds for the chronic lowering of groundwater levels.
- Deficiency 3: involved the establishment of sustainable management criteria for land subsidence.

These findings are based on all uses of groundwater in the region and not specific to the proposed use. Under SGMA, the Groundwater Authorities are required to begin implementation of the plans, although found inadequate, while working to amend the plans and address the deficiencies.

Local

Kern County General Plan (KCGP)

The proposed project site is located within the KCGP. The policies, goals, and implementation measures in the KCGP for hydrology and water resources applicable to the proposed project are provided below.

Chapter 1. Land Use, Open Space, and Conservation Element

1.3 – Physical and Environmental Constraints

Policies

Policy 1: Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained (Map Code 2.1 [Seismic Hazard], Map Code 2.2 [Landslide], Map Code 2.3 [Shallow Groundwater], Map Code 2.5 [Flood Hazard], Map Codes from 2.6 – 2.9, Map Code 2.10 [Nearby Waste Facility], and Map Code 2.11 [Burn Dump Hazard]) to support such development unless appropriate studies establish that such development will not result in unmitigated significant impact.

Policy 9: Construction of structures that impede water flow in a primary floodplain will be discouraged.

Policy 10: The County will allow lands which are within flood hazard areas, other than primary floodplains, to be developed in accordance with the General Plan and Floodplain

Management Ordinance, if mitigation measures are incorporated so as to ensure that the proposed development will not be hazardous within the requirements of the Safety Element (Chapter 4) of this General Plan.

Policy 11: Protect and maintain watershed integrity within Kern County.

Implementation Measures

Measure F: The County will comply with the Colbey-Alquist Floodplain Management Act in regulating land use within designated floodways.

Measure J: Compliance with the Floodplain Management Ordinance prior to grading or improvement of land for development or the construction, expansion, conversion or substantial improvements of a structure is required.

Measure N: Applicants for new discretionary development should consult with the appropriate Resource Conservation District and the California Regional Water Quality Control Board regarding soil disturbances issues.

1.9 – Resources

Policy

Policy 11: Minimize the alteration of natural drainage areas. Require development plans to include necessary mitigation to stabilize runoff and silt deposition through utilization of grading and flood protection ordinances.

1.10 – General Provisions

1.10.6 Surface Water and Groundwater

Policies

Policy 33: Water related infrastructure shall be provided in an efficient and cost effective manner.

Policy 34: Ensure that water quality standards are met for existing users and future development.

Policy 40: Encourage utilization of community water system rather than the reliance on individual wells.

Policy 41: Review development proposals to ensure adequate water is available to accommodate projected growth.

Policy 43: Drainage shall conform to the Kern County Development Standards and the Grading Ordinance.

Policy 44: Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of

impervious surfaces as required by the California Environmental Quality Act (CEQA), to prevent the degradation of the watershed to the extent practical.

Policy 46: In accordance with the Kern County Development Standards, tank truck hauling of domestic water for land developments or lots within new land developments is not permitted.

Implementation Measure

Measure Y: Promote efficient water use by utilizing measures such as: (i) Requiring water-conserving design and equipment in new construction; (ii) Encouraging water-conserving landscaping and irrigation methods; and (iii) Encouraging the retrofitting of existing development with water conserving devices.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

Bakersfield is the largest incorporated area in Kern County. Bakersfield is the County Seat and the focus of much of the business activity in the county. Accordingly, Kern County and the City of Bakersfield have jointly adopted a general plan for the metropolitan area (Metropolitan Bakersfield General Plan) that provides further information on planned land uses, policies, and implementation programs for the unincorporated portions of the metropolitan plan area. The policies, goals, and implementation measures in the Metropolitan Bakersfield General Plan for water resources applicable to the proposed project are provided below:

Chapter V: Conservation/Water Resources

Goals

Goal 1: Conserve and augment the available water resources of the planning area.

Goal 2: Assure that adequate groundwater resources remain available to the planning area.

Goal 3: Assure the adequate surface water supplies remain available to the planning area.

Goal 5: Achieve a continuing balance between competing demands for water resource usage.

Policies

Policy 2: Minimize the loss of water which could otherwise be utilized for groundwater recharge purposes and benefit planning area groundwater aquifers from diversion to locations outside the area.

Policy 6: Protect planning area groundwater resources from further quality degradation.

Policy 7: Provide substitute or supplemental water resources to areas already impacted by groundwater quality degradation by supporting facilities construction for surface water diversions.

Policy 8: Consider each proposal for water resource usage with the context of total planning area needs and priorities—major incremental water transport, groundwater recharge, flood control, recreational needs, riparian habitat preservation and conservation.

Kern County Zoning Ordinance

Kern County Code of Building Regulations

Kern County Grading Ordinance

Chapter 17.28 Kern County Grading Code

Requirements of the Kern County Grading Code will be implemented. A grading permit will be obtained prior to commencement of construction activities. Of particular note, with respect to hydrology and water quality, is Section 17.28.140, Erosion Control, which addresses the following:

- **Slopes.** The faces of cut and fill slopes shall be prepared and maintained to control against erosion. This control may consist of effective planting. The protection for the slopes shall be installed as soon as practicable and prior to calling for final approval. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted.
- **Other Devices.** Where necessary, check dams, cribbing, riprap or other devices or methods shall be employed to control erosion and provide safety.
- **Temporary Devices.** Temporary drainage and erosion control shall be provided as needed at the end of each work day during grading operations, such that existing drainage channels would not be blocked. Dust control shall be applied to all graded areas and materials and shall consist of applying water or another approved dust palliative for the alleviation or prevention of dust nuisance. Deposition of rocks, earth materials or debris onto adjacent property, public roads or drainage channels shall not be allowed.

Kern County Integrated Regional Water Management Plan (Kern IRWMP)

The Tulare Lake Basin portion of the Kern County Integrated Regional Water Management Plan (Kern IRWMP) is a collaboration of water suppliers, community and government representatives, environmental groups, businesses and a variety of other interested parties. The Kern IRWMP seeks to preserve the economic and environmental health of Kern County communities through comprehensive and efficient management of its water resources.

Kern County Development Standards

The Kern County Development Standards apply to all developments within Kern County that are outside of incorporated cities. These standards establish minimum design and construction requirements that will result in improvements that are economical to maintain and will adequately serve the general public. The requirements set forth in these standards are considered minimum design standards and will require the approval of the entity that will maintain the facilities to be constructed prior to approval by Kern County.

Kern County – Applicability of NPDES Program for a Project Disturbing 1 Acre or Greater

As closed systems never contact the ocean, many of the waters within Kern County are technically not subject to protective regulations under the federal NPDES Program. The Kern County Engineering, Surveying, and Permit Services Department requires the completion of an NPDES applicability form for projects with construction activities disturbing 1 acre or more within Kern County. This form requires the applicant to provide background information on construction activities and to identify whether stormwater runoff has the potential of discharging into waters of the United States, being contained on-site, or discharging indirectly off-site to a river, lake, stream, or off-site drainage facility. Should stormwater runoff be contained on-site and not discharge into any waters, no special actions are required. Should stormwater runoff discharge into waters of the United States, compliance with the State Water Board Construction General Permit is required, which requires preparation of a SWPPP. Should stormwater runoff not drain to waters of the United States (e.g., drains to a terminal drainage facility), the applicant would be required to develop a SWPPP and BMPs. Projects disturbing at least 1 acre of soil in Kern County are required to apply for a County NPDES Stormwater Program Permit. Prior to issuance of the permit, Kern County Engineering, Surveying and Permit Services must verify the applicant's stormwater plans. Applicants must apply for the permit under one of the following four conditions:

1. All stormwater is retained on-site and no stormwater runoff, sediment, or pollutants from on-site construction activity can discharge directly or indirectly off-site or to a river, lake, stream, municipal storm drain, or off-site drainage facilities.
2. All stormwater runoff is not retained on-site, but does not discharge to a water of the United States (i.e., drains to a terminal drainage facility). Therefore, a SWPPP has been developed and BMPs must be implemented.
3. All stormwater runoff is not retained on-site, and the discharge is to a water of the United States. Therefore, a Notice of Intent (NOI) must be filed with the State Water Board prior to issuance of the building permit. Also, a SWPPP has been developed and BMPs must be implemented.
4. Construction activity is between 1 to 5 acres and an Erosivity Waiver was granted by the State Water Board and BMPs must be implemented.

4.10.4 Impacts and Mitigation Measures

Methodology

This section analyzes impacts on hydrology and water quality from the implementation of the proposed project based on changes to the environmental setting as described above, identified drainage conditions in the proposed project site, and the current regulatory framework. Impacts were evaluated based on the *Water Supply Assessment* prepared by Oildale Mutual Water Company (Appendix M) as well as the Kern Groundwater Authority Groundwater Sustainability Plan (Kern Groundwater Authority [KGA] 2022), Central Valley Regional Water Quality Control Board (RWQCB), Water Quality Control Plan for the Central Valley Region (Basin Plan) (RWQCB 2019), the California Water Plan Tulare Lake Hydrologic Region Report (California Department of Water Resources [DWR] 2013), and other online sources and published documents.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the *CEQA Guidelines*, to determine if a project could potentially have a significant adverse effect on hydrology and water quality.

A project could have a significant adverse effect on hydrology and water quality if the project would:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

   i. Result in substantial erosion or siltation on-site or off-site;

   ii. Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site;

   iii. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

   iv. Impede or redirect flood flows.

d. In flood hazard, tsunami, seiche zones, risk release of pollutants due to project inundation;

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The lead agency determined in the Notice of Preparation/Initial Study (NOP/IS) that all thresholds would be further analyzed in this EIR.

Project Impacts

Impact 4.10-1: The Project Would Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Substantially Degrade Surface or Groundwater Quality.

Construction

Currently, the proposed project site is entirely undeveloped, with a portion being utilized for the cultivation of table grapes. The Lerdo Canal flows southeast to northwest along the eastern boundary of the Phase 2 portion of the proposed project and the western boundary of the Phase 1 portion of the proposed project, effectively dividing the two phases of the proposed project.

Project construction activities have the potential to result in erosion, sedimentation, and discharge of construction debris, and could result in the discharge of wastewater and runoff at the project site. Furthermore, any construction activity that results in the accidental release of pollutants, hazardous or potentially hazardous materials could also degrade water quality. Materials that could contribute to this impact include, but are not limited to, diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, lubricant grease, cement slurry, and other fluids utilized by construction and maintenance vehicles and equipment. Motorized equipment could leak hazardous materials such as motor oil, transmission fluid, or antifreeze due to inadequate or improper maintenance, unnoticed or unrepaired damage, improper refueling, or operator error (refer to Section 4.9, *Hazards and Hazardous Materials* of this Draft EIR). As noted in Section 4.9, Mitigation Measure **MM 4.9-3** would require the project proponent to provide a Hazardous Materials Business Plan that would delineate hazardous material and hazardous waste storage areas; describe proper handling, storage, transport, and disposal techniques; describe methods to be used to avoid spills and minimize impacts in the event of a spill; describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction; and establish public and agency notification procedures for spills and other emergencies, including fires.

Project construction would encompass an area greater than one acre and would be subject to a General Construction Permit under the National Pollution Discharge Elimination System (NPDES) permit program of the federal Clean Water Act. A Stormwater Pollution Prevention Plan (SWPPP) would be implemented consistent with General Construction Permit requirements. The NPDES permit would require submittal of a Notice of Intent to the Regional Water Quality Control Board (RWQCB) prior to commencement of construction activities. Implementation of the SWPPP would begin with the commencement of construction and continue through the completion of the proposed project. The objectives of a SWPPP are to identify pollution sources (such as sediment) that may affect the quality of stormwater discharge and to implement best management practices (BMPs) to reduce pollutants in stormwater during proposed project construction until the site is stabilized. During construction, potential impacts to water quality associated with erosion and sedimentation would be localized and temporary. However, proposed project-related impacts on water quality within on- and off-site drainage channels as a result of temporary construction activities are considered potentially significant.

To avoid impacts to water quality, the Kern County Public Works Department requires the completion of an NPDES Applicability Form for projects with construction activities that would disturb one or more acre in Kern County. Since the proposed project area drains to a terminal basin that is not hydrologically connected to a navigable waterway, acquisition of coverage under the State Construction General Permit for stormwater is not required. However, because the proposed project would disturb more than one acre of ground surface and stormwater would not be contained on-site or discharge into a terminal drainage facility, the project proponent would be required to prepare and implement a SWPPP for the proposed project. As required by Mitigation Measure **MM 4.10-1**, below, the proposed project would implement a SWPPP that would include erosion control and sediment control BMPs designed to prevent soil erosion from occurring and would retaining loose sediments on-site preventing runoff of water pollutants from active construction areas. Specific BMPs for the construction phase would be identified during completion and County review of the SWPPP. However, typical BMPs to be implemented would include the following:

- Stockpiling and disposing of demolition debris, concrete, and soil properly;
- Installation of a stabilized construction entrance/exit and stabilization of disturbed areas;
- Implementing erosion controls;

- Properly managing construction materials;
- Proper protections for fueling and maintenance of equipment and vehicles; and
- Managing waste, aggressively controlling litter, and implementing sediment controls.

Additionally, to reduce potential impacts associated with hazardous materials, the proposed project would implement Mitigation Measure **MM 4.10-2**, which requires the preparation of a hydrologic study and drainage plan per the Kern County Development Standards and the Kern County Code of Building Regulations prior to issuance of a grading permit. Based on the findings of the hydrologic study, the drainage plan would recommend an on-site design that complies with all setback requirements and ensure facilities are located in such a way to lessen their impact on drainage areas and their water quality. Mitigation Measure **MM 4.10-2** would require that ground disturbance is minimized within drainage areas and timed to avoid the rainy season where possible. This would decrease the potential of stormwater mixing with construction-related materials and degrading water quality.

Implementation of Mitigation Measures **MM 4.9-3**, **MM 4.10-1**, and **MM 4.10-2** would reduce construction impacts to water quality to a level of less than significant.

Operation

The conversion of farmland to urban land uses would alter the types, quantities, and timing of contaminant discharges in stormwater runoff. The amount and type of water contamination generated in urban areas differ from those generated in farmlands. Urbanization usually results in increased surface water concentrations of fecal coliforms, oil, grease, and heavy metals. Most farmers systematically apply a variety of pesticides and fertilizers to their crops. Some of these chemicals reach the soil and eventually leach into the groundwater. Soil and groundwater contamination also occur where chemicals are mixed or stored, where wells are constructed or abandoned, and through rainwater infiltration. Agricultural application of pesticides accounts for approximately 92 percent of all pesticide use in California (including chlorine). Conversion of farmlands to urban use decreases the area whereon which vegetation is treated with chemicals due to the addition of impervious surfaces associated with non-agricultural uses (Appendix M).

An increase of impervious surfaces within the proposed project area would result in increased rates of stormwater runoff during rainy periods, which can be a source of surface water pollution. Urban runoff pollutants may stem from erosion of disturbed areas, deposition of atmospheric particles derived from automobile or industrial sources, corrosion or decay of building materials, rainfall contact with toxic substances, and spills of toxic materials on surfaces which receive rainfall and generate runoff. New urban industrial and commercial development can generate urban runoff from parking areas as well as any areas of hazardous materials storage exposed to rainfall. The proposed project would implement Mitigation Measure **MM 4.10-2**, which requires the preparation of a hydrologic study and drainage plan per the Kern County Development Standards and the Kern County Code of Building Regulations prior to issuance of a grading permit. Based on the findings of the hydrologic study, the drainage plan would recommend an on-site design that complies with all channel setback requirements and ensure facilities are located in such a way to lessen their impact on drainage areas and their water quality. The drainage plan would require that the proposed project include on-site surface water retention basins to control surface water runoff on-site. Adherence to the requirements of the

approved final hydrologic study and drainage plan would minimize operational impacts to water quality during operation.

With Mitigation Measure **MM 4.10-1**, implementation of the proposed project would require the preparation of a SWPPP and Water Quality Management Plan to reduce the proposed project's potential impacts on water quality caused by stormwater runoff. Since proposed project construction would encompass an area greater than 1 acre, the proposed project would be subject to a General Construction Permit under the NPDES permit program of the federal CWA. As required under the General Construction Permit, the project proponent (or contractor) would prepare and implement a SWPPP. The SWPPP would require submittal of a Notice of Intent to the Central Valley RWQCB prior to commencement of construction activities. Implementation of the SWPPP would begin with the commencement of construction and continue through the completion of the proposed project. The objectives of a SWPPP are to identify pollution sources (such as sediment) that may affect the quality of stormwater discharge and to implement BMPs to reduce pollutants in stormwater.

Since the end users of the proposed warehouse distribution facility, final proposed project design, exact quantities of water use and waste discharge, and types of pollutants associated with operational activities are currently unknown, the impacts are considered potentially significant. The proposed warehouses could require limited use of certain hazardous materials for routine operations and maintenance. Accidental release of such materials could include fuels, paints, coatings, lubricants, and mechanical fluids, which would result in water quality degradation should the materials become entrained in stormwater. This would result in a potentially significant impact on water quality. As noted in Section 4.9, *Hazards and Hazardous Materials*, of this Draft EIR, **MM 4.9-3** would require the project applicant to provide a Hazardous Materials Business Plan that would delineate hazardous material and hazardous waste storage areas; describe proper handling, storage, transport, and disposal techniques; describe methods to be used to avoid spills and minimize impacts in the event of a spill; describe procedures for handling and disposing of unanticipated hazardous materials encountered during project operation; and establish public and agency notification procedures for spills and other emergencies, including fires. Implementation of a Hazardous Materials Business Plan would ensure safe handling of hazardous materials on-site and provide the means for prompt cleanup in the event of an accidental hazardous material release.

With implementation of Mitigation Measures **MM 4.9-3**, **MM 4.10-1**, and **MM 4.10-2**, proposed project operation would not violate water quality standards or waste discharge requirements, or otherwise degrade water quality and impacts would be less than significant.

Mitigation Measures

Implementation of Mitigation Measure **MM 4.9-3**, (see Section 4.9, *Hazards and Hazardous Materials*, for full mitigation measure text), and:

MM 4.10-1: Prior to issuance of a grading permit, the project proponent/operator shall submit a Stormwater Pollution Prevention Plan (SWPPP) for review and approval by the Regional Water Quality Control Board. The SWPPP shall be designed to minimize runoff and shall specify best management practices to prevent all construction pollutants from contacting stormwater, with the intent of keeping sediment or any other pollutants from moving off-site and into receiving waters. The requirements of the SWPPP shall be incorporated into

design specifications and construction contracts. Recommended best management practices to be incorporated in the SWPPP may include the following:

a. Minimization of vegetation removal.
b. Implementing sediment controls, including silt fences as necessary.
c. Installation of a stabilized construction entrance/exit and stabilization of disturbed areas.
d. Properly containing and disposing of hazardous materials used for construction on-site.
e. Properly covering stockpiled soils to prevent wind erosion.
f. Proper protections and containment for fueling and maintenance of equipment and vehicles.
g. Appropriate disposal of demolition debris, concrete and soil, and aggressively controlling litter.
h. Cleanup of silt and mud on adjacent street due to construction activity.
i. Checking all lined and unlined ditches after each rainfall.
j. Restoring all erosion control devices to working order to the satisfaction of the Regional Water Quality Control Board after each rainfall runoff.
k. Installing additional erosion control measures as may be required due to uncompleted grading operations or unforeseen circumstances which may arise.

MM 4.10-2: Prior to the issuance of a grading permit, the project proponent/operator shall submit a final hydrologic study and drainage plan for review and approval by the Kern County Public Works Department. The final hydrologic study and drainage plan shall be designed to evaluate and minimize potential increases in runoff from the project site. The final hydrologic study and drainage plan shall include, but not be limited to the following:

a. Numerical stormwater model for the project site, which would evaluate existing and proposed (with project) drainage conditions during storm events ranging up to the 10-year event.
b. Consideration of the potential for erosion and sedimentation in light of modeled changes in stormwater flow across the project area that would result from project implementation.
c. Engineering recommendations to be incorporated into the project and applied within the site boundary. Engineering recommendations will include measures to offset increases in stormwater runoff that would result from the project, as well as implementation of design measures to minimize or manage flow concentration and changes in flow depth or velocity so as to minimize erosion, sedimentation, and flooding on-site or off-site.
d. The hydrologic study and drainage plan shall be prepared in accordance with the Kern County Grading Code, Kern County Development Standards, Kern County Hydrology Manual and Kern County Floodplain Ordinance, and approved by the Kern County Public Works Department prior to the issuance of grading permits.

Level of Significance After Mitigation

Impacts would be less than significant with implementation of **MM 4.9-3**, **MM 4.10-1** and **MM 4.10-2**.

Impact 4.10-2: The Project Would Substantially Decrease Groundwater Supplies or Interfere Substantially With Groundwater Recharge Such That the Project may Impede Sustainable Groundwater Management of the Basin.

Construction

Implementation of the proposed project would result in the conversion of approximately 739 acres of farmland surfaces. During construction of the proposed project, it is expected that approximately 350,000 gallons of non-potable water would be used for dust suppression and equipment cleaning purposes on the proposed project site. Water to be used during the construction phase of the proposed project will be pumped from existing wells on-site or mobile water trucks and purified/potable water will be provided to the construction workers. Additionally, on-site restroom facilities for the construction workers would be provided by portable units to be serviced by licensed providers; no connection to a public sewer system is required for proposed project construction, and therefore, water for such purposes is not required. Therefore, construction of the proposed project would not substantially deplete groundwater supplies and impacts are considered less than significant.

Operation

The project site is currently undeveloped and contains pervious surface. Proposed project implementation would result in intensification of development and addition of impervious surfaces from the development of building foundations, on-site roads, parking pavements, and pedestrian sidewalks within the complex that would reduce infiltration. The impervious surface area resulting from the proposed project has the potential to interfere with groundwater recharge compared to existing conditions. However, runoff from the project site would be captured by on-site retention basins and routed through a storm drain system. From there, runoff would percolate into the soil, facilitating groundwater recharge. Furthermore, the proposed project would include approximately 37 acres of landscaping, or a minimum of five percent of the project site per Section 19.86.060 of the Kern County Zoning Ordinance.

Once construction is completed, it is estimated that operation of the proposed project will have an annual water demand of approximately 591 acre-feet per year (AFY). It is expected that the Oildale Mutual Water Company (OMWC) would pump and deliver groundwater from existing allocations for the project site with off-site improvements including an extension of OMWC's six-inch domestic water line and 12-inch non-potable water line. See **Figure 4.10-3**, *Off-site Improvements.*

The projected water demand for Phase 1 would be supplied via agreements secured with Cawelo Water Service District to provide an estimated 485 AFY. Projected water demand of 106 AFY for Phase 2 would be supplied through Kern River Water via North Kern Water Service District pursuant to Amendment 1 of the 1952 Agreement. The expected 591 AFY water demand is less than half of the 1,256 AFY that is currently allocated to the project site for agricultural operations. Although a Water Supply Assessment prepared by OMWC for the project indicated sufficient supplies are available for the project, Mitigation

Measure **MM 4.10-3** would be implemented that requires the applicant provide a will-serve letter from the water agency serving the site and Mitigation Measure **MM 4.18-2** would be implemented to ensure that any groundwater or reclaimed water used is accounted for should the project require additional water supplies in excess of the allotment from the District. Other projects in the vicinity would be required to comply with similar water supply requirements.

The OMWC primarily pumps groundwater but balances this extraction by recharging its State Water Project (SWP) water and other supplemental water supplies. Such banked water is not considered SWP water any longer once banked and can be used as a project source under CEQA. The OMWC is allocated 15,000 acre-feet per year of SWP surface water at 100% allocation when available. Based on the OMWC 2020 Urban Water Management Plan (UWMP), the average water supply is 25,000 acre-feet per year. According to the UWMP, when SWP water is restricted, OMWC can meet water demand using banked groundwater supplies. Malibu Vineyards is a customer of OMWC and has an allocation which could come from groundwater supplies since the source is dependent on the OMWC Board, not the applicant.

With implementation of Mitigation Measure **MM 4.10-3** and **MM 4.18-2**, proposed project operations would have a less than significant impact on groundwater supplies or recharge.

Mitigation Measures

Implementation of Mitigation Measure **MM 4.18-2** (see Section 4.18, *Utilities and Service Systems*, for full mitigation measure text), and:

MM 4.10-3: Prior to the start of any ground-disturbing activities, the project proponent shall provide a water will-serve letter for the project, as approved by Kern County Environmental Health.

Level of Significance After Mitigation

With implementation of **MM 4.10-3** and **MM 4.18-2**, impacts would be less than significant.

Impact 4.10-3: The Project Would Substantially Alter the Existing Drainage Pattern of the Site or Area, Including Through the Alteration of the Course of a Stream or River or Through the Addition of Impervious Surfaces, in a Manner Which Would Result in Substantial Erosion or Siltation On- or Off-Site.

Construction

Construction of the proposed project would result in grading and ground disturbance for the development of the proposed warehouse facilities. Grading activities associated with the proposed project have the potential to cause increased runoff, erosion, and sedimentation on- and off-site that would not otherwise occur. All of the soil types present within the proposed project site are identified as having a slight erosion hazard, which indicates that erosion is unlikely under ordinary climatic conditions and existing topography (NRCS 2022).

During construction, required grading activities for the proposed project could alter existing on-site drainage patterns and flow paths, and could alter the way that stormwater flows on-site during major events. These changes could concentrate flows from storms and construction water usage, and thus result in increased erosion of existing soils on-site and sedimentation downstream. Ground disturbance in drainage areas has a higher likelihood of resulting in erosion and sedimentation since water flow is more concentrated in these areas and has a higher erosive power. However, as described above in Impact 4.10-1, the project proponent/operator would develop and implement a SWPPP during proposed project construction that would include various BMPs designed to prevent soil erosion and sedimentation from occurring on-site.

In addition, the proposed project would comply with the Kern County Grading Ordinance, which requires implementation of dust control during all grading operations and the use of temporary drainage and erosion control measures on-site as needed. Furthermore, Mitigation Measure **MM 4.10-2** would require the proposed project to prepare a hydrologic study and drainage plan per the Kern County Development Standards and the Kern County Code of Building Regulations prior to issuance of a grading permit. The proposed project would also maintain pervious surfaces on-site surrounding construction areas which would help increase the potential for waters to percolate into the ground prior to causing major erosion or sedimentation. Implementation of Mitigation Measures **MM 4.10-1** and **MM 4.10-2**, as well as compliance with applicable regulations, would reduce potential erosion and sedimentation both on- and off-site that could occur from alterations to drainages that would result in erosion. Impacts would be less than significant with mitigation.

Operation

Operation of the proposed project would result in the creation of new impervious surfaces, which would result in increased, displaced stormwater runoff and modified drainage patterns on-site and in the immediate vicinity of the proposed project site. Increased stormwater runoff and modified drainage patterns could result in increased soil erosion and loss of topsoil off-site. Therefore, implementation of the proposed project could result in substantial soil erosion, siltation, and/or the loss of topsoil. Proposed project design includes the development of an on-site drainage system and surface water retention basins to control surface runoff on-site and prevent off-site runoff.

The CWA Section 402(p) requires that operators of "discharges associated with industrial activity" obtain an NPDES permit. Therefore, implementation of the proposed project would require the project proponent to prepare a SWPPP per implementation of Mitigation Measure **MM 4.10-1**. The SWPPP would include erosion control measures in order to comply with the NPDES requirements of the federal CWA. In addition to its NPDES and CWA obligations, the proposed project would also be subject to Kern County ordinances and standards related to hydrology and water quality. All earthwork is required to be performed in accordance with applicable Kern County requirements as stipulated in the Kern County Ordinance Code.

Additionally, Mitigation Measure **MM 4.10-2** would require preparation of a hydrologic study and a drainage plan in accordance with the Kern County Development Standards and Kern County Code of Building Regulations that would evaluate the changes to hydrology on-site and recommend measures to minimize potential increases in runoff from the project site. Based on the findings of the hydrologic study, the drainage plan would recommend a design that would include post-construction BMPs such as a retention basin that would retain runoff during proposed project operation, thereby preventing erosion and

sedimentation on-site. With implementation of Mitigation Measures **MM 4.10-1** and **MM 4.10-2**, impacts would be less than significant.

Mitigation Measures

Mitigation Measures **MM 4.10-1** and **MM 4.10-2** shall be implemented.

Level of Significance After Mitigation

With implementation of Mitigation Measure **MM 4.10-1** and **MM 4.10-2**, impacts would be less than significant.

Impact 4.10-4: The Project Would Substantially Alter the Existing Drainage Pattern of the Sites or Area, Including Through the Alteration of the Course of a Stream or River, or Through the Addition of Impervious Surfaces in a Manner That Could Result in Flooding On-Site or Off-Site.

Refer to Impact Discussion 4.10-3 above. Grading and installation of the proposed project facilities would modify the existing drainage pattern on the project site in a manner that could substantially increase the rate and amount of surface water runoff and result in on- and/or off-site flooding. The project site is currently vacant with a portion used as an active agricultural field; thus, implementation of the proposed project would introduce a significant amount of new impervious surfaces. However, as discussed above, runoff from the project site would be collected via on-site retention basins and routed through a storm drain system. Mitigation Measure **MM 4.10-2** requires the preparation and submittal of a hydrologic study and drainage plan to be reviewed for approval by the Kern County Public Works Department prior to the issuance of grading permits. The final study and drainage plan would be designed to evaluate and minimize potential increases in runoff from the project site and identify elements of drainage control such as the proposed retention basins to ensure that grading for the project facilities does not alter the ground surface such that the extent of flooding during flood events is substantially increased. Therefore, impacts related to flooding would be less than significant.

Mitigation Measures

Mitigation Measure **MM 4.10-2** shall be implemented.

Level of Significance After Mitigation

With implementation of Mitigation Measure **MM 4.10-2**, impacts would be less than significant.

Impact 4.10-5: The Project Would 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.

The project site does not contain any existing stormwater drainage systems on-site. Proposed project implementation would result in intensification of development and addition of impervious surfaces that

would potentially provide additional sources of polluted runoff. Impacts are considered potentially significant.

Mitigation Measure **MM 4.10-2** would require preparation of a hydrologic study and a drainage plan in accordance with the Kern County Development Standards and Kern County Code of Building Regulations that would evaluate the changes to hydrology on-site and recommend measures to minimize potential increases in runoff from the project site. Based on the findings of the hydrologic study, the drainage plan would recommend a design that would include post-construction BMPs such as retention basins that would retain runoff during proposed project operation, thereby preventing polluted runoff on- and off-site.

In addition, as discussed in Section 4.9 *Hazards and Hazardous Materials,* **MM 4.9-1** would require a Spill Prevention Control and Countermeasures Response Plan to be prepared and submitted to the Kern County Public Health Services Department, Environmental Health Division, and the California Department of Water Resources, for review and approval by said agencies. Compliance with the approved Spill Prevention Control and Countermeasures Response Plan would prevent sources of polluted runoff on-site and reduce impacts to a less than significant level.

Furthermore, as noted in Section 4.9, *Hazards and Hazardous Materials*, of this EIR, Mitigation Measure **MM 4.9-3** would require the project proponent/operator to prepare a Hazardous Materials Business Plan that would delineate hazardous material and hazardous waste storage areas; describe proper handling, storage, transport, and disposal techniques; describe methods to be used to avoid spills and minimize impacts in the event of a spill; describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction; and establish public and agency notification procedures for spills and other emergencies, including fires. Therefore, potential impacts related to additional sources of polluted runoff from the accidental release of hazardous materials would be reduced to a less than significant level.

Mitigation Measures

Mitigation Measures **MM 4.9-1**, **MM 4.9-3**, and **MM 4.10-2** shall be implemented.

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM 4.9-1**, **MM 4.9-3** and **MM 4.10-2**, impacts would be less than significant.

Impact 4.10-6: The Project Would Impede or Redirect Flood Flows.

The Federal Emergency Management Agency (FEMA) delineates flood hazard areas on its Flood Insurance Rate Maps (FIRMs). According to the FIRMs for the project area, the project site is located in Zone X, an area with a 0.2 percent annual chance of flooding (FEMA 2008). The alteration of surface topography via ground disturbance may have the potential to alter drainage patterns such that flooding could be exacerbated on-site during a rain event. Areas surrounding drainages are especially prone to flooding.

However, the proposed project would be reviewed by the Kern County Public Works Department-Floodplain for adherence to applicable floodplain management standards. Additionally, erosion control and sedimentation control BMPs required by the SWPPP and drainage control measures required by the Kern

County Grading Ordinance would also help control flows on-site by maintaining existing vegetation or installing structures designed to slow and/or control flows. Furthermore, implementation of Mitigation Measure **MM 4.10-2** would require preparation of a hydrologic study and drainage plan. The hydrologic study would evaluate the changes to hydrology on-site and recommend measures to minimize potential increases in runoff from the project site. Based on the findings of the hydrologic study, the drainage plan would recommend a design that complies with County drainage design standards and would include post-construction BMPs such as a retention basins that would retain runoff during proposed project operation, thereby preventing flooding on- and off-site. Hydraulic analysis would verify that the proposed project would not result in a significant impact to the drainage flows.

Therefore, following compliance with applicable regulations and implementation of Mitigation Measure **MM 4.10-2**, construction or operation of the proposed project is not expected to impede or redirect flood flows. Impacts would be less than significant.

Mitigation Measures

Mitigation Measure **MM 4.10-2** shall be implemented.

Level of Significance After Mitigation

With implementation of Mitigation Measure **MM 4.10-2**, impacts would be less than significant.

Impact 4.10-7: The Project Would, In a Flood Hazard, Tsunami, or Seiche Zones, Risk the Release of Pollutants Due to Project Inundation.

As discussed above, the project site is located in FEMA Zone X, an area with a 0.2 percent annual chance of flooding (FEMA 2008). In addition, the project site is located well inland and far from the ocean or any enclosed or semi-enclosed water body such that there would be no potential threat from a tsunami or seiche waves. In this context, the proposed project would not contribute to inundation by a flood hazard, tsunami, or seiche zones, that would increase the risk of pollutants release and no impact would be expected.

Mitigation Measures

No mitigation would be required.

Level of Significance After Mitigation

No impact would occur.

Impact 4.10-8: The Project Would Conflict with or Obstruct Implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan.

The project site is located within the Tulare Lake Basin, which consists of approximately 17,000 square miles, and includes all of Tulare and Kings Counties, and most of Fresno and Kern Counties. Ongoing management of this basin is governed by the Tulare Lake Basin portion of the Kern County Integrated

Regional Water Management Plan (IRWMP) and serves as a sustainable groundwater management plan (Kern Region Water Management Group 2020). The project site is located within the Central Valley RWQCB and is subject to applicable requirements of the Basin Plan. As described in Section 4.10.2 above, the proposed project is located in the Cawelo WD and North Kern WSD. However, water service would be provided to the project site by OMWC.

The proposed project would require water for construction and operation phases. Water to be used during the construction phase of the proposed project will be pumped from existing wells on-site and purified/potable water will be provided to the construction workers. OMWC would provide water to the project site during operations.

As described in Impact 4.10-2, Mitigation Measure **MM 4.10-3** would require the project proponents to provide a water will-serve letter for the proposed project and submit it to Kern County Environmental Health for approval. Implementation of Mitigation Measure **MM 4.10-3** would ensure that the OMWC would provide water service to the site and reduce impacts to a less than significant level.

Mitigation Measures

Mitigation Measure **MM 4.10-3** shall be implemented.

Level of Significance After Mitigation

With implementation of Mitigation Measure **MM 4.10-3**, impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

The proposed project's contribution to a cumulative impact to hydrology and water quality is considered in the context of other past, present, and reasonably foreseeable future projects in the area. As discussed in Section 3.10 of this EIR, cumulative projects within a 6-mile radius of the project site include projects with industrial, commercial and residential uses. If constructed, these projects could cumulatively contribute to impacts to hydrology and water quality in the area.

Implementation of the proposed project has the potential to result in hydrology and water quality impacts associated with ground-disturbing construction activities, accidental release of hazardous materials or other pollutants that could contribute to water quality impacts, modification of existing drainage patterns which could result in increased runoff, interference with groundwater recharge, and depletion of groundwater resources. The project proponent has designed the proposed project to minimize impacts to hydrology and water quality through the incorporation of on-site surface water retention basins to control on-site surface runoff and prevent off-site runoff. Implementation of proposed mitigation measures would reduce these proposed project-specific impacts to be less than significant; however, when considered in combination with other past, present, and reasonably foreseeable future projects in the area, the proposed project has the potential to contribute to cumulative impacts to hydrology and water quality.

All of the cumulative projects are located within the same watershed as the proposed project site (Tulare-Buena Vista Lakes Watershed). All of the cumulative projects are located within the same groundwater basin as the proposed project site (San Joaquin Valley Groundwater Basin – Kern County Subbasin). The proposed project is not expected to make cumulatively significant contributions to water quality, water

discharge, off-site drainages, off-site erosion, or off-site flooding impacts because proposed project design of an on-site drainage system and surface water retention basins and incorporation of Mitigation Measures **MM 4.10-1** through **MM4.10-3** as described above, and **MM 4.9-1** and **MM 4.9 3**, as described in Section 4.9 *Hazards and Hazardous Materials,* would reduce impacts to less than significant levels.

Implementation of the proposed project has the potential to contribute to cumulative impacts associated with the substantial depletion of groundwater supplies within the Kern County Subbasin. As discussed in Section 4.10.2 above, the DWR determined that the Subbasin is in a condition of critical overdraft. Conditions of critical overdraft have the potential to cause a chronic lowering of water levels, inelastic land subsidence, and/or reduction of surface water supply (as a reduction in baseflow to streams or an increase in induced surface water recharge). The Subbasin was determined or classified to be a "high" priority basin, which triggers the requirement of submittal of a GSP under the SGMA. Although the Water Supply Assessment found that adequate water supplies are available to meet the demands of the proposed project and proposed project implementation would not cause undesirable results within the KGA GSA or Cawelo GSA Plan Areas due to groundwater pumping, groundwater pumping from other projects in the Subbasin have the potential to create significant and unavoidable impacts.

Mitigation Measures

Mitigation Measures **MM 4.9-1** and **MM 4.9-3**, as described in Section 4.9 *Hazards and Hazardous Materials,* and **MM 4.10-1** through **MM 4.10-3** shall be implemented.

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM 4.9-1**, **MM 4.9-3**, and **MM 4.10-1** through **MM 4.10-3**, cumulative impacts remain significant and unavoidable.

Section 4.11

Land Use and Planning

Section 4.11

Land Use and Planning

4.11.1 Introduction

This section of the Environmental Impact Report (EIR) describes the affected environment and regulatory setting of the proposed project for impacts that may affect land use and planning. It also discusses the need for mitigation measures where applicable. The information in this section is based primarily, but not exclusively, on a review of the proposed project's consistency with the Kern County General Plan (KCGP), the Kern County Metropolitan Bakersfield General Plan (MBGP), the Kern County Zoning Ordinance, and the Kern County Airport Land Use Compatibility Plan (ALUCP) for the Meadows Field Airport.

4.11.2 Environmental Setting

On-site Land Uses

As discussed in Chapter 3, *Project Description*, the proposed project site encompasses approximately 739-acres composed of 21 parcels within unincorporated Kern County, north of Imperial Avenue and east of State Route 99 (SR 99), with site access from Saco Road and Imperial Avenue. The project site is just east of the City of Shafter, which is on the west side of SR 99, and approximately one mile north of the City of Bakersfield. The project site is relatively flat and lacks significant topographical features, ranging in elevation from approximately 440-550 feet above mean sea level (msl) throughout the site. Based on historical topographic maps and aerial photographs, the project site has been cultivated for grape vineyards since at least 2003. The site includes outdoor storage of various farm related operational equipment, along with a fenced and secured concrete floor storage shed for additional agricultural related tools and products. Agricultural uses are adjacent north, east, south, and west of the project site.

No native vegetation or natural habitat exists within the project site and no riparian habitat or surface water resources are located on or in the immediate vicinity of the project site.

The project site is located within the Tulare Lake Bed Watershed (Hydrologic Unit Code 18030012) within a Federal Emergency Management Agency (FEMA) Flood Zone "X," as designated by the Flood Insurance Rate Map (FIRM) (06029C1825F) as issued by FEMA (refer to **Figure 3-10***, Flood Zone Map*). Zone "X" denotes an area outside the 500-year flood (in this case, areas of 0.2 percent annual chance of flood; areas of 1 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1 percent annual chance of flood).

The project would be constructed in two phases. Phase 1 includes seven existing parcels on approximately 534 acres, and is located between Burbank Street to the north, and Imperial Avenue to the south, with the western boundary being the Lerdo Canal and SR 99. Phase 1 is in Kern County Zone Map 81, as portions of Sections 29 and 30, Township 28 South, Range 27 East, in the Mount Diablo Base & Meridian (MDBM).

Phase 2 includes fourteen existing parcels on approximately 205 acres, with the western boundary SR 99 and the eastern boundary the Lerdo Canal. The site is located generally south of Lerdo Highway, and north of Imperial Avenue. Phase 2 is in Kern County Zone Maps 80 and 81, as portions of Sections 24 and 25, Township 28 South, Range 26 East, MDBM, and Section 30, Township 28 South, Range 27 East, MDBM.

The proposed project site is currently zoned A (Exclusive Agriculture), with a land use designation of 8.1 (Intensive Agriculture) and R-IA (Intensive Agriculture) by the KCGP and MBGP, respectively. Approximately 739 acres or 100 percent of the project site is designated by California Department of Conservation (DOC) as Prime Farmland if water for irrigation is available (DOC 2022). A pending Department of Conservation mapping update shows a very small portion of the project site being redesignated as Grazing Unique Farmland, with the remaining designated as Prime Farmland. The project site is located within the boundaries of Agricultural Preserve Number 8 and Agricultural Preserve Number 14. However, the entire 739-acre project site has been excluded from these Agricultural Preserves (Kern County 2021). There are no Williamson Act Contracts associated with the project site.

As identified in the Kern County ALUCP, southern portions of the project site are located within the Extended Approach/Departure Zone (B2) and Common Traffic Pattern Zone (C) of the Meadows Field Airport.

Surrounding Land Uses

The proposed project site is bordered by agricultural land to the north; vacant land, agricultural, residential, and industrial uses to the east; agricultural and industrial uses to the south; and SR 99, the City of Shafter boundary, residential, and industrial uses to the west. The Lerdo Canal trends northwest to southeast through Phase 2 of the project site.

The sensitive receptors closest to the project site are a rural, single-family residence located approximately 350 feet west of the project site and south of SR 99, and a rural, single-family residence located approximately 2,100 feet from the project site (Bollard Acoustical Consultants, Inc. 2021). The nearest residential community is Gossamer Grove, located approximately 0.6 miles southwest of the project site, and consists of single-family residences. The nearest schools include Norris Middle School, located approximately two miles south, and Norris Elementary School, located approximately 2.6 miles southwest of the project site. **Table 4.11-1**, *Project Site and Surrounding Land Uses, General Plan Map Code Designations, and Zoning* identifies the project site and surrounding land uses.

Surrounding properties map code designations are classified R-IA (Intensive Agriculture), 8.1 (Intensive Agriculture), SI (Service Industrial), HI (Heavy Industrial), and 1.2 (Incorporated Cities). See **Table 4.11-1**, *Project Site and Surrounding Land Uses, General Plan Map Code Designations, and Zoning* below.

Surrounding properties are located within the zoning classifications of A (Exclusive Agriculture), M-2 PD (Medium Industrial, Precise Development Combining), I (Industrial), SP (Specific Plan Residential) and GC (General Commercial). See **Figure 4.11-2** below.

As identified in the Kern County ALUCP, surrounding properties to the northeast and east of the project site are located within the Outer Boundary of the Approach/Departure Zone (B1) and Extended Approach/Departure Zone (B2) of the Meadows Field Airport, and surrounding properties to the south and west are located within the Common Traffic Pattern Zone (C) of the Meadows Field Airport.

Table 4.11-1: Project Site and Surrounding Land Uses, General Plan Map Code Designations, and Zoning

Location	Existing Land Use	Jurisdiction	Zoning	Map Code Designation
Phase 1 Phase 2	Agriculture Agriculture	Kern County Kern County	Exclusive Agriculture (A) Exclusive Agriculture (A)	Intensive Agriculture (R-IA) Intensive Agriculture (R-IA) Intensive Agriculture (8.1)
North	Agriculture	Kern County	Exclusive Agriculture (A)	Intensive Agriculture (8.1)
East	Agriculture, vacant, residential, industrial	Kern County	Exclusive Agriculture (A)	Intensive Agriculture (8.1) Intensive Agriculture (R-IA)
South	Agriculture, industrial	Kern County	Exclusive Agriculture (A) Medium Industrial, Precise Development Combining (M-2 PD)	Service Industrial (SI) Heavy Industrial (H1)
South	Agriculture, Industrial	City of Shafter	General Commercial (GC)	Incorporated Cities (1.2)
West	Agriculture, residential	City of Shafter	Exclusive Agriculture (A) Industrial (I) General Commercial (GC) Specific Plan Residential (SP)	Incorporated Cities (1.2)
Source: Kern County 2021				

Figure 4.11-1: Existing General Plan Designations

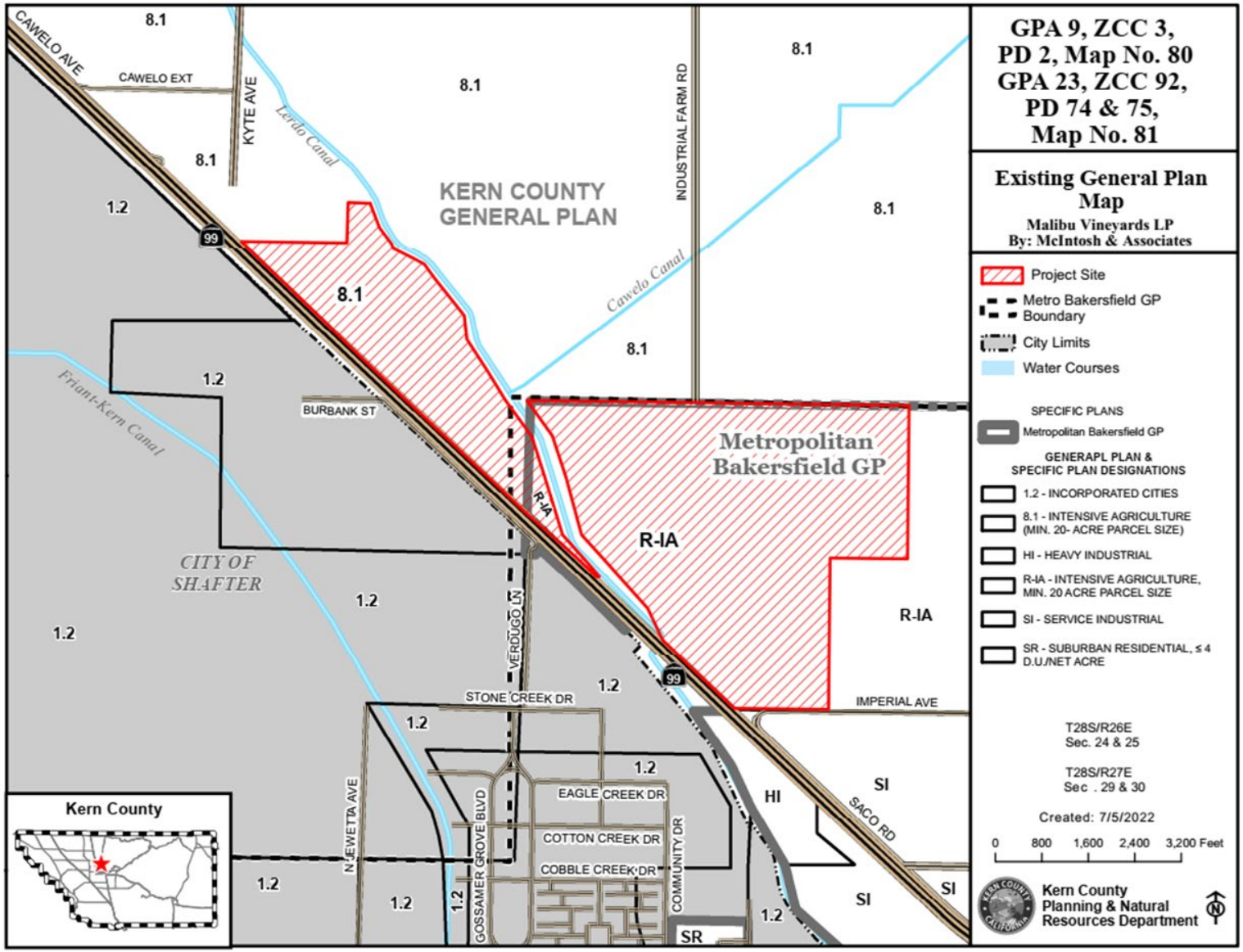
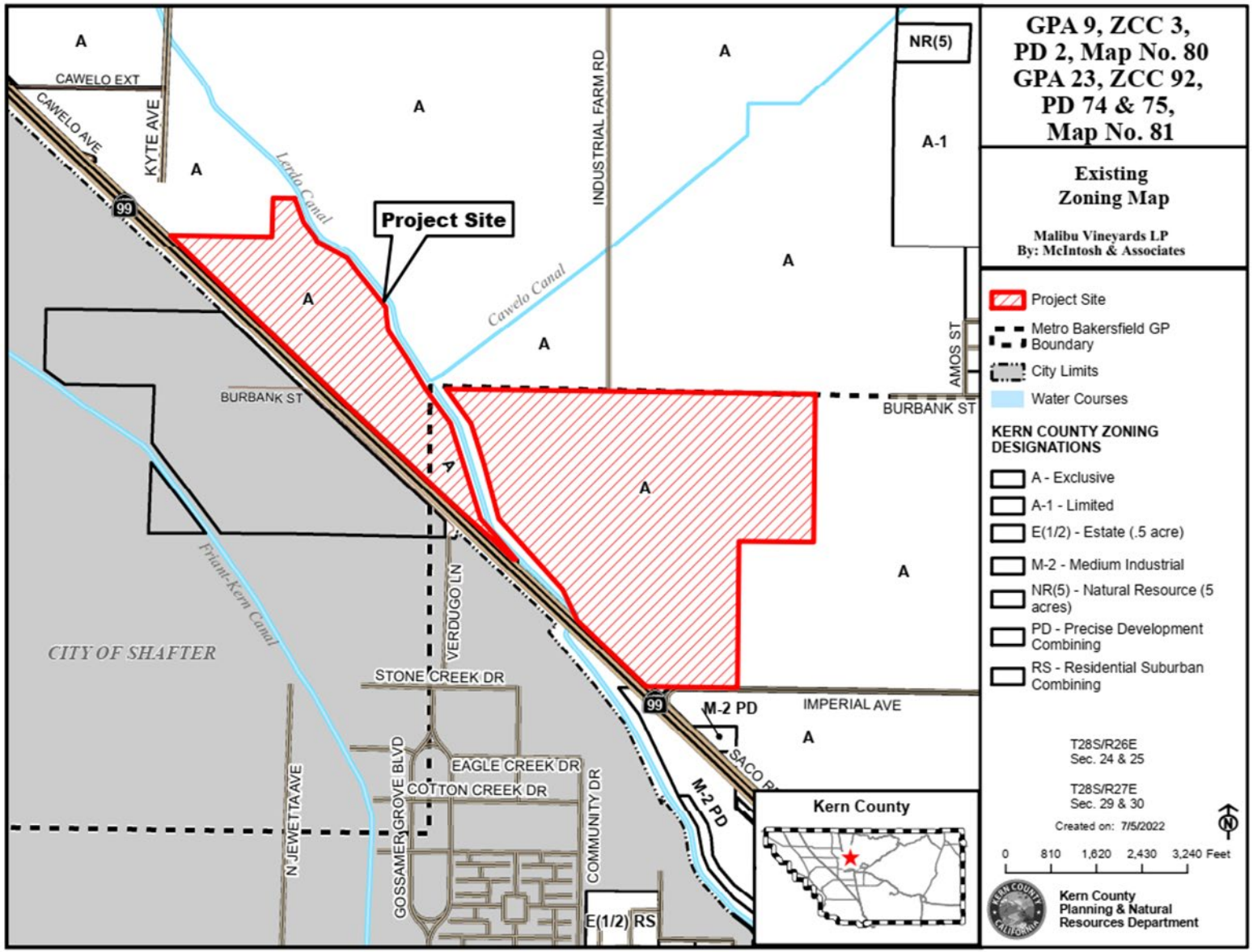


Figure 4.11-2: Existing Zoning Classifications



4.11.3 Regulatory Setting

Federal

There are no applicable federal regulations for this issue area.

State

The California Environmental Quality Act (CEQA) establishes that a significant effect on the environment involves an adverse change to the physical environment. Pursuant to the *CEQA Guidelines*, a project's impact related to land use planning is evaluated in terms of compatibility with existing land uses and consistency with local plans and other local land use controls (i.e., general plans, zoning codes, specific plans, etc.).

California Government Code §6586021 requires zone classifications to be consistent with the general plan land use designations. Consistency with the general plan is possible only if the local government, in this case Kern County, has officially adopted a general plan. The uses authorized in the Kern County Zoning Ordinance must then be compatible with the objectives, policies, general land uses, and programs specified in the KCGP. This consistency is completed at the County level during the approval process of a general plan, general plan element (such as a housing element), general plan amendment, or zone classification change.

Specific to the project, there are no applicable State regulations for Land Use and Planning.

Local

Land use and planning decisions within and adjacent to the project site are guided and regulated by the Kern County General Plan, Metropolitan Bakersfield General Plan, City of Shafter General Plan, Kern County Zoning Ordinance, and City of Shafter Zoning Ordinance. For the purposes of this document, the City of Shafter General Plan and City of Shafter Zoning Ordinance, which govern sites adjacent to the proposed project, will not be evaluated. Both the Kern County General Plan and Metropolitan Bakersfield General Plan contain goals, objectives, and policies and provide an overall foundation for establishing land use patterns. Included in this land use impact analysis are lists of all relevant goals, objectives, policies, and implementation measures related to the proposed project. The Zoning Ordinance contains regulations through which the General Plan's provisions are implemented. The most relevant regulations pertaining to industrial development are presented below.

Kern County General Plan (KCGP)

The KCGP is a policy document designed to provide long-range guidance for planning decisions that affect the growth and resources of unincorporated Kern County. Included in the Kern County General Plan is the Land Use, Open Space, and Conservation Element, which provides for a variety of land uses for future economic growth while also ensuring the conservation of Kern County's agricultural, natural, and resource attributes. Within the Land Use, Open Space and Conservation Element, policy areas are separated by

overlay designations, known as "Map Codes," which are identified on the Kern County General Plan maps for each section of the County and include the following categories: (1) non- jurisdictional land (State and federal); (2) physical and environmental constraints overlay; (3) public facilities and services; (4) special treatment areas (accepted county plan areas, rural communities and specific plan required); (5) residential; (6) commercial; (7) industrial; and (8) resource. Each Map Code/overlay area contains specific goals, policies, and implementation measures to guide development within them. The majority of the project parcels under Phase 2 are designated by the Kern County General Plan as Map Code 8.1 (Intensive Agriculture).

In addition to the Land Use, Open Space, and Conservation Element, the KCGP includes other elements related to circulation, noise, safety, and energy. Each element establishes goals, policies, and implementation measures that guide planning decisions in unincorporated Kern County. Applicable goals, policies, and implementation measures and an analysis of project consistency with the KCGP is demonstrated in **Table 4.11-2**, *Consistency Analysis with General Plan for Land Use* at the end of this *Land Use and Planning* section.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.3 Physical and Environmental Constraints

Goal

Goal 1: To strive to prevent loss of life, reduce personal injuries, and property damage, minimize economic and social diseconomies resulting from natural disaster by directing development to areas which are not hazardous.

Policies

Policy 2: In order to minimize risk to Kern County residents and their property, new development will not be permitted in hazard areas in the absence of implementing ordinances and programs. These ordinances will establish conditions, criteria and standards for the approval of development in hazard areas.

Policy 11: Protect and maintain watershed integrity within Kern County.

Implementation Measures

Measure C: Cooperate with the Kern County Water Agency to classify lands in the County overlying groundwater according to groundwater quantity and quality limitations.

Measure N: Applicants for new discretionary development should consult with the appropriate Resource Conservation District and the California Regional Water Quality Control Board regarding soil disturbances issues.

Section 1.4 Public Facilities and Services

Goal

Goal 1: Kern County residents and businesses should receive adequate and cost-effective public services and facilities. The County will compare new urban development proposals and land use changes to the required public services and facilities needed for the proposed project.

Goal 2: Promote an urban growth pattern in areas where adequate public service infrastructure exists or can be provided.

Goal 5: Ensure that adequate supplies of quality (appropriate for intended use) water are available to residential, industrial, and agricultural users within Kern County.

Goal 9: Serve the needs of industries and Kern County residents in a manner that does not degrade the water supply and the environment and protect the public health and safety by avoiding surface and subsurface nuisances resulting from the disposal of hazardous wastes, irrespective of the geographic origin of the waste.

Policies

Policy 1: New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.

Policy 3: Individual projects will provide availability of public utility service as per approved guidelines of the serving utility.

Section 1.8 Industrial

Goal

Goal 1: Ensure that an adequate and geographically balanced supply of land is designated for a range of industrial purposes.

Goal 2: Promote the future economic strength and well-being of Kern County and its residents without detriment to its environmental quality.

Goal 3: Ensure compatibility with land use designations such as residential, commercial, or other land uses that may be affected by such activities.

Policies

Policy 1: Locations for new industrial activities shall be provided with adequate infrastructure (water, sewage, disposal systems, roads, drainage, etc.) to minimize effects on County services.

Policy 3: The land areas best suited for industrial activity by virtue of their location and other criteria will be protected from residential and other incompatible development.

Policy 5: Provide for the clustering of new industrial development adjacent to existing industrial uses and along major transportation corridors.

Policy 7: Require that industrial uses provide design features such as screen walls, landscaping, increased height and/or setbacks, and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound, and vibration.

Policy 8: The County shall give priority to proposed industrial developments where:

i. Specific uses are proposed in conjunction with submittal of a concurrent precise development plan; and

ii. Where multiple phases, tenants, or lots are proposed through the adoption of a master precise development plan in conjunction with a General Plan Amendment

Policy 9: Prior to approval, all new discretionary industrial projects located in the Airport Influence Areas will be reviewed for compatibility with the Airport Land Use Compatibility Plan.

Policy 11: Requests for new Map Code 7.2 (Service Industrial) and Map Code 7.3 (Heavy Industrial) designations should be discouraged on sites contiguous to or located within 1/4 mile of residentially designated property.

Policy 12: All industrial development equal to or greater than 40 acres in a rural area will require the adoption of a Specific Plan prior to development approval.

Policy 13: Where feasible, locate future industrial activities in close proximity to railroad facilities and inter- and intra-State transportation corridors to minimize extensive travel through urban areas and to promote alternative transportation of goods.

Implementation Measures

Measure A: Evaluation of applications for any General or Specific Plan Amendment to an industrial designation will include sufficient data for review to facilitate desirable new industrial development proposals consistent with General Plan policies, using the following criteria and guidelines:

i. Location suitability with respect to market demand area.

ii. Provision of adequate access, ingress and egress facilities and services, and the mitigation of traffic impacts.

iii. Provision of adequate water, sewer, and other public services to be used.

iv. Provision of adequate on-site, nonpublic water supply and sewage disposal if no public systems are available or used.

v. Compatibility with adjacent uses (scale, noise, emissions, or other nuisances, etc.) and methods for buffering.

vi. Design, layout, and visual appearance coordinated with existing adjacent industrial uses.

vii. Overall consistency with the General Plan.

Measure F: All General Plan Amendments, zone changes, conditional use permits, discretionary industrial developments, and variations from height limits established by zoning for properties which are located in the Airport Influence areas or near a military airport shall be reviewed by the Planning Department for compatibility with the Kern County Airport Land Use Compatibility Plan.

Measure G: Require a Specific Plan for industrial land projects (as defined in the Assumptions Section of the Special Treatment Areas) to identify site specific issues and implementation, such as infrastructure, circulation, compatibility, and public services and facilities.

Section 1.9 Resource

Goal

Goal 1: To contain new development within an area large enough to meet generous projections of foreseeable need, but in locations which will not impair the economic strength derived from the petroleum, agriculture, rangeland, or mineral resources, or diminish the other amenities which exist in the County.

Goal 2: Protect areas of important mineral, petroleum, and agricultural resource potential for future use.

Goal 3: Ensure the development of resource areas minimize effects on neighboring resource lands.

Goal 5: Conserve prime agriculture lands from premature conversion.

Policies

Policy 2: In areas with a resource designation on the General Plan map, only industrial activities which directly and obviously relate to the exploration, production, and transportation of the particular resource will be considered to be consistent with this General Plan.

Policy 7: Areas designated for agricultural use, which include Class I and II and other enhanced agricultural soils with surface delivery water systems, should be protected from incompatible residential, commercial, and industrial subdivision and development activities.

Implementation Measures

Measure C: The County Planning Department will seek review and comment from the County Engineering and Survey Services Department on the implementation of the National Pollution Discharge Elimination System for all discretionary projects.

Measure H: Use the California Geological Survey's latest maps to locate mineral deposits until the regional and Statewide importance mineral deposits map has been completed, as required by the Surface Mining and Reclamation Act.

Section 1.10.1 Public Services and Facilities

Policies

Policy 9: New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure which it generates and upon which it is dependent.

Policy 12: All methods of sewage disposal and water supply shall meet the requirements of the Kern County Environmental Health Services Department and the California Regional Water Quality Control Board. The Environmental Health Department shall periodically review and modify, as necessary, its requirements for sewage disposal and water supply, and shall comply with any new standards adopted by the State for implementation of Government Code Division 7 of the Water Code, Chapter 4.5 (Section 13290-13291.7). (Assembly Bill 885) (2000).

Policy 15: Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the California Environmental Quality Act (CEQA) documents, staff analysis, and the operator, that adequate public or private services and resources are available to serve the proposed development.

Policy 16: The developer shall assume full responsibility for costs incurred in service extensions or improvements that are required to serve the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.

Implementation Measures

Measure E: All new discretionary development projects shall be subject to the Standards for Sewage, Water Supply and Preservation of Environmental Health Rules and Regulations administered by the Environmental Health Services Department. Those projects having percolation rates of less than five minutes per inch shall provide a preliminary soils study and site specific documentation that characterizes the quality of upper groundwater in the project vicinity and evaluation of the extent to which, if any, the proposed use of alternative septic systems will adversely impact groundwater quality. If the evaluation indicates that the uppermost groundwater at the proposed site already exceeds groundwater quality objectives of the Regional Water Quality Control Board or would if the alternative septic system is installed, the applicant shall be required to supply sewage collection, treatment and disposal facilities.

Section 1.10.2 Air Quality

Policies

Policy 18: The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on minimizing air quality degradation in the desert to enable effective military operations and in the valley region to meet attainment goals.

Policy 19: In considering discretionary projects for which an Environmental Impact Report must be prepared pursuant to the California Environmental Quality Act, the appropriate decision making body, as part of its deliberations, will ensure that:

A. All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and

B. The benefits of the proposed project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the California Environmental Quality Act.

Policy 20: The County shall include fugitive dust control measures as a requirement for discretionary projects and as required by the adopted rules and regulations of the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District on ministerial permits.

Policy 21: The County shall support air districts' efforts to reduce PM_{10} and $PM_{2.5}$ emissions.

Implementation Measures

Measure F: All discretionary permits shall be referred to the appropriate air district for review and comment.

Measure H: Discretionary projects may use one or more of the following to reduce air quality effects:

a. Pave dirt roads within the development.
b. Pave outside storage areas.
c. Provide additional low Volatile Organic Compounds (VOC) producing trees on landscape plans.
d. Use of alternative fuel fleet vehicles or hybrid vehicles.
e. Use of emission control devices on diesel equipment.
f. Develop residential neighborhoods without fireplaces or with the use of Environmental Protection Agency certified, low emission natural gas fireplaces.
g. Provide bicycle lockers and shower facilities on site.

h. Increasing the amount of landscaping beyond what is required in the Zoning Ordinance (Chapter 19.86).

i. The use and development of park and ride facilities in outlaying areas.

j. Other strategies that may be recommended by the local Air Pollution Control Districts.

Section 1.10.3 Archaeological, Paleontological, Cultural, and Historical Preservation

Policies

Policy 25: The County will promote the preservation of cultural and historic resources which provide ties with the past and constitute a heritage value to residents and visitors.

Implementation Measures

Measure L: The County shall address archaeological and historical resources for discretionary projects in accordance with the California Environmental Quality Act (CEQA).

Section 1.10.5 Threatened and Endangered Species

Policies

Policy 27: Threatened or endangered plant and wildlife species should be protected in accordance with state and federal laws.

Policy 28: County should work closely with state and federal agencies to assure that discretionary projects avoid or minimize impacts to fish, wildlife, and botanical resources.

Policy 31: Under the provisions of the California Environmental Quality Act (CEQA), the County, as lead agency, will solicit comments from the California Department of Fish and Game and the U.S. Fish and Wildlife Service when an environmental document (Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report) is prepared.

Implementation Measures

Measure Q: Discretionary projects shall consider effects to biological resources as required by the California Environmental Quality Act.

Section 1.10.6 Surface Water and Groundwater

Policies

Policy 34: Ensure that water quality standards are met for existing users and future development.

Policy 43: Drainage shall conform to the Kern County Development Standards and the Grading Ordinance.

Policy 44: Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by the California Environmental Quality Act (CEQA), to prevent the degradation of the watershed to the extent practical.

Implementation Measures

Measure W: Applications for General or Specific Plan Amendments will include sufficient data for review to facilitate desirable new development proposals consistent with General Plan policies, using the following criteria and guidelines:

i. The provision of adequate water, sewer, and other public services to be used.

ii. The provision of adequate on-site nonpublic water supply and sewage disposal if no public systems are available or used.

Section 1.10.7 Light and Glare

Policies

Policy 47: Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas.

Policy 48: Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.

Implementation Measures

Measure AA: The County shall utilize CEQA Guidelines and the provisions of the Zoning Ordinance to minimize the impacts of light and glare on adjacent properties and in rural undeveloped areas.

Chapter 2. Circulation Element

Section 2.3.3 Highway Plan

Goal

Goal 5: Maintain a minimum Level of Service (LOS) D.

Policies

Policy 2: The County should monitor development applications as they relate to traffic estimates developed for this plan. Mitigation is required if development causes affected roadways to fall below Level Of Service (LOS) D. However, development proposed as part of a Community Plan or Specific Plan which utilizes Smart Growth Policies that encourage efficient multi-modal movements (see Section 1.10.8) is allowed the flexibility to assess traffic and safety impacts through other means than Level Of Service (LOS). Utilization of the CEQA process would help identify alternatives to or mitigation for such developments.

Mitigation could involve amending the Land Use, Open Space and Conservation Element to establish jobs/housing balance if projected trips in any traffic zone exceed trips identified for this Circulation Element. Mitigation could involve exactions to build off-site transportation facilities. These enhancements would reduce traffic congestion to an acceptable level.

Policy 4: As a condition of private development approval, developers shall build roads needed to access the existing road network. Developers shall build these roads to County standards unless improvements along State routes are necessary then roads shall be built to Caltrans standards. Developers shall locate these roads (width to be determined by the Circulation Plan) along centerlines shown on the circulation diagram map unless otherwise authorized by an approved Specific Plan Line. Developers may build local roads along lines other than those on the circulation diagram map. Developers would negotiate necessary easements to allow this

Implementation Measures

Measure A: The Planning Department shall carry out the road network Policies by using the Kern County Land Division Ordinance and Zoning Ordinance, which implements the Kern County Development Standards that includes road standards related to urban and rural planning requirements. These ordinances also regulate access points. Planning Department can help developers and property owners in identifying where planned circulation is to occur.

Section 2.3.4 Future Growth

Policies

Policy 2: The County should monitor development applications as they relate to traffic estimates developed for this plan. Mitigation is required if development causes affected roadways to fall below Level Of Service (LOS) D. However, development proposed as part of a Community Plan or Specific Plan which utilizes Smart Growth Policies that encourage efficient multi-modal movements (See Section 1.10.8) is allowed the flexibility to assess traffic and safety impacts through other means than Level Of Service (LOS). Utilization of the CEQA process would help identify alternatives to or mitigation for such developments. Mitigation could involve amending the Land Use, Open Space and Conservation Element to establish jobs/housing balance if projected trips in any traffic zone exceed trips identified for this Circulation Element. Mitigation could involve exactions to build off-site transportation facilities. These enhancements would reduce traffic congestion to an acceptable level.

Policy 4: As a condition of private development approval, developers shall build roads needed to access the existing road network. Developers shall build these roads to County standards unless improvements along State routes are necessary then roads shall be built to Caltrans standards. Developers shall locate these roads (width to be determined by the Circulation Plan) along centerlines shown on the circulation diagram map unless otherwise authorized by an approved Specific Plan Line. Developers may build local roads along lines other than

those on the circulation diagram map. Developers would negotiate necessary easements to allow this.

Policy 5: When there is a legal lot of record, improvement of access to County, city or State roads will require funding by sources other than the County. Funding could be by starting a local benefit assessment district or, depending on the size of a project, direct development impact fees.

Policy 6: The County may accept a developer's road into the county's maintained road system. This is at Kern County's discretion. Acceptance would occur after the developer follows the above requirements. Roads are included in the County road maintenance system through approval by the Board of Supervisors.

Implementation Measures

Measure C: Project development shall comply with the requirements of the Kern County Zoning Ordinance, Land Division Ordinance, and Development Standards.

Section 2.5.2 Airport Land Use Compatibility Plan

Policies

Policy 2: To the extent legally allowable, prevent encroachment on public airport and military base operations from incompatible, unmitigated land uses.

Implementation Measures

Measure A: Review discretionary land use development applications within the airports influence area and the military base operating area as shown in the ALUCP for consistency.

Section 2.5.4 Transportation of Hazardous Materials

Goals

Goal 1: Reduce risk to public health from transportation of hazardous materials.

Policies

Policy 1: The commercial transportation of hazardous material, identification and designation of appropriate shipping routes will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.

Policy 2: Kern County and affected cities should reduce use of County-maintained roads and city-maintained streets for transportation of hazardous materials.

Implementation Measures

Measure A: Roads and highways utilized for commercial shipping of hazardous waste destined for disposal will be designated as such pursuant to Vehicle Code Sections 31303 et seq. Permit applications shall identify commercial shipping routes they propose to utilize for particular waste streams.

Chapter 3. Noise Element

Goal

Goal 1: Ensure that residents of Kern County are protected from excessive noise and that moderate levels of noise are maintained.

Policies

Policy 1: Review discretionary industrial, commercial, or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses.

Policy 2: Require noise level criteria applied to all categories of land uses to be consistent with the recommendations of the California Division of Occupational Safety and Health (DOSH).

Policy 3: Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.

Policy 4: Utilize good land use planning principles to reduce conflicts related to noise emissions.

Policy 5: Prohibit new noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into the project design. Such mitigation shall be designed to reduce noise to the following levels:

a) 65 dB Ldn or less in outdoor activity areas;

b) 45 dB Ldn or less within interior living spaces or other noise sensitive interior spaces.

Policy 6: Ensure that new development in the vicinity of airports will be compatible with existing and projected airport noise levels as set forth in the ALUCP.

Policy 7: Employ the best available methods of noise control.

Policy 8: Enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code concerning the construction of new multiple-occupancy dwellings such as hotels, apartments, and condominiums.

Chapter 4. Safety Element

Goal

Goal 1: Minimize injuries and loss of life and reduce property damage.

Goal 7: Ensure that adequate emergency services and facilities are available to the residents of Kern County through the coordination of planning and development of emergency facilities and services.

Goal 8: Reduce the public's exposure to fire, explosion, blowout, and other hazards associated with the accidental release of crude oil, natural gas, and hydrogen sulfide gas.

Implementation Measures

Measure A: All hazards (geologic, fire, and flood) should be considered whenever a Planning Commission or Board of Supervisor's action could involve the establishment of a land use activity susceptible to such hazards.

Measure B: Require detailed site studies for ground shaking characteristics, liquefaction potential, dam failure inundation, flooding potential, and fault rupture potential as background to the design process for critical facilities under County discretionary approval.

Measure F: The adopted multi-jurisdictional Kern County, California Multi-Hazard Mitigation Plan, as approved by FEMA, shall be used as a source document for preparation of environmental documents pursuant to CEQA, evaluation of project proposals, formulation of potential mitigation, and identification of specific actions that could, if implemented, mitigate impacts from future disasters and other threats to public safety.

Section 4.5 Landslides, Subsidence, Seiche, and Liquefaction

Policies

Policy 3: Reduce potential for exposure of residential, commercial, and industrial development to hazards of landslide, land subsidence, liquefaction, and erosion.

Implementation Measures

Measure D: Discretionary actions will be required to address and mitigate impacts from inundation, land subsidence, landslides, high groundwater areas, liquefaction and seismic events through the CEQA process.

Section 4.6 Wildland and Urban Fire

Policies

Policy 1: Require discretionary projects to assess impacts on emergency services and facilities.

Policy 3: The County will encourage the promotion of fire prevention methods to reduce service protection costs and costs to taxpayers.

Policy 4: Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.

Policy 6: All discretionary projects shall comply with the adopted Fire Code and the requirements of the Fire Department.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The MBGP is a policy document designed to provide long-range guidance for planning decisions that affect the growth and resources of the Metropolitan Bakersfield area of Kern County. The MBGP provides goals, policies, and development standards to guide development and ensure compatibility and safety of projects within its plan area. Applicable goals, policies, and implementation measures and an analysis of project consistency with the MBGP are demonstrated in **Table 4.11-2**, *Consistency Analysis with General Plan for Land Use* at the end of this *Land Use and Planning* section.

Chapter II. Land Use Element

Industrial Development

Goals

Goal 1: Accommodate new development which captures the economic demands generated by the marketplace and establishes Bakersfield's role as the capital of the southern San Joaquin Valley.

Goal 3: Accommodate new development which is compatible with and complements existing land uses.

Goal 4: Accommodate new development which channels land uses in a phased, orderly manner and is coordinated with the provision of infrastructure and public improvements.

Goal 7: Establish a built environment which achieves a compatible functional and visual relationship among individual buildings and sites.

Policies

Policy 31: Allow for a variety of industrial uses, including land-extensive mineral extraction and processing, heavy manufacturing, light manufacturing, warehousing and distribution, transportation-related, and research and development uses.

Policy 32: Provide for the clustering of new industrial development adjacent to existing industrial uses and along major transportation corridor.

Policy 35: Encourage upgrading of visual character of heavy manufacturing industrial areas through the use of landscaping or screening-of visually unattractive buildings and storage areas.

Policy 36: Require that industrial uses provide design features, such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound and vibration.

Policy 37: Street frontages along all new industrial development shall be landscaped.

Implementation Measures

Measure 3: **Specific Plans** State law (G.C Sec. 65450) authorizes cities and counties to prepare Specific Plans for the systematic implementation of the general plan for all or part of the area covered by the general plan. Specific Plans are intended to provide more definite specifications of the type of uses to be permitted, development standards (setbacks, heights, landscape, architecture, etc.) and circulation and infrastructure improvements.

Measure 6: **Development Review** b) In the county, any development within the following county zone classifications requires approval of a Special Development Standards Plot Plan Review: R-2, R-3, C-O, C-1, C-2, CH, M-1, M-2, and M-3. This review enables the county to formally review projects for compliance with urban development standards and obtain necessary street dedications and improvements. The review is performed at the staff level, therefore public hearings are not held on these projects. Projects within most other zone classifications are not formally reviewed, rather the project is reviewed at the building permit stage. Urban development standards are not imposed. Site zoning that requires a Precise Development Plan or Conditional Use Permit are discretionary projects that must be found consistent with the general plan.

Measure 7: **Environmental Review** Local guidelines for project processing shall reflect *California Environmental Quality Act (CEQA) Guidelines* which state that the environmental effects of a project must be taken into account as part of project consideration.

General

Policies

Policy 76: Provide for a mix of land uses which meets the diverse needs of residents; offers a variety of employment opportunities; capitalizes, enhances, and expands upon existing physical and economic assets; and allows for the capture of regional growth.

Policy 79: Provide for an orderly outward expansion of new "urban" development (any commercial, industrial, and residential development having a density greater than one unit per acre) so that it maintains continuity of existing development, allows for the incremental expansion of infrastructure and public services, minimizes impacts on natural environmental resources, and provides a high-quality environment for living and business.

Policy 95: When planning for new development, coordinate with utility companies to designate future or potential electrical transmission line corridors as needed to serve the metropolitan area.

Chapter III. Circulation Element

General

Policies

Policy 37: Require new development and expansion of existing development to pay for necessary access improvements, such as street extensions, widenings, turn lanes, signals, etc., as identified in the transportation impact report as may be required for a project.

Policy 39: Require new development and expansion of existing development to pay or participate in its pro rata share of the costs of expansions in area-wide transportation facilities and services which it necessitates.

Parking

Policies

Policy 3: Ensure that adequate on-site parking supply and parking lot circulation is provided on all site plans in accordance with the adopted parking standards.

Implementation Measures

Measure 17: Maintain city and county street standards to conform with parking requirements set forth in the Circulation Element. Remove parking from existing arterials, and major collectors when traffic studies indicate removal is warranted to improve safety or increase capacity.

Measure 19: Assess potential noise impacts in street design, and to the extent feasible, route streets to minimize impacts.

Measure 26: Establish guidelines for project design review based on traffic engineering standards (e.g., driveway design, on-site circulation) and the Level of Service Ordinance (see below).

Chapter V. Conservation Element

Soils and Agriculture

Policies

Policy 15: Buffers such as setbacks, berms, greenbelts, and open space areas shall be established to separate farmland from incompatible urban uses.

Policy 18: To reduce the potential for conflicts between agricultural and nonagricultural uses, sensitive subdivision design of lands near or adjacent to agricultural areas shall be conducted including provisions for buffer zones.

Implementation Measures

Measure 2: Evaluate discretionary projects for their impact on agricultural resources.

Measure 5: Encourage the use of Land Conservation Act contracts in areas designated for agricultural land use.

Water Resources

Policies

Policy 1: Develop and maintain facilities for groundwater recharge in the planning area.

Policy 2: Minimize the loss of water which could otherwise be utilized for groundwater recharge purposes and benefit planning area groundwater aquifers from diversion to locations outside the area.

Policy 6: Protect planning area groundwater resources from further quality degradation.

Policy 8: Consider each proposal for water resource usage within the context of total planning area needs and priorities--major incremental water transport, groundwater recharge, flood control, recreational needs, riparian habitat preservation and conservation.

Policy 9: Encourage and implement water conservation measures and programs (I-11).

Implementation Measures

Measure 7: Maintain industrial waste discharge regulation and monitoring programs which protect the planning area groundwater from contaminants.

Measure 10: Support additional water conservation measures and programs of benefit to the planning area.

Air Quality

Goals

Goal 1: Promote air quality that is compatible with health, well being, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants

Goal 2: Continue working toward attainment of Federal, State and Local standards as enforced by the San Joaquin Valley Unified Air Pollution Control District.

Goal 4: Reduce the amount of vehicular emissions in the planning area.

Policies

Policy 3: Require dust abatement measures during significant grading and construction operations.

Policy 22: Require the provision of secure, convenient bike storage racks at shopping centers, office buildings, and other places of employment in the Bakersfield Metropolitan area.

Policy 24: Encourage employers to implement programs for staggered work hours, compressed work weeks, or other measures which relieve vehicle congestion during commute periods and reduce total work trips.

Implementation Measures

Measure 6: Create the private and public infrastructure necessary to support alternative fuel vehicles.

Chapter VII. Noise Element

Noise Issues

Goals

Goal 1: Ensure that residents of the Bakersfield Metropolitan Area are protected from excessive noise and existing moderate levels of noise are maintained.

Policies

Policy 3: Review discretionary industrial, commercial or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards contained within Table VII-2 in areas containing residential or other noise-sensitive land uses.

Policy 5: Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.

Implementation Measures

Measure 2: Review discretionary development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance to the policy framework outlined in this element.

Measure 4: Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB CNEL and interior noise levels in excess of 45 dB CNEL and so that impacts on noise sensitive uses shall not exceed the performance standards in Table VII-2.

At time of any discretionary approval, such as a request for zone change or subdivision, the developer may be required to submit an acoustical report indicating the means by which the developer proposes to comply with the noise standards. The acoustical report shall:

a) Be the responsibility of the applicant.

b) Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.

c) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.

d) Include estimated noise levels in terms of CNEL and the standards of Table VII-2 (if applicable) for existing and projected future (10-20 years hence) conditions, with a comparison made to the adopted policies of the Noise Element.

e) Include recommendations for appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element.

f) Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the adopted standards and policies of the Noise Element will not be achieved, a rationale for acceptance of the project must be provided.

Chapter VIII. Safety/Seismic Element

Seismic Safety

Goals

Goal 2: Ensure the availability and effective response of emergency services following an earthquake.

Goal 5: Protect essential lifelines and prevent casualties and major social and economic disruption due to liquefaction in an earthquake.

Goal 7: Protect land uses from the risk of dam failure inundation including the assurances that: the functional capabilities of essential facilities are available in the event of a flood; hazardous materials* are not released; effective measures for mitigation of dam failure inundation are incorporated into the design of critical facilities; and the rapid and orderly evacuation of populations in the inundation area will occur.

Policies

Policy 10: Prohibit development designed for human occupancy within 50 feet of a known active fault and prohibit any building from being placed astride an active fault.

Implementation Measures

Measure 3: Require structures that are within the plan area and are subject to Building Department review to adhere to the most current seismic standards adopted as part of the Uniform Building Code.

Measure 18: Develop specific guidelines for the collection of data for determination of liquefaction potential at a site.

Public Safety

Policies

Policy 13: Fugitive dust emissions shall be controlled through applicable requirements (Regulation VIII) set forth by the San Joaquin Valley Unified Air Pollution Control District, including but not limited to: irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects resulting from the development of agricultural property.

Policy 14: Establish buffer zones adjacent to urban development proposals located adjacent to agricultural areas, as recommended by the Kern County Agricultural Commission.

Policy 15: Fugitive dust emissions shall be controlled through applicable requirements set forth by the San Joaquin Valley Unified Air Pollution Control District (Regulation VIII), including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects as a result of exposure to Coccidioidomycosis.

Policy 16: All new discretionary development projects shall be subject to environmental and design review on a site-specific, project-by-project basis, including but not limited to, an assessment to determine whether hazardous materials present potential health affects to human health as required by the Department of Environmental Services.

Kern County Zoning Ordinance

Title 19 of the Kern County Zoning Ordinance (Zoning Ordinance) provides a description of permitted uses for the various zoning classifications within the county. The Zoning Ordinance consists of two primary parts: a Zoning Map that delineates the boundaries of zoning districts; and Zoning Ordinance that explains the purpose of the districts, specifies permitted and conditional uses, and establishes development and performance standards. The intent of the Zoning Ordinance is to protect public health, safety, and the general welfare of residents and visitors in the county. Together with the Zoning Map, the Zoning Ordinance identifies the particular uses permitted on each parcel of land in the county and sets forth regulations and standards for development to ensure that the policies, goals, and objectives of the General Plan are implemented. In addition to land use regulations, the Zoning Ordinance contains development standards that can lessen a new structure's impacts on a location or area. These standards control the height, setbacks, parking, lot coverage, gross floor area, etc. for new structures. The Zoning Ordinance also regulates which uses are permitted in each of the County's zoning districts to ensure compatibility between land uses.

Airport Land Use Compatibility Plan

The Kern County ALUCP establishes procedures and criteria by which the County can address compatibility issues when making planning decisions concerning airports and the land uses around them.

Regional Transportation Plan

The 2022 Regional Transportation Plan (RTP), prepared by the Kern Council of Governments (COG) is a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. It was developed through a continuing, comprehensive, and cooperative planning process, and provides for effective coordination between local, regional, State, and federal agencies. Included in the 2022 RTP is the Sustainable Communities Strategy (SCS) required by California's Sustainable Communities and Climate Protection Act, of Senate Bill (SB) 375. The California Air Resources Board (CARB) set Kern greenhouse gas (GHG) emissions reductions from passenger vehicles and light-duty trucks at 5 percent per capita by 2020 and 10 percent per capita by 2035 as compared to 2005. In addition, SB 375 provides for closer integration of the RTP/SCS with the Regional Housing Needs Allocation (RHNA) ensuring consistency between low-income housing needs and transportation planning. Kern COG engaged in the RHNA process concurrently with the development of the 2022 RTP/SCS. This process required Kern COG to work with its member agencies to identify areas within the region that can provide sufficient housing for all economic segments of the population and ensure that the State's housing goals are met.

The intent of the SCS is to achieve the State's emissions reduction targets for automobiles and light trucks. The SCS will also provide opportunities for a stronger economy, healthier environment, and safer quality of life for community members in Kern County. The RTP/SCS seeks to improve economic vitality; improve air quality; improve the health of communities; increase transportation and public safety; promote the conservation of natural resources and undeveloped land; increase access to community services; increase regional and local energy independence; and increase opportunities to help shape our community's future.

The 2022 RTP/SCS financial plan identifies how much money is available to support the region's transportation investments. The plan includes a core revenue forecast of existing local, State, and federal sources along with funding sources that are considered to be reasonably available over the time horizon of the RTP/SCS. These new sources include adjustments to State and federal gas tax rates based on historical trends and recommendations from two national commissions (National Surface Transportation Policy and Revenue Study Commission and National Surface Transportation Infrastructure Financing Commission), leveraging of local sales tax measures, local transportation impact fees, potential national freight program/freight fees, future State bonding programs, and mileage-based user fees (Kern COG 2022).

Kern County's Solid Waste Management Plan

The Solid Waste Management Plan is a comprehensive guide for all solid waste management activities in the County. The plan identifies the existing solid waste generation and disposal facilities in Kern County, estimates future solid waste disposal demand, and identifies programs to meet this future need.

Kern County and Incorporated Cities Hazardous Waste Management Plan

The Kern County and Incorporated Cities Hazardous Waste Management Plan focuses on the siting of hazardous waste disposal facilities, the transport of hazardous waste in the county, protection of water resources from hazardous waste contamination, and public education concerning the use and disposal of hazardous waste.

4.11.4 Impacts and Mitigation Measures

Methodology

The potential impacts associated with the proposed project are evaluated on a qualitative basis through a comparison of the existing land use and the proposed land uses, in consideration of the applicable planning goals and policies. Compliance with the applicable planning goals and policies is illustrated in **Table 4.11-2**, *Consistency Analysis with General Plan for Land Use* at the end of this *Land Use and Planning* section. The change in the land use of the project site is significant if the effect described under the thresholds of significance below occurs as a result of the project. The evaluation of project impacts is based on review of the aforementioned resources, professional judgment, analysis of the County's land use policies, and review of the significance criteria established in Appendix G of the *CEQA Guidelines*, which the County has determined appropriate for this EIR.

Thresholds of Significance

As established in Appendix G of the *CEQA Guidelines*, the Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, to determine if a project could potentially have a significant adverse effect on land use.

A project could have a have a significant impact on land use if the project would:

a. Physically divide an established community; or

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation for the purpose of avoiding or mitigating an environmental effect.

The lead agency determined in the Notice of Preparation/Initial Study (NOP/IS) (see Appendix A) that the following environmental issue would result in no impacts and was therefore scoped out of requiring further review in this EIR. Please refer to Appendix A of this EIR for a copy of the NOP/IS and additional information regarding this issue area:

- Physically divide an established community.

Project Impacts

Impact 4.11-1: The Project Would Conflict with Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction Over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect.

The proposed project, as currently designed, would include the construction of approximately 8,907,446square-feet of industrial use space, comprised of 24 buildings on 739 acres of land, of which a portion (approximately 313 acres) is currently used for growing table grapes and the remaining portion is vacant. The proposed project would support industrial warehouse operations with associated office space. As discussed in 4.11.2, *Environmental Setting*, of this section, the project site is primarily zoned for

agricultural use and the project site is designated by the DOC as Prime Farmland if water for irrigation is available. See **Table 4.11-1**, **Figure 4.11-1,** *Existing General Plan Designations,* and **Figure 4.11-2**, *Existing Zoning Classifications* for current zoning and general plan designations.

Therefore, as discussed in Chapter 3, *Project Description*, implementation of the project as proposed would require the adoption of the Malibu Vineyards Industrial Parkway Specific Plan, amendments to the KCGP and MBGP from the existing agricultural land use designations to industrial, as well as a change in the Kern County Zoning Classification from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development) to facilitate the future construction and operation of a warehouse/distribution center at the proposed project site. See **Table 4.11-1**, **Figure 4.11-3**, *Proposed General Plan Designations,* and **Figure 4.11-4**, *Proposed Zoning Classifications* for proposed zoning and general plan designations.

Kern County General Plan

As shown in **Table 4.11-1**, *Project Site and Surrounding Land Uses, General Plan Map Code Designations, and Zoning* and **Figure 4.11-1**, *Existing General Plan Designations*, a portion of the project is designated as Map Code 8.1 (Intensive Agriculture Minimum 20 Acre Parcel) within the Kern County General Plan. According to the Kern County General Plan, the Intensive Agriculture (minimum 20-acre parcel size) land use designation applies to areas devoted to the production of irrigated crops or having a potential for such use. Typical uses include irrigated cropland, orchards, vineyards, horse ranches, growing nursery stock ornamental flowers and Christmas trees, fish farms, beekeeping, ranch and farm facilities and related uses, one single-family dwelling unit, cattle feed yards, dairies, dry land farming, livestock grazing, water storage, groundwater recharge areas, mineral, aggregate, and petroleum exploration and extraction, hunting clubs, wildlife preserves, farm labor housing, public utility uses, and agricultural industries. The minimum allowable parcel size in the Intensive Agriculture category is 20 acres gross. The project proponent has submitted an application for a General Plan Amendment from 8.1 (Intensive Agriculture) to 7.2 (Service Industrial) to make the proposed use consistent with the Kern County General Plan. An evaluation of the proposed project's consistency with the KCGP is included in **Table 4.11-2**, *Consistency Analysis with General Plans for Land Use*. The table lists the applicable goals and policies and provides an analysis for the proposed project's general consistency.

Kern County Metropolitan Bakersfield General Plan (Unincorporated Planning Area)

As shown in **Table 4.11-1** and **Figure 4.11-1**, a portion of the project is designated as Map Code R-IA (Intensive Agriculture) within the Metropolitan Bakersfield General Plan. According to the Metropolitan Bakersfield General Plan, the Intensive Agriculture land use designation applies to areas devoted to the production of irrigated crops or having a potential for such use. The project proponent has submitted an application for a General Plan Amendment from R-IA (Intensive Agriculture) to SI (Service Industrial) to make the proposed use consistent with the Metropolitan Bakersfield General Plan. An evaluation of the proposed project's consistency with the Metropolitan Bakersfield General Plan is included in **Table 4.11-2**. The table lists the applicable goals and policies and provides an analysis for the proposed project's general consistency.

Kern County Zoning Ordinance

The entire project area is also subject to the provisions of the Kern County Zoning Ordinance. The zoning districts are defined in Title 19 of the Kern County Zoning Ordinance. As shown in **Table 4.11-1**, *Project Site and Surrounding Land Uses, General Plan Map Code Designations, and Zoning* and **Figure 4.11-2**, *Existing Zoning Classifications*, the Kern County Zoning Ordinance classifies the proposed project site as being within the A (Exclusive Agriculture) zone district. The purpose of the A (Exclusive Agriculture) Zone District is to designate areas suitable for agricultural uses and to prevent the encroachment of incompatible uses onto agricultural lands and the premature conversion of such lands to nonagricultural uses. Uses in the A Zone District are limited primarily to agricultural uses and other activities compatible with agricultural uses.

Pursuant to Section 19.38.020(E)(2) and 19.38.020(E)(3) of the Kern County Zoning Ordinance, the construction and operation of an industrial park with warehousing and distribution facilities is permitted in areas zoned for M-2 PD (Medium Industrial, Precise Development) with a Precise Development Plan. The project proponent has submitted an application for a zone change from A to M-2 PD to make the requested use consistent with the Kern County Zoning Ordinance.

Kern County Airport Land Use Compatibility Plan

Southern portions of the project site are within the Airport Land Use Compatibility Plan (ALUCP) for the Meadows Field Airport located approximately 1.5 miles southeast of the project site. These portions of the project are in the ALUCP Zone B2, which may require a dedication of avigation easement, and Zone C, which limits high-rise office buildings to no more than four stories. See **Figure 4.11-5**, *Airport Land Use Compatibility Map.*

The proposed project will implement mitigation measures **MM 4.11-1** and **MM 4.11-2** below, requiring an executed avigation easement for the benefit of the Meadows Field Airport, as well as consultation with the Airport to coordinate and avoid potential frequency conflicts with airport operation. Mitigation Measure **MM 4.11-3** requires the proposed project ensure compliance with criteria within the ALUCP Zones for Meadows Field Airport by requiring that modifications to the Precise Development Plan include identified uses within the adopted Zones be considered at a noticed public hearing. Mitigation Measure **MM 4.11-4** requires demonstration of compliance with the maximum density of people per acre and open land requirements per the adopted ALUCP.

The proposed project would be required to comply with the County's ALUCP and applicable Federal Aviation Administration (FAA) regulations regarding project approval to ensure that there would be no conflict with airport operations and no safety hazards are presented. As discussed in Section 4.9, *Hazards and Hazardous Materials*, implementation of Mitigation Measures **MM 4.9-12** would ensure the project would be consistent with the ALUCP and applicable Kern County regulations by requiring the developer to obtain approval from FAA and the Meadows Field Airport. With implementation of these mitigation measures, impacts would be less than significant.

Figure 4.11-3: Proposed General Plan Designations

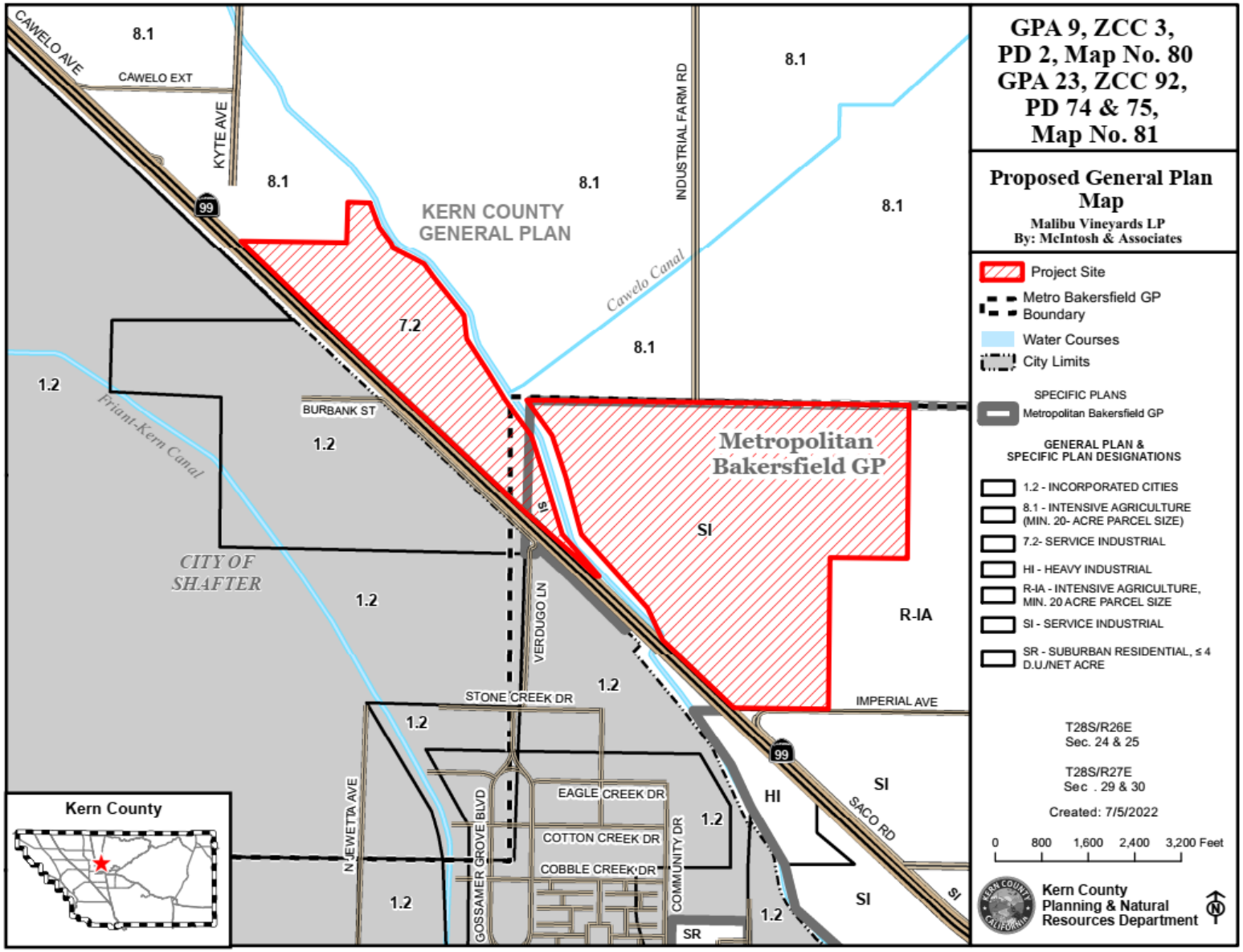


Figure 4.11-4: Proposed Zoning Classifications

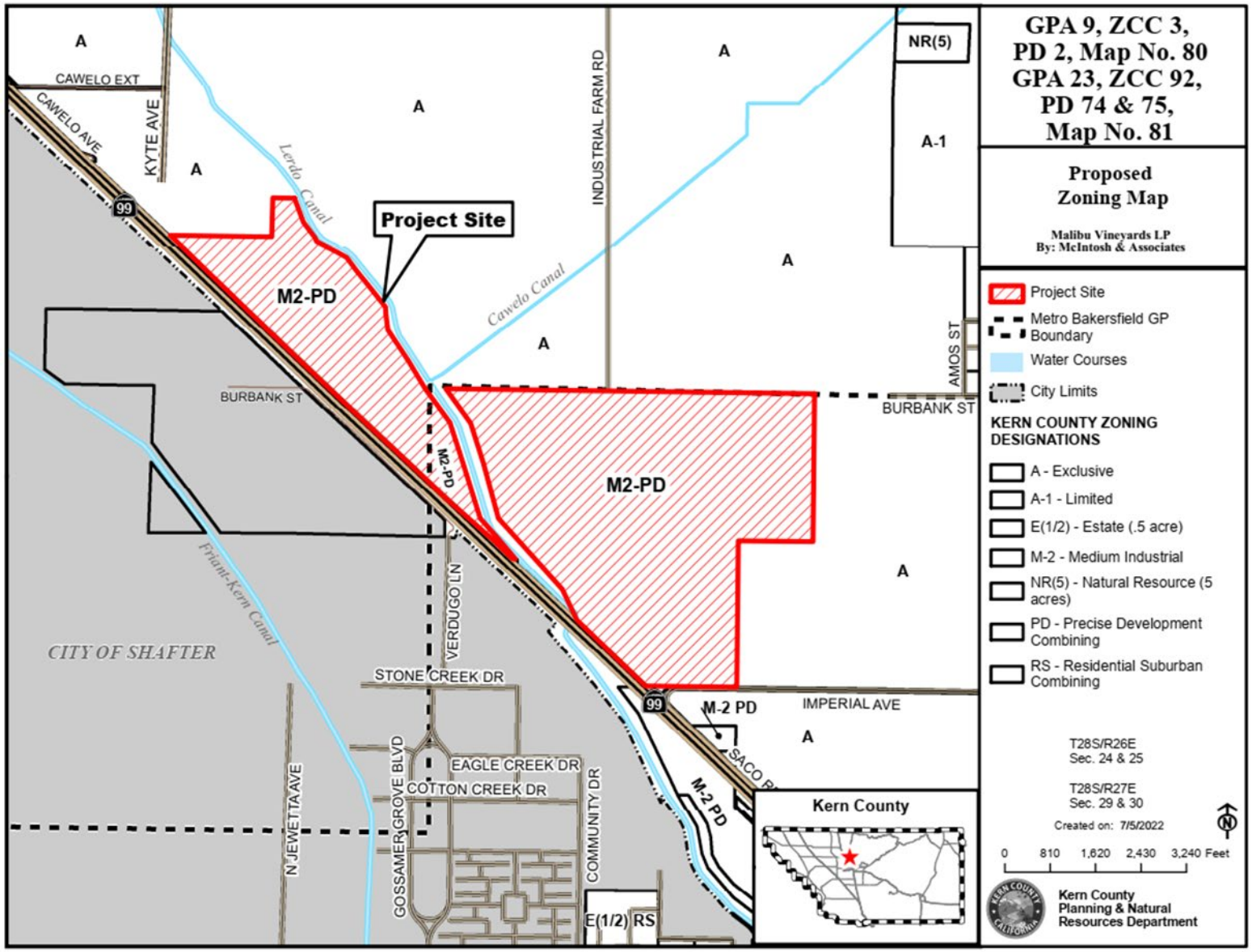
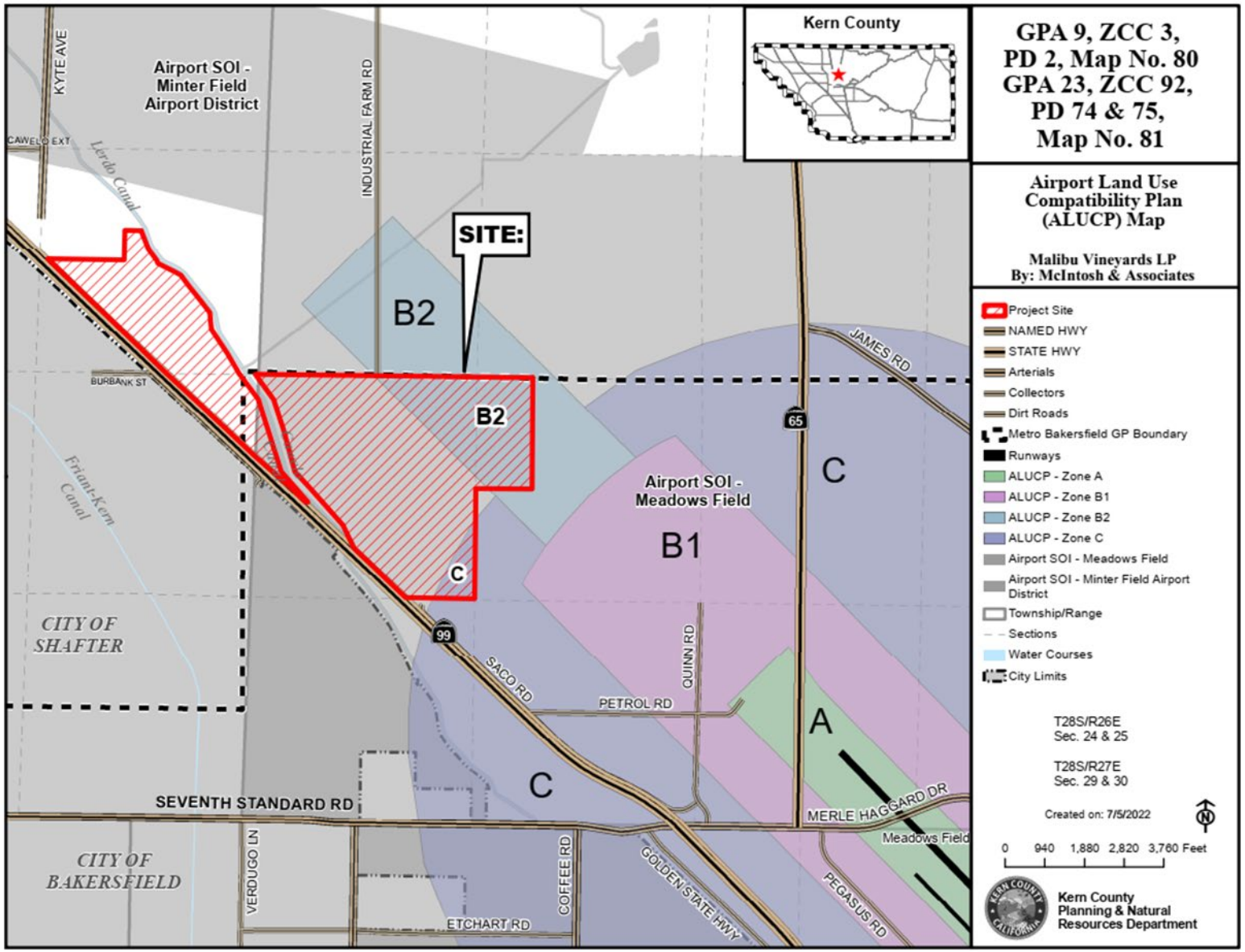


Figure 4.11-5: Airport Land Use Compatibility Plan Map



Summary

The proposed project, as mitigated in this EIR, would maintain consistency with the goals and policies of the KCGP and MBGP. In addition, with approval of the Malibu Vineyards Industrial Parkway Specific Plan, amendments to the KCGP and MBGP from Agriculture to Industrial land use area, as well as a change in the Kern County Zoning Classification from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development), the proposed project would be an allowable use that would not conflict with the land use or zoning classification for the site. Implementation of the mitigation measures provided below would reduce potential impacts associated with the proposed project, and would address potential policy inconsistencies, as identified in **Table 4.11-2** below.

Project impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measure MM 4.9-12 as provided in Section 4.9, *Hazards and Hazardous Materials*, of this EIR.

The following mitigation measures are required to conflicts with applicable land use plans.

MM 4.11-1: Prior to the issuance of building permits, the operator shall consult with the Meadows Field Airport to identify the appropriate Frequency Management Office officials to coordinate the use of telemetry to avoid potential frequency conflicts with airport operations.

MM 4.11-2: Prior to the issuance of building or grading permits, the project operator shall submit to the Kern County Planning and Natural Resources Department an executed avigation easement, approved as to form by County Counsel, for the benefit of the Meadows Field Airport.

MM 4.11-3: To ensure continued compliance with the criteria within the adopted Kern County Airport Land Use Compatibility Plan, any modification to the Precise Development Plan to include the following uses within the B-2 and/or C Zones of the Meadows Field Airport shall be considered at a noticed public hearing:

a. Within the B-2 Zone:

    1. Residential subdivisions
    2. Intensive retail uses
    3. Intensive manufacturing or food processing uses
    4. Offices with more than two (2) stories
    5. Hotels and motels

b. Within C Zone:

    1. Large shopping malls
    2. Theaters, auditoriums

3. Large sports stadiums
4. High-rise office buildings with more than four (4) stories

MM 4.11-4: Prior to the issuance of building or grading permits, the project operator shall submit a report to the Kern County Planning and Natural Resources Department demonstrating compliance with the maximum density of people per acre and open land requirements, with respect to the respective zone of the Meadows Field Airport, per the adopted Airport Land Use Compatibility Plan.

Level of Significance After Mitigation

Implementation of Mitigation Measure MM 4.9-12, discussed in *Hazards and Hazardous Materials*, and mitigation measures MM 4.11-1 through MM 4.11-4, would ensure that the proposed project would be consistent with the Kern County ALUCP. Therefore, impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

The geographic scope for cumulative impacts to land use includes closely related past, present, and reasonably foreseeable future projects within six miles of the proposed project site. This geographic scope of analysis is appropriate because it reflects the maximum distance land uses may be affected by implementation of the proposed project. As discussed in Section 3.10, *Cumulative Projects*, of this EIR, cumulative projects within a six-mile radius of the proposed project site include residential, agricultural, commercial, and industrial uses.

Implementation of the proposed project, combined with the development of ongoing projects and future industrial projects in the greater proposed project area could potentially result in cumulative impacts associated with land use and planning, if these projects collectively conflict with either existing land uses or other future projects in the area. The anticipated impacts of the proposed project in conjunction with cumulative development in the area of the project would increase urbanization and result in the loss of lands designated as agriculture. Potential land use impacts require evaluation on a case-by-case basis because of the interactive effects of a specific development and its immediate environment. As described in **Table 4.11-2**, the proposed project, as mitigated in this EIR, would maintain consistency with the goals and policies of the KCGP and MBGP. In addition, with approval of the Malibu Vineyards Industrial Parkway Specific Plan, amendments to the KCGP and MBGP, as well as a change in the Kern County Zoning Classification from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development), the proposed project would implement an industrial use consistent with the allowed uses as outlined in the M-2 (Medium Industrial) Zone District section of the Kern County Zoning Ordinance and would not conflict with the land use or zoning classification for the project site. Therefore, the proposed project would not result in a cumulatively considerable impact regarding land use.

Mitigation Measures

Mitigation measures are not required.

Level of Significance After Mitigation

Cumulative impacts would be less than significant.

Project Consistency with the Kern County General Plan and Metropolitan Bakersfield General Plan

Table 4.11-2, summarizes the consistency of the proposed project with all applicable goals and policies of the Kern County General Plan and the Metropolitan Bakersfield General Plan.

Table 4.11-2: Consistency Analysis with General Plans for Land Use

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Kern County General Plan		
Chapter 1. Land Use, Open Space and Conservation Element		
1.3 Physical and Environmental Constraints		
Goal 1. To strive to prevent loss of life, reduce personal injuries, and property damage, minimize economic and social diseconomies resulting from natural disaster by directing development to areas which are not hazardous.	Consistent	The proposed project as currently designed includes the construction of approximately 8,907,446square-feet of industrial use space, comprised of 24 buildings on 739 acres of existing vineyard that would support industrial warehouse operations with office space, in addition to associated driveways, parking areas, truck courts, landscaping, and detention basins to control surface drainage. Parcels have not been identified as containing hazardous materials. Refer to Section 4.9, *Hazards and Hazardous Materials*, of this EIR. The proposed project would be consistent with this goal.
Policy 2. In order to minimize risk to Kern County residents and their property, new development will not be permitted in hazard areas in the absence of implementing ordinances and programs. These ordinances will establish conditions, criteria and standards for the approval of development in hazard areas.	Consistent, with implementation of Mitigation Measures MM 4.9-1 through MM 4.9-3	Refer to 1.3, Physical and Environmental Constraints, Goal 1, above. The proposed project would be consistent with this policy.
Policy 11. Protect and maintain watershed integrity within Kern County.	Consistent with implementation of Mitigation Measures MM 4.10-1 through MM 4.10-3	Hydrology impacts are evaluated in Section 4.10, *Hydrology and Water Quality*, of this EIR. The proposed project site is not located within a watershed. The proposed project would be consistent with this policy with mitigation.
Implementation Measure C. Cooperate with the Kern County Water Agency to classify lands in the County overlying groundwater according to groundwater quantity and quality limitations.	Consistent with Mitigation Measures MM 4.10-2 and MM 4.10-3	Hydrology impacts are evaluated in Section 4.10, *Hydrology and Water Quality*, of this EIR. Mitigation Measure MM 4.10-3 would be implemented that requires the applicant provide a will-serve letter from the water agency serving the site; and Mitigation Measure MM 4.18-2 would be implemented to ensure that any groundwater or reclaimed water used is accounted for should the project require additional water supplies in excess of the allotment from the District.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Implementation Measure N. Applicants for new discretionary development should consult with the appropriate Resource Conservation District and the California Regional Water Quality Control Board regarding soil disturbances issues.	Consistent	Hydrology impacts are evaluated in Section 4.10, *Hydrology and Water Quality*, of this EIR. The proposed project would be subject to a General Construction Permit under the National Pollution Discharge Elimination System (NPDES) permit program of the federal Clean Water Act. A Stormwater Pollution Prevention Plan (SWPPP) would be implemented consistent with General Construction Permit requirements, which would address soil disturbances issues. The NPDES permit would require submittal of a Notice of Intent to the Regional Water Quality Control Board prior to commencement of construction activities. Implementation of the SWPPP would begin with the commencement of construction and continue through the completion of the proposed project.
1.4 Public Facilities and Services		
Goal 1. Kern County residents and businesses should receive adequate and cost-effective public services and facilities. The County will compare new urban development proposals and land use changes to the required public services and facilities needed for the proposed project.	Consistent, with implementation of Mitigation Measure MM 4.14-1	As described in Section 4.14, *Public Services*, of this EIR, the project proponent would be required to pay a fee assigned by the Kern County Planning and Natural Resources Department in order to mitigate any potential impacts to fire or police protection services resulting from the proposed project. MM 4.14-1 would assure the sales and use tax from the project be provided to unincorporated Kern County so that sales taxes from the proposed project can be maximized to compensate for any increase in service demand by the proposed project
Goal 2. Promote an urban growth pattern in areas where adequate public service infrastructure exists or can be provided.	Consistent with implementation of Mitigation Measure MM 4.14-1	As described in Section 4.14, *Public Services*, of this EIR, the project proponent would be required to pay a fee assigned by the Kern County Planning and Natural Resources Department in order to mitigate any potential impacts to fire or police protection services resulting from the proposed project. MM 4.14-1 would assure the sales and use tax from the project be provided to unincorporated Kern County so that sales taxes from the proposed project can be maximized to compensate for any increase in service demand by the proposed project
Goal 5. Ensure that adequate supplies of quality (appropriate for intended use) water are available to residential, industrial, and agricultural users within Kern County.	Consistent with implementation of Mitigation Measures MM 4.18-1, 4.18-2, MM 4.10-1 and MM 4.10-3	A discussion of water demands and supply is available for review in Section 4.18-1, *Utilities and Service Systems*, of this EIR.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Goal 9. Serve the needs of industries and Kern County residents in a manner that does not degrade the water supply and the environment and protect the public health and safety by avoiding surface and subsurface nuisances resulting from the disposal of hazardous wastes, irrespective of the geographic origin of the waste.	Consistent with implementation of Mitigation Measures MM 4.9-1 through MM 4.9-3	Impacts related to the disposal of hazardous wastes are discussed in Section 4.9, *Hazards and Hazardous Materials*, of this EIR.
Policy 1. New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.	Consistent	As described in Section 4.14, *Public Services*, of this EIR, the project proponent would be required to pay a fee assigned by the Kern County Planning and Natural Resources Department in order to mitigate any potential impacts to fire or police protection services resulting from the proposed project. MM 4.14-1 would assure the sales and use tax from the project be provided to unincorporated Kern County so that sales taxes from the proposed project can be maximized to compensate for any increase in service demand by the proposed project
Policy 3. Individual projects will provide availability of public utility service as per approved guidelines of the serving utility.	Consistent	A discussion of available public utility service is available for review in Section 4.18-1, *Utilities and Service Systems*, of this EIR.
1.8 Industrial		
Goal 1. Ensure that an adequate and geographically balanced supply of land is designated for a range of industrial purposes.	Consistent	By approving the proposed General Plan Amendments and Zone Change from 8.1 (Intensive Agriculture), R-IA (Intensive Agriculture) and, A (Exclusive Agriculture) to 7.2 (Service Industrial), SI (Service Industrial) and M-2 PD (Medium Industrial Precise Development), Kern County and the Bakersfield metropolitan area will contribute an additional 739 acres of land that is available for industrial uses. This will also result in a northward extension of an already industrialized corridor along SR-99, while creating a cluster of industrial development in the proposed project's area.
Goal 2. Promote the future economic strength and well-being of Kern County and its residents without detriment to its environmental quality.	Consistent with implementation of Mitigation Measures MM 4.3-1 through MM 4.3-9, MM 4.4-1 through MM 4.4-5, MM 4.7-1 through MM 4.7-6, MM 4.8-1, MM 4.9-1through MM 4.9-15, MM 4.10-1 through MM 4.10-3, MM 4.11-1 through MM 4.11-4, MM 4.12-1 through	Implementation of the proposed project would create a new source of employment and revenue in Kern County during construction and operation. Mitigation measures have been incorporated for various resource areas to ensure the proposed project does not have a significant detriment to environmental quality. Therefore, the proposed project would be consistent with implementation of mitigation measures MM 4.3-1 through MM 4.3-9, MM 4.4-1 through MM 4.4-5, MM 4.7-1 through MM 4.7-6, MM 4.8-1, MM 4.9-1through MM 4.9-15, MM 4.10-1 through MM 4.10-3, MM 4.11-1 through MM 4.11-4, MM 4.12-1 through MM 4.12-4, and MM 4.18-1 through 4.18-6.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
	MM 4.12-4, and MM 4.18-1 through 4.18-6	
Goal 3. Ensure compatibility with land use designations such as residential, commercial, or other land uses that may be affected by such activities.	Consistent with development standards from the Kern County Zoning Ordinance, the approval of the Malibu Vineyards Industrial Parkway Specific Plan, amendments to the KCGP and MBGP and a change in the Kern County Zoning classification.	The proposed project site and surrounding areas are designated for Agriculture land use. Implementation of the project as proposed would require the adoption of the Malibu Vineyards Industrial Parkway Specific Plan, amendments to the KCGP and MBGP from the existing agricultural land use designations to industrial, as well as a change in the Kern County Zoning Classification from agricultural to industrial to facilitate the future construction and operation of a warehouse/distribution center at the proposed project site. With approval of the Malibu Vineyards Industrial Parkway Specific Plan, amendments to the KCGP and MBGP, and a change in the Kern County Zoning classification, the proposed project would be consistent with industrial uses to the east and south. The nearest rural residence is located approximately 350 feet south of the project site, across and south of SR-99. However, as discussed in Section 4.3, *Air Quality*, and Section 4.12, *Noise*, of this EIR, with implementation of MM 4.3-1 through MM 4.3-4 and MM 4.12-1 through MM 4.12-4, impacts related to sensitive receptors would be less than significant.
Policy 1. Locations for new industrial activities shall be provided with adequate infrastructure (water, sewage, disposal systems, roads, drainage, etc.) to minimize effects on County services.	Consistent with implementation of Mitigation Measures MM 4.18-1 through 4.18-4, MM 4.10-1 and MM 4.10-3	Hydrology impacts are evaluated in Section 4.10, *Hydrology and Water Quality*, of this EIR. The proposed project includes the development infrastructure, including a drainage system, access driveways, parking areas, roads, and water delivery infrastructure to serve the proposed development. Utility impacts are discussed in Section 4.18, *Utilities and Service Systems*, of this EIR. As discussed therein, impacts related to water, sewage, disposal systems, roads, and drainage would be less than significant with implementation of MM 4.18-1 through 4.18-4. The proposed project would also include on-site and off-site improvements to utility systems. Off-site improvements would include extension of OMWD's six-inch domestic water line and 12-inch non-potable water line, from Quinn Road along Imperial Street, to the southeast corner of the proposed project. A new sewer trunk is currently being installed from the existing 36-inch line to the future intersection of Imperial Street at Endes Street via Coffee Road and Seventh Standard Road. Phase 1 would require installation of a sewer lift station to reach the new sewer trunk. In addition, the proposed project would include a connection to the existing facilities, a new natural gas pressure reducing station, as well as gas main extension and distribution laterals within the project site.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Policy 3. The land areas best suited for industrial activity by virtue of their location and other criteria will be protected from residential and other incompatible development.	Consistent	The proposed project would include the development of an industrial use space and would not include construction of residential or other incompatible development.
Policy 5. Provide for the clustering of new industrial development adjacent to existing industrial uses and along major transportation corridors.	Consistent	The proposed project would include the development of an industrial use space immediately east of SR-99. Therefore, the proposed project would be consistent with this policy.
Policy 7. Require that industrial uses provide design features such as screen walls, landscaping, increased height and/or setbacks, and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound, and vibration.	Consistent with implementation of Mitigation Measures MM 4.1-1 through MM 4.1-5	The proposed project is not directly adjacent to any residential land use designations. However, as described in Section 4.1, *Aesthetics*, of this EIR, Mitigation Measure MM 4.1-2 would require that prior to the issuance of building permits, site plans submitted for commercial buildings located within 1,000 feet of the SR 99 corridor shall include rooftop screening features, such as a parapet or other screening material, be installed to create a visual screen for rooftop mechanical equipment. Furthermore, Mitigation Measure MM 4.1-3 would require that prior to the issuance of building permits the applicant will submit a landscape plan, which must include a 20-foot-wide perimeter buffer along any visible boundary from the SR 99 frontage consisting of live ground cover, shrubs, or grass.
Policy 8. The County shall give priority to proposed industrial developments where: i. Specific uses are proposed in conjunction with submittal of a concurrent precise development plan; and ii. Where multiple phases, tenants, or lots are proposed through the adoption of a master precise development plan in conjunction with a General Plan Amendment	Consistent	Figure 3-13A through Figure 3-15D from Section 3, Project Description, of this EIR show the project's proposed precise development plans for Phase 1 and Phase 2. Additionally, the proposed project would result in the development of 24 buildings which would accommodate multiple tenants.
Policy 9. Prior to approval, all new discretionary industrial projects located in the Airport Influence Areas will be reviewed for compatibility with the Airport Land Use Compatibility Plan.	Consistent with implementation of MM's 4.10-1 through 4.10-3	The proposed project will be reviewed for compatibility with the Airport Land Use Compatibility Plan.
Policy 11. Requests for new Map Code 7.2 (Service Industrial) and Map Code 7.3 (Heavy Industrial) designations should be discouraged on sites contiguous to or located within 1/4 mile of residentially designated property.	Consistent with implementation of Mitigation Measures MM 4.3-1 through MM 4.3-4, MM 4.12-1 through MM 4.12-4	The nearest rural residence is located approximately 350 feet south of the project site, across and south of State Route (SR) 99. However, as discussed in Section 4.3, *Air Quality*, and Section 4.12, *Noise*, of this EIR, with implementation of MM 4.3-1 through MM 4.3-4 and MM 4.12-1 through MM 4.12-4, impacts related to sensitive receptors would be less than significant.
Policy 12. All industrial development equal to or greater than 40 acres in a rural area will require the adoption of a Specific Plan prior to development approval.	Consistent with the approval of the Malibu Vineyards Industrial Parkway Specific Plan	As discussed in the Chapter 3, *Project Description*, the project as proposed, includes a request to adopt the Malibu Vineyards Industrial Parkway Specific Plan.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Policy 13. Where feasible, locate future industrial activities in close proximity to railroad facilities and inter- and intra-State transportation corridors to minimize extensive travel through urban areas and to promote alternative transportation of goods.	Consistent	Refer to 1.8, Industrial, Policy 5 above. The proposed project would be consistent with this policy.
Implementation Measure A. Evaluation of applications for any General or Specific Plan Amendment to an industrial designation will include sufficient data for review to facilitate desirable new industrial development proposals consistent with General Plan policies, using the following criteria and guidelines: i. Location suitability with respect to market demand area. ii. Provision of adequate access, ingress and egress facilities and services, and the mitigation of traffic impacts. iii. Provision of adequate water, sewer, and other public services to be used. iv. Provision of adequate on-site, nonpublic water supply and sewage disposal if no public systems are available or used. v. Compatibility with adjacent uses (scale, noise, emissions, or other nuisances, etc.) and methods for buffering. vi. Design, layout, and visual appearance coordinated with existing adjacent industrial uses. vii. Overall consistency with the General Plan.	Consistent with implementation of Mitigation Measures MM 4.18-1 through MM 4.18-6 and MM 4.16-1 through MM 4.16-11	Impacts to Utilities are evaluated in Section 4.14, *Public Services*, and Section 4.18, *Utilities and Service Systems*, of this EIR. Impacts to traffic are discussed in Section 4.16, *Transportation*, of this IER.
Implementation Measure F. All General Plan Amendments, zone changes, conditional use permits, discretionary industrial developments, and variations from height limits established by zoning for properties which are located in the Airport Influence areas or near a military airport shall be reviewed by the Planning Department for compatibility with the Kern County Airport Land Use Compatibility Plan.	Consistent	The proposed project would be reviewed by the Planning Department for compatibility with the Kern County ALUCP.
Implementation Measure G. Require a Specific Plan for industrial land projects (as defined in the Assumptions Section of the Special Treatment Areas) to identify site specific issues and implementation, such as infrastructure, circulation, compatibility, and public services and facilities.	Consistent with implementation of Mitigation Measures MM 4.18-1 through MM 4.18-6, MM 4.14-1 and MM 4.14-2, and MM MM 4.16-1 through MM 4.16-11	Impacts to Public Services and Utilities are evaluated in Section 4.14, *Public Services* and Section 4.18, *Utilities and Service Systems*, of this EIR. Impacts to traffic are discussed in Section 4.16, *Transportation*, of this IER.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
1.9 Resource		
Goal 1. To contain new development within an area large enough to meet generous projections of foreseeable need, but in locations which will not impair the economic strength derived from the petroleum, agriculture, rangeland, or mineral resources, or diminish the other amenities which exist in the County.	Consistent	The proposed project site is currently composed of agricultural land. The proposed project site is not identified as rangeland and is not known to support petroleum or mineral resources. The proposed project site is surrounded by land under Williamson Act contracts and supporting active agricultural operations. Implementation of the proposed project would not impair the economic strength derived from surrounding agricultural operations or diminish other amenities; therefore, the proposed project would be consistent with this goal.
Goal 2. Protect areas of important mineral, petroleum, and agricultural resource potential for future use.	Inconsistent. Implementation of Mitigation Measures MM 4.2-1 through MM 4.2-4	The proposed project site does not support important mineral or petroleum resources. The proposed project site is currently designated for agricultural land use, and the project would result in its permanent conversion to 8,907,446square-feet of industrial use space, comprised of 24 buildings on 739 acres of partially existing vineyard. However, as discussed in Chapter 3, *Project Description*, the proposed project is expected to generate 5,000 to 6,000 full time job opportunities upon buildout and generate annual property taxes upon buildout. Furthermore, potential benefits of this conversation are listed in the Farmland Conversion Study Report including the potential reduction of pesticides and fertilizers found in ground water and a potential reduction in water use.
Goal 3. Ensure the development of resource areas minimize effects on neighboring resource lands.	Consistent with implementation of Mitigation Measures MM 4.7-3, MM 4.10-1, MM 4.10-2, and MM 4.18-1	The proposed project would result in its permanent conversion to 8,907,446 square-feet of industrial use space, comprised of 24 buildings on 739 acres of partially existing vineyard. The proposed project would modify existing on-site and off-site drainage patterns which could contribute to off-site erosion and sedimentation, and temporarily generate dust during construction, which could negatively impact surrounding agricultural lands. The proposed project includes the development of an on-site stormwater control system and implementation of Mitigation Measures MM 4.7-3, MM 4.10-1, MM 4.10-2, and MM 4.18-1 would reduce potential impacts.
Goal 5. Conserve prime agriculture lands from premature conversion.	Inconsistent. Implementation of Mitigation Measures MM 4.2-1 through MM 4.2-4	As discussed in Section 4.2, *Agriculture*, approximately 739 acres or 100 percent of the project site is designated by DOC as Prime Farmland if water for irrigation is available (DOC 2019). Despite Mitigation Measures MM 4.2-1 through MM 4.2-4, impacts related to conversion of prime agriculture lands would be significant and unavoidable.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Policy 2. In areas with a resource designation on the General Plan map, only industrial activities which directly and obviously relate to the exploration, production, and transportation of the particular resource will be considered to be consistent with this General Plan.	Inconsistent	According to the Kern County General Plan, the Intensive Agriculture (minimum 20-acre parcel size) land use designation applies to areas devoted to the production of irrigated crops or having a potential for such use. Typical uses include irrigated cropland; orchards; vineyards; horse ranches; growing nursery stock ornamental flowers and Christmas trees; fish farms; beekeeping; ranch and farm facilities and related uses; one single-family dwelling unit; cattle feed yards; dairies; dry land farming; livestock grazing; water storage; groundwater recharge areas; mineral, aggregate, and petroleum exploration and extraction; hunting clubs; wildlife preserves; farm labor housing; public utility uses; and agricultural industries. The project site is currently comprised of existing vineyard and vacant land. The proposed project would include the construction of approximately 8,907,446square-feet of industrial use space in 24 buildings but would not include the exploration, production, or transportation of irrigated crops.
Policy 7. Areas designated for agricultural use, which include Class I and II and other enhanced agricultural soils with surface delivery water systems, should be protected from incompatible residential, commercial, and industrial subdivision and development activities.	Inconsistent. Implementation of Mitigation Measures MM 4.2-1 through MM 4.2-4	As discussed in Section 4.2, *Agriculture*, approximately 739 acres or 100 percent of the project site is designated by DOC as Prime Farmland if water for irrigation is available (DOC 2019). Despite Mitigation Measures MM 4.2-1 through MM 4.2-4, impacts related to conversion of prime agriculture lands would be significant and unavoidable.
Implementation Measure C. The County Planning Department will seek review and comment from the County Engineering and Survey Services Department on the implementation of the National Pollution Discharge Elimination System for all discretionary projects.	Consistent	Hydrology impacts are evaluated in Section 4.10, *Hydrology and Water Quality*, of this EIR. The proposed project would be subject to a General Construction Permit under the National Pollution Discharge Elimination System (NPDES) permit program of the federal Clean Water Act. A Stormwater Pollution Prevention Plan (SWPPP) would be implemented consistent with General Construction Permit requirements, which would address soil disturbances issues. The NPDES permit would require submittal of a Notice of Intent to the Regional Water Quality Control Board prior to commencement of construction activities. Implementation of the SWPPP would begin with the commencement of construction and continue through the completion of the proposed project.
Implementation Measure H. Use the California Geological Survey's latest maps to locate mineral deposits until the regional and Statewide importance mineral deposits map has been completed, as required by the Surface Mining and Reclamation Act.	Consistent	As discussed in Section XII, *Mineral Resources*, of Appendix A to the EIR, the project site is not located within a designated mineral and petroleum resource site within the KCGP, or other land use plan.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
1.10 General Provisions		
1.10.1 Public Services and Facilities		
Policy 9. New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure which it generates and upon which it is dependent.	Consistent	Impacts to Utilities are evaluated in Section 4.14, *Public Services*, and Section 4.18, *Utilities and Service Systems*, of this EIR.
Policy 12. All methods of sewage disposal and water supply shall meet the requirements of the Kern County Environmental Health Services Department and the California Regional Water Quality Control Board. The Environmental Health Department shall periodically review and modify, as necessary, its requirements for sewage disposal and water supply, and shall comply with any new standards adopted by the State for implementation of Government Code Division 7 of the Water Code, Chapter 4.5 (Section 13290-13291.7). (Assembly Bill 885) (2000).	Consistent with implementation of Mitigation Measure MM 4.18-1	Impacts to wastewater and water supply are evaluated in Section 4.18, *Utilities and Service Systems*.
Policy 15. Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the California Environmental Quality Act (CEQA) documents, staff analysis, and the operator, that adequate public or private services and resources are available to serve the proposed development.	Consistent	Impacts to wastewater and water supply are evaluated in Section 4.18, *Utilities and Service Systems,* of this EIR. Impacts to public services are evaluated in Section 4.14, *Public Services*, of this EIR.
Policy 16. The developer shall assume full responsibility for costs incurred in service extensions or improvements that are required to serve the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.	Consistent	Impacts to wastewater and water supply are evaluated in Section 4.18, *Utilities and Service Systems*. Impacts to public services are evaluated in Section 4.14, *Public Services*, of this EIR.
Implementation Measure E. All new discretionary development projects shall be subject to the Standards for Sewage, Water Supply and Preservation of Environmental Health Rules and Regulations administered by the Environmental Health Services Department. Those projects having percolation rates of less than five minutes per inch shall provide a preliminary soils study and site specific documentation that characterizes the quality of upper groundwater in the project vicinity and evaluation of the extent to which, if any, the proposed use of alternative septic systems will adversely impact groundwater quality. If the evaluation indicates that the uppermost groundwater at the proposed site already exceeds groundwater quality objectives of the Regional Water Quality Control Board or would if the alternative septic system is	Consistent with implementation of Mitigation Measures MM 4.10-3 and MM 4.18-2	Impacts to groundwater are evaluated in Section 4.10, *Hydrology and Water Quality*, of this EIR. Impacts to wastewater and water supply are evaluated in Section 4.18, *Utilities and Service Systems,* of this EIR.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
installed, the applicant shall be required to supply sewage collection, treatment and disposal facilities.		
1.10.2 Air Quality		
Policy 18. The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on minimizing air quality degradation in the desert to enable effective military operations and in the valley region to meet attainment goals.	Consistent	Air quality impacts are evaluated in Section 4.3, *Air Quality*, of this EIR.
Policy 19. In considering discretionary projects for which an Environmental Impact Report must be prepared pursuant to the California Environmental Quality Act, the appropriate decision making body, as part of its deliberations, will ensure that: A. All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and B. The benefits of the proposed project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the California Environmental Quality Act.	Consistent with implementation of Mitigation Measures MM 4.3-1 through MM 4.3-4	Air quality impacts are evaluated in Section 4.3, *Air Quality*, of this EIR.
Policy 20. The County shall include fugitive dust control measures as a requirement for discretionary projects and as required by the adopted rules and regulations of the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District on ministerial permits.	Consistent with implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2	Air quality impacts are evaluated in Section 4.3, *Air Quality*, of this EIR. Mitigation Measures MM 4.3-1 and MM 4.3-2 dictate that the project shall continuously comply with applicable rules and regulations set forth by the SJVAPCD and prepare a comprehensive Fugitive Dust Control Plan.
Policy 21. The County shall support air districts' efforts to reduce PM_{10} and $PM_{2.5}$ emissions.	Consistent with implementation of Mitigation Measure MM 4.3-4	Air quality impacts are evaluated in Section 4.3, *Air Quality*, of this EIR.
Implementation Measure F. All discretionary permits shall be referred to the appropriate air district for review and comment.	Consistent	Air quality impacts are evaluated in Section 4.3, *Air Quality*, of this EIR.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Implementation Measure H. Discretionary projects may use one or more of the following to reduce air quality effects: a. Pave dirt roads within the development. b. Pave outside storage areas. c. Provide additional low Volatile Organic Compounds (VOC) producing trees on landscape plans. d. Use of alternative fuel fleet vehicles or hybrid vehicles. e. Use of emission control devices on diesel equipment. f. Develop residential neighborhoods without fireplaces or with the use of Environmental Protection Agency certified, low emission natural gas fireplaces. g. Provide bicycle lockers and shower facilities on site. h. Increasing the amount of landscaping beyond what is required in the Zoning Ordinance (Chapter 19.86). i. The use and development of park and ride facilities in outlaying areas. j. Other strategies that may be recommended by the local Air Pollution Control Districts.	Consistent with implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2	Air quality impacts are evaluated in Section 4.3, *Air Quality*, of this EIR.
1.10.3 Archaeological, Paleontological, Cultural, and Historical Preservation		
Policy 25. The County will promote the preservation of cultural and historic resources which provide ties with the past and constitute a heritage value to residents and visitors.	Consistent with implementation of Mitigation Measures MM 4.5-1 through MM 4.5-4	Cultural resource impacts are evaluated in Section 4.5, *Cultural Resources*, of this EIR. This EIR serves to comply with this policy with mitigation measures to promote the preservation of cultural and historic resources where necessary. Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-4 would ensure the proposed project is consistent with this policy.
Implementation Measure L. The County shall address archaeological and historical resources for discretionary projects in accordance with the California Environmental Quality Act (CEQA).	Consistent with implementation of Mitigation Measures MM 4.5-1 through MM 4.5-4	Cultural resource impacts are evaluated in Section 4.5, *Cultural Resources*, of this EIR. Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-4 would ensure protection of archaeological and historical resources.
1.10.5 Threatened and Endangered Species		
Policy 27. Threatened or endangered plant and wildlife species should be protected in accordance with state and federal laws.	Consistent with implementation of Mitigation Measures MM 4.4-1 through MM 4.4-5	Biological resource impacts are evaluated in Section 4.4, *Biological Resources*, of this EIR.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Policy 28. County should work closely with state and federal agencies to assure that discretionary projects avoid or minimize impacts to fish, wildlife, and botanical resources.	Consistent with implementation of Mitigation Measures MM 4.4-1 through MM 4.4-5	Prior to the issuance of grading or building permits, the project operator shall retain a Lead Biologist(s) who meets the qualifications of an Authorized Biologist as defined by California Department of Fish and Wildlife (CDFW) Service to oversee compliance with protection measures for all listed and other special-status species that may be affected by the construction and operation of the project. The resume and contact information for the Lead Biologist(s) shall be provided in writing to the Planning and Natural Resources Department. Further analysis is provided in Section 4.4, *Biological Resources*, of this EIR
Policy 31. Under the provisions of the California Environmental Quality Act (CEQA), the County, as lead agency, will solicit comments from the California Department of Fish and Game and the U.S. Fish and Wildlife Service when an environmental document (Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report) is prepared.	Consistent with implementation of Mitigation Measures MM 4.4-1 through MM 4.4-5	Refer to 1.10.5, Threatened and Endangered Species, Policy 28 above.
Implementation Measure Q. Discretionary projects shall consider effects to biological resources as required by the California Environmental Quality Act.	Consistent with implementation of Mitigation Measures MM 4.4-1 through MM 4.4-5	Biological resource impacts are evaluated in Section 4.4, *Biological Resources*, of this EIR.
1.10.6 Surface Water and Groundwater		
Policy 34. Ensure that water quality standards are met for existing users and future development.	Consistent with implementation of Mitigation Measures MM 4.18-1, MM 4.18-2, MM 4.10-1 and MM 4.10-3	Hydrology impacts are evaluated in Section 4.10, *Hydrology and Water Quality*, of this EIR. Utilities and service systems impacts are evaluated in Section 4.18, *Utilities and Service Systems,* of this EIR.
Policy 43. Drainage shall conform to the Kern County Development Standards and the Grading Ordinance.	Consistent with implementation of Mitigation Measures MM 4.18-1, MM 4.18-2, MM 4.10-1, MM 4.10-2 and MM 4.10-3	A discussion about drainage is available in Section 4.18 *Utilities and Service Systems,* of this EIR and Section 4.10, *Hydrology and Water Quality*.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Policy 44. Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by the California Environmental Quality Act (CEQA), to prevent the degradation of the watershed to the extent practical.	Consistent with implementation of Mitigation Measures MM 4.18-1, MM 4.18-2, MM 4.10-1, MM 4.10-2 and MM 4.10-3	A discussion drainage is available in Section 4.10, *Hydrology and Water Quality*. Utilities and service systems impacts are evaluated in Section 4.18, *Utilities and Service Systems,* of this EIR.
Implementation Measure W. Applications for General or Specific Plan Amendments will include sufficient data for review to facilitate desirable new development proposals consistent with General Plan policies, using the following criteria and guidelines: i. The provision of adequate water, sewer, and other public services to be used. ii. The provision of adequate on-site nonpublic water supply and sewage disposal if no public systems are available or used.	Consistent with implementation of Mitigation Measures MM 4.18-1 through 4.18-6, MM 4.14-1 and 4.14-2	Utilities and service systems impacts are evaluated in Section 4.18, *Utilities and Service Systems,* of this EIR. Public services impacts are evaluated in Section 4.14, *Public Services,* of this EIR.
1.10.7 Light and Glare		
Policy 47. Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas.	Consistent with implementation of Mitigation Measures MM 4.1-4 and MM 4.1-4	Aesthetic impacts are evaluated in Section 4.1, *Aesthetics*, of this EIR. This EIR serves to comply with this policy and reduce potential impacts through implementation of Mitigation Measures MM 4.1-4 and 4.1-4.
Policy 48. Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.	Consistent with implementation of Mitigation Measures MM 4.1-4 and MM 4.1-4	Refer to 1.10.7, Light and Glare, Policy 47 above. This EIR serves to comply with this policy and reduce potential impacts through implementation of Mitigation Measures MM 4.1-4 and MM 4.1-4.
Implementation Measure AA. The County shall utilize CEQA Guidelines and the provisions of the Zoning Ordinance to minimize the impacts of light and glare on adjacent properties and in rural undeveloped areas.	Consistent with implementation of Mitigation Measures MM 4.1-4 and MM 4.1-4	Aesthetic impacts are evaluated in Section 4.1, *Aesthetics*, of this EIR. This EIR serves to comply with this implementation measure and reduce potential impacts through implementation of Mitigation Measures MM 4.1-4 and 4.1-4.
Chapter 2 Circulation Element		
2.3.3 Highway Plan		
Goal 5. Maintain a minimum Level of Service (LOS) D.	Consistent with implementation of Mitigation Measures MM 4.16-1 through MM 4.16-11	As discussed in Section 4.16, Transportation, of this EIR, the addition of project traffic to existing traffic would cause a deterioration in traffic operations on the existing street system along Porterville Highway (SR 65) between Merle Haggard Drive and Imperial Avenue and at the intersections of Imperial Avenue at SR 65, Lerdo Highway at SR 99 southbound ramps and 7th Standard Road at Coffee Road. The anticipated growth in traffic

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
		volumes along the 7th Standard Road/Merle Haggard Corridor over the next 10 to 20 years is anticipated to result a substantial increase in congestion, with several locations operating below LOS C, with or without project traffic. However, the project applicant would pay its proportionate fair share for local improvements and pay into the RTIF program in accordance with the current fee schedule during the building permit process for those portions of the project located within the RTIF boundary, which applies to Phase 1 only, as Phase 2 is located outside of the RTIF boundary and not required to pay into the program. The project applicant would also coordinate with the County on development and funding of additional regional capacity to relieve congestion along the 7th Standard Road/Merle Haggard Drive corridor, including the extension of Imperial Avenue east of SR 65 and future expansion of the Burbank Street alignment between 7th Standard Road and Lerdo Highway.
Policy 2. The County should monitor development applications as they relate to traffic estimates developed for this plan. Mitigation is required if development causes affected roadways to fall below Level Of Service (LOS) D. However, development proposed as part of a Community Plan or Specific Plan which utilizes Smart Growth Policies that encourage efficient multi-modal movements (see Section 1.10.8) is allowed the flexibility to assess traffic and safety impacts through other means than Level Of Service (LOS). Utilization of the CEQA process would help identify alternatives to or mitigation for such developments. Mitigation could involve amending the Land Use, Open Space and Conservation Element to establish jobs/housing balance if projected trips in any traffic zone exceed trips identified for this Circulation Element. Mitigation could involve exactions to build off-site transportation facilities. These enhancements would reduce traffic congestion to an acceptable level.	Consistent with implementation of Mitigation Measures MM 4.16-1 through MM 4.16-11	As discussed in Section 4.16, Transportation, of this EIR, the addition of project traffic to existing traffic would cause a deterioration in traffic operations on the existing street system along Porterville Highway (SR 65) between Merle Haggard Drive and Imperial Avenue and at the intersections of Imperial Avenue at SR 65, Lerdo Hwy at SR 99 southbound ramps and 7th Standard Road at Coffee Road. The anticipated growth in traffic volumes along the 7th Standard Road/Merle Haggard Corridor over the next 10 to 20 years is anticipated to result a substantial increase in congestion, with several locations operating below LOS C, with or without project traffic. However, the project applicant would pay its proportionate fair share for local improvements and pay into the RTIF program in accordance with the current fee schedule during the building permit process for those portions of the project located within the RTIF boundary, which applies to Phase 1 only, as Phase 2 is located outside of the RTIF boundary and not required to pay into the program. The project applicant would also coordinate with the County on development and funding of additional regional capacity to relieve congestion along the 7th Standard Road/Merle Haggard Drive corridor, including the extension of Imperial Avenue east of SR 65 and future expansion of the Burbank Street alignment between 7th Standard Road and Lerdo Highway.
Policy 4. As a condition of private development approval, developers shall build roads needed to access the existing road network. Developers shall build these roads to County standards unless improvements along State routes are necessary then roads shall be built to Caltrans standards. Developers shall locate these roads (width to be determined by the Circulation Plan) along centerlines shown on the circulation diagram map unless	Consistent with implementation of Mitigation Measures MM 4.16-1 through MM 4.16-11	Transportation is discussed in Section 4.16, Transportation, of this EIR. The project will be required to bond for an improve or construct roads for access to the site per County standards.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
otherwise authorized by an approved Specific Plan Line. Developers may build local roads along lines other than those on the circulation diagram map. Developers would negotiate necessary easements to allow this.		
Implementation Measure A. The Planning Department shall carry out the road network Policies by using the Kern County Land Division Ordinance and Zoning Ordinance, which implements the Kern County Development Standards that includes road standards related to urban and rural planning requirements. These ordinances also regulate access points. Planning Department can help developers and property owners in identifying where planned circulation is to occur.	Consistent with implementation of Mitigation Measures MM 4.16-1 through MM 4.16-11	Transportation is discussed in Section 4.16, *Transportation*, of this EIR. The project will be required to bond for and improve or construct roads for access to the site per County standards and consistent with the Circulation Elements of both the KCGP and MBGP.
2.3.4 Future Growth		
Policy 2. The County should monitor development applications as they relate to traffic estimates developed for this plan. Mitigation is required if development causes affected roadways to fall below Level Of Service (LOS) D. However, development proposed as part of a Community Plan or Specific Plan which utilizes Smart Growth Policies that encourage efficient multi-modal movements (See Section 1.10.8) is allowed the flexibility to assess traffic and safety impacts through other means than Level Of Service (LOS). Utilization of the CEQA process would help identify alternatives to or mitigation for such developments. Mitigation could involve amending the Land Use, Open Space and Conservation Element to establish jobs/housing balance if projected trips in any traffic zone exceed trips identified for this Circulation Element. Mitigation could involve exactions to build off-site transportation facilities. These enhancements would reduce traffic congestion to an acceptable level.	Consistent with implementation of Mitigation Measures MM 4.16-1 through MM 4.16-11	As discussed in Section 4.16, *Transportation*, of this EIR, the addition of project traffic to existing traffic would cause a deterioration in traffic operations on the existing street system along Porterville Highway (SR 65) between Merle Haggard Drive and Imperial Avenue and at the intersections of Imperial Avenue at SR 65, Lerdo Hwy at SR 99 southbound ramps and 7th Standard Road at Coffee Road. The anticipated growth in traffic volumes along the 7th Standard Road/Merle Haggard Corridor over the next 10 to 20 years is anticipated to result a substantial increase in congestion, with several locations operating below LOS C, with or without project traffic. However, the project applicant would pay its proportionate fair share for local improvements and pay into the RTIF program in accordance with the current fee schedule during the building permit process for those portions of the project located within the RTIF boundary, which applies to Phase 1 only, as Phase 2 is located outside of the RTIF boundary and not required to pay into the program. The project applicant would also coordinate with the County on development and funding of additional regional capacity to relieve congestion along the 7th Standard Road/Merle Haggard Drive corridor, including the extension of Imperial Avenue east of SR 65 and future expansion of the Burbank Street alignment between 7th Standard Road and Lerdo Highway.
Policy 4. As a condition of private development approval, developers shall build roads needed to access the existing road network. Developers shall build these roads to County standards unless improvements along State routes are necessary then roads shall be built to Caltrans standards. Developers shall locate these roads (width to be determined by the Circulation Plan) along	Consistent with implementation of Mitigation Measures MM 4.16-1 through MM 4.16-11	Transportation is discussed in Section 4.16, *Transportation*, of this EIR.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
centerlines shown on the circulation diagram map unless otherwise authorized by an approved Specific Plan Line. Developers may build local roads along lines other than those on the circulation diagram map. Developers would negotiate necessary easements to allow this.		
Policy 5. When there is a legal lot of record, improvement of access to County, city or State roads will require funding by sources other than the County. Funding could be by starting a local benefit assessment district or, depending on the size of a project, direct development impact fees.	Consistent with implementation of Mitigation Measures MM 4.16-1 through MM 4.16-11	The project applicant would pay its proportionate fair share for local improvements and pay into the RTIF program in accordance with the current fee schedule during the building permit process for those portions of the project located within the RTIF boundary, which applies to Phase 1 only, as Phase 2 is located outside of the RTIF boundary and not required to pay into the program. The project applicant would also coordinate with the County on development and funding of additional regional capacity to relieve congestion along the 7th Standard Road/Merle Haggard Drive corridor, including the extension of Imperial Avenue east of SR 65 and future expansion of the Burbank Street alignment between 7th Standard Road and Lerdo Highway.
Policy 6. The County may accept a developer's road into the county's maintained road system. This is at Kern County's discretion. Acceptance would occur after the developer follows the above requirements. Roads are included in the County road maintenance system through approval by the Board of Supervisors.	Consistent with implementation of Mitigation Measures MM 4.16-1 through MM 4.16-11	The project applicant would pay its proportionate fair share for local improvements and pay into the RTIF program in accordance with the current fee schedule during the building permit process for those portions of the project located within the RTIF boundary, which applies to Phase 1 only, as Phase 2 is located outside of the RTIF boundary and not required to pay into the program. The project applicant would also coordinate with the County on development and funding of additional regional capacity to relieve congestion along the 7th Standard Road/Merle Haggard Drive corridor, including the extension of Imperial Avenue east of SR 65 and future expansion of the Burbank Street alignment between 7th Standard Road and Lerdo Highway.
Implementation Measure C. Project development shall comply with the requirements of the Kern County Zoning Ordinance, Land Division Ordinance, and Development Standards.	Consistent	The proposed project would be required to comply with requirements outlined in the Kern County Zoning Ordinance, Land Division Ordinance, and Development Standards.
2.5.2 Airport Land Use Compatibility Plan		
Policy 2. To the extent legally allowable, prevent encroachment on public airport and military base operations from incompatible, unmitigated land uses.	Consistent with implementation of Mitigation Measures 4.11-3 and 4.11-4	As identified in the Kern County ALUCP, a portion of the project site is located within the Extended Approach/Departure Zone (B2) and Common Traffic Pattern Zone (C) of the Meadows Field Airport (County of Kern 2012). Pursuant to the Meadows Field Plan, future parcels within Compatibility Zone B-2 will need to dedicate an avigation easement, possibly including height restrictions, and the southeast corner of Phase 1, which includes Compatibility Zone C, will also require an avigation easement with a 35-foot object height restriction (McIntosh 2023).

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
		Therefore, impacts are considered potentially significant. However, Mitigation Measure MM 4.11-3 would require any modification to the Precise Development Plan to include uses specific uses within the B-2 and/or C Zones of the Meadows Field Airport be considered at a noticed public hearing, and MM 4.11-4 would require a report demonstrating compliance with the maximum density of people per acre and open land requirements, per the ALUCP, be prepared and submitted to the County for review.
Implementation Measure A. Review discretionary land use development applications within the airports influence area and the military base operating area as shown in the ALUCP for consistency.	Consistent with implementation of Mitigation Measures 4.11-3 and 4.11-4	As identified in the Kern County ALUCP, a portion of the project site is located within the Extended Approach/Departure Zone (B2) and Common Traffic Pattern Zone (C) of the Meadows Field Airport (County of Kern 2012). Pursuant to the Meadows Field Plan, future parcels within Compatibility Zone B-2 will need to dedicate an avigation easement, possibly including height restrictions, and the southeast corner of Phase 1, which includes Compatibility Zone C, will also require an avigation easement with a 35-foot object height restriction (McIntosh 2023). Therefore, impacts are considered potentially significant. However, Mitigation Measure MM 4.11-3 would require any modification to the Precise Development Plan to include uses specific uses within the B-2 and/or C Zones of the Meadows Field Airport be considered at a noticed public hearing, and MM 4.11-4 would require a report demonstrating compliance with the maximum density of people per acre and open land requirements, per the ALUCP, be prepared and submitted to the County for review.
2.5.4 Transportation of Hazardous Materials		
Goal 1. Reduce risk to public health from transportation of hazardous materials.	Consistent with implementation of Mitigation Measures MM 4.9-1 through MM 4.9-11	Transportation of hazardous materials are evaluated in Section 4.9, *Hazards and Hazardous Materials*, in this EIR.
Policy 1. The commercial transportation of hazardous material, identification and designation of appropriate shipping routes will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.	Consistent with implementation of Mitigation Measures MM 4.9-1 through MM 4.9-11	Transportation of hazardous materials are evaluated in Section 4.9, *Hazards and Hazardous Materials*, in this EIR.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Policy 2. Kern County and affected cities should reduce use of County-maintained roads and city-maintained streets for transportation of hazardous materials.	Consistent with implementation of Mitigation Measures MM 4.9-1 through MM 4.9-11	Transportation of hazardous materials are evaluated in Section 4.9, *Hazards and Hazardous Materials*, in this EIR.
Implementation Measure A. Roads and highways utilized for commercial shipping of hazardous waste destined for disposal will be designated as such pursuant to Vehicle Code Sections 31303 et seq. Permit applications shall identify commercial shipping routes they propose to utilize for particular waste streams.	Consistent with implementation of Mitigation Measures MM 4.9-1 through MM 4.9-11	Transportation of hazardous materials are evaluated in Section 4.9, *Hazards and Hazardous Materials*, in this EIR.
Chapter 3 Noise Element		
Goal 1. Ensure that residents of Kern County are protected from excessive noise and that moderate levels of noise are maintained.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Nearest sensitive receptors are a single-family residence located approximately 0.25 mile west of the project site, south of SR 99, and a single-family residence located approximately 2,100 feet from the project site. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.
Policy 1. Review discretionary industrial, commercial, or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.
Policy 2. Require noise level criteria applied to all categories of land uses to be consistent with the recommendations of the California Division of Occupational Safety and Health (DOSH).	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.
Policy 3. Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.
Policy 4. Utilize good land use planning principles to reduce conflicts related to noise emissions.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Policy 5. Prohibit new noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into the project design. Such mitigation shall be designed to reduce noise to the following levels: a) 65 dB Ldn or less in outdoor activity areas; b) 45 dB Ldn or less within interior living spaces or other noise sensitive interior spaces.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.
Policy 6. Ensure that new development in the vicinity of airports will be compatible with existing and projected airport noise levels as set forth in the ALUCP.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. The project is located within the adopted Kern County ALUCP area B-2 and C of the Meadows Field Airport. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.
Policy 7. Employ the best available methods of noise control.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.
Policy 8. Enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code concerning the construction of new multiple-occupancy dwellings such as hotels, apartments, and condominiums.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.
Chapter 4 Safety Element		
Goal 1. Minimize injuries and loss of life and reduce property damage.	Consistent	Consistent with this goal, the proposed project would be required to comply with adopted safety regulations, such as the Fire Code, the CBC, the IBC, CalOSHA, the NPDES permit, and Implementation Measures A, B, and F of Chapter 4 of the KCGP.
Goal 7. Ensure that adequate emergency services and facilities are available to the residents of Kern County through the coordination of planning and development of emergency facilities and services.	Consistent with implementation of Mitigation Measure MM 4.14-1 through MM 4.14-2	See Section 4.14, *Public Services*,.
Goal 8. Reduce the public's exposure to fire, explosion, blowout, and other hazards associated with the accidental release of crude oil, natural gas, and hydrogen sulfide gas.	Consistent with implementation of Mitigation Measures MM 4.9-1 through 4.9-11	Fire hazard impacts are discussed in Section 4.9, *Hazards and Hazardous Materials*, and Section 4.19, *Wildfire*, of this EIR.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Implementation Measure A. All hazards (geologic, fire, and flood) should be considered whenever a Planning Commission or Board of Supervisor's action could involve the establishment of a land use activity susceptible to such hazards.	Consistent with implementation of Mitigation Measures MM 4.9-1 through 4.9-11and MM 4.7-1 through 4.7-3	Fire hazard impacts are discussed in Section 4.9, *Hazards and Hazardous Materials*, and Section 4.19, *Wildfire*, of this EIR. Geologic hazard impacts are discussed in Section 4.7, *Geology and Soils*, of this EIR. Flood hazard impacts are discussed in Section 4.10, *Hydrology and Water Quality*, of this EIR.
Implementation Measure B. Require detailed site studies for ground shaking characteristics, liquefaction potential, dam failure inundation, flooding potential, and fault rupture potential as background to the design process for critical facilities under County discretionary approval.	Consistent with implementation of Mitigation Measures MM 4.7-1 through 4.7-3	Geologic hazard impacts are discussed in Section 4.7, *Geology and Soils*, of this EIR.
Implementation Measure F. The adopted multi-jurisdictional Kern County, California Multi-Hazard Mitigation Plan, as approved by FEMA, shall be used as a source document for preparation of environmental documents pursuant to CEQA, evaluation of project proposals, formulation of potential mitigation, and identification of specific actions that could, if implemented, mitigate impacts from future disasters and other threats to public safety.	Consistent	The Kern County Multi-Jurisdictional Hazard Mitigation Plan is discussed in Section 4.9, *Hazards and Hazardous Materials*, of this EIR.
4.5 Landslides, Subsidence, Seiche, and Liquefaction		
Policy 3. Reduce potential for exposure of residential, commercial, and industrial development to hazards of landslide, land subsidence, liquefaction, and erosion.	Consistent with implementation of Mitigation Measures MM 4.7-1 through MM 4.7-6	Impacts related to geologic hazards are discussed in Section 4.7, *Geology and Soils*, of this EIR. The proposed project would be designed consistent with the Uniform Building Code and California Building Code and implementation of Mitigation Measures MM 4.7-1 through MM 4.7-6 would reduce potential erosion impacts and ensure the proposed project is consistent with this policy.
Implementation Measure D. Discretionary actions will be required to address and mitigate impacts from inundation, land subsidence, landslides, high groundwater areas, liquefaction and seismic events through the CEQA process.	Consistent with implementation of Mitigation Measures MM 4.7-1 through MM 4.7-6	Impacts related to geologic hazards are discussed in Section 4.7, *Geology and Soils*, of this EIR. The proposed project would be designed consistent with the Uniform Building Code and California Building Code and implementation of Mitigation Measures MM 4.7-1 through MM 4.7-6 would reduce potential geology and soils impacts and ensure the proposed project is consistent with this policy.
4.6 Wildland and Urban Fire		
Policy 1. Require discretionary projects to assess impacts on emergency services and facilities.	Consistent with implementation of Mitigation Measures	Impacts on emergency services and facilities are discussed in Section 4.14, *Public Services*, of this EIR. Implementation of Mitigation Measures MM 4.14-1 and MM 4.14-2 would ensure the proposed project is consistent with this policy.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
	MM 4.14-1 and MM 4.14-2	
Policy 3. The County will encourage the promotion of fire prevention methods to reduce service protection costs and costs to taxpayers.	Consistent with implementation of Mitigation Measures MM 4.9-13	Mitigation Measures MM 4.9-13 would require the project to prepare a Fire Safety Plan.
Policy 4. Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.	Consistent with implementation of Mitigation Measures MM 4.9-13	Site access is discussed in Section 4.9, *Hazards and Hazardous Materials*, of this EIR. Furthermore, Mitigation Measure MM 4.9-13 would require the project to prepare a Fire Safety Plan.
Policy 6. All discretionary projects shall comply with the adopted Fire Code and the requirements of the Fire Department.	Consistent	The proposed project would be required to comply with the adopted Fire Code and the requirement of the Kern County Fire Department.
Metropolitan Bakersfield General Plan		
Chapter II - Land Use Element		
Industrial Development		
Goal 1. Accommodate new development which captures the economic demands generated by the marketplace and establishes Bakersfield's role as the capital of the southern San Joaquin Valley.	Consistent	The project would be consistent, as it entails the development of industrial uses and generation of 5,000 to 6,000 full time job opportunities upon buildout, as well as, $10,000,000 to $12,000,000 in annual property taxes upon buildout.
Goal 3. Accommodate new development which is compatible with and complements existing land uses.	Consistent with implementation of Mitigation Measures MM 4.11-1 through MM 4.11-4	The project proponent has submitted an application for a General Plan Amendment from 8.1 (Intensive Agriculture) to 7.2 (Service Industrial) to make the proposed use consistent with the Kern County General Plan and the Metropolitan Bakersfield General Plan. In addition, the proposed project would be required to comply with Mitigation Measures MM 4.11-1 through MM 4.11-4, which would ensure that the project is consistent with nearby existing land uses.
Goal 4. Accommodate new development which channels land uses in a phased, orderly manner and is coordinated with the provision of infrastructure and public improvements.	Consistent	The proposed project would be developed in an orderly manner and would be developed in two phases: Phase 1 includes seven existing parcels on approximately 534 acres and Phase 2 includes 14 existing parcels on approximately 205 acres.
Goal 7. Establish a built environment which achieves a compatible functional and visual relationship among individual buildings and sites.	Consistent	Aesthetics impacts are discussed in Section 4.1, *Aesthetics*, of this EIR.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Policy 31. Allow for a variety of industrial uses, including land-extensive mineral extraction and processing, heavy manufacturing, light manufacturing, warehousing and distribution, transportation-related, and research and development uses.	Consistent	The project would be consistent, as it entails the development of industrial uses.
Policy 32. Provide for the clustering of new industrial development adjacent to existing industrial uses and along major transportation corridor.	Consistent	The project would be consistent, as it entails the development of an industrial use along SR 99.
Policy 35. Encourage upgrading of visual character of heavy manufacturing industrial areas through the use of landscaping or screening-of visually unattractive buildings and storage areas.	Consistent with implementation of Mitigation Measures MM 4.1-1 through MM 4.1-5	The proposed project is not directly adjacent to any residential land use designations. However, as described in Section 4.1, *Aesthetics*, of this EIR, Mitigation Measure MM 4.1-2 would require that prior to the issuance of building permits, site plans submitted for commercial buildings located within 1,000 feet of the SR 99 corridor shall include rooftop screening features, such as a parapet or other screening material, be installed to create a visual screen for rooftop mechanical equipment. Furthermore, Mitigation Measure MM 4.1-3 would require that prior to the issuance of building permits the applicant would submit a landscape plan, which must include a 20-foot-wide perimeter buffer along any visible boundary from the SR 99 frontage consisting of: live ground cover, shrubs, or grass.
Policy 36. Require that industrial uses provide design features, such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound and vibration.	Consistent with implementation of Mitigation Measures MM 4.1-1 through MM 4.1-5	See Policy 35 above.
Policy 37. Street frontages along all new industrial development shall be landscaped.	Consistent with implementation of Mitigation Measures MM 4.1-1 through MM 4.1-5	See Policy 35 above.
Implementation Measure 3. Specific Plans State law (G.C Sec. 65450) authorizes cities and counties to prepare Specific Plans for the systematic implementation of the general plan for all or part of the area covered by the general plan. Specific Plans are intended to provide more definite specifications of the type of uses to be permitted, development standards (setbacks, heights, landscape, architecture, etc.) and circulation and infrastructure improvements.	Consistent	As discussed in Section 3, *Project Description*, of this EIR, the proposed project would include adoption of the Malibu Vineyards Industrial Parkway Specific Plan which includes the following components: approximately 8,907,446square feet of industrial space, comprised of 24 buildings, developed over two phases, to setback standards, building height standards, and architectural features over an anticipated 25-year buildout period.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Implementation Measure 6. Development Review b) In the county, any development within the following county zone classifications requires approval of a Special Development Standards Plot Plan Review: R-2, R-3, C-O, C-1, C-2, CH, M-1, M-2, and M-3. This review enables the county to formally review projects for compliance with urban development standards and obtain necessary street dedications and improvements. The review is performed at the staff level, therefore public hearings are not held on these projects. Projects within most other zone classifications are not formally reviewed, rather the project is reviewed at the building permit stage. Urban development standards are not imposed. Site zoning that requires a Precise Development Plan or Conditional Use Permit are discretionary projects that must be found consistent with the general plan.	Consistent	The proposed project would be subject to review by the Planning Commission in formal public hearings. The project includes a Precise Development Plan and any modifications or changes will undergo discretionary review per County standards.
Implementation Measure 7. Environmental Review Local guidelines for project processing shall reflect California Environmental Quality Act (CEQA) Guidelines which state that the environmental effects of a project must be taken into account as part of project consideration.	Consistent	This EIR analyzes the proposed project's impacts on the environment pursuant to CEQA Guidelines.
General		
Policy 76. Provide for a mix of land uses which meets the diverse needs of residents; offers a variety of employment opportunities; capitalizes, enhances, and expands upon existing physical and economic assets; and allows for the capture of regional growth.	Consistent	The project would be consistent, as it will include office space and other industrial uses. Furthermore, as discussed in Chapter 3, *Project Description*, the proposed project is expected to generate 5,000 to 6,000 full time job opportunities upon buildout and generate $10,000,000 to $12,000,000 in annual property taxes upon buildout.
Policy 79. Provide for an orderly outward expansion of new "urban" development (any commercial, industrial, and residential development having a density greater than one unit per acre) so that it maintains continuity of existing development, allows for the incremental expansion of infrastructure and public services, minimizes impacts on natural environmental resources, and provides a high-quality environment for living and business.	Consistent	The proposed project would include development of approximately 8,907,446 square-feet of industrial use space, comprised of 24 buildings on 739 acres. The project will improve major infrastructure in the project vicinity to allow for outward expansion and development. These improvements include expansion of utilities, such as sewer, storm drain, electricity via a new substation, cable and fiber optics, and roads.
Policy 95. When planning for new development, coordinate with utility companies to designate future or potential electrical transmission line corridors as needed to serve the metropolitan area.	Consistent	Utilities are discussed in Section 4.18, *Utilities and Service Systems*, of this EIR.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Chapter III - Circulation Element		
General		
Policy 37. Require new development and expansion of existing development to pay for necessary access improvements, such as street extensions, widenings, turn lanes, signals, etc., as identified in the transportation impact report as may be required for a project.	Consistent	The project applicant would pay its proportionate fair share for local improvements and pay into the RTIF program in accordance with the current fee schedule during the building permit process for the project located within the RTIF boundary, which applies to Phase 1 only, as Phase 2 is located outside of the RTIF boundary and not required to pay into the program. The project applicant would also coordinate with the County on development and funding of additional regional capacity to relieve congestion along the 7th Standard Road/Merle Haggard Drive corridor, including the extension of Imperial Avenue east of SR 65 and the future expansion of the Burbank Street alignment.
Policy 39. Require new development and expansion of existing development to pay or participate in its pro rata share of the costs of expansions in area-wide transportation facilities and services which it necessitates.	Consistent	The project applicant would pay its proportionate fair share for local improvements and pay into the RTIF program in accordance with the current fee schedule during the building permit process for the project located within the RTIF boundary, which applies to Phase 1 only, as Phase 2 is located outside of the RTIF boundary and not required to pay into the program. The project applicant would also coordinate with the County on development and funding of additional regional capacity to relieve congestion along the 7th Standard Road/Merle Haggard Drive corridor, including the extension of Imperial Avenue east of SR 65 and the future expansion of the Burbank Street alignment.
Parking		
Policy 3. Ensure that adequate on-site parking supply and parking lot circulation is provided on all site plans in accordance with the adopted parking standards.	Consistent	As discussed in Chapter 3, *Project Description*, the project would provide an estimated 4,796 standard and 3,568 truck parking spaces for Phase 1 and an estimated 2,130 standard and 924 truck parking spaces for Phase 2.
Implementation Measure 17. Maintain city and county street standards to conform with parking requirements set forth in the Circulation Element. Remove parking from existing arterials, and major collectors when traffic studies indicate removal is warranted to improve safety or increase capacity.	Consistent	Transportation is discussed in Section 4.16, *Transportation*, of this EIR. As discussed therein, project design includes sufficient parking areas and would not result in inadequate emergency access.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Implementation Measure 19. Assess potential noise impacts in street design, and to the extent feasible, route streets to minimize impacts.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise is discussed in Section 4.12, *Noise*, of this EIR. Based on the noise level reduction achieved from standard building construction (minimum of 15 dB with windows open), adverse reaction to traffic noise level exposure within the indoor sensitive areas of proposed industrial buildings is not expected. Nonetheless, implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce impacts related to construction noise to a less than significant level.
Implementation Measure 26. Establish guidelines for project design review based on traffic engineering standards (e.g., driveway design, on-site circulation) and the Level of Service Ordinance (see below).	Consistent with implementation of Mitigation Measures MM 4.16-2 through MM 4.16-11	Design hazards and LOS are discussed in Section 4.16, *Transportation*, of this EIR.
Chapter V – Conservation Element		
Soils and Agriculture		
Policy 15. Buffers such as setbacks, berms, greenbelts, and open space areas shall be established to separate farmland from incompatible urban uses.	Consistent with implementation of Mitigation Measure MM 4.2-1	As discussed in Section 4.2, *Agricultural Resources*, Mitigation Measure MM 4.2-1 requires that prior to the issuance of building permits, a site plan shall be submitted to the Kern County Planning and Natural Resources Department showing a minimum 100-foot setback from property zoned A (Exclusive Agriculture) to eliminate interference with agricultural operations.
Policy 18. To reduce the potential for conflicts between agricultural and nonagricultural uses, sensitive subdivision design of lands near or adjacent to agricultural areas shall be conducted including provisions for buffer zones.	Consistent with implementation of Mitigation Measure MM 4.2-1	See Policy 15 above.
Implementation Measure 2. Evaluate discretionary projects for their impact on agricultural resources.	Consistent with implementation of Mitigation Measure MM 4.2-1	Agricultural resources impacts are discussed in Section 4.2, *Agricultural Resources*, of this EIR.
Implementation Measure 5. Encourage the use of Land Conservation Act contracts in areas designated for agricultural land use.	Consistent with implementation of Mitigation Measure MM 4.2-1	As discussed in Section 4.2, *Agricultural Resources*, of this EIR, the project site is not under a Williamson Act Land Use Contract, and therefore would not result in the cancellation of an open space or agricultural contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Water Resources		
Policy 1. Develop and maintain facilities for groundwater recharge in the planning area.	Consistent with implementation of Mitigation Measure MM 4.10-2	As discussed in Section 4.10, *Hydrology and Water Quality*, development of the proposed project would increase impervious surfaces on the site from the development building foundations, parking pavements and pedestrian sidewalks within the complex. The proposed project would include sumps and a storm drain system to manage surface runoff and recharge ground water.
Policy 2. Minimize the loss of water which could otherwise be utilized for groundwater recharge purposes and benefit planning area groundwater aquifers from diversion to locations outside the area.	Consistent with implementation of Mitigation Measures MM 4.10-2 and MM 4.10-3	As discussed in Section 4.10, *Hydrology and Water Quality*, with implementation of Mitigation Measures MM 4.10-2 and MM 4.10-3, project operations would have a less than significant impact on groundwater supplies or recharge.
Policy 6. Protect planning area groundwater resources from further quality degradation.	Consistent with implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2	As discussed in Section 4.10, *Hydrology and Water Quality*, the project proponent/operator would prepare and implement a SWPPP during project construction and decommissioning that would include various BMPs designed to prevent soil erosion and sedimentation from occurring on-site which could result in quality degradation.
Policy 8. Consider each proposal for water resource usage within the context of total planning area needs and priorities--major incremental water transport, groundwater recharge, flood control, recreational needs, riparian habitat preservation and conservation.	Consistent with implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2	Please see section 4.10, *Hydrology and Water Quality*, Section 4.4, *Biological Resources*, and Section 4.18, *Utilities and Service Systems*, for discussions about water transport, groundwater recharge, flood control, recreational needs, riparian habitat preservation, and conservation.
Policy 9. Encourage and implement water conservation measures and programs (I-11).	Consistent with implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2	Water conservation measures and programs are discussed in Section 4.10, *Hydrology and Water Quality*, of this EIR.
Implementation Measure 7. Maintain industrial waste discharge regulation and monitoring programs which protect the planning area groundwater from contaminants.	Consistent with implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2	Hydrology impacts are evaluated in Section 4.10, *Hydrology and Water Quality*, of this EIR. The proposed project would be subject to a General Construction Permit under the National Pollution Discharge Elimination System (NPDES) permit program of the federal Clean Water Act. A Stormwater Pollution Prevention Plan (SWPPP) would be implemented consistent with General Construction Permit requirements, which would address soil disturbances issues. The NPDES permit would require submittal of a Notice of Intent to the Regional Water Quality Control Board prior to commencement of construction activities. Implementation of the SWPPP would begin with the commencement of construction and continue through the completion of the proposed project.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Implementation Measure 10. Support additional water conservation measures and programs of benefit to the planning area.	Consistent with implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2	Water conservation measures and programs are discussed in Section 4.10, *Hydrology and Water Quality*, of this EIR.
Air Quality		
Goal 1. Promote air quality that is compatible with health, well being, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.	Consistent with implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2	Air quality impacts are discussed in Section 4.3, *Air Quality*, of this EIR.
Goal 2. Continue working toward attainment of Federal, State and Local standards as enforced by the San Joaquin Valley Unified Air Pollution Control District.	Consistent with implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2	Air quality impacts are discussed in Section 4.3, *Air Quality*, of this EIR.
Goal 3. Reduce the amount of vehicular emissions in the planning area.	Consistent with implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2	Air quality impacts are discussed in Section 4.3, *Air Quality*, of this EIR.
Policy 3. Require dust abatement measures during significant grading and construction operations.	Consistent with implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2	Air quality impacts are evaluated in Section 4.3, *Air Quality*, of this EIR. Mitigation Measures MM 4.3-1 and MM 4.3-2 dictate that the project shall continuously comply with applicable rules and regulations set forth by the SJVAPCD and prepare a comprehensive Fugitive Dust Control Plan.
Policy 22. Require the provision of secure, convenient bike storage racks at shopping centers, office buildings, and other places of employment in the Bakersfield Metropolitan area.	Consistent	The proposed project includes adoption of a Specific Plan and Precise Development Plan (as well as other related, supporting entitlements described in Chapter 3, *Project Description* of this EIR) to facilitate the future construction and operation of a warehouse/distribution center at the proposed project site. Site plans for individual development projects that would be carried out in the future, if the proposed project is approved, have been developed. Review and approval of these compliance items will be conducted by the Building Department prior to issuance of permits.
Policy 24. Encourage employers to implement programs for staggered work hours, compressed work weeks, or other measures which relieve vehicle congestion during commute periods and reduce total work trips.	Not Applicable	The proposed project includes adoption of a Specific Plan and Precise Development Plan (as well as other related, supporting entitlements described in Chapter 3, *Project Description* of this EIR) to facilitate the future construction and operation of a warehouse/distribution center at the proposed project site. Employers can be encouraged to implement programs such as those described in Policy 24 at the time of application for approval of individual projects carried out under the proposed project.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Implementation Measure 6. Create the private and public infrastructure necessary to support alternative fuel vehicles.	Consistent	The proposed project would provide electric vehicle capable spaces per the California Green Code standards.
Chapter VII – Noise Element		
Noise Issues		
Goal 1. Ensure that residents of the Bakersfield Metropolitan Area are protected from excessive noise and existing moderate levels of noise are maintained.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.
Policy 3. Review discretionary industrial, commercial or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards contained within Table VII-2 in areas containing residential or other noise-sensitive land uses.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts at sensitive receptors to a less than significant level. The proposed project is not adjacent to any noise sensitive receptors.
Policy 5. Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.	Consistent with implementation of Mitigation Measures MM 4.1-1 through MM 4.1-5	As described in Section 4.1, *Aesthetics*, of this EIR, Mitigation Measure MM 4.1-3 would require that prior to the issuance of building permits, the applicant would submit a landscape plan, which must include a 20-foot wide perimeter buffer along any visible boundary from the State Route SR 99 frontage consisting of: live ground cover, shrubs, or grass.
Implementation Measure 2. Review discretionary development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance to the policy framework outlined in this element.	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.
Implementation Measure 4. Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB CNEL and interior noise levels in excess of 45 dB CNEL and so that impacts on noise sensitive uses shall not exceed the performance standards in Table VII-2. At time of any discretionary approval, such as a request for zone change or subdivision, the developer may be required to submit an acoustical report indicating the means by which the developer	Consistent with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-4	Noise impacts, sensitive receptors and County thresholds are evaluated in Section 4.12, *Noise*, of this EIR. Mitigation Measures MM 4.12-1 through MM 4.12-4 would reduce noise related impacts to a less than significant level.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
proposes to comply with the noise standards. The acoustical report shall: a) Be the responsibility of the applicant. b) Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics. c) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions. d) Include estimated noise levels in terms of CNEL and the standards of Table VII-2 (if applicable) for existing and projected future (10-20 years hence) conditions, with a comparison made to the adopted policies of the Noise Element. e) Include recommendations for appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element. f) Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the adopted standards and policies of the Noise Element will not be achieved, a rationale for acceptance of the project must be provided.		
Chapter VIII – Safety/Seismic Element		
Seismic Safety		
Goal 2. Ensure the availability and effective response of emergency services following an earthquake.	Consistent with implementation of Mitigation Measures MM 4.7-1 and MM 4.7-2	Seismic impacts are discussed in Section 4.7, *Geology and Soils*, of this EIR.
Goal 5. Protect essential lifelines and prevent casualties and major social and economic disruption due to liquefaction in an earthquake.	Consistent with implementation of Mitigation Measures MM4.7-1 and MM 4.7-2	Liquefaction impacts are discussed in Section 4.7, *Geology and Soils*, of this EIR.
Goal 7. Protect land uses from the risk of dam failure inundation including the assurances that: the functional capabilities of essential facilities are available in the event of a flood; hazardous materials are not released; effective measures for mitigation of dam failure inundation are incorporated into the design of critical	Consistent with implementation of Mitigation Measures MM 4.9-1 through MM 4.9-15	Dam failure inundation and flooding hazards are discussed in Section 4.10, *Hydrology and Water Quality*, of this EIR. Hazardous materials impacts are discussed in Section 4.9, *Hazards and Hazardous Materials*, of this EIR.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
facilities; and the rapid and orderly evacuation of populations in the inundation area will occur.	and MM 4.10-1 and 4.10-2	
Policy 10. Prohibit development designed for human occupancy within 50 feet of a known active fault and prohibit any building from being placed astride an active fault.	Consistent	The proposed project is not within 50 feet of a known active fault.
Implementation Measure 3. Require structures that are within the plan area and are subject to Building Department review to adhere to the most current seismic standards adopted as part of the Uniform Building Code.	Consistent with implementation of Mitigation Measures MM4.7-1 and MM 4.7-2	Seismic impacts are discussed in Section 4.7, *Geology and Soils*, of this EIR. The proposed project would be required to adhere to the most current seismic standards adopted as part of the Uniform Building Code.
Implementation Measure 18. Develop specific guidelines for the collection of data for determination of liquefaction potential at a site.	Consistent with implementation of Mitigation Measures MM4.7-1 and MM 4.7-2	As discussed in Section 4.7, *Geology and Soils*, of this EIR, liquefaction potential at the site is very low.
Public Safety		
Policy 13. Fugitive dust emissions shall be controlled through applicable requirements (Regulation VIII) set forth by the San Joaquin Valley Unified Air Pollution Control District, including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects resulting from the development of agricultural property.	Consistent with implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2	Air quality impacts are evaluated in Section 4.3, *Air Quality*, of this EIR. Mitigation Measures MM 4.3-1 and MM 4.3-2 dictate that the project shall continuously comply with applicable rules and regulations set forth by the SJVAPCD and prepare a comprehensive Fugitive Dust Control Plan.
Policy 14. Establish buffer zones adjacent to urban development proposals located adjacent to agricultural areas, as recommended by the Kern County Agricultural Commission.	Consistent with implementation of Mitigation Measure MM 4.2-1	As discussed in Section 4.2, *Agricultural Resources*, Mitigation Measure MM 4.2-1 requires that prior to the issuance of building permits, a site plan shall be submitted to the Kern County Planning and Natural Resources Department showing a minimum 100-foot buffer, such as setbacks, roads, berms, greenbelts, canal, and open space areas, be established on project areas adjacent to agricultural fields to eliminate interference with agricultural operations.
Policy 15. Fugitive dust emissions shall be controlled through applicable requirements set forth by the San Joaquin Valley Unified Air Pollution Control District (Regulation VIII), including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects as a result of exposure to Coccidioidomycosis.	Consistent with implementation of Mitigation Measure MM 4.3-1 and MM 4.3-2	Air quality impacts are evaluated in Section 4.3, *Air Quality*, of this EIR. Mitigation Measures MM 4.3-1 and MM 4.3-2 dictate that the project shall continuously comply with applicable rules and regulations set forth by the SJVAPCD and prepare a comprehensive Fugitive Dust Control Plan.

General Plan Goals and Policies	Preliminary Consistency Determination	Project Consistency
Policy 16. All new discretionary development projects shall be subject to environmental and design review on a site-specific, project-by-project basis, including but not limited to, an assessment to determine whether hazardous materials present potential health affects to human health as required by the Department of Environmental Services.	Consistent with implementation of Mitigation Measures MM 4.9-1 through MM 4.9-15	Hazardous materials impacts are discussed in Section 4.9, *Hazards and Hazardous Materials*, of this EIR.

Section 4.12

Noise

4.12.1 Introduction

This section of the EIR describes the affected environment and regulatory setting relating to noise and groundborne vibration for the proposed project. It also describes the impacts associated with noise and groundborne vibration that would result from the implementation of the project, and includes mitigation measures that would reduce these impacts, where applicable. The information and analysis in this section is largely based on the *Environmental Noise and Vibration Assessment* prepared by Bollard Acoustical Consultants, Inc. (BAC) (April 2022) located in Appendix K of this EIR.

Noise Fundamentals

An understanding of the physical characteristics of sound is useful for evaluating environmental noise. The methods and metrics used to quantify human response to noise exposure, relative judgement of loudness, and noise levels of common noise environments are also discussed.

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity and interferes with or disrupts normal activities. The effects of noise on people can be grouped into four general categories:

- Subjective effects (dissatisfaction, annoyance);
- Interference effects (communication and sleep interference, learning);
- Physiological effects (startle response); and,
- Physical effects (hearing loss).

Although exposure to high noise levels has been demonstrated to cause physical (i.e., to the body itself) and physiological (i.e., to body functions) effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. The subjective responses of individuals to similar noise events are diverse and influenced by many factors, including the type of noise, the perceived importance of the noise, its appropriateness to the setting, the duration of the noise, the time of day, the type of activity during which the noise occurs, and individual noise sensitivity.

Interference effects of environmental noise refer to those effects that interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening from sleep and arousal to a lesser state of sleep.

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air, and are sensed by the human ear. Sound is generally characterized by several variables, including frequency

and amplitude. Frequency describes the sound's pitch (tone) and is measured in cycles per second (Hertz [Hz]), while amplitude describes the sound's pressure (loudness). Because the range of sound pressures that occurs in the environment is extremely large, it is convenient to express these pressures on a logarithmic scale that compresses the wide range of pressures into a more useful range of numbers. The standard unit of sound measurement is the decibel (dB). Hz is a measure of how many times each second the crest of a sound pressure wave passes a fixed point. For example, when a drummer beats a drum, the skin of the drum vibrates a given number of times per second. If the drum vibrates 100 times per second, it generates a sound pressure wave that is oscillating at 100 Hz, and this pressure oscillation is perceived by the ear/brain as a tonal pitch of 100 Hz. Sound frequencies between 20 and 20,000 Hz are within the range of sensitivity of the healthy human ear.

Sound levels are expressed by reference to a specified national/international standard. The sound pressure level is used to describe sound pressure (loudness) and is specified at a given distance or specific receptor location. In expressing sound pressure level on a logarithmic scale, sound pressure (dB) is referenced to a value of 20 micropascals (μPa). Sound pressure level depends not only on the power of the source but also on the distance from the source to the receiver and the acoustical characteristics of the sound propagation path (absorption, reflection, etc.).

Outdoor sound levels decrease logarithmically as the distance from the source increases. This decrease is due to wave divergence, atmospheric absorption, and ground attenuation. Sound radiating from a source in a homogeneous and undisturbed manner travels in spherical waves. As the sound waves travel away from the source, the sound energy is dispersed over a greater area, decreasing the sound pressure of the wave. Spherical spreading of the sound wave from a point source reduces the noise level at a rate of 6 dB per doubling of distance.

Atmospheric absorption also influences the sound levels received by an observer. The greater the distance traveled, the greater the influence of the atmosphere and the resultant fluctuations. Atmospheric absorption becomes important at distances greater than 1,000 feet. The degree of absorption varies depending on the frequency of the sound as well as the humidity and temperature of the air. For example, atmospheric absorption is lowest (i.e., sound carries farther) at high humidity and high temperatures, and lower frequencies are less readily absorbed (i.e., sound carries farther) than higher frequencies. Over long distances, lower frequencies become dominant as the higher frequencies are more rapidly attenuated. Turbulence, gradients of wind, and other atmospheric phenomena also play a significant role in determining the degree of attenuation. For example, certain conditions, such as temperature inversions, can channel or focus the sound waves, resulting in higher noise levels than would result from simple spherical spreading.

Sound from a tuning fork contains a single frequency (a pure tone), but most sounds in the environment do not consist of a single frequency. Instead, they are a broad band of many frequencies differing in sound level. Because of the broad range of audible frequencies, methods have been developed to quantify these values into a single number representative of human hearing. The most common method used to quantify environmental sounds consists of evaluating all frequencies of a sound according to a weighting system that is reflective of human hearing characteristics. Human hearing is less sensitive at low frequencies and extremely high frequencies than at the mid-range frequencies. This process is termed "A weighting," and the resulting dB level is termed the "A-weighted" decibel (dBA).

Because A-weighting is designed to emulate the frequency response characteristics of the human ear and reflect the way people perceive sounds, it is widely used in local noise ordinances and state and federal

guidelines, including those of the State of California and Kern County. Unless specifically noted, the use of A-weighting is always assumed with respect to environmental sound and community noise, even if the notation does not include the "A."

In terms of human perception, a sound level of 0 dBA is the threshold of human hearing and is barely audible by a healthy ear under extremely quiet listening conditions. This threshold is the reference level against which the amplitude of other sounds is compared. Normal speech has a sound level of 60 dBA. Sound levels above about 120 dBA begin to be felt inside the human ear as discomfort, progressing to pain at still higher levels. Humans are much better at discerning relative sound levels than absolute sound levels. The minimum change in the sound level of individual events that an average human ear can detect is about 1 to 3 dBA. A 3 to 5 dBA change is readily perceived. An increase (or decrease) in sound level of about 10 dBA is usually perceived by the average person as a doubling (or halving) of the sound's loudness.

Because of the logarithmic nature of the decibel, sound levels cannot be added or subtracted directly. However, some simple rules are useful in dealing with sound levels. First, if a sound's acoustical energy is doubled, the sound level increases by 3 dBA, regardless of the initial sound level (e.g., 60 dBA + 60 dB = 63 dBA; 80 dBA + 80 dBA = 83 dBA). However, an increase of 10 dBA is required to double the perceived loudness of a sound, and a doubling or halving of the acoustical energy (a 3 dBA difference) is at the lower limit of readily perceived change.

Although dBA may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most ambient environmental noise includes a mixture of noise from nearby and distant sources that creates an ebb and flow of sound, including some identifiable sources plus a relatively steady background noise in which no particular source is identifiable. A single descriptor, termed the equivalent sound level (L_{eq}), is used to describe sound that is constant or changing in level. L_{eq} is the energy-mean dBA during a measured time interval. It is the "equivalent" sound level produced by a given constant source equal to the acoustic energy contained in the fluctuating sound level measured during the interval. In addition to the energy-average level, it is often desirable to know the acoustic range of the noise source being measured. This is accomplished through the maximum instantaneous (L_{max}) and minimum instantaneous (L_{min}) noise level indicators that represent the root-mean-square maximum and minimum noise levels measured during the monitoring interval. The L_{min} value obtained for a particular monitoring location is often called the acoustic floor for that location.

To describe the time-varying character of environmental noise, the statistical or percentile noise descriptors L_{10}, L_{50}, and L_{90} may be used, which represent the noise levels equaled or exceeded during 10 percent, 50 percent, and 90 percent of the measured time interval, respectively. Sound levels associated with L_{10} typically describe transient or short-term events, L_{50} represents the median sound level during the measurement interval, and L_{90} levels are typically used to describe background noise conditions.

The Day-Night Average Sound Level (L_{dn} or DNL) represents the average sound level for a 24-hour day and is calculated by adding a 10 dBA penalty to sound levels during the night period (10:00 p.m. to 7:00 a.m.). The L_{dn} is the descriptor of choice and used by nearly all federal, state, and local agencies throughout the United States to define acceptable land use compatibility with respect to noise. Within California, the Community Noise Equivalent Level (CNEL) is sometimes used. CNEL is very similar to L_{dn}, except that an additional 5 dBA penalty is applied to the evening hours (7:00 p.m. to 10:00 p.m.). Because of the time-of-day penalties associated with the L_{dn} and CNEL descriptors, the L_{dn} or CNEL dBA value for a continuously operating sound source during a 24-hour period will be numerically greater than

the dBA value of the 24-hour L_{eq}. Thus, for a continuously operating noise source producing a constant noise level operating for periods of 24 hours or more, the L_{dn} will be 6 dBA higher than the 24-hour L_{eq} value. For convenience, a summary of common noise metrics is provided in **Table 4.12-1**, *Common Noise Metrics,* below. To provide a frame of reference, common sound levels are presented in **Figure 4.12-1**, *Effects of Noise on People*, also below.

Table 4.12-1: Common Noise Metrics

Unit of Measure		Description
dB	Decibel	Decibels, which are units for measuring the volume of sound, are measured on a logarithmic scale, representing points on a sharply rising curve. For example, 10 dB sounds are 10 times more intense than 1 dB sounds, and 20 dB sounds are 100 times more intense. A 10 dB increase in sound level is perceived by the human ear as a doubling of the loudness of the sound.
dBA	A-Weighted Decibel	A sound pressure level that has been weighted to quantitatively reduce the effect of high- and low-frequency noise. It was designed to approximate the response of the human ear to sound.
CNEL	Community Noise Equivalent Level	A metric representing the 24-hour average sound level that includes a 5 dBA penalty during relaxation hours (7:00 p.m. to 10:00 p.m.) and a 10 dBA penalty for sleeping hours (10:00 p.m. to 7:00 a.m.).
L_{dn}	Day-Night Average Noise	The 24-hour average sound level, expressed in a single decibel rating, for the period from midnight to midnight obtained after the addition of a 10 dBA penalty to sound levels for the periods between 10:00 p.m. and 7:00 a.m.
L_{eq}	Equivalent Noise Level	The average acoustic energy content of noise for a stated period of time. The L_{eq} of a time varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. The L_{eq} may also be referred to as the average sound level.
L_{max}	Maximum Noise Level	L_{max} represents the maximum instantaneous noise level experienced during a given period of time. It reflects peak operating conditions and addresses the annoying aspects of intermittent noise.
L_{min}	Minimum Noise Level	L_{min} represents the minimum instantaneous noise level experienced during a given period of time. It reflects baseline operating conditions and is commonly referenced as the noise floor.
L1, L10, L50, L90	Percentile Noise Exceedance Levels	The A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 1 percent, 10 percent, 50 percent, and 90 percent of a stated time period.

Vibration Fundamentals

As described in the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018), groundborne vibration can be a serious concern for nearby neighbors of a transit system route or maintenance facility, causing buildings to shake and rumbling sounds to be heard. In contrast to airborne noise, groundborne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of groundborne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving, and operation of heavy earth-moving equipment.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the

squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The relationship of PPV to RMS velocity is expressed in terms of the "crest factor," defined as the ratio of the PPV amplitude to the RMS amplitude. PPV is typically a factor of 1.7 to 6 times greater than RMS vibration velocity (FTA 2018). The decibel notation acts to compress the range of numbers required to describe vibration. Typically, groundborne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration sensitive equipment.

The effects of groundborne vibration include movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. Annoyance from vibration often occurs when the vibration levels exceed the threshold of perception by only a small margin. A vibration level that causes annoyance will be well below the damage threshold for normal buildings.

In residential areas, the background vibration velocity level is usually around 50 VdB (approximately 0.0013 inches per second [in/sec] PPV). This level is well below the vibration velocity level threshold of perception for humans, which is approximately 65 VdB. A vibration velocity level of 75 VdB is considered to be the approximate dividing line between barely perceptible and distinctly perceptible levels for many people (FTA 2018).

4.12.2 Environmental Setting

Existing Noise Levels

The project site is located in an agricultural environment with scattered rural residential, industrial and agricultural uses. Ambient noise levels in this area are low, especially during the evening and nighttime hours. The project site is bordered by State Route (SR) 99 to the west. Primary noise sources during the day include local passenger and heavy-duty truck traffic along SR 99 and to a lesser extent, agricultural activities.

To determine existing noise levels in the area, BAC conducted long-term (48-hour) ambient noise level surveys at two locations on the project site from August 17, 2019, through August 18, 2019. Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used to complete the noise level measurement surveys. The meters were calibrated immediately before and after use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all specifications of the American National Standards Institute requirements for Type 1 sound level meters (ANSI S1.4) (BAC 2022). **Table 4.12-2,** *Long-Term Noise Level Measurement Results,* summarizes the existing noise level results. **Figure 4.12-2** *Long-Term Noise Level Measurement Locations* (taken from Figure 1 of the *Environmental Noise and Vibration Assessment*), shows the locations of noise measurements. The two noise measurement locations were chosen to provide a representative range of ambient noise levels across the project site, including the noise generation of traffic on SR 99.

Measured noise levels ranged from 48.0 dBA Leq to 71.0 dBA Leq at nighttime. The loudest measurement, 71.0 dBA Leq, was located near site 2 along SR 99.

Table 4.12-2: Long-Term Noise Level Measurement Results – August 17-18, 2019[1]

Site Description[2]	Date	Average Measured Hourly Noise Levels, dBA				
			Daytime[3]		Nighttime[4]	
		L_{dn}	L_{eq}	L_{max}	L_{eq}	L_{max}
Site 1: Eastern boundary of project Phase 1 near Imperial Road, approximately 3,000 feet from SR 99 centerline	8/17/19	59	55	74	52	63
	8/18/19	56	52	72	48	60
Site 2: Northwestern boundary of project Phase 2, approximately 175 feet from SR 99 centerline	8/17/19	77	71	81	71	82
	8/18/19	76	71	80	69	80

[1] Detailed summaries of the noise monitoring results are provided in Appendices D and E.
[2] Long-term ambient noise monitoring locations are identified on Figure 4.12-1.
[3] Daytime hours: 7:00 a.m. to 10:00 p.m.
[4] Nighttime hours: 10:00 p.m. to 7:00 a.m.
Source: Bollard Acoustical Consultants, Inc. (2022)

Figure 4.12-1: Effects of Noise on People

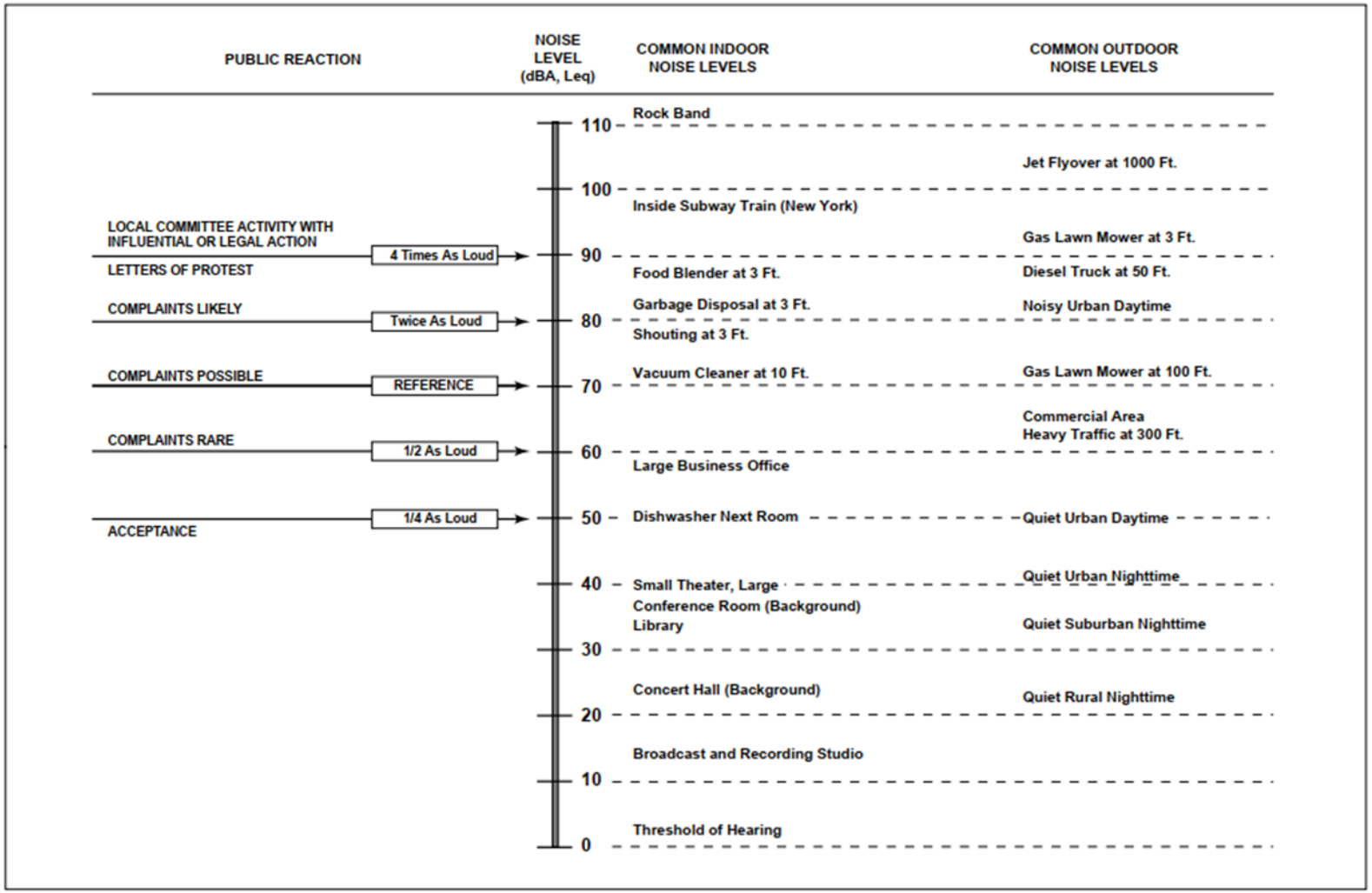
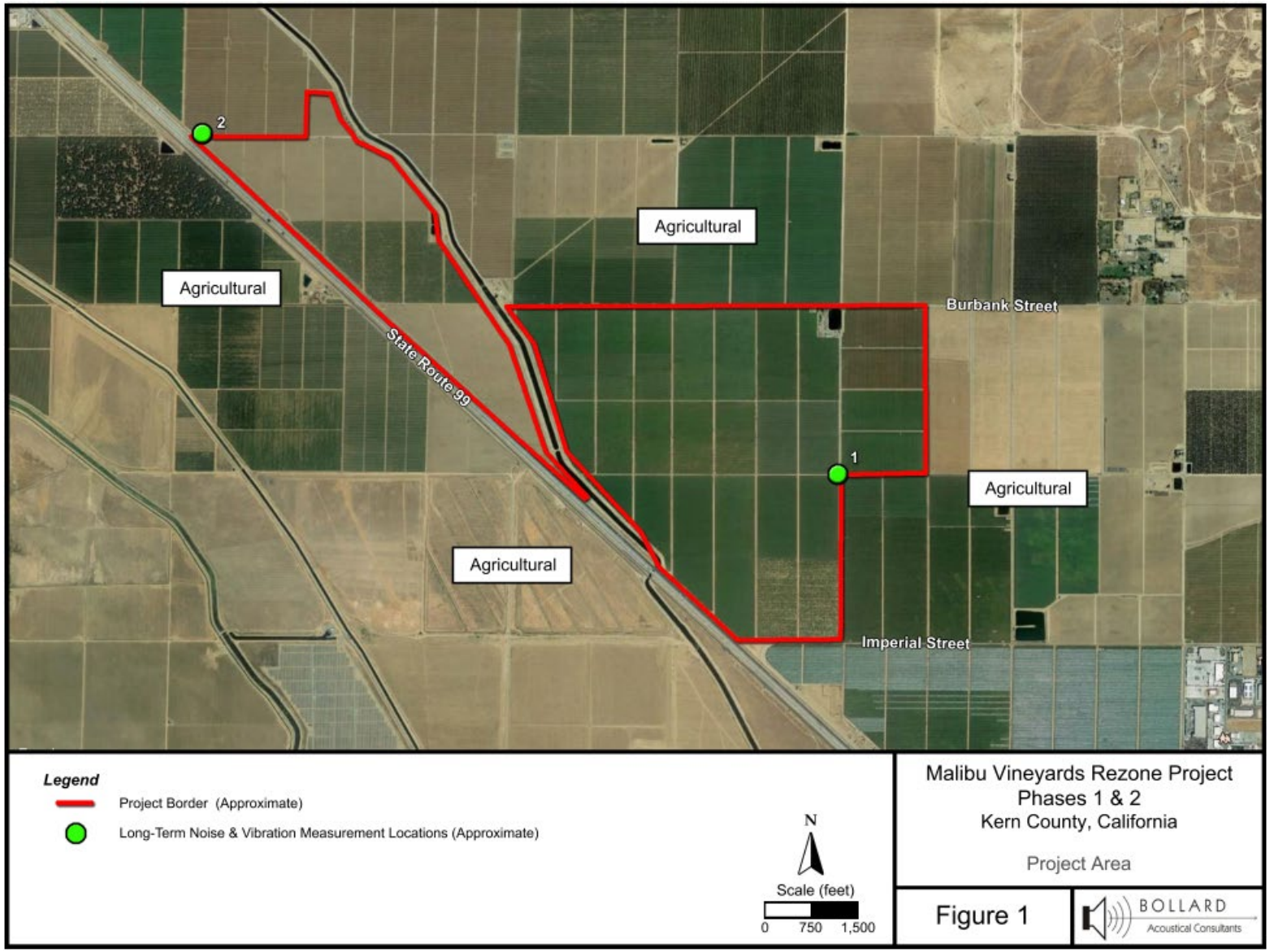


Figure 4.12-2: Long-Term Noise Level Measurement Locations



Existing Vibration Levels

To determine the existing vibration levels in the area, BAC conducted short-term (15-minute) vibration measurements at the two locations identified in **Figure 4.12-2** *Long-Term Noise Level Measurement Locations*. A Larson-Davis Laboratories Model LxT precision integrating sound level meter equipped with a vibration transducer was used to complete the measurements. The results are summarized in **Table 4.12-3**, *Summary of Ambient Vibration Level Survey Results,* below.

Table 4.12-3: Summary of Ambient Vibration Level Survey Results – August 16, 2019

Site Description	Time	Average Measured Vibration Level, PPV (in. sec)[1]
Site 1: Eastern boundary of project Phase 1 near Imperial Road	2:46 p.m.	0.009
Site 2: Northwestern boundary of project Phase 2 near SR 99	3:19 p.m.	<0.001

[1] PPV = Peak Particle Velocity (inches/second)
Source: Bollard Acoustical Consultants, Inc. (2022)

Sensitive Receptors

Land uses deemed sensitive by the State of California include schools, hospitals, rest homes, and long-term care and mental care facilities, which are considered to be more sensitive to ambient noise levels than others. Many jurisdictions also consider residential uses particularly noise-sensitive because families and individuals expect to use time in the home for rest and relaxation, and noise can interfere with those activities. Some jurisdictions may also identify other noise-sensitive uses such as churches, libraries, and parks. Furthermore, sensitive noise receptors may include threatened or endangered biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Land uses that are generally not considered to be noise-sensitive receptors include office, commercial, and retail developments.

The sensitive receptors with the highest potential to be affected by the project include a rural, single-family residence located approximately 350 feet west of the project site, south of SR 99, and a rural, single-family residence located approximately 2,100 feet east of the project site (BAC 2022).

Airports

A portion of the project site is located within the Extended Approach/Departure Zone (B2) and Common Traffic Pattern Zone (C) of the Meadows Field Airport. Zone B2 is categorized as having significant noise and risk impacts, as aircraft are commonly below 800 feet, and Zone C is categorized as limited risk with frequent noise intrusion.

4.12.3 Regulatory Setting

Federal

Noise Control Act of 1972

The Noise Control Act of 1972 (42 USC 4910) establishes a national policy to promote an environment for all Americans to be free from noise that jeopardizes their health and welfare. The Act establishes a means for the coordination of federal research and activities in noise control, authorizes the establishment of federal noise emissions standards for products distributed in commerce, and provides the noise-emission and noise-reduction characteristics of such products to the public.

United States Environmental Protection Agency, Environmental Noise Levels

The United States Environmental Protection Agency (USEPA) provided guidance on environmental noise levels in Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety (USEPA, 1974), commonly referenced as the "Levels Document," that establishes an L_{dn} of 55 dBA, as the requisite level, with an adequate margin of safety, for areas of outdoor uses, including residences and recreation areas. The Levels Document does not constitute USEPA regulations or standards but identifies safe levels of environmental noise exposure without consideration of costs for achieving these levels or other potentially relevant considerations.

Federal Highway Administration Noise Abatement Procedures (23 CFR Part 772)

The purpose of 23 CFR Part 772 is to provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, supply noise abatement criteria, and establish requirements for information to be given to local officials for use in the planning and design of highways. It establishes five categories of noise-sensitive receptors and prescribes the use of the hourly L_{eq} as the criterion metric for evaluating traffic noise impacts.

Department of Housing and Urban Development Environmental Standards

The Department of Housing and Urban Development (HUD) regulations (24 CFR Part 51) set forth the following exterior noise standards for new home construction assisted or supported by HUD:

- 65 dBA Ldn or less – Acceptable
- 65 dBA Ldn to less than 75 dBA Ldn – Normally unacceptable, appropriate sound attenuation measures must be provided
- 75 dBA Ldn or more – Unacceptable

HUD regulations do not contain standards for interior noise levels. Rather, a goal of 45 dBA is set forth, and attenuation requirements are geared to achieve that goal.

Occupational Safety and Health Administration Occupational Noise Exposure

Occupational Safety and Health Administration (OSHA), *Occupational Noise Exposure; Hearing Conservation Amendment* (Federal Register 48 [46], 9738–9785, 1983) stipulates that protection against the effects of noise exposure shall be provided for employees when sound levels exceed 90 dBA over an 8-hour exposure period. Protection shall consist of feasible administrative or engineering controls. If such controls fail to reduce sound levels to within acceptable levels, personal protective equipment shall be provided and used to reduce exposure of the employee. Additionally, a Hearing Conservation Program must be instituted by the employers whenever employee noise exposure equals or exceeds the action level of an 8-hour time-weighted average sound level of 85 dBA. The Hearing Conservation Program requirements consist of periodic area and personal noise monitoring, performance and evaluation of audiograms, provision of hearing protection, annual employee training, and record keeping.

State

The California Department of Health Services studied the correlation of noise levels and their effects on various land uses and established guidelines for evaluating the compatibility of various land uses, for the noise elements of local general plans, as a function of community noise exposure. The guidelines are the basis for most noise element land use compatibility guidelines in California.

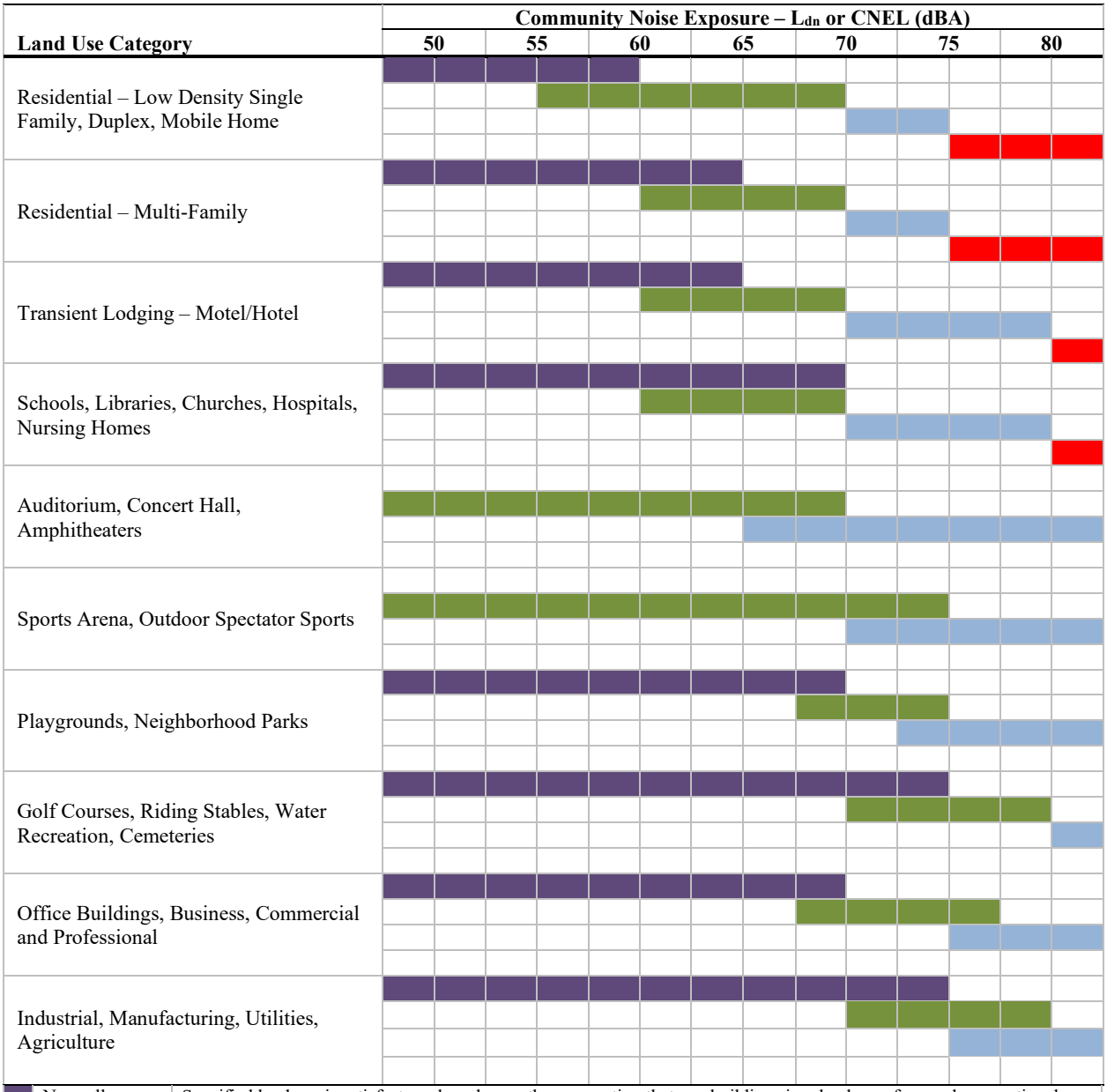
The State requires all municipalities to prepare and adopt a comprehensive long-range general plan. General plans must contain a noise element (California Government Code Section 65302(f) and Section 46050.1 of the Health Safety Code). The requirements for the noise element of the general plan include describing the noise environment quantitatively using a cumulative noise metric such as CNEL or L_{dn}, establishing noise/land use compatibility criteria, and establishing programs for achieving and/or maintaining land use compatibility. Noise elements should address all major noise sources in the community, including mobile and stationary noise sources. In California, most cities and counties have also adopted noise ordinances which serve as enforcement mechanisms for controlling noise.

The land use compatibility for community noise environment chart identifies the normally acceptable range for several different land uses, as shown in **Figure 4.12-3**, *Land Use Compatibility for Community Noise Environment*. Persons in low-density residential settings are most sensitive to noise intrusion, with noise levels of 60 dBA CNEL and below are considered "acceptable." For land uses such as schools, libraries, churches, hospitals, and parks, acceptable noise levels are up to 70 dBA CNEL.

CEQA Guidelines (PRC Section 21000 et seq.) requires the identification of "significant" environmental impacts and their feasible mitigation. Section XIII of Appendix G to the CEQA Guidelines (California Code of Regulations [CCR] Title 14, Appendix G) lists some indicators of potentially significant impacts, which are included below under the heading "Thresholds of Significance."

The State also establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the State pass-by standard is consistent with the federal limit of 80 dBA at 15 meters. The State pass-by standard for light trucks and passenger cars (less than 4.5 tons, gross vehicle rating) is also 80 dBA at 15 meters. These standards are implemented through controls on vehicle manufacturers and by legal sanction of vehicle operators by State and local law enforcement officials.

Figure 4.12-3: Land Use Compatibility for Community Noise Environment



Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements
Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable	New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and needed noise insulation features included in the design.
Clearly Unacceptable	New construction or development generally should not be undertaken.

SOURCE: State of California, Governor's Office of Planning and Research, 2003.

Local

Kern County General Plan

The Noise Element of the Kern County General Plan provides goals, policies, and implementation measures applicable to noise, which, as related to the proposed project, are provided below. The major purpose of the County's Noise Element is to establish reasonable standards for maximum noise levels desired in Kern County, and to develop an implementation program which could effectively mitigate potential noise problems and not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dBA L_{dn}, and interior noise levels in excess of 45 dBA L_{dn}.

Chapter 3. Noise Element

3.2 Noise Sensitive Areas

Goals

Goal 1: Ensure that residents of Kern County are protected from excessive noise and that moderate levels of noise are maintained.

Goal 2: Protect the economic base of Kern County by preventing the encroachment of incompatible land uses near known noise producing roadways, industries, railroads, airports, oil and gas extraction, and other sources.

Policies

Policy 1: Review discretionary industrial, commercial, or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses.

Policy 2: Require noise level criteria applied to all categories of land uses to be consistent with the recommendations of the California Division of Occupational Safety and Health (DOSH).

Policy 3: Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.

Policy 4: Utilize good land use planning principles to reduce conflicts related to noise emissions.

Policy 6: Ensure that new development in the vicinity of airports will be compatible with existing and projected airport noise levels as set forth in the ALUCP.

Policy 7: Employ the best available methods of noise control.

Implementation Measures

Measure A: Utilize zoning regulations to assist in achieving noise-compatible land use patterns.

Measure C: Review discretionary development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance to the policies outlined in this element.

Measure E: Review discretionary development plans to ensure compatibility with adopted Airport Land Use Compatibility Plans.

Measure F: Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB L_{dn} and interior noise levels in excess of 45 dB L_{dn}.

Measure G: At the time of any discretionary approval, such as a request for a General Plan Amendment, zone change or subdivision, the developer may be required to submit an acoustical report indicating the means by which the developer proposes to comply with the noise standards. The acoustical report shall:

a. Be the responsibility of the applicant.

b. Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.

c. Be subject to the review and approval of the Kern County Planning Department and the Environmental Health Services Department. All recommendations therein shall be complied with prior to final approval of the project.

Measure I: Noise analyses shall include recommended mitigation, if required, and shall:

a. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.

b. Include estimated noise levels, in terms of CNEL, for existing and projected future (10 – 20 years hence) conditions, with a comparison made to the adopted policies of the Noise Element.

c. Include recommendations for appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element.

d. Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the adopted standards and policies of the Noise Element will not be achieved, a rationale for acceptance of the project must be provided.

Measure J: Develop implementation procedures to ensure that requirements imposed pursuant to the findings of an acoustical analysis are conducted as part of the project permitting process.

Kern County Municipal Code

The Kern County Municipal Code, Chapter 8.36 (Noise Control), includes acceptable hours of construction, and limitations on construction related noise impacts on adjacent sensitive receptors.

Section 8.36.020 – Prohibited Sounds

It is unlawful for any person to do, or cause to be done, any of the following acts within the unincorporated areas of the county:

H. To create noise from construction, between the hours of nine (9:00) p.m. and six (6:00) a.m. on weekdays and nine (9:00) p.m. and eight (8:00) a.m. on weekends, which is audible to a person with average hearing faculties or capacity at a distance of one hundred fifty (150) feet from the construction site, if the construction site is within one thousand (1,000) feet of an occupied residential dwelling except as provided below:

1. The resource management director or a designated representative may for good cause exempt some construction work for a limited time.
2. Emergency work is exempt from this section.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The Noise element in the Metropolitan Bakersfield General Plan identifies traffic on state highways and major local streets, railroad operations, airport operations, and local industrial activities as the major contributors to the ambient noise level in the plan area. The Noise element of the Metropolitan Bakersfield General Plan also identifies residential areas, schools, convalescent and acute care hospitals, and parks and recreational areas as sensitive land uses.

Applicable goals, policies, and implementation measures from this element of the Metropolitan Bakersfield General Plan, relevant to the proposed project, are summarized below.

Noise Element

Goals

Goal 1: Ensure that residents of the Bakersfield Metropolitan Area are protected from excessive noise and existing moderate levels of noise are maintained.

Goal 2: Protect the citizens of the planning area from the harmful effects of exposure to excessive noise, and protect the economic base of the area by preventing the encroachment of incompatible land uses near known noise-producing roadways, industries, railroads, airports and other sources.

Policies

Policy 1: Identify noise-impact areas exposed to existing or projected noise levels exceeding 65 dB CNEL (exterior) or the performance standards described in Table VII-2. The noise exposure contour maps on file at the City of Bakersfield and County of Kern indicate areas where existing and projected noise exposures exceed 65 dB CNEL (exterior) for the major noise sources identified.

Policy 3: Review discretionary industrial, commercial or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards contained within Table VII-2 in areas containing residential or other noise-sensitive land uses.

Policy 4: Require noise level criteria applied to land uses other than residential or other noise-sensitive uses to be consistent with the recommendations of the California Office of Noise Control

Policy 5: Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.

Policy 7: Establish threshold standards for the determination of the existence of cumulative noise impacts that are significant, and will therefore require mitigation to achieve acceptable noise standards that do not exceed the standards contained in this element.

Implementation Measures

Measure 2: Review discretionary development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance to the policy framework outlined in this element.

Measure 4: Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB CNEL and interior noise levels in excess of 45 dB CNEL and so that impacts on noise sensitive uses shall not exceed the performance standards in Table VII-2 (**Table 4.12-4**, *Noise Level Performance Standards – Exterior Noise Level Standards* herein).

At time of any discretionary approval, such as a request for zone change or subdivision, the developer may be required to submit an acoustical report indicating the means by which the developer proposes to comply with the noise standards. The acoustical report shall:

a) Be the responsibility of the applicant.

b) Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.

c) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.

d) Include estimated noise levels in terms of CNEL and the standards of Table VII-2 (if applicable) for existing and projected future (10-20 years hence) conditions, with a comparison made to the adopted policies of the Noise Element.

e) Include recommendations for appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element.

f) Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the adopted standards and policies of the Noise Element will not be achieved, a rationale for acceptance of the project must be provided.

Measure 5: Develop implementation procedures to ensure that requirements imposed pursuant to the findings of an acoustical analysis are conducted as part of the project permitting process.

Measure 10: The following standards shall be used to determine the existence of significant cumulative noise impacts expected to result from proposed construction or development projects. The projected occurrence of such significant cumulative impacts shall require the adoption of practical and feasible mitigation measures to be identified in an Environmental Impact Report or Negative Declaration, whichever is applicable.

Standards for Cumulative Noise Impacts

A significant increase in ambient noise level affective existing noise-sensitive land uses (receptors), requiring the adoption of practical and feasible mitigation measures, is deemed to occur where a project will cause:

- An increase in ambient noise level of 1dB or more over 65dB CNEL, where the existing ambient level is 65dB CNEL or less;

or

- The ambient noise level is less than 60 dB CNEL and the project increases noise levels by 5 dB or more;
- The ambient noise level is 60 to 65 dB CNEL and the project increases noise levels by 3 dB or more;
- The ambient noise level is greater that 65 dB CNEL and the project increases noise levels by 1.5 dB or more.

Table 4.12-4: Noise Level Performance Standards – Exterior Noise Level Standards

Noise Level Descriptor (dB)	Daytime (7 a.m. – 10 p.m.)	Nighttime (10 p.m. – 7 a.m.)
L_{50}	55	50
L_{25}	60	55
L_{8}	65	60
L_{2}	70	65
L_{max}	75	70
Source: Metropolitan Bakersfield General Plan, Noise Element, Table VII-2		

Bakersfield Municipal Code

The provisions of the Bakersfield Municipal Code which would be most applicable to this project are reproduced below.

Chapter 9.22 Noise

9.22.050 Noise during construction.

A. Except as provided herein or in subsection B, C or D of this section, it is unlawful for any person, firm or corporation to erect, demolish, alter or repair any building, or to grade or excavate land, streets or highways, other than between the hours of six a.m. and nine p.m. on weekdays, and between eight a.m. and nine p.m. on weekends; provided, however, that city crews and those of the city's contractors performing street work between nine p.m. and six a.m. are exempt here from if the city engineer has directed that work be performed between such hours to alleviate potential traffic congestion.

B. Notwithstanding any other provisions of this chapter, if the city manager determines that the public health and safety will not be impaired by the erection, demolition, alteration or repair of any building or the excavating and grading of land, streets or highways between the hours of nine p.m. and six a.m., and if he or she further determines that loss or inconvenience would result to any party in interest by virtue of the requirements provided in subsection A of this section, he or she may grant a permit for such work to be done between the hours of nine p.m. and six a.m., upon application being made at the time the permit for the work is awarded or during the progress of the work. Such permit may be granted for a period not to exceed three days and may be extended by the city manager for a period not to exceed three days.

C. The provisions of this section shall not apply to any work of construction performed one thousand feet or more from the nearest residential dwelling.

D. The provisions of this section shall not apply to performance of emergency work as defined in this chapter.

Groundborne Vibration

There are currently no federal, State, or local regulatory standards for groundborne vibration. However, the California Department of Transportation (Caltrans) has developed vibration criteria based on potential structural damage risks and human annoyance. While the proposed project would not be subject to Caltrans oversight, guidance by the agency nonetheless provides groundborne vibration criteria that are useful in establishing thresholds of impact. Caltrans' threshold criteria pertaining to building damage and human annoyance for continuous and transient events are summarized in **Table 4.12-5**, *Vibration Criteria for Structural Damage*, and **Table 4.12-6**, *Vibration Criteria for Human Annoyance*, respectively below.

Table 4.12-5: Vibration Criteria for Structural Damage

Structure and Condition	Vibration Level (in/sec PPV)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
Newer residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Note: Transient sources create a single isolated vibration event, such as blasting or ball drops. Traffic, train, and most construction vibrations are considered continuous.
in/sec ppv = inches per second peak particle velocity
Source: Caltrans 2020.

Table 4.12-6: Vibration Criteria for Human Annoyance

Human Response	Vibration Level (in/sec PPV)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.1
Annoying to people in buildings	–	0.2
Severe	2.0	0.4

Note: Transient sources create a single isolated vibration event, such as blasting or ball drops. Traffic, train, and most construction vibrations are considered continuous.
in/sec ppv = inches per second peak particle velocity
— = not available.
Source: Caltrans 2020.

As indicated in **Table 4.12-5**, *Vibration Criteria for Structural Damage*, the structural damage threshold, at which there is a risk to normal structures from continuous or frequent vibration sources, is 0.3 in/sec PPV for older residential structures and 0.5 in/sec PPV for newer building construction. The 0.5 in/sec PPV threshold also represents the structural damage threshold applied to older structures for transient vibration sources. With regard to human perception (refer to **Table 4.12-6**, *Vibration Criteria for Human Annoyance*), vibration levels would begin to become distinctly perceptible at levels of 0.04 in/sec PPV for continuous or frequent vibration sources and 0.25 in/sec PPV for transient vibration sources. Continuous vibration levels are considered annoying for people in buildings at levels of 0.2 in/sec PPV.

4.12.4 Impacts and Mitigation Measures

Methodology

Noise impacts associated with the proposed project were assessed in this section based on the *Environmental Noise and Vibration Assessment* prepared for the project (BAC 2022) located in Appendix K of this EIR. To assess the potential for temporary construction and long-term operational noise impacts, noise-sensitive receptors closest to the project site were identified. **Figure 4.12-1**, *Long-Term Noise Level Measurement Locations,* shows the general locations of noise-sensitive receptors in the project area. Potential significant impacts associated with the proposed project were evaluated on a quantitative and qualitative basis through a review of existing literature and available information in comparing the anticipated project effects on noise with existing conditions.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA Guidelines, to determine if a project could potentially have a significant noise-related adverse effect.

A project could have a significant noise-related adverse effect if it would result in:

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance, or applicable standards of other agencies;

b. Generation of excessive groundborne vibration or groundborne noise levels;

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or

d. For a project located within the vicinity of a private airstrip or Kern County Airport Land Use Compatibility Plan, the project would expose people residing or working in the project area to excessive noise levels.

Substantial Temporary or Permanent Ambient Noise Increase in Excess of Standards

Kern County regulates noise levels per the requirements of Chapter 8.36 (Noise Control) of the Kern County Code of Ordinances, which establishes hours of construction and limitations on construction-related noise impacts on adjacent sensitive receptors. Specifically, construction activities that are audible to a person with average hearing ability at a distance of 150 feet from the construction site, or if the construction site is within 1,000 feet of an occupied residential dwelling, are prohibited between the hours of 9:00 p.m. and 6:00 a.m. on weekdays and 9:00 p.m. and 8:00 a.m. on weekends. However, as previously stipulated, the following exceptions are permitted: (1) The resource management director or a designated representative may for good cause exempt some construction work for a limited time, and (2) Emergency work is exempt from this section. Given that a 5 dBA change in the community noise environment is

considered to be readily perceptible by the human ear, construction activities occurring outside of the acceptable construction hours established by the County that increases the ambient noise levels at a noise-sensitive land use by 5 dBA or more is considered to be a violation of the County's construction noise regulations.

For operational noise, the Kern County General Plan Noise Element requires that proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB L_{dn} and interior noise levels in excess of 45 dB L_{dn}. As such, operational noise impacts from stationary equipment are assessed by determining if a project would result in a substantial increase in ambient noise levels that would exceed the applicable County noise standards at the outdoor activity area of the nearest noise sensitive land use.

The Metropolitan Bakersfield General Plan regulates noise levels per the requirements of Chapter 9.22 (Noise) of the Bakersfield Municipal Code, which establishes hours of construction and limitations on construction-related noise impacts on adjacent sensitive receptors. Section 9.22.050 states that it is unlawful for any person, firm or corporation to erect, demolish, alter or repair any building, or to grade or excavate land, streets or highways, other than between the hours of six a.m. and nine p.m. on weekdays, and between eight a.m. and nine p.m. on weekend, unless exempt pursuant to Section 9.22.050 subsections B, C or D.

For operational noise, the MBGP requires proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB CNEL and interior noise levels in excess of 45 dB CNEL and so that impacts on noise sensitive uses shall not exceed the performance standards in **Table 4.12-4,** *Noise Level Performance Standards – Exterior Noise Level Standards*.

Generation of Excessive Groundborne Vibration

For the purposes of assessing potential groundborne vibration impacts associated with the proposed project, Caltrans's vibration criteria for potential structural damage risks and human annoyance were used in this analysis. Accordingly, groundborne vibration levels would be considered significant if predicted short-term construction or long-term operational groundborne vibration levels attributable to the proposed project would exceed the recommended criteria for structural damage or human annoyance (i.e., 0.25 and 0.1 in/sec PPV, respectively) at the nearest off-site existing structure (refer to **Table 4.12-5***, Vibration Criteria for Structural Damage* and **Table 4.12-6**, *Vibration Criteria for Human Annoyance,* above). These thresholds are considered to represent a conservative level at which construction-related activities would result in either structural damage or human annoyance.

Project Impacts

Impact 4.12-1: The Project Would Generate a Substantial Temporary or Permanent Increase in Ambient Noise Levels in the Vicinity of the Project in Excess of Standards Established in a Local General Plan or Noise Ordinance, or Applicable Standards of Other Agencies.

Construction

During project construction, heavy equipment would be used for grading excavation, paving, and building construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how it is operated, and how well it is maintained. Noise exposure at any single point outside the project work area would also vary depending upon the proximity of equipment activities to that point. The nearest identified existing sensitive receptor (residence) is located south of SR 99, approximately 350 feet away from where construction activities would occur on the project site.

Table 4.12-7, *Construction Equipment Reference Noise Levels*, below includes the range of maximum (L_{max}) noise levels for equipment commonly used in general construction projects at full-power operation at a distance of 50 feet. Not all of these construction activities would be required of this project. The data also include predicted maximum equipment noise levels at the nearest sensitive use located approximately 350 feet away, which assumes a standard spherical spreading loss of 6 dB per doubling of distance.

Table 4.12-7: Construction Equipment Reference Noise Levels

Noise Source	Maximum Noise Level at 50 Feet, L_{max} (dB)	Predicted Maximum Noise Level at 350 feet, L_{max} (dB)
Air compressor	80	63
Backhoe	80	63
Ballast equalizer	82	65
Ballast tamper	83	66
Compactor	82	65
Concrete mixer	85	68
Concrete pump	82	65
Concrete vibrator	76	59
Crane, mobile	83	66
Dozer	85	68
Generator	82	65
Grader	85	68
Impact wrench	85	68
Jack hammer	88	71
Loader	80	63
Paver	85	68
Pneumatic tool	85	68
Pump	77	60
Rail saw	90	73

Noise Source	Maximum Noise Level at 50 Feet, L_{max} (dB)	Predicted Maximum Noise Level at 350 feet, L_{max} (dB)
Saw	76	59
Scarifier	83	66
Scraper	85	68
Shovel	82	65
Spike driver	77	60
Tie cutter	84	67
Tie handler	80	63
Tie inserter	85	68
Truck	84	67
Source: FTA 2018.		

Based on the equipment noise levels in **Table 4.12-7**, *Construction Equipment Reference Noise Levels*, above, worst-case on-site project construction equipment maximum noise levels at the nearest existing residence located approximately 350 feet away are expected to range from approximately 59 to 73 dB Lmax. However, as mentioned previously, this residence is exposed to an elevated noise level environment located within close proximity to SR 99. It is expected that SR 99 traffic noise exposure would effectively mask project construction noise levels at this residence. The next-nearest existing residence is located approximately 2,100 feet east from where project construction could occur. When projected to this distance, worst-case project construction equipment noise levels are expected to range from 44 to 58 dB L_{max}. According to the results from the BAC ambient noise level survey, specifically at measurement site 1 which was furthest removed from the SR 99 (a primary noise source in the area), average measured maximum noise levels ranged from 60 to 74 dB L_{max} during the 48-hour monitoring period (**Table 4.12-2**, *Long-Term Noise Level Measurement Results*). After a comparison of the locations of both BAC site 1 and the previously identified existing residence located 2,100 feet from the project area, it is reasonably assumed that measured ambient conditions at site 1 would be generally acoustically equivalent of existing ambient conditions at that residence. Based on this assumption, the predicted construction maximum noise levels of 44 to 58 dB L_{max} at that residence would be below the established ambient noise level environment at that residence.

Based on the analysis provided above, project construction noise levels at the nearest existing sensitive receptors are expected to be below ambient noise conditions at those locations. It is further expected that project construction noise exposure would satisfy applicable Kern County General Plan and Metropolitan Bakersfield General Plan noise level criteria at those locations. The next-nearest residence is located approximately 2,100 feet from where project construction could occur. When projected to this distance, worst-case project construction equipment noise levels are expected to range from 44 to 58 dB and would be below the ambient noise level environment at that location. Further, the predicted noise levels at that location would satisfy applicable Kern County General Plan and Metropolitan Bakersfield General Plan noise level criteria.

Given the distance between the proposed project site and sensitive receptors, the proposed project is not expected to generate construction noise which would exceed a maximum noise level threshold in the vicinity of sensitive receptors, pursuant to local noise thresholds for residences. Construction activities would also be conducted in accordance with applicable local noise standards (i.e., construction activities will not take place before 6:00 a.m. or after 9:00 p.m. on weekdays and 8:00 a.m. or after 9:00 p.m. on

weekends). Construction noise would be short-term, intermittent, and limited to the hours described by the County's Noise Ordinance; therefore, impacts would be less than significant. However, implementation of Mitigation Measures **MM 4.12-1** through **MM 4.12-4** would further reduce impacts from construction of the proposed project.

Operation

The project proposes industrial zoning for the entire project site. Operational noise generated by the proposed project would be consistent with the type of noise commonly associated with industrial uses. Operational noise would be generated from daily activities such as heavy truck circulation, loading dock activities, and mechanical equipment. Noise generated by equipment and processes occurring within buildings tends to be contained by the building envelope. Reference noise levels for the exterior industrial noise sources identified above can vary but are would likely range from 50 to 60 dB L_{eq} and 70 to 75 dB L_{max} at a distance of 100 feet from the noise sources.

The nearest identified existing sensitive receptor has been identified as a residence located on the south side of SR 99, approximately 350 feet from the project boundary. When projected to a distance of 350 feet, noise levels from the exterior industrial noise sources indicated above are calculated to be approximately 50 dB Leq and 65 dB Lmax. However, this residence is located approximately 250 feet from the centerline of SR 99 and is exposed to an extremely high ambient noise environment (traffic). It is expected that the elevated ambient noise level environment associated with SR 99 traffic would effectively mask project industrial noise levels at this residence. The next-nearest existing residence is located approximately 2,100 feet east from the project area. When projected to a distance of 2,100 feet, noise levels from exterior industrial noise sources are expected to be approximately 35 dB Leq and 50 dB Lmax. According to the results from the BAC ambient noise level survey, specifically at measurement site 1 which was furthest removed from the SR 99 (a primary noise source in the area), average measured hourly noise levels ranged from 48 to 55 dB Leq and from 60 to 74 dB Lmax during the 48-hour monitoring period (**Table 4.12-2**, *Long-Term Noise Level Measurement Results*). After a comparison of the locations of both BAC site 1 and the previously identified existing residence located 2,100 feet from the project area, it is reasonably assumed that measured ambient conditions at site 1 would be generally acoustically equivalent of existing ambient conditions at that residence. Based on this assumption, the predicted industrial operations noise levels of 35 dB Leq and 50 dB Lmax at that residence would be well below the established ambient noise level environment at that residence.

Based on the analysis provided above, project industrial operations noise levels at the nearest existing sensitive receptors are expected to be below ambient noise conditions at those locations. It is further expected that project industrial operations noise exposure would satisfy applicable Kern County General Plan and Metropolitan Bakersfield General Plan noise level criteria at those locations. As a result, this impact is considered to be less than significant.

The worst-case traffic noise exposure at the development is expected to occur at the industrial uses proposed nearest to SR 99. The project site map identifies the locations of the industrial uses nearest to SR 99 maintain a separation of approximately 100 feet from the centerline of the roadway.

On-Site Traffic Noise Impacts

The FHWA Model was used with future traffic data to predict SR 99 traffic noise levels at the proposed development. The future Average Daily Traffic (ADT) for SR 99 was conservatively estimated by increasing the existing ADT volume by a factor of 50 percent to account for regional growth in the next 20 years. The existing (2019) ADT volume for the segment of SR 99 adjacent to the proposed development was obtained from published Caltrans traffic volume data. The day/night distribution and truck percentages were derived from BAC file data and published Caltrans data.

Based on the above information, future day-night average (Ldn) traffic noise exposure from the segment of SR 99 adjacent to the proposed development is predicted to be approximately 75 dB Ldn at a distance of 350 feet from the centerline of SR 99. Kern County General Plan Noise Element requires that proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB Ldn and interior noise levels in excess of 45 dB Ldn. The Metropolitan Bakersfield General Plan establishes a normally acceptable exterior noise level limit of 75 dB Ldn for industrial uses. Exterior areas of industrial uses are not inherently considered to be noise sensitive. Rather, the noise-sensitivity at industrial uses typically occurs within indoor offices, break rooms, conference rooms, etc. Based on the noise level reduction achieved from standard building construction (minimum of 15 dB with windows open), adverse reaction to traffic noise level exposure within the indoor sensitive areas of proposed industrial buildings is not expected.

Mitigation Measures

In order to satisfy the applicable Metropolitan Bakersfield General Plan exterior noise level limit at potential outdoor areas of industrial uses, one of the following measures is recommended:

MM 4.12-1: The following measures are required to reduce short- term noise levels associated with project construction:

a. Construction activities at the project site shall comply with the hourly restrictions for noise-generating construction activities, as specified in the Kern County Noise Ordinance (Municipal Ordinance Code 8.36.020). Accordingly, construction activities shall be prohibited between the hours of 9:00 p.m. to 6:00 a.m. on weekdays, and between 9:00 p.m. to 8:00 a.m. on weekends. These hourly limitations shall not apply to activities where hourly limitations would result in increased safety risk to workers or the public.

b. Equipment staging and laydown areas shall be located at the furthest practical distance from nearby residential land uses. To the extent possible, staging and laydown areas should be located at least 500 feet of existing residential dwellings.

c. Where feasible, construction equipment shall be fitted with approved noise- reduction features such as mufflers, baffles and engine shrouds that are no less effective than those originally installed by the manufacturer.

d. Haul trucks shall not be allowed to idle for periods greater than five minutes, except as needed to perform a specified function (e.g., concrete mixing).

e. On-site vehicle speeds shall be limited to 15 miles per hour, or less (except in cases of emergency).

f. Back-up beepers for all construction equipment and vehicles shall be broadband sound alarms or adjusted to the lowest noise levels possible, provided that the Occupational Safety and Health Administration and California Division of Occupational Safety and Health's safety requirements are not violated. On vehicles where back-up beepers are not available, alternative safety measures such as escorts and spotters shall be employed.

MM 4.12-2: Prior to the issuance of grading permits, a "Noise Disturbance Coordinator" shall be established. The project operator shall continuously comply with the following during construction:

a. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise.

b. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved.

MM 4.12-3: Prior to commencement of any on-site construction activities (i.e., fence construction, mobilization of construction equipment, initial grading, etc.), the project proponent/operator shall provide written notice to the public through mailing a notice, which shall include:

a. The mailing notice shall be to all residences within 1,000 feet of the project site, no sooner than 15 days prior to construction activities. The notices shall include: the construction schedule, telephone number and email address where complaints and questions can be registered with the Noise Disturbance Coordinator.

b. A minimum of one sign, legible at a distance of 50 feet, shall be posted at the construction site or adjacent to the nearest public access to the main construction entrance throughout construction activities that shall provide the construction schedule (updated as needed) and a telephone number where noise complaints can be registered with the Noise Disturbance Coordinator.

c. Documentation that the public notice has been sent and the sign has been posted shall be provided to the Kern County Planning and Natural Resources Department.

MM 4.12-4: The following notes shall be placed on all grading and building permits issued for the project site:

"Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.

During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.

All equipment shall be fitted with factory equipped mufflers, and be in good working condition. Construction contracts shall specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state required noise attenuation devices."

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM 4.12-1** through **MM 4.12-4**, impacts would be less than significant.

Impact 4.12-2: The Project Would Expose Persons to or Generate Excessive Ground-Borne Vibration or Ground-Borne Noise Levels.

Construction activities have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. During project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction. The nearest identified existing sensitive receptor is a residential structure located approximately 350 feet from construction activities which would occur within the project site.

Table 4.12-8, *Vibration Source Levels for Construction Equipment and Predicted Levels at 350 Feet*, below includes the range of vibration levels for equipment commonly used in general construction projects at a distance of 25 feet. The table also includes predicted equipment vibration levels at the nearest existing residences to the project site located approximately 350 feet away.

Table 4.12-8: Vibration Source Levels for Construction Equipment and Predicted Levels at 350 Feet

	Maximum PPV (inches/second)[1]	
Equipment	**PPV at 25 feet[2]**	**Approximate PPV at 350 feet**
Hoe Ram	0.089	0.002
Large Bulldozer	0.089	0.002
Caisson drilling	0.089	0.002
Loaded trucks	0.076	0.001
Jackhammer	0.035	<0.001
Small bulldozer	0.003	<0.001

[1] PPV = Peak Particle Velocity
[2] Reference vibration level obtained from the Federal Transit Administration (FTA), Transit Noise and Vibration Impact Assessment Manual (2018).

Vibration levels generated from on-site construction activities at the nearest existing residence located approximately 350 feet away are predicted to be well below the strictest Caltrans thresholds for damage to residential structures of 0.30 in/sec PPV (**Table 4.12-5**, *Vibration Criteria for Structural Damage*). Further, the predicted vibration levels in **Table 4.12-8**, *Vibration Source Levels for Construction Equipment and*

Predicted Levels at 350, are well below the threshold for a severe human response as defined by Caltrans in **Table 4.12-5,** *Vibration Criteria for Structural Damage*. Therefore, on-site construction within the project area is not expected to result in excessive groundborne vibration levels at nearby existing residential uses.

Results from the ambient vibration level monitoring at the project site (**Table 4.12-3,** *Summary of Ambient Vibration Level Survey Results – August 16, 2019*) indicate that measured average vibration levels were below the strictest Caltrans thresholds for damage to structures and thresholds for annoyance. Therefore, it is expected that the project would not result in the exposure of persons to excessive groundborne vibration levels at proposed uses of the project. The project proposes medium industrial (M-2) uses within the development. After a review of types of industrial uses allowed by Kern County within the M-2 zoning, it is expected that the equipment associated with those uses would not produce appreciable vibration. Specifically, vibration levels that would be generated by the types of equipment within the industrial project dissipate very rapidly with distance and are expected to be well below Caltrans thresholds for damage to structures and thresholds for annoyance at the nearest existing residence located approximately 350 feet away.

Because vibration levels due to and upon the proposed project are expected to satisfy the applicable Caltrans groundborne impact vibration criteria at the nearest existing sensitive receptors, this impact would be less than significant.

Mitigation Measures

Mitigation measures are not required.

Level of Significance After Mitigation

Impacts would be less than significant.

Impact 4.12-3: The Project Would Result in a Substantial Permanent Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Project.

As discussed under Impact Discussion 4.12-1 above, the proposed project site would generate operational noise from daily activities such as on-site heavy truck circulation, loading dock activities, and mechanical equipment. Noise generated by equipment and processes occurring within buildings tends to be contained by the building envelope. Reference noise levels for the exterior industrial noise sources identified above can vary but would likely range from 50-60 dB L_{eq} and 70-75 dB L_{max} at a distance of 100 feet from the noise sources. Project industrial operations noise levels at the nearest existing sensitive receptors are expected to be below ambient noise conditions at those locations. Therefore, impacts would be less than significant.

Mitigation Measures

Mitigation measures are not required.

Level of Significance After Mitigation

Impacts would be less than significant.

Impact 4.12-4: The Project Would Expose People Residing or Working in the Project Area to Excessive Noise Levels, for a Project Located Within the Kern County Airport Land Use Compatibility Plan

The project site is located approximately 8,700 feet (1.65 miles) to the northwest of Meadows Field Airport. According to the Noise Contours Map identified in the County of Kern Airport Land Use Compatibility Plan, the project area is geographically located outside of the 60 dB CNEL noise contour. In addition, the results from the ambient noise level survey indicate that measured day-night average (L_{dn}) noise levels at the project site (excluding the data obtained at site 2 which was adjacent to SR 99) were below 60 dB L_{dn} (site 1).

Based on the information above, the results from the BAC conducted noise level survey at the project site, and after consideration of the exterior to interior noise level reduction achieved within standard building construction (at least 25 dB with windows closed and approximately 15 dB with windows open), noise generated from normal aircraft operations at the Meadows Field Airport is not expected to exceed the applicable Metropolitan Bakersfield General Plan exterior noise level criteria at the proposed development, or result in adverse reaction within the interior areas of the proposed industrial buildings.

As described above under Section 4.11, *Land Use and Planning*, a portion of the project site is located within the Extended Approach/Departure Zone (B-2) and Common Traffic Pattern Zone (C) of the Meadows Field Airport (County of Kern 2012). Zone B-2 is categorized as having significant noise and risk impacts, as aircraft are commonly below 800 feet, and Zone C is categorized as limited risk with frequent noise intrusion (County of Kern 2012). Pursuant to the Meadows Field Plan, future parcels within Compatibility Zone B-2 will need to dedicate an avigation easement, possibly including height restrictions, and the southeast corner of Phase 1, which includes Compatibility Zone C, will also require an avigation easement with a 35-foot object height restriction (McIntosh 2023). Therefore, impacts are considered potentially significant. However, Mitigation Measure **MM 4.11-3** and **MM 4.11-4** described in Section 4.11, *Land Use and Planning,* will be implemented. Mitigation Measure **MM 4.11-3** requires any modification to the Precise Development Plan to include uses specific uses within the B-2 and/or C Zones of the Meadows Field Airport be considered at a noticed public hearing. Mitigation **MM 4.11-4** requires a report demonstrating compliance with the maximum density of people per acre and open land requirements, per the ALUCP, be prepared and submitted to the County for review.

Mitigation Measures

Implementation of Mitigation Measures **MM 4.11-3** and **MM 4.11-4**, as described in Section 4.11 *Land Use and Planning.*

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM 4.11-3** and **MM 4.11-4**, impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

As described in Chapter 3, *Project Description*, of this EIR, several projects with industrial, residential and commercial uses are proposed throughout Kern County. A list of projects that compose the cumulative setting is provided Section 3.10 of this EIR.

The proposed project could potentially contribute to significant cumulative noise impacts. Construction activities associated with other projects in proximity to the proposed project site could occur at the same time as the proposed project. Although these projects would also be subject to Kern County noise standards and similar mitigation measures, the noise related impacts from these projects are undetermined. When considered with the other past, present, and reasonably foreseeable future projects, the proposed project could potentially cumulatively considerably contribute to noise impacts in the vicinity of the proposed project.

Mitigation Measures

Implement Mitigation Measures **MM 4.11-3** and **MM 4.11-4**, as described Section 4.11, *Land Use and Planning,* and **MM 4.12-1** through **MM 4.12-4**.

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM 4.11-3** and **MM 4.11-4**, as described Section 4.11, *Land Use and Planning,* and **MM 4.12-1** through **MM 4.12-4**, cumulative impacts would be significant and unavoidable for temporary construction impacts.

Section 4.13

Population and Housing

Section 4.13

Population and Housing

4.13.1 Introduction

This section of the Environmental Impact Report (EIR) examines the impacts of the proposed project on population, housing, and employment in the area. This section also outlines the existing population and housing in the area, as well as projected population growth, future housing demands, and employment growth in Kern County. Information in this section is based on data from the Kern Council of Government (Kern COG), including its Regional Housing Needs Allocation Plan (Kern COG 2014a); the Kern County Housing Element 2015–2023; the U.S. Census Bureau; and California Department of Finance (DOF) demographic information.

4.13.2 Environmental Setting

Existing and Projected Population

Within an area of 8,161 square miles, Kern County is the third largest county in California geographically. According to DOF, the population in Kern County was 908,107 persons as of January 1, 2022, and 907,476 persons as of January 1, 2023. This represents a growth rate of -0.1 % over one year. The City of Bakersfield has a current population of 408,373 as of January 1, 2023. This is a 0.2 % increase from the January 1, 2022 population of 407,491 (DOF 2023a).

The population is expected to increase in Kern County. According to the DOF's projections, the County's population is anticipated to increase to 940,257 persons by the year 2030 and 966,310 persons by 2040 (DOF 2022). In addition, the City of Bakersfield population is 403,455 (US Census 2022). According to Kern COG's 2022 Regional Transportation Plan (RTP), "this past decade Kern County's population increased, on average, by 7,000 per year, over 60% less than the 17,800 people per year from the prior decade 2000 to 2010 including the 3 years of the great recession" (Kern COG 2022b). Growth in the Kern region could vary widely based on a host of factors, including spillover from Southern California, water availability, employment opportunities, housing costs, interest rates, , air quality regulations, and land availability.

Existing and Projected Housing

In 2010, Kern County had a total of 284,367 housing units and in 2022, there were 305,853 units (DOF 2021, 2023). Approximately 93.4% of the 305,853 units were occupied, and 19,950 (or 6.5%) of the units were vacant in 2022 (DOF 2023). According to the U.S. Census Bureau, between 2017 and 2021, 58.3% of the housing units were owner occupied (U.S. Census Bureau 2021). Housing units and occupancy/vacancy rate trends for 2020 and 2022 are reflected below in **Table 4.13-1**, *Kern County Housing Trends*.

Table 4.13-1: Kern County Housing Trends

Area	Unit Count			Occupancy/Vacancy Rate		
	2020	2022	Percent Change	Occupied/ Vacancy 2020	Occupied/ Vacancy 2022	Percent Change
Incorporated	188,710	193,032	2.29	180,479/4.4%	184,509/4.4%	2.23/0.0
Unincorporated	112,299	112,821	0.46	101,019/10.0%	101,206/10.3%	0.19/3.0
TOTAL	**301,009**	**305,853**	**1.61**	**281,498/6.5%**	**285,715/6.6%**	**1.5/1.5**
Source: DOF 2022						

Existing and projected housing in the region and vicinity (including incorporated cities), as reported by the Kern County Regional Transportation Plan/Sustainable Community Strategy are presented in **Table 4.13-2**, Estimated and Projected Trends within Kern County.

Table 4.13-2: Estimated and Projected Housing Trends within Incorporated and Unincorporated Regional Statistical Areas

Area	2010	2020	Percent Change 2010-2020
Greater Arvin Area	4,228	4,753	12.4
Metro-Bakersfield	176,600	187,362	6.1
Delano	10,260	11,113	8.3
McFarland	2,599	3,345	28.7
Maricopa	414	372	-10.1
Shafter	4,230	5,204	49.7
Taft	2,254	2,379	5.3
Greater Tehachapi Area	11,614	15,672	40.0
Greater Wasco Area	3,121	3,526	12.9
Unincorporated	96,358	101,019	4.8
TOTAL	**311,678**	**334,745**	**7.4**
Source: Kern COG 2022			

Table 4.13-3: Estimated and Projected Housing Unit Trends within Incorporated Cities

	Housing Units			Households		
Area	2013	2023	% Change 2013-2023	2013	2023	% Change 2013-2023
City of Arvin	4,568	6,000	31.32%	4,315	5,700	32.1%
City of Bakersfield	123,066	140,500	14.17%	113,287	130,200	14.9%
City of Delano	10,831	12,500	15.41%	10,373	12,000	15.7%
McFarland	2,755	3,100	12.52%	2,669	3,000	12.4%
City of Shafter	4,612	7,200	56.11%	4,314	6,800	57.6%
City of Taft	2,522	2,800	11.02%	2,251	2,500	11.1%
City of Maricopa	464	500	7.76%	410	410	0.0%
City of Wasco	5,649	7,400	31.00%	5,293	7,000	32.3%
TOTAL	**154,468**	**180,000**	**16.53%**	**142,912**	**167,610**	**17.3%**
Source: Kern COG 2014						

Existing and Projected Employment

As of February 2024, Kern County had a labor force of 400,800 persons (California Employment Development Department [EDD] 2024a). An estimated 41,000 people (approximately 10.2 %) of the labor force were unemployed. As of February 2024, Kern County's current unemployment rate is higher than California's rate (5.6 %) and the national rate (4.2 %).

The County's predominant industries for employment are government, trade, transportation, utilities, agriculture, educational, and health services. The government industry accounts for approximately 18.3% (73,346 jobs) of Kern County's employment (EDD 2024a).

According to the California Employment Development Department, Kern County consistently ranks among the top five most-productive agricultural counties in the United States and is the nation's third largest petroleum producing county. Due to its unique geographic location, Kern has also become the distribution center for some of the world's largest companies, with freight cargo going to and from the Ports of Los Angeles and Long Beach.

Between 2010 and 2022, Kern County's civilian labor force grew by 5.2% (from 372,200 to 391,554, respectively). The employed labor force grew by 16.1% between 2010 and 2022 (from 312,600 to 362,929, respectively) (California Employment Development Department, 2021). The Kern Economic Development Corporation (KEDC) projects the fastest growing occupations within Kern County between 2018 and 2028 to be within the Education, Healthcare & Social Assistance industry and Transportation, Warehousing & Utilities industry (KEDC 2022).

In 2022, the annual average number of individuals participating in the Kern County labor force was 391,700; among these individuals, 364,600 were employed, leaving 27,100 actively looking for work. The KEDC 2022 Market Overview projected that industry employment in Kern County would to reach 382,200

by 2028, an increase of 9.4% over the 10-year period. The unemployment rate in Kern County remains high at 10.2%.

According to the Kern COG Regional Housing Data Report, there were 1.10 jobs per housing unit for incorporated areas of Kern County in 2010. That ratio increased to 1.18 in 2013, but was projected to decrease to 1.03 by 2023. Similarly, the ratio of jobs to housing units in unincorporated areas of Kern County was expected to decrease from 1.13 (2013) to 0.83 (2023) (Kern COG 2014).

4.13.3 Regulatory Setting

Federal

There are no applicable federal regulations for this issue area.

State

California State law requires each city and county to adopt a general plan as a blueprint for future growth containing at least seven mandatory elements, including housing. The plan must identify housing needs for all economic segments and provide opportunities for housing development to meet those needs. The housing element unlike other general plan elements, is required to be updated every five to six years, and is subject to detailed statutory requirements and mandatory review by a State agency, the California Department of Housing and Community Development (HCD 2023). Among other things, the housing element must incorporate policies and identify potential sites that would accommodate the city's or county's share of their regional housing needs. Before adopting an update to its housing element, the jurisdiction must submit the draft to HCD for review. HCD will advise the local jurisdiction whether its housing element complies with the provisions of California Housing Element Law.

The councils of governments are required to assign regional housing shares to the cities and counties within their region on a similar five-year schedule. At the beginning of each cycle, HCD provides population projections to the councils of governments, who then allocate shares to their cities and counties. The shares of the regional need are allocated before the end of the cycle so that the cities and counties can amend their housing elements by the deadline.

At the State level, HCD estimates the relative share of California's projected population growth that would occur in each county in the state based on DOF population projections and historic growth trends. Where there is a regional council of governments (COG), as in Kern County, HCD provides information regarding the regional housing need to the regional council. Locally, Kern COG then assigns a share of the regional housing need to each of its cities and the county. The process of assigning shares provides cities and counties the opportunity to comment on the proposed allocations. HCD oversees the process to ensure that the council of governments distributes its share of the State's projected housing need.

Regional Housing Need Allocation Process

Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element

of the general plan. As part of this process, the California Department of HCD identifies state-wide housing needs and assigns the jurisdiction a share in a manner that is consistent with the development pattern included in the Sustainable Communities Strategy (SCS) of the 2014 RTP that was adopted in June 2014. This process was revised in 2008 with the approval of Senate Bill (SB) 375, which amended the RHNA schedule and methodology requiring due dates for local governments to update their housing elements no later than 18 months from the date that Kern COG adopted the RTP. (California Government Code Section 65584 et seq.). The RHNA for January 1, 2013 through December 31, 2023, was adopted June 19, 2014, as Appendix H of the 2014 Regional Transportation Plan.

Senate Bill 375 Sustainable Communities Strategy

Senate Bill (SB) 375 (Chapter 728, Statues of 2008) directs the California Air Resources Board to set regional targets for the reduction of greenhouse gas (GHG) emissions in coordination with California's Assembly Bill (AB) 32 Global Warming Solutions Act of 2006. SB 375 is designed to enhance existing regional planning efforts by coordinating regional transportation planning together with the RHNA in an effort to reduce GHG emissions from cars and light-duty trucks through the provision of incentivized land use strategies by willing local governments and development applicants. Under the SB 375 process, cities and counties maintain their existing authority over local planning and land use decisions.

Under SB 375, GHG reduction is addressed through the reduction of vehicle miles traveled by passenger vehicles and light-duty trucks through land use strategies and improved transportation opportunities implemented by local governments. This is done by (1) connecting regional land use planning to regional transportation planning, (2) coordinating regional housing needs, (3) providing incentives for local governments to implement regional plans through funding opportunities, and (4) providing incentives to developers whose proposals are consistent with regional plans in order to receive streamlined California Environmental Quality Act (CEQA) processing.

SB 375 is implemented through the development of a Sustainable Communities Strategy (SCS), which undertakes a planning program that sets forth a forecasted development pattern and GHG reduction policies and programs designed to reduce air emissions from passenger vehicles and light-duty trucks to help meet GHG reduction targets. This SCS is a chapter of the 2014 RTP, which was approved on June 19, 2014, by the Kern COG Board functioning as the Transportation Planning Policy Committee.

The proposed SCS document includes a Map of Forecasted Development Patterns—Kern Region 2035, which conceptually depicts in a generalized manner future development patterns consistent with the cities' and county general plans.

Table 4-8, Proposed Greenhouse Gas Emissions and Vehicle Trips Reduction Strategies, of the 2014 RTP (Kern COG, 2014a), presents a range of transit, transportation demand management road projects, pricing, and land use strategies that Kern COG, transit agencies, and local governments can pursue in conformance with the SCS. A land use strategy of particular importance to be implemented by local governments is to "rebalance housing closer to employment/shopping areas." This strategy is specifically acknowledged for use in outlying communities near jobs.

As part of the RHNA allocation process, Kern COG must identify areas within the region sufficient to house an 11-year projection of the regional housing need. Additionally, the RHNA must allocate housing units

within the region consistent with the generalized forecasted development pattern included within the SCS. The SCS forecasted development pattern is based on city and county general plans. The goal of this coordination between the RHNA, SCS, and RTP processes is to provide enhanced housing and transportation choices and a higher quality of life, and to promote a vibrant economy.

Local

Kern County General Plan (KCGP)

A portion of the proposed project site is located in the unincorporated Kern County and is subject to the goals and policies set forth in the *Kern County General Plan* (KCGP). The *Kern County General Plan* is a policy document with planned land use maps and related information designed to provide long-range guidance to County officials making decisions affecting development and the resources of the unincorporated Kern County, excluding the Metropolitan Bakersfield planning area. The KCGP helps to ensure that day-to-day decisions conform to long range policies designed to protect and further the public interest related to the County's growth and development. The KCGP includes a Land Use, Open Space, and Conservation Element, as well as a Housing Element (among other mandated and voluntary elements), which most closely deals with population growth and the provision of housing.

Below are the applicable policies, goals, and implementation measures for public services found in the KCGP. The KCGP contains policies, goals, and implementation measures that are more general in nature and not specific to development such as the proposed project. Therefore, they are not listed below. However, as stated in Chapter 2, *Introduction,* of this EIR, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

1.6 Residential

Goals

Goal 2: Ensure the provision of safe and amenable living environments and the promotion of efficient and economical use of land.

Goal 3: Discourage scattered urban density development within Kern County that is not supported by adequate infrastructure.

Goal 7: Minimize land use conflicts between residential and resource, commercial, or industrial land uses.

Policies

Policy 5: Discourage premature urban encroachment into areas of intense agricultural areas.

Policy 9: Development in areas without adequate infrastructure or development that places a burden on public services (i.e., fire, sheriff, parks, and libraries) shall be discouraged.

Policy 11: Provide for an orderly outward expansion of new urban development so that it maintains continuity of existing development, allows for the incremental expansion of infrastructure and public service, minimizes impacts in natural environmental resources, and provides high quality environment for residents and businesses.

Implementation Measures

Measure A: Review existing development ordinances and, if necessary, adopt additional standards to ensure that the design and siting of new residential development is compatible with adjacent land uses.

Measure D: All General Plan Amendments, zone changes, conditional use permits, discretionary residential developments of five or more dwelling units, and variations from height limits established by zoning for properties which are located in the Airport Influence Areas or near a military airport shall be reviewed by the Planning Department for compatibility with the Kern County Airport Land Use Compatibility Plan.

Measure G: Discretionary project applicants shall provide documentation of adequate public infrastructure and services which include, but are not limited to:

a. Fire protection.
b. Police protection.
c. Sewage disposal.
d. Water service including quality and quantity.
e. Documentation that water conservation measures have been considered.

1.8 Industrial

Goals

Goal 3: Ensure compatibility with land use designations such as residential, commercial or other land uses that may be affected by such activities.

Policies

Policy 3: The land areas best suited for industrial activity by virtue of their location and other criteria will be protected from residential and other incompatible development.

Policy 8: The County shall give priority to proposed industrial developments where:

i. Specific uses are proposed in conjunction with submittal of a concurrent precise development plan; and
ii. Where multiple phases, tenants, or lots are proposed through the adoption of a master precise development plan in conjunction with a General Plan Amendment.

1.10 General Provisions

Goal

Goal 1: Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving valuable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

Policies

Policy 6: The County shall ensure the fair treatment of people of all races, cultures, incomes and age groups with respect to the development, adoption, implementation and enforcement of land use and environmental programs.

Policy 7: In administering land use and environmental programs, the County shall not deny any individual or group the enjoyment of the use of land due to race, sex, color, religion, ethnicity, national origin, ancestry, lawful occupation or age.

Policy 8: The County shall ensure that new industrial uses and activities are sited to avoid or minimize significant hazards to human health and safety in a manner that avoids over concentrating such uses in proximity to schools and residents.

Implementation Measure

Measure A: The Kern Council of Governments (COG) will monitor population growth and its subsequent development effects to identify the distribution of population increases and the capabilities of governmental and public agencies to provide new development with adequate services and facilities in a fiscally acceptable manner.

Section 1.10.8 Smart Growth

Policies

Policy 49: Discretionary development projects should be encouraged to incorporate innovative or "smart growth" land use planning techniques as design features, as follows:

i. Higher Density development, where compatible, to maximize the efficient use of land.

ii. Mixed use developments that promote reduced vehicle trips by having residential, commercial, and public uses proximate to each other.

iii. Variety of housing types, including those using energy efficient design, and densities to address Kern County's housing needs.

iv. Master planned communities that feature interconnected roads, transit stops, sidewalks, landscaping, and trails to encourage efficient vehicle and pedestrian movement.

v. Compact development that conserves open space, agricultural land, flood prone areas, creeks, hillsides, ridge tops, wetlands, and other natural features.

vi. Adequate infrastructure (i.e. roads, sewer, water, parks, etc.) is provided as a condition of development approval by the project proponent.

vii. Aesthetically pleasing and unifying design features that promote a visually pleasing environment.

Section 1.10.9 Economic Development

Policies

Policy 50: Employ land use policies that protect the county's businesses from physical degradation and ensure orderly growth, thereby sustaining opportunities for current and future generations to enjoy economic vitality.

Policy 56: Provides for mixed land uses that offer a variety of employment opportunities and enhance the county's economic assets to allow the capture of regional growth.

Implementation Measures

Measure HH: Develop Specific Plans for communities throughout the County which provide for a mix of land uses to promote employment opportunities and housing, while maintaining a good quality of life.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The *Metropolitan Bakersfield General Plan* is a policy document designed to give long range guidance to those making decisions affecting the future character of the Metropolitan Bakersfield planning area. It represents the official statement of the community's physical development as well as its economic, social and environmental goals. The general plan also acts to clarify and articulate the relationship and intentions of local governments to the rights and expectations of the general public, property owners, and prospective investors. Through the plan, the local jurisdiction can inform these groups of its goals, policies and development standards, communicating what must be done to meet the objectives of the general plan.

A portion of the proposed project site is located within the Metropolitan Bakersfield area. Below are the applicable policies and goals for industrial uses found in the *Metropolitan Bakersfield General Plan*. The *Metropolitan Bakersfield General Plan* contains policies and goals that are more general in nature and not specific to development, such as the proposed project. Therefore, they are not listed below. However, as stated in Chapter 2, *Introduction,* of this EIR, all policies in the *Metropolitan Bakersfield General Plan* are incorporated by reference.

Chapter 2. Land Use Element

Industrial Development

Policies

Policy 31: Allow for a variety of industrial uses, including land-extensive mineral extraction and processing, heavy manufacturing, light manufacturing, warehousing and distribution, transportation-related, research and development.

Policy 34: Provide for the clustering of new industrial development adjacent to existing industrial uses and along major transportation corridors.

Policy 35: Encourage upgrading of visual character of heavy manufacturing industrial areas through the use of landscaping or screening-of visually unattractive buildings and storage areas.

Policy 36: Require that industrial uses provide design features, such as screen walls, landscaping and height, set back and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise sound and vibration.

Policy 38: Minimize impacts of industrial traffic on adjacent residential parcels through the use of site plan review and improvement standards.

Goals

Goal 1: Accommodate new development which captures the economic demands generated by the marketplace and establishes Bakersfield's role as the capital of the southern San Joaquin Valley.

Goal 3: Accommodate new development which is compatible with and complements existing land uses.

Goal 4: Accommodate new development which channels land uses in a phased, orderly manner and is coordinated with the provision of infrastructure and public improvements

Goal 7: Establish a build environment which achieves a compatible functional and visual relationship among individual buildings and sites.

County of Kern Housing Element 2015–2023, Adopted April 26, 2016

The KCGP Housing Element represents Kern County's long-term commitment to the development and improvement of housing. The housing element is one of the seven mandated elements of the local general plan. Housing element law, enacted in 1969, mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law acknowledges that, in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for, and do not unduly

constrain, housing development. As a result, housing policy in the State rests largely upon the effective implementation of local general plans and, in particular, local housing elements. Housing element law also requires the HCD to review local housing elements for compliance with State law and to report its written findings to the local government. State law required the Kern County Housing Element to be updated and was adopted by the Kern County Board of Supervisors on April 26, 2016, and approved by the State on June 3, 2016.

As stated previously, to receive regional housing funds, each city and county must update its general plan housing element on a regular basis (generally, every five or eight years). The 6th Cycle Kern County Housing Element (2024 - 2031) is currently in public review. The housing element must incorporate policies and identify potential sites that would accommodate the city's or county's share of the regional housing needs. Because the proposed project would not include housing, the goals and polices of the Housing Element largely do not apply.

Kern Council of Governments

Kern COG is an association of city and county governments created to address regional transportation issues while protecting the integrity and autonomy of each jurisdiction. Its member agencies include Kern County and the 11 incorporated cities within Kern County.

Under California Housing Element Law, Kern COG is the regional council of governments responsible for allocating the regional housing need to the County. Kern COG must identify areas within the region sufficient to house an 11-year projection of the Regional Housing Need Allocation (RHNA). The RHNA must allocate housing units within the region consistent with the development pattern included in the Sustainable Communities Strategy (SCS) and the Regional Transportation Plan (RTP). Pursuant to Government Code, Section 95584, the RHNA is required by State law and is based on countywide housing projections developed by the HCD. The sixth cycle regional housing needs assessment determination projection period is June 30, 2023, through December 31, 2031 (Kern COG 2022).

Future housing needs refer to the projected amount of housing a community is required to plan for during a specified planning period. HCD provides each regional council of governments its share of the statewide housing need. In turn, all councils of governments are required by state law to determine the portion allocated to each jurisdiction within the region. This allocation process is known as the RHAP in the Kern COG region.

The RHAP determines housing needs with a special emphasis on ensuring adequate housing for persons in the very low, low, and moderate income ranges. This assessment allows communities to anticipate growth so that they can grow in a way that enhances quality of life; improves access to jobs, transportation, and housing; and does not adversely affect the environment. Kern COG has determined the total number of units needed in the unincorporated areas of the County in 2031 is 9,243. The production goal for the unincorporated areas, which is where the proposed project site is located, is identified in **Table 4.13-4**, *2023-2031 Draft RHNA Allocations by Income Category*.

Table 4.13-4: 2023-2031 Draft RHNA Allocations by Income Category

Income Category for Unincorporated County Areas	Number of Housing Units	Percent of Total RHNA
Very Low Income	1,551	10.58%

Income Category for Unincorporated County Areas	Number of Housing Units	Percent of Total RHNA
Low Income	987	10.58%
Moderate Income	1,852	19.91%
Above Moderate Income	4,852	19.91%
TOTAL	**9,243**	**16.03%**
Source: Kern COG 2022a.		

4.13.4 Impacts and Mitigation Measures

This section of the EIR describes the impact analysis relating to population and housing for the proposed project. It describes the methods used to determine the impacts of the proposed project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate significant impacts accompany each impact discussion, where applicable.

Methodology

The potential impacts to population growth and housing associated with the proposed project were evaluated on qualitative and quantitative analyses of the proposed project's related increases in population and housing compared to planned growth estimates and population projections for the unincorporated areas in Kern County. The evaluation of the impacts of the proposed project is based on professional judgment, the significance criteria established by the California Environmental Quality Act (CEQA) and the County, and an analysis of the KCGP, MBGP, and Specific Plans goals and policies related to population growth.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist, as established in Appendix G of the *CEQA Guidelines*, state that a project would have a significant impact on population and housing if it would:

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); or

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

The lead agency determined in the Notice of Preparation/Initial Study (NOP/IS) that the following environmental issue area would result in no impact or less than significant impact and was therefore scoped out of requiring further review in this EIR. Please refer to Appendix A of this EIR for a copy of the NOP/IS and additional information regarding these issue areas:

- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Project Impacts

Impact 4.13-1: The Project Would Directly 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).

The proposed project would generate a temporary workforce to construct the industrial park with warehousing and distribution facilities. The number of on-site construction workers needed would largely depend on the specific phase of construction, but would likely average 200 employees, with a maximum of 500 employees, over a buildout timeframe of 25 years. Construction workers are likely to travel to the site from various local communities and not relocate to the area. If temporary housing should be necessary, it is expected that accommodations would be available in the nearby hotels or newly constructed residences west of the project in the City of Shafter.

Operation of the project would potentially create 5,000 to 6,000 full time jobs. Recently available data provided by EDD found that the unemployment rate in the proposed project region (Bakersfield Metropolitan Statistical Area [MSA] – Kern County) was 10.2% in February 2024, up from a revised 9.5% in January 2024. This regional unemployment rate is still above the California unemployment rate (5.6%t) and national (4.2%) average. Thus, the temporary and permanent employees required for the proposed project could come from the surrounding areas within the Bakersfield MSA, without the need for relocation. If employees do relocate, employees are likely to relocate to vacant housing units in the area. Regardless, the project could potentially require the development of new housing to accommodate an increase in population.

CEQA Guidelines Section 15126.2(d) states that an EIR must "discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Typical established local thresholds of significance for housing and population growth pursuant to the CEQA Guidelines, Section 15064.7, include effects that would: induce substantial growth or concentration of a population beyond County projections, alter the location, distribution, density, or growth rate of the population beyond what is projected in the KCGP and MBGP Housing Elements, result in a substantial increase in demand for additional housing, or create a development that significantly reduces the ability of the County to meet housing objectives set forth in the General Plan Housing Elements. By developing an industrial park with warehousing and distribution facilities, the proposed project would remove an "obstacle to population growth" and indirectly induce population growth in the proposed project area by providing jobs. Employees relocating to the area could substantially increase the demand for additional housing. Therefore, impacts associated with population growth and housing resulting from operation of the proposed project are considered significant and unavoidable.

Mitigation Measures

No feasible mitigation measures.

Level of Significance after Mitigation

Impacts would be significant and unavoidable.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

Cumulative impacts are two or more individual impacts that, when considered together, are considerable or that compound or substantially increase other environmental impacts. Cumulative impacts for a project are considered significant if the incremental effects of the individual projects are considerable when viewed in connection with the effects of past projects, and the effects of other projects located in the vicinity of the proposed project site. Analysis of cumulative impacts takes into consideration the entirety of impacts that the projects, zone changes, and general plan modifications previously discussed would have on population and housing. The development of both ongoing projects and future related projects in the greater proposed project area could potentially result in cumulative impacts associated with population and housing, if these projects collectively induce significant population growth that surpasses KCGP growth projections, outpaces the regional housing supply, or exceeds the capability of the local and regional circulation and infrastructure systems to adequately serve the increased population.

As discussed in Section 3.10, *Cumulative Projects*, of this EIR, cumulative projects within a one- and six-mile radius of the proposed project site include residential, commercial and industrial uses which would also directly induce population growth through the development of new housing and, based on their proposed locations, are expected to require the extension of utilities that could indirectly induce population growth. All of the projects are located within the Bakersfield MSA, which has a high unemployment rate; therefore, any new employees required to support the new projects may be expected to be hired from the existing regional workforce. Regardless, project-level impacts associated with the development of the proposed project would be significant and unavoidable and the proposed project could induce significant population growth in the proposed project area. Therefore, the proposed project's cumulative contribution to impacts associated with population and housing are considered significant and unavoidable with no feasible mitigation measures.

Mitigation Measures

No feasible mitigation measures.

Level of Significance after Mitigation

Cumulative impacts would be significant and unavoidable.

Section 4.14
Public Services

4.14.1 Introduction

This section of the Environmental Impact Report (EIR) describes the affected environment and regulatory setting pertaining to public services, which include fire and law enforcement, schools, parks, and other public facilities. This section also addresses the potential impacts on public services that would result from implementation of the proposed project, and the mitigation measures to reduce these potential impacts. Information for this section was taken from numerous sources, including websites and service agency plans.

4.14.2 Environmental Setting

Fire Protection Services

The Kern County Fire Department (KCFD) provides primary fire protection services, fire prevention, emergency medical, and rescue services, as well as arson investigation and hazardous material coordination, for more than 500,000 people over 8,000 square miles, which encompasses the unincorporated areas of Kern County and the cities of Arvin, Bakersfield, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, and Wasco. The KCFD operates 47 full-time fire stations and is divided into seven battalions for operational management. Currently, the KCFD is staffed with 521 firefighters, four water tenders, two hand crews, three crash rescue, three hazardous material response team members, two technical rescue personnel, and one fire foam tender. The KCFD is equipped with 58 fire engines, 54 patrol vehicles, 30 command vehicles, six ladder trucks, five crew buggies, six dozers, one masticator, seven reserve dozers, three mass deacon trailers, two light/air vans, two helicopters, one excavator, two fire education trailers and three sandbag trailers (KCFD 2023). In addition, KCFD is engaged in 14 Mutual Aid Agreements with neighboring fire suppression organizations.

During the 2020-2021 operating year, KCFD received 62,718 incident calls and had an operating budget of $163,400,000 (KCFD 2023).

The project site is located within Battalions 4 and 6, which are predominantly Local Responsibility Areas (LRAs) to the south and east sides of Bakersfield. There are some State Responsibility areas (SRAs) in the eastern portion of the battalion that adjoins the Sequoia National Forest. There are 96,023 State Responsibility Area (SRA) acres within Battalion 4. There are no existing towns or cities (either incorporated or unincorporated), and only one subdivision of consequence. The proposed project site would be served by the nearest KCFD fire station to the site, which is Station 61 – located approximately 3.2 miles southeast of the project site at 6400 Fruitvale Avenue in Bakersfield. This station would be the primary responder to a fire or emergency at the proposed project site; however, in the event of a major incident, other nearby stations would be called on to respond as necessary. Information on the five KCFD stations nearest to the project site is included in **Table 4.14-1**, *List of Nearby Fire Stations*, below.

Table 4.14-1: List of Nearby Fire Stations

Agency	Facility	Address	Approximate Distance from Project Site
KCFD	Fire Station No. 61	6400 Fruitvale Avenue, Bakersfield, CA 93308	3 miles southeast of the project site
KCFD	Fire Station No. 62	1652 Sunnyside Court, Bakersfield, CA 93308	3 miles southeast of the project site
KCFD	Fire Station No. 65	10051 Meacham Road, Bakersfield, CA 93312	4 miles southwest of the project site
KCFD	Fire Station No. 63	101 University Ave, Bakersfield, CA 93308	5 miles southeast of the project site
KCFD	Fire Station No. 64	101 East Roberts Lane, Bakersfield CA 93308	6 miles southeast of the project site

According to California Department of Forestry and Fire Protection (CAL FIRE), the project site is not located within a State Responsibility Area (CAL FIRE 2024). The Kern County Fire Hazard Safety Zone (FHSZ) Maps for the Local Responsibility Area identify the project site as LRA Unzoned (CAL FIRE 2024).

Kern County applies and utilizes the National Fire Code set forth by the National Fire Protection Association, the California Fire Code, the California Building Code, and the Kern County Ordinance Code to regulate fire safety.

The Kern County Emergency Medical Services (EMS) Division of Public Health is the lead agency for the EMS system in Kern County and is responsible for coordinating all system participants in the county, which includes the public, fire departments, ambulance companies, other emergency service providers, hospitals, and Emergency Medical Technician (EMT) training programs throughout the county. EMS includes a system of services organized to provide rapid response to serious medical emergencies, including immediate medical care and patient transport to a hospital setting. The EMS Division provides services for day-to-day emergencies, disaster medical response planning and preparation, and preventive health care. The EMS Division also provides certification and recertification for EMTs, paramedics, specialized nurses, and specialized dispatchers (Kern County Public Health 2023). The closest hospital to the project site is the Dignity Health - Memorial Hospital, approximately 8.6 miles southeast of the project site.

Law Enforcement Protection

Kern County Sheriff's Department

The Kern County Sheriff's Office (KCSO) provides law enforcement services in the unincorporated areas of the county, which includes the proposed project area. The KCSO enforces federal, State, and local laws and is responsible for crime prevention, field patrol (ground and air), crime investigation, the apprehension of offenders, regulation of noncriminal activity, and a number of related support services, including patrolling off-highway vehicle recreation areas in the desert and mountainous areas of the county. Traffic and parking control functions are also provided along with some investigation of property damage reports and traffic accidents. Complete investigations are conducted for injury, fatal, intoxication-related, and hit and run accidents.

The KCSO also administers police services throughout the County, including jail system management, bailiff and prisoner transportation services to the courts, search and rescue operations, coroner services, and civil processing (serving lawsuit papers). It also operates the Central Receiving Facility, Lerdo Pre-Trial Facility, Lerdo Justice Facility, Lerdo Maximum/Medium Security Facility, the Mojave Jail, and the Ridgecrest Jail (KCSO 2023a).

Headquarters for the KCSO is located at 1350 Norris Road in the City of Bakersfield. In addition, there are 15 substations that provide patrol services and all have access to department support services. Substations are staffed by sheriff deputies, investigators, and supervisors, and each substation has access to all department support services. Currently, the Kern County Sheriff's Department is staffed with 1,202 sworn and civilian employees, 567 deputy sheriffs, 338 detention deputy positions, and 297 professional support staff (KCSO 2023b). The proposed project site would be served by the nearest station, located at 1350 Norris Road in the City of Bakersfield, approximately 5 miles southeast of the proposed project site. (KSCO, 2023c). Information of the closest substations to the project site is included in **Table 4.14-2**, *List of Nearby Sheriff Substations*, below.

Table 4.14-2: List of Nearby Sheriff Substations

Agency	Facility	Address	Approximate Distance from Project Site
KCSO	Kern County Sherriff's Office	1350 Norris Road Bakersfield, CA 93308	5 miles southeast of the project site
KCSO	Kern County Sheriff's Department Communications Center	2601 Panorama Drive Bakersfield, CA 93306	8 miles southeast of the project site
KCSO	Kern County Sheriff's Department	748 F Street Wasco, CA 93280	15 miles northwest of the project site
KCSO	Kern County Sheriff's Department	455 Lexington Street Delano, CA 93215	22 miles north of the project site
KCSO	Kern County Sheriff	1122 Jefferson Street Delano, CA 93215	23 miles north of the project site

The KCSO strives to respond to calls as quickly as possible. Life-threatening calls that involve a danger to someone's personal safety are given first priority. Response time is defined as the time required to respond to a call for service, measured from the time a call is received until the time a patrol car arrives at the scene. Response times vary because the nearest responding patrol vehicle may be anywhere in the patrol area versus the nearest substation. Average response time for the KCSO is 5 minutes or less for an emergency or immediate-response incident (e.g., a crime that is in progress and/or a life-or-death situation) and 8 to 10 minutes for routine calls (e.g., a crime that has already occurred and/or an incident that is not life-threatening).

Response time to an emergency at or near the project site would vary depending on the level of demand at the substation at the time of the call. If demand is high, the response time would be longer than the average given above.

California Highway Patrol (CHP)

As a major Statewide law enforcement agency, the California Highway Patrol (CHP) is responsible for managing and regulating traffic for the safe, lawful, and efficient use of California highways. The CHP patrols State highways and all county roadways, enforces traffic regulations, responds to traffic accidents, and provides service and assistance to disabled vehicles. The CHP has a mutual aid agreement with KCSO.

The CHP is divided into eight divisions that provide services in areas of California (CHP 2023a). The project site is within the jurisdiction of the Central Division, which encompasses the heart of the San Joaquin Valley with two long freeway segments, a 244-mile stretch of State Route (SR) 99 and a 275-mile stretch of Interstate 5 (I-5), which run the flat length of the Division (CHP 2023b).

The nearest CHP office to the project site is Office 420, part of the Central Division, located at 9855 Compagnoni Street in the City of Bakersfield, approximately 15.4 miles south of the project site.

Schools

The project site is located within the Beardsley Elementary District, which consists of Beardsley Elementary School, North Beardsley Elementary School, San Lauren Elementary School, and Beardsley Junior High School (BSD 2024). The closest school to the project site is Norris Elementary School, which is approximately 2.3 miles southwest of the project Site. Additionally, Norris Middle School is approximately 2.5 miles from the project Site. The project site is also within the Kern High School District (KHSD). The KHSD operates 19 high schools in addition to one adult school and several alternative education schools (KHSD 2023a). The project site is within the attendance boundary of North High School, which is located approximately 4.5 miles southeast of the project site (KHSD 2023b).

Parks

The project location falls into the sphere of influence for the City of Bakersfield and the City of Shafter. The nearest park to the project is Pathway Park located in the City of Shafter, approximately 1.5 miles southwest of the project site. The Kern County Parks and Recreation Department manages an extensive system of large regional parks designed to serve the entire countywide population, and small neighborhood and community parks intended primarily to meet the recreational needs of nearby residents in unincorporated communities. Kern County Parks & Recreation manages eight regional parks, 40 neighborhood parks, and 25 public buildings, supervises three golf courses and landscapes 76 county buildings (Kern County 2023). Other public facilities include library facilities, post office facilities, and courthouses.

Other Public Facilities

Other public facilities include library facilities, post office facilities, and courthouses. The Kern County Library system is a countywide system providing all public library services in the County. The Kern County Library system includes seven Bakersfield locations and 15 countywide locations which serve over 850,000 residents within the county (Kern County Library 2023). Additionally, there are currently 37 post offices that serve the County (United States Postal Service [USPS] 2023). Furthermore, there are currently 11 facilities serving the Superior Court of California in Kern County (Superior Court of California 2023).

The Kern County Fiscal Year 2022-2023 Recommended Budget (Kern County 2021) shows on-going deficiencies in funding libraries and parks with facility closings and lack of maintenance for facilities.

4.14.3 Regulatory Setting

Federal

There are no applicable federal regulations for this issue area.

State

2019 California Fire Code

The 2022 California Fire Code establishes the minimum requirements consistent with nationally recognized practices to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises and to provide safety and assistance to fire fighters and emergency responders during emergency operations. Chapter 6 (Building Services and Systems) of the Code focuses on building systems and services as they relate to potential safety hazards and when and how they should be installed. Chapter 33 (Fire Safety During Construction and Demolition) of the Code outlines general fire safety precautions to maintain required levels of fire protection, limit fire spread, establish the appropriate operation of equipment, and promote prompt response to fire emergencies.

California Department of Forestry and Fire Protection (CAL FIRE)

Under Title 14 of the California Code of Regulations (CCR), the California Department of Forestry and Fire Protection (CAL FIRE) has the primary responsibility for implementing wildfire planning, forest and natural resource management, fire prevention and protection for State Responsibility Areas (SRAs). CAL FIRE enforces regulations and issues fire-safe clearances for land within a fire district of the SRA. More than 31 million acres of California's privately owned wildlands are under CAL FIRE's jurisdiction.

CAL FIRE adopted Fire Hazard Severity Zone maps for classification of all land within SRAs and Local Responsibility Areas (LRAs) in 1992 and last updated in November 2007. Fire Hazard is a way to measure the physical fire behavior so that people can predict the damage a fire is likely to cause. Fire hazard measurement includes the speed at which a wildfire moves, the amount of heat the fire produces, and most importantly, the burning fire brands that the fire sends ahead of the flaming front. The proposed project site is located within an LRA and is not considered a fire hazard severity zone (CAL FIRE 2023).

In addition to wildland fires, CAL FIRE's planning efforts involve responding to other types of emergencies that may occur on a daily basis, including residential or commercial structure fires, automobile accidents, heart attacks, drowning victims, lost hikers, hazardous material spills on highways, train wrecks, floods, and earthquakes. Through contracts with local government, CAL FIRE provides emergency services in 36 of California's 58 counties.

Local

Kern County General Plan (KCGP)

The *Kern County General Plan* (KCGP) is a policy document with planned land use maps and related information designed to provide long range guidance to County officials making decisions affecting development and the resources of the unincorporated Kern County. The KCGP helps to ensure that day-to-day decisions conform to long range policies designed to protect and further the public interest related to the County's growth and development.

A portion of the proposed project site is located in the KCGP area. Below are the applicable policies, goals, and implementation measures for public services found in the KCGP. The KCGP contains additional policies, goals, and implementation measures that are more general in nature and not specific to development such as the proposed project. Therefore, they are not listed below. However, as stated in Chapter 2, *Introduction,* of this EIR, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

1.4 – Public Facilities and Services

Policies

Policy 1: New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.

Policy 6: The County will ensure adequate fire protection to all Kern County residents.

Policy 7: The County will ensure adequate police protection to all Kern County residents.

Implementation Measures

Measure A: Continue to administer the Capital Improvement Program (CIP) and coordinate with public utility providers listing the necessary improvements to Kern County's public services and facilities in collaboration with key service providing agencies and the County Administrative Office as a first step toward the preparation of a long-term Public Services Plan for Kern County. This plan addresses the projected demand for public services throughout the County in comparison with projected revenues and identifies long-term financial trends for the major public service providers. The CIP and General Plan can assure compliance with the provisions of Government Code Sections 65401 and 65402 which require review of all capital facility decisions for consistency with this General Plan.

Measure B: Determine local costs of County facility and infrastructure improvements and expansion which are necessitated by new development of any type and prepare a schedule of charges to be levied on the developer at the site of approval of the Final Map. This implementation can be effectuated by the formation of a County work group.

Measure L: Prior to the approval of development projects, the County shall determine the need for fire protection services. New development in the County shall not be approved unless adequate fire protection facilities and resources can be provided.

1.10 – General Provisions

Goal

Goal 1: Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving viable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

1.10.1 – Public Services and Facilities

Policies

Policy 9: New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure that it generates and upon which it is dependent.

Policy 15: Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the California Environmental Quality Act (CEQA) documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.

Policy 16: The developer shall assume full responsibility for costs incurred in service extension or improvements that are required to ensure the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.

Chapter 4. Safety Element

4.6 – Wildland and Urban Fire

Policies

Policy 1: Require discretionary projects to assess impacts on emergency services and facilities.

Policy 3: The County will encourage the promotion of fire prevention methods to reduce service protection costs and costs to taxpayers.

Policy 4: Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.

Policy 6: All discretionary projects shall comply with the adopted fire code and the requirements of the fire department.

Implementation Measure

Measure A: Require that all development comply with the requirements of the Kern County Fire Department or other appropriate agency regarding access, fire flows, and fire protection facilities.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

Bakersfield is the largest incorporated area in Kern County. Bakersfield is the County Seat and the focus of much of the business activity in the County. Accordingly, Kern County and the City of Bakersfield have jointly adopted a general plan for the metropolitan area (Metropolitan Bakersfield General Plan) that provides further information on planned land uses, policies, and implementation programs for the incorporated and unincorporated portions of the metropolitan plan area. The policies, goals, and implementation measures in the Metropolitan Bakersfield General Plan for public services applicable to the proposed project are provided below:

Chapter VII: Safety/Public Safety

Goals

Goal 1: Ensure that adequate police and fire services and facilities are available to meet the needs of current and future metropolitan residents through the coordination of planning and development of metropolitan police and fire facilities and services.

Policies

Policy 2: Require discretionary projects to assess impacts on police and fire services and facilities.

Chapter XI: Parks Element

Goals

Goal 7: Require that the costs of park and recreation facilities and programs are borne by those who benefit from and contribute to additional demand.

Policies

Policy 3: Require all developers to dedicate land, provide improvements and/or in lieu fees to serve the needs of the population in newly developing areas.

Kern County Fire Code

Chapter 17.32 of the Kern County Municipal Code details the Kern County Fire Code, which is an adoption of the 2022 California Fire Code and the 2021 International Fire Code with some amendments. The purpose of the Kern County Fire Code is to regulate the safeguarding of life, property, and public welfare to a reasonable degree from the hazards of fire, hazardous materials release and/or explosion due to handling of dangerous and hazardous materials, conditions hazardous to life or property in the occupancy and use of buildings and premises, the operation, installation, construction, and location of attendant equipment, the

installation and maintenance of adequate means of egress, and providing for the issuance of permits and collection of fees therefore.

Kern County Fire Department 2021 Strategic Fire Plan

The KCFD 2021 Strategic Fire Plan, updated in April 2022, is the most current document that assesses the wildland fire situation throughout the SRA within the County. Similar to other plans, this document includes stakeholder contributions and priorities and identifies strategic targets for pre-fire solutions as defined by the people who live and work within the local fire areas. The plan provides for a comprehensive analysis of fire hazards, assets at risk, and level of services to systematically assess the existing levels of wildland protection services and identifies high-risk and high-value areas that are potential locations for costly and damaging wildfires. The plan gives an overview of KCFD Battalions and ranks these areas in terms of priority needs as well as identifies the areas of the SRA. According to the plan, 69 percent of Kern County is within an SRA. The County is broken up into six different fuel management areas: Tehachapi, Western Kern, Northern Kern, Mount Pinos Communities, Kern River Valley, and the Valley/Foothill. The project site is located within Battalions 4, and 6 which consist of predominantly Local Responsibility Area (LRA) and is not within an FHSZ (KCFD 2022).

Kern County Community Wildfire Protection Plan

The Kern County Community Wildfire Protection Plan (CWPP) was developed in response to the federal Healthy Forests Restoration Act (HFRA). The CWPP addresses hazards and risks of wildland fire throughout the County and makes recommendations for fuel reduction projects, public outreach and education, structural ignitability reduction, and fire response capabilities. The goal of the CWPP, adopted in March 2022, is to enable local communities to improve their wildfire-mitigation capacity, identify high fire-risk areas, and prioritize areas for mitigation, fire suppression, and emergency preparedness. The CWPP enhances public awareness by helping residents better understand the natural- and human-caused risk of wildland fires (KCFD 2022).

Kern County Emergency Operations Plan

The Kern County Emergency Operations Plan (EOP), adopted May 1, 2022, is an all-hazards document that provides for the integration and coordination of planning efforts of the County with those of its cities, special districts, and the State region. The purpose of the EOP is to provide the basis for a coordinated response before, during, and after a disaster affecting the County or other jurisdictions in the EOP's Operational Area. The EOP establishes policies, stipulates an emergency management organization, and assigns roles and responsibilities to ensure the effective management of emergency operations. The EOP also identifies sources of external support which might be provided through mutual aid and specific statutory authorities by other jurisdictions, State and federal agencies, and the private sector (County OES 2022).

Kern County Multi-Jurisdictional Hazard Mitigation Plan

The purpose of the Kern County Multi-Jurisdictional Hazard Mitigation Plan is to reduce or eliminate long-term risk to people and property from natural hazards and their effects in Kern County. The plan includes specific recommendations for actions that can mitigate future disaster losses, as well as a review of the

County's current capabilities to reduce hazards impacts. This multi-jurisdictional plan includes Kern County and the incorporated municipalities of Arvin, Bakersfield, California City, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, and Wasco. The plan also covers 53 special districts that include school, recreation and park, water, community service, and other districts. The plan has been formally adopted by each participating entity and is required to be updated a minimum of every 5 years (Kern County Office of Emergency Services 2023).

4.14.4 Impacts and Mitigation Measures

Methodology

The methodology used to evaluate fire and law enforcement services impacts includes the following: (1) evaluation of existing fire and law enforcement services and personnel for the fire and law enforcement stations serving the project site; (2) determination of whether the existing fire and law enforcement services and personnel are capable of servicing the proposed project in addition to the existing population and building stock; and (3) determining whether the proposed project's contribution to the future service population would cause fire or law enforcement station(s) to operate beyond service capacity. The determination of the significance of the proposed project on fire protection and emergency medical and law enforcement services considers the level of services required by the proposed project and the ability to provide this level of service and maintain the regular level of service provided throughout the County, which in turn could require the construction of new or expansion of existing facilities. The methodology for this analysis included a review of published information pertaining to KCFD and KCSO. Using the aforementioned resources and professional judgment, impacts were analyzed according to the CEQA significance criteria described below.

Thresholds of Significance

The California Environmental Quality Act (CEQA) Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the *CEQA Guidelines*, to determine if a project could potentially have a significant adverse effect on public services.

A project could have a significant adverse effect on public services if it would:

a. Result in substantial adverse physical impacts associated with the need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:
    i. Fire Protection
    ii. Police Protection
    iii. Schools
    iv. Parks
    v. Other Public Facilities

Project Impacts

Impact 4.13-1: The project would result in substantial adverse physical impacts associated with the provision of 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 to other performance objectives for fire protection, law enforcement protection, schools, parks, or other public facilities.

Fire Protection

The proposed project site is not within an area identified as a high or very high fire hazard zone, as determined by Kern County or CAL FIRE (CAL FIRE 2023). The proposed project would include development of an approximately 8,907,446 square-feet of industrial use space, comprised of 24 buildings on approximately 739 acres of existing vineyard and vacant land. Operations are expected to include the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) and distribution to retail locations or other warehouses. The proposed project would include approximately 8,000 employees during operations. As proposed, the project would include emergency access and other safety features and plans for fire protection. Site access is from Imperial Avenue for Phase 1 and the future expansion of Burbank Street for Phase 2. Access roads would be improved to support the safety and construction requirements of the proposed project.

Fire protection facilities requirements are based on the number of residents and workers in the KCFD primary service area. Service demand is primarily tied to population, not building size, because emergency medical calls typically make up the majority of responses provided by the fire department. As the number of residents and workers increases, so does the number of emergency medical calls. There are no residential structures within the proposed project boundary, and none would be constructed for the proposed project. Therefore, no residents would live within the proposed project site and service demands per resident would not increase.

Service demands per employee are less than service demands per resident; nevertheless, the addition of construction and operational personnel to the proposed project area could result in an increased demand for fire protection services to accommodate fire suppression and emergency medical calls. Implementation of the proposed project would require a temporary workforce averaging 200 workers, with a peak of 500 workers, to construct the warehouses. The proposed project would provide Kern County with approximately 8,000 operational jobs, stimulating local employment in the warehouse distribution industry. Construction and operation of the proposed project would generate truck and employee traffic along haul routes and the proposed site, which could increase the need for fire and sheriff services.

The KCFD would continue to provide fire protection services to the proposed project site. The fire station closest to the project site is Kern County Fire Station No. 61, located approximately 3.2 miles southeast of the project site at 6400 Fruitvale Ave in Bakersfield; however, in the event of a major fire, other stations could be called on to respond, as necessary. The proposed project would add over eight million square-feet of structures to KCFD's service area, resulting in a related potential increase in service demand. Further, as discussed in Chapter 4-13, *Population and Housing*, the project has the potential to induce population

growth in the area, including additional housing and service-oriented commercial uses. The increase in growth is likely to create an in-kind demand on fire service within the KCFD, Shafter Fire Department, and Bakersfield Fire Department. New development would be subject to design review consistent with current Fire Code and local fire department requirements aimed at reducing fire-related risk and loss. If the proposed project is not equipped with adequate fire prevention facilities, Station No. 61 may require a larger capacity fire engine to adequately control fire in the large warehouses. The project proponent would also be required to pay appropriate Kern County development impact fees for fire protection infrastructure. Therefore, the proposed project could have a significant impact on fire protection services; however, impacts are expected to be less than significant with implementation of Mitigation Measures **MM 4.9-13** which requires the development and implementation of a Fire Safety Plan, as described in Section 4.9, *Hazards and Hazardous Materials*, and Mitigation Measures **MM 4.14-1** and **MM 4.14-2**, which assures the sales and use tax from the construction of the project be provided to unincorporated Kern County so that taxes from construction of the proposed project can be maximized for the impacts to required services.

Law Enforcement Protection

KCSO provides basic law enforcement services in the unincorporated areas of the County. The nearest substation that would provide service to the project site is located at 1350 Norris Road in the City of Bakersfield, approximately 5 miles southeast of the proposed project site. The nearest CHP office to the project site is the Central Division located at 9855 Compagnoni Street in the City of Bakersfield, approximately 15 miles south of the project site. Similar to fire protection services, construction and operation of the proposed project could increase service needs for KCSO. The proposed project may attract vandals or present other security risks and increase traffic. However, the proposed project site is located in a relatively remote location surrounded by undeveloped land, agriculture, and rural communities, and is unlikely to attract attention that would make proposed project facilities susceptible to crime.

Both residents and the labor force in unincorporated portions of the County benefit from the patrol and investigation services provided by KCSO. Demand for such services is related to the County's combined residential and labor populations in the unincorporated areas. Although the potential is low, the proposed project may attract vandals or other security risks that could increase demand for law enforcement services at the proposed project site, when compared to existing conditions. Based on the proposed Precise Development (PD) Plan prepared for the proposed project, the entire perimeter of the site would be fenced with a six (6)-foot minimum chain link fence, which would serve as a deterrent to crime at the project site. No sidewalks are proposed along State Route (SR) 99. Access to the site would be controlled and limited to the areas surrounding the proposed project site during construction and operation, thereby minimizing the need for police surveillance. The proposed project would also include lighting for safety and security.

Traffic volumes along SR 99 would temporarily increase during construction of the proposed project and would permanently increase during operation of the proposed project. However, project personnel commuting to the proposed project site via these transportation corridors would be required to adhere to all traffic laws. The added traffic associated with workers commuting to the proposed project site during construction and operation would be along major transportation corridors and would not be expected to adversely affect the CHP's ability to patrol. The additional traffic is not expected to result in the need for new or altered facilities.

New or physically altered KCSO or CHP facilities would not be required to accommodate the limited increase in needs from the proposed project. Impacts to law enforcement services are expected to be less than significant. The project proponent would also be required to pay appropriate Kern County development impact fees for sheriff services when building permits are issued. Mitigation Measure **MM 4.14-1**, which assures the sales and use tax from the construction of the project be provided to unincorporated Kern County so that taxes from construction of the proposed project can be maximized for the impacts to required services, would be implemented to reduce potential impacts.

Schools/Parks/Other Public Facilities

As stated above, the on-site construction workforce for the proposed project would be temporary and the average daily workforce would vary depending upon the stage in construction. The expected average daily workforce is 200 workers, with a peak of 500 workers. The presence of construction workers at the project site would be temporary through the buildout of each phase. Mitigation Measure **MM 4.14-2** requires the project proponent to encourage site contractors hire at least 50 percent of the workers from local Kern County communities. Construction workers would likely come from an existing local and/or regional construction labor force and would not likely relocate their households as a consequence of working on the construction of the proposed project. Therefore, the short-term increased employment of construction workers on the project site would not result in a notable increase in the residential population of the area surrounding the project site. Accordingly, there would not be a corresponding demand for or use of the local schools, parks, or public facilities. Therefore, project construction workers would not increase demand for local schools, parks, or public facilities such that substantial physical deterioration of such facilities would occur, nor would project construction require the construction or expansion of such facilities which might have an adverse effect on the environment. Impacts during construction would be less than significant.

In Kern County, the current unemployment rate for residents is 8.7 percent (EDD 2024b). Long-term operation could result in approximately 8,000 new jobs. Employees for these new jobs would likely come from an existing local and/or regional labor force. However, the new jobs may attract new residents from outside the area and result in a related increase in the population and the need for schools, parks, or other public facilities.

The project site is located within the Beardsley Elementary District, which consists of Beardsley Elementary School, North Beardsley School, San Lauren Elementary School, and Beardsley Junior High School. The project site is located within the KHSD. The KHSD operates 19 high schools in addition to one adult school and several alternative education schools. The project site is within the attendance boundary of North High School, which is located approximately 4.5 miles southeast of the project site. The closest school to the project site is Norris Elementary School, which is approximately 2.3 miles southwest of the project Site. Additionally, Norris Middle School is approximately 2.5 miles from the project Site. These schools could be affected by the proposed project. New industrial, residential, and commercial development, including the proposed project, would be required to pay development impact fees. The payment of statutory school district fees of $0.66 per square foot would reduce impacts associated with the proposed project.

The proposed project also has the potential to increase the local population and related demand for public parks and other public facilities. All new industrial, residential, and commercial development, including

the proposed project, would be required to pay development impact fees, and Implementation of Mitigation Measure **MM 4.14-1**, which assures the sales and use tax from the project be provided to unincorporated Kern County so that sales taxes from the proposed project can be maximized to compensate for any increase in service demand by the proposed project, would reduce impacts to less than significant.

Mitigation Measures

The following measures shall be implemented to reduce potential impacts.

Implement Mitigation Measure **MM 4.9-13** (see **Section 4.9**, *Hazards and Hazardous Materials)*, which requires the project proponent, prior to the issuance of grading or building permits, to develop and implement a Fire Safety Plan for use during construction and operation of the proposed project.

MM 4.14-1: The project proponent/operator shall work with the County to determine how the use of sales and use taxes from construction of the project can be maximized. This process shall include, but is not necessarily limited to, the project proponent/operator obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, and registering this address with the State Board of Equalization. As an alternative to the aforementioned process, the project proponent/operator may make arrangements with Kern County for a guaranteed single payment that is equivalent to the amount of sales and use taxes that would have otherwise been received (less any sales and use taxes actually paid); with the amount of the single payment to be determined via a formula approved by Kern County. The project proponent/operator shall allow the County to use this sales tax information publicly for reporting purposes.

MM 4.14-2: Prior to the issuance of any building permits on the property, the project operator shall submit a letter detailing the hiring efforts prior to commencement of construction, which encourages all contractors of the project site to hire at least 50 percent of their workers from local Kern County communities. The project operator shall provide the contractors a list of training programs that provide skilled workers and shall require the contractor to advertise locally for available jobs, notifying the training programs of job availability, all in conjunction with normal hiring practices of the contractor.

Level of Significance After Mitigation

With implementation of **MM 4.9-13** (see **Section 4.9**, *Hazards and Hazardous Materials,* for full mitigation measure), **MM 4.14-1**, and **MM 4.14-2**, impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative impacts are two or more individual impacts that, when considered together, are considerable or that compound or substantially increase other environmental impacts. Cumulative impacts for a project are considered significant if the incremental effects of the individual projects are considerable when viewed in connection with the effects of past projects and the effects of other projects located in the vicinity of the project site. The cumulative study area related to public services is based on the service area for each of the fire, sheriff, schools, and other governmental facilities serving the proposed project site. Similar to the proposed project, all of the related projects listed in Chapter 3, *Project Description*, in **Table 3-4**,

Cumulative Projects List, of this EIR would be required to pay a development impact mitigation fee, if deemed appropriate by the Kern County Planning and Natural Resources Department or equivalent agency (in the case of fire protection). As discussed above, fire and sheriff service impacts related to the project would be less than significant with mitigation. Mitigation Measures **MM 4.9-13** (see **Section 4.9,** *Hazards and Hazardous Materials* for full mitigation measure) and **MM 4.14-1** require implementation of a Fire Safety Plan during project construction and operation that would include notification procedures and emergency fire precautions to reduce fire risks and the consequential need for fire protection services on-site and use of project sales tax to benefit the services in unincorporated Kern County. Other related cumulative projects may also be required to pay applicable fees and taxes to reduce significant impacts to fire or law enforcement protection services. With payment of the required mitigation fee as assessed by the Kern County Planning and Natural Resources Department for transfer to the Kern County General Fund, any slight contribution the project would have on the need for additional fire or law enforcement protection services, facilities or personnel required would be appropriately funded. Similar to the project, all other past, present, and reasonably foreseeable future projects located within these fire and sheriff service areas were or would be required to pay appropriate fees, if deemed appropriate by the Kern County Planning and Natural Resources Department. These projects would also be required to undergo environmental review, in compliance with the requirements of CEQA. Should potential impacts to public services be identified, appropriate mitigation would be prescribed that would reduce impacts to less than significant levels.

Therefore, the proposed project would not create a significant impact on public services and would comply with the goals, policies, and implementation measures of the Kern County General Plan and Metropolitan Bakersfield General Plan, and other related projects would also be expected to avoid or mitigate impacts on public services, cumulative impacts are anticipated to be less than significant. Therefore, the proposed project's incremental effect is not cumulatively considerable when viewed in connection with the effects of other closely related past projects, the effects of other current projects, and the effects of probable future projects. The proposed project would not create a cumulatively considerable impact related to public services with the incorporation of Mitigation Measures **MM 4.9-13**, **MM 4.14-1**, and **MM 4.14-2** and would have a less than significant cumulative impact.

Mitigation Measures

Implement Mitigation Measures **MM 4.9-13** (see **Section 4.**9, *Hazards and Hazardous Materials,* for full mitigation measure), **MM 4.14-1** and **MM 4.14-2**.

Level of Significance After Mitigation

With implementation of **MM 4.9-13** (see **Section 4.**9, *Hazards and Hazardous Materials,* for full mitigation measure), **MM 4.14-1**, and **MM 4.14-2**, impacts would be less than significant with mitigation.\

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Section 4.15
Recreation

Section 4.15
Recreation

4.15.1 Introduction

This section of the EIR addresses potential impacts of the proposed project on parks and recreation opportunities in the proposed project's vicinity. This section also describes the environmental and regulatory settings and discusses mitigation measures to reduce impacts, where applicable.

Sources of information and data provided in this section include, but are not limited to, the Kern County General Plan (KCGP) and Housing Element, Kern County General Plan and Housing Element Annual Report (2022), Kern County Parks and Recreation Master Plan (2010) and demographic information from the U.S. Census Bureau.

4.15.2 Environmental Setting

Local

Kern County Parks and Recreation

The Kern County Parks and Recreation Department operates and maintains 40 neighborhood parks throughout the County, as well as several public buildings that are used for recreational purposes (Kern County Parks and Recreation Department, 2010). The project site is located in the Greater Bakersfield area of Kern County, which is served by two regional parks, 13 local/neighborhood parks, two golf courses, and seven public buildings. The project site is not located near any recreational facilities or parks and does not contain any recreational facilities or parks. The neighborhood parks closest to the project site are North Highlands Park and North Meadows Park, both located approximately 4 miles southeast of the project site.

North of the River Recreation and Park District

The North of the River Recreation and Park District (NOR) encompasses 215 square miles and has 24 park sites. The parks maintained by North of the River closest to the project site are Madison Grove Park and Fruitvale Norris Park, both located approximately 3 miles south of the project site, and Almondale Park located 4 miles south of the project site (NOR, 2023).

City of Bakersfield Recreation and Parks Department

The City of Bakersfield's Recreation and Parks Department provides several amenities to residents and visitors, including (City of Bakersfield, 2023):

- 62 public parks
- Four public pools and 10 spray parks
- Two sports complexes and two skate parks
- One large amphitheater
- Disc golf courses available in three parks: City in the Hills, Kern River Parkway and Silver Creek Park
- Several pickleball court locations

The parks maintained by the City of Bakersfield located closest to the project site are Centennial Park located 7 miles south of the project site and Mill Creek Park located 7.5 miles south of the project site.

Shafter Recreation and Park District

The Shafter Recreation and Park District operates and maintains 6 parks and recreational centers. Facilities include basketball gyms, baseball and softball diamonds, soccer fields, the Shafter Aquatic Center and the WC Walker Senior Center. The recreation centers located closest to the project site are the Richland School District Activity Center located 8 miles away and Kirschenmann Park located 7 miles away (Shafter Recreation and Park District, 2023).

Regional

Recreational facilities in the vicinity of the project site include three national forests, three state parks, and the Wind Wolves Preserve operated by The Wildlands Conservancy. The Carrizo Plain National Monument, Buena Vista Aquatic Recreation Area, Tule Elk State Reserve, Pyramid Lake Recreation Area, and Castaic Lake State Recreation Area are located within an approximately one- to two-hour driving distance from the project.

The Kern County Parks and Recreation Department operates and maintains seven regional parks (Buena Vista Aquatic Recreational Area, Greenhorn Mountain Park, Leroy Jackson Park, Kern River County Park, Lake Woollomes, Metro Recreation Center, and Tehachapi Mountain Park). These parks provide approximately 4,282 acres of parkland for recreational purposes (Kern County Parks and Recreation Department, 2010). No regional parks are near or within the project site.

As shown in the Kern County Parks and Recreation Department Master Plan, Kern River County Park is the closest regional park to the proposed project (located approximately 11 miles southeast of the project site). The park is located within unincorporated Kern County, 10 miles north of the City of Bakersfield on the Lake Ming Road exit off the Alfred Harrell Highway. The 1,012-acre Kern River County Park offers a variety of activities, including Hart Memorial Park, picnic areas, camping sites, and a variety of aquatic activities at Lake Ming.

The Metropolitan Recreation Center is located approximately 6 miles south of the project site within the City of Bakersfield. It includes Stramler Park, as well as numerous other cultural and recreational facilities; most notably the Kern County Museum and the Sam Lynn baseball park.

Other public facilities include city and County libraries. The County library system is divided into two districts: Greater Bakersfield Area and Outside Bakersfield Area. Greater Bakersfield Area has seven branch libraries, plus a bookmobile and the Olive Drive Fire Research Center; Outside Bakersfield Area has 13 branches, plus a bookmobile. The project site is not located in the vicinity of a post office or library.

State

Six California Department of Parks and Recreation facilities are located within a 70-mile radius of the project site. This includes the Tule Elk State Natural Reserve located approximately 17 miles southwest of the project site. The Tule Elk State Natural Reserve protects a small herd of tule elk, once in danger of extinction. Colonel Allensworth State Historic Park is located approximately 29 miles north of the project site and features a collection of restored reconstructed buildings marking the location of the historic town. The Tomo-Kahni State Historic Park is located approximately 47 miles south of the project site. Tomo-Kahni State Historic Park was created as a unit of California State Parks in 1993 to protect and preserve the integrity of the Kawaiisu Native American village. Eastern Kern County Onyx Ranch State Vehicular Recreation Area is located approximately 65 miles southeast of the project site and offers over 26,000 acres of scenic and challenging terrain for all-terrain vehicles, motorcycles, recreational off-highway vehicles, and 4x4 vehicles. Red Rock Canyon State Park is located approximately 67 miles southeast of the project site and features scenic desert cliffs, buttes and spectacular rock formations. The park is located where the southernmost tip of the Sierra Nevada converges with the El Paso Range. Fort Tejon State Historic Park is located approximately 44 miles south of the project site. The fort was established to protect and control the Native Americans who were living on the Sebastian Indian Reservation, and to protect both the Native Americans and white settlers from raids by the Paiutes, Chemehuevi, Mojave, and other Native American groups of the desert regions to the southeast (California Department of Parks and Recreation 2023).

National Parks and Forests

Several national parks and forests are located in California's Central Valley and southern desert region, which are accessible from Kern County, although a significant distance away. These include Sequoia National Park, Death Valley National Park, Kings Canyon State Park, Yosemite National Park, and Mojave National Preserve. All State parks are over 50 miles away from the project site. Sequoia National Park is the closest National Park to the project site, located 75 miles northeast of the project site. Sequoia National Park offers hiking, horseback riding, rock climbing, fishing, and visiting Moro Rock and other Granite Domes.

Sequoia National Forest is the closest national forest to the project site, located 39 miles north of the project. Sequoia National Forest covers over 1.1 million acres in three counties of central California. The Forest offers 52 developed campgrounds, hiking on more than 1,147 miles of trails, over 314,448 acres of wilderness, 222 miles of wild and scenic rivers, boating, fishing, biking, and horseback riding.

Los Padres National Forest is located 87 miles south and west of the project site. The Los Padres National Forest lies in the southwestern corner of Kern County adjacent to Frazier Park, encompassing almost two million acres of land.

The Mojave National Preserve is located approximately 90 miles east of the project site. The Mojave Preserve is a diverse mosaic of ecological habitats and has a 10,000-year history of human connection with

the desert. It provides camping facilities and an extensive range of other outdoor recreation opportunities (Kern County, 2010).

The César E. Chávez National Monument is located approximately 35 miles southeast of the project site. The César E. Chávez National Monument is a tribute to César E. Chávez where visitors are welcome to the visitor center, the Memorial Garden in which César Chávez is buried, and the small Desert Garden.

Inyo National Forest is located approximately 112 miles northeast of the project site. Inyo National Forest extends 165 miles near the California and Nevada border between Los Angeles and Reno, covering almost 2 million acres, mostly on the eastern slope of the Sierra Nevada (National Parks Service 2023). Inyo National Forest offers many popular outdoor destinations including Mono Lake, Mammoth Mountain Ski Resort, and Mount Whitney.

Angeles National Forest is located 90 miles south of the project site. Angeles National Forest serves the Greater Los Angeles Area and offers many activities such as beaches and dunes, bicycling, fishing, camping, climbing, horseback riding, hiking, hunting, water activities, and winter sports.

The Manzanar National Historic site is located 100 miles northeast of the project site. The Manzanar National Historic War Relocation Center was one of ten camps at which Japanese American citizens and resident Japanese immigrants were incarcerated during World War II. Activities include the visitor center, the buildings and exhibits of Block 14, the self-guided driving tour to see Merritt Park, the cemetery monument, the site of the Children's Village, remnants of the hospital, the orchards, eleven uncovered Japanese gardens, the baseball field, and the Shepherd Ranch site.

4.15.3 Regulatory Setting

Federal

There are no federal recreation regulations applicable to this proposed project.

State

Quimby Act

The California State Legislature established the Quimby Act and codified it as California Government Code Section 66477 in 1975. The Quimby Act allows the legislative body of a city or county to establish an ordinance requiring the dedication of land, payment of fees in lieu thereof, or a combination of both, for the provision of parks or recreational facilities as a condition of approval for a tentative tract map or parcel map. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities in the same subdivision for which fees were paid as a condition to the approval of a map. The Quimby Act was amended in 1982 (AB 1600) to require agencies to clearly show a reasonable relationship between the public need for the recreational facility or parkland and the type of development project upon which the fee is imposed.

Local

Kern County General Plan (KCGP)

The project site is located within the KCGP. The KCGP contains policies, goals, and implementation measures that are general in nature and not specific to development such as the proposed project. Therefore, they are not listed below, but as stated in **Chapter 2**, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.4 Public Facilities and Services

Goal 8: Provide recreational opportunities for all citizens of Kern County while avoiding duplication between jurisdictions.

Goal 12: Provide a balanced system of parks and recreational facilities to meet Kern County's diverse needs, and clearly define responsibility for the provision of these facilities.

Goal 13: Provide a variety of park and recreation programs that offer safe, equitable, and balanced recreation opportunities for all residents and visitors.

Policies

Policy 4: The provision of parks and recreational facilities of varying size, function, and location to serve County residents will be encouraged. Special attention will be directed to providing linear parks along creeks, rivers, and streambeds in urban areas.

Policy 5: Seek to provide recreational facilities where deficiencies have been identified.

Implementation Measure

Measure F: Continue to use the accepted California and National Design Standards for both passive and active park development to accommodate programmed and spontaneous activities. Some usable area should be held as open turf for free play and community festivals.

Measure GG: Implement a level of service standard of 2.5 acres of park area per 1,000 residents.

Measure HH: The County shall periodically investigate the level of service standards for park and recreation services to ensure that adequate recreation facilities are provided for County residents.

Measure II: The Kern County Parks and Recreation Department will evaluate the possibility of alternative funding sources for the development, rehabilitation, and operation of park and recreational facilities. These funding sources shall include the possible implementation of development fees and/or special assessment districts such as used for lighting and landscaping, under a County Service Area (CSA).

Kern County Parks and Recreation Master Plan

The primary purpose of this Master Plan is to help guide decision-makers in the development of the Kern County park system through 2028. The recommendations, goals and strategies presented were developed based on an assessment of all existing County parks and public input to identify community priorities. The project site is located within Area 3 – Greater Bakersfield, which includes the Shafter Recreation and Park District and the North of the River Recreation and Park District (see figure following page II-6 in the May 2010 Kern County Parks and Recreation Master Plan). The Greater Bakersfield part of Kern County is the most heavily populated in Kern County. It features an extensive part of the Kern County park system, 13 local/neighborhood parks, two golf courses, and seven public buildings. Altogether, this section encompasses 1,718 acres of park land.

Section 5.1 Policy I – Goals and Actions

Policies

Policy 1: Provide a quality park and open space system that supports opportunities for active and passive recreation to meet the wide-ranging recreational and social needs of the diverse, varied communities of Kern County.

Goals

Goal 2: Provide a minimum standard 5 acres of park land per 1,000 residents. This standard would apply to regional parks serving the entire County, as well as local parks in unincorporated areas of the County not served by a local park district.

Goal 7: Achieve sustainable long-term financial viability for the Kern County park system to satisfy operational needs, capital requirements and desired recreational services.

Kern County Land Division Ordinance (Title 18 of the Kern County Ordinance Code)

Section 18.50.080 Park Land Dedication

California Government Code Section 66477, referenced as the Quimby Act within the California Subdivision Map Act, identifies allowable methods under which local land use authorities may require recreational land dedications or in-lieu fee payments as a condition of subdivision approval. The project site is located within the Kern County Parks and Recreation Department's jurisdiction. Kern County has implemented the Quimby Act for the Kern County Parks and Recreation portion of the project in Section 18.50.080 of the Kern County Land Division Ordinance, which requires that every land division include a dedication of parkland or payment of an equivalent in-lieu fee (Land Division Ordinance 18.50.080.D.1). The County code provides that a project may receive a credit at the recommendation of the appropriate parks and recreation district against a parkland fee based on the value of private open space within the development that is usable for active recreational purposes, including private recreation and private open space.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The project site is located within the Metropolitan Bakersfield area. The Metropolitan Bakersfield General Plan contains policies, goals, and implementation programs for parks in the planning area.

Chapter XI. Parks Element

Goals

Goal 1: Provide parks and recreation facilities to meet the planning area's diverse needs.

Goal 2: Supply neighborhood parks at a minimum of 2.5 acres per 1,000 persons throughout the plan area.

Goal 3: Provide four acres of park and recreation space for each 1,000 persons (based on the most recent census) for general regional recreation opportunity as a minimum standard. Park and recreational space includes mini-parks, neighborhood parks, community parks, and regional parks.

Goal 4: Provide a diversity of programs and facilities to meet the needs of the full range of citizen groups including the elderly, handicapped, and economically disadvantaged.

Goal 5: Coordinate development of park facilities and trail systems throughout the plan area which enhance the centers concept and complement unique visual or natural resources.

Goal 6: Ensure that all park and recreation facilities are adequately designed, landscaped, and maintained.

Goal 7: Require that the cost of park and recreation facilities and programs are borne by those who benefit from and contribute to additional demand.

Goal 8: Provide safety, accessibility, and compatibility between parks and adjacent residential areas through "good neighbor" park practices.

Goal 9: Coordinate efforts by volunteer agencies, civic organizations, private enterprise, and all government entities to assure the provision of a complete range of recreation opportunities for all residents of the planning area.

Policies

Policy 3: Require developers of new subdivisions to show and adhere to park locations (depicted on the Land Use Element).

Implementation Measures

Implementation 9c: Modify the subdivisions and building ordinances to require developers to show park locations on development plans.

Implementation 12b: Pursue the adoption of the Central Park master plan.

4.15.4 Impacts and Mitigation Measures

Methodology

Recreational facilities and opportunities in the region were evaluated to determine whether they would be adversely affected by the project. This evaluation included consideration of the overall number and area of parklands or other recreational facilities and proximity to the project, and whether the project would result in overuse and deterioration of existing facilities or necessitate the construction of new facilities. Potential impacts to parks and recreational resources were assessed based on the following:

- A review of existing recreational resources in Kern County.
- Considering new park and access to open space that would be provided by the project.
- Projecting future population growth associated with implementation of the project.
- Determining demand for park and recreational services anticipated with implementation of the project, based on established service ratios.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on recreation if it would:

a. 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; or,
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Project Impacts

Impact 4.15-1: The Project Would 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.

The proposed project would result in a temporary increase in population during construction as a result of the influx of construction workers. As discussed in Section 4.13, *Population and Housing,* the number of construction workers needed during any given time period depends largely on the specific stage of construction, but would average 200 workers, with a peak of up to 500 workers. Construction workers are

expected to travel to the site from various local communities, and the number of workers expected to relocate to the surrounding area is not expected to be substantial. If temporary housing should be necessary, it is expected that accommodations would be available in the nearby cities of Bakersfield or Shafter. The temporary increase in use of recreation facilities during construction that might be caused by an influx of workers would be minimal. Any construction workers who relocate to these areas may use the neighborhood and regional parks in the vicinity of the project site. Due to the limited addition of people to the area, and the temporary duration of construction, the potential temporary increase in use by construction personnel at any one park is not anticipated to be significant or result in a detectable physical deterioration of parks. A less than significant impact would occur in this regard.

Once completed, operation of the proposed project would require approximately 8,000 full-time employees. The resulting addition of families to this area would potentially increase the number of users at local parks. However, as described in Section 4.13. *Population and Housing,* the temporary and permanent employees required for the proposed project could come from the surrounding areas within the Bakersfield Metropolitan Statistical Area (MSA), without the need for relocation. Additionally, any workers who relocate to the area may use the several neighborhood and regional parks in the vicinity of the project site. Operation of the proposed project would not result in a substantial influx of people (such as a new residential development, school, or other use that would result in large volumes of people residing or traveling to the area) and, therefore, the potential increase in use by project personnel at any one neighborhood and/or regional park is not anticipated to be significant or result in a detectable physical deterioration of parks. A less than significant impact would occur in this regard.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be less than significant.

Impact 4.15-2: The Project Would Include Recreational Facilities or Require the Construction or Expansion of Recreational Facilities That Might Have An Adverse Physical Effect on The Environment.

As discussed above, implementation of the project would not result in substantially increased use of any area recreational facilities and would not require construction of new or expansion of any other existing recreational facilities. Therefore, impacts to the environment as a result of changes to recreational facilities are not expected, and impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impacts would occur.

Cumulative Setting, Impacts, and Mitigation Measures

The geographic scope for cumulative impacts to recreation resources includes the area within six miles of the project site. While projects in a larger area may affect some of the same recreation resources as the project, by focusing on projects within six miles of the project site, the analysis of cumulative impacts can be made on those projects that would most comparably affect the same resources as the project.

With regard to projects resulting in increased use of recreational facilities, the proposed project's impacts would be minimal due to the lack of substantial increase in population. As described in Section 4.13, *Population and Housing*, the employment of an average of 200 workers, with a peak of up to 500 workers would be needed to construct the proposed project and would create jobs for the surrounding unincorporated and incorporated communities. The approximately 8,000 full-time employees would further serve that need, meaning population would only increase slightly, and use of recreational facilities would not increase substantially. Therefore, the project's contribution to increased recreational facility usage would be negligible and would, therefore, not combine with impacts from cumulative projects to result in a significant impact.

Projects listed within the six-mile radius include industrial, commercial and residential uses. These projects may increase the need for recreational facilities. However, all of the projects are located within the Bakersfield MSA, which has a high unemployment rate; therefore, any new employees required to support the new projects may be expected to be hired from the existing regional workforce. Additionally, each of these individual projects would be subject to project level CEQA review.

With regard to the construction or expansion of new recreational facilities, the project would result in little to no impact, due to no need for new construction of these facilities. Therefore, impacts of the project would not have the potential to combine with impacts from cumulative projects to result in a significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts would be less than significant.

Section 4.16

Transportation and Traffic

4.16.1 Introduction

This section of the Environmental Impact Report (EIR) describes the affected environment, regulatory setting, and project impacts for traffic and transportation. It also describes mitigation measures that would reduce these impacts, where applicable. This section is primarily based on the Traffic Study prepared by Ruettgers & Schuler, originally dated June 2022, updated in October 2023, for the proposed project, included as Appendix L of this EIR (Ruettgers & Schuler 2023).

4.16.2 Environmental Setting

The proposed project site is located on agricultural land within unincorporated Kern County. The parcels are currently owned by Malibu Vineyards, LP, with a portion of the property being utilized for growing table grapes. The Lerdo Canal flows southeast to northwest along the eastern boundary of the Phase 2 portion of the project, and the western boundary of the Phase 1 portion of the project, effectively dividing the two phases of the project. State Route (SR) 99 is located along the west side of the proposed project site. Surrounding roadways are mostly dirt roads used for accessing agricultural use areas. The project site can be accessed from Saco Road, Burbank Street and Imperial Avenue, see **Figure 4.16-1**, *Project Location Map*.

Regional Setting

Major Highways

SR 99 and SR 65 are both within the vicinity of the project. SR 99 is located along the west side of the proposed project site and would provide access to the general vicinity of the proposed project during the construction and operation phases.

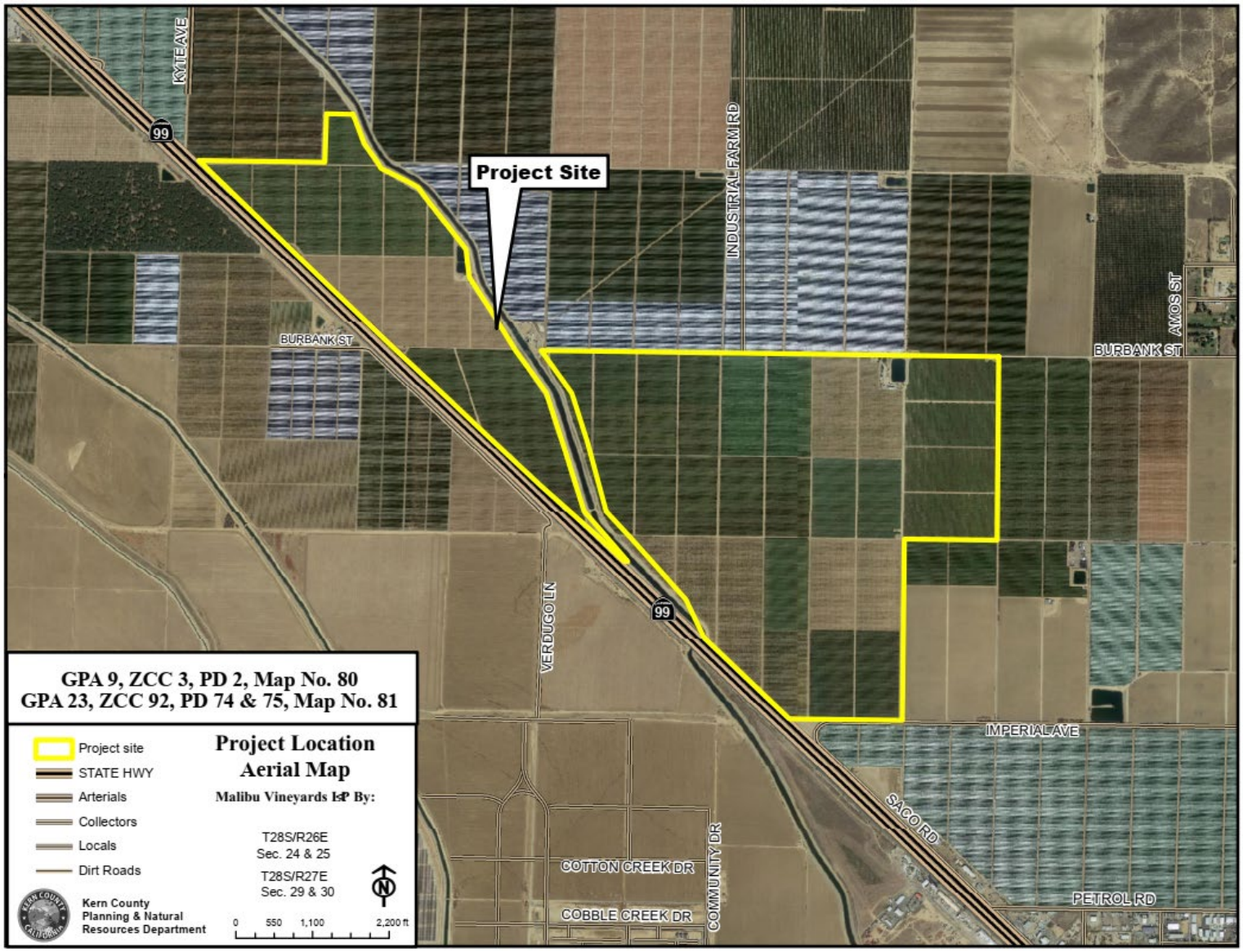
State Route 99

SR 99 is a north-south State highway, connecting at the southern end to Interstate-5 and at the northern end to SR 36. In the proposed project vicinity, SR 99 is six lanes. SR 99 connects to SR 46 with a modified trumpet interchange, but with both southbound ramps connecting to the southern side of SR 46.

State Route 65

SR 65 (Porterville Highway) is a major highway that extends from SR 99 to Lindsay, California. SR 65 is a two-lane highway with an interchange at SR 99. It is designated as a four-lane expressway from SR 99 to Imperial Avenue.

Figure 4.16-1: Project Location Map



Alternative Transit Facilities

Public Transit

There are no accessible public transit routes in the vicinity of the proposed project site. Public transportation in Kern County is generally provided by Kern Regional Transit, which offers 16 fixed routes throughout the County. Kern Transit Route 110 runs adjacent to the proposed project site along SR 99, and serves Delano, McFarland, Wasco, Shafter, and Bakersfield. However, the closest bus stop is located approximately 8.5 miles away in the City of Bakersfield. Additionally, the proposed project site is outside of the service area of the Kern Transit Dial-A-Ride services.

Non-Motorized Transportation

There are no dedicated pedestrian or bicycle facilities in the immediate vicinity of the proposed project site or along the surrounding roadways. SR 99 prohibits bicycle access, and there are no sidewalks or pedestrian crossings within the surrounding area.

Other Transportation Facilities

Railway

The closest railway is the Atchison Topeka and Santa Fe Railroad operated by the Union Pacific Railroad. This railway runs parallel on the west side of SR 99, adjacent to the proposed project site.

Airport Facilities

The closest airport facility is the Meadows Field Airport, located at 3701 Wings Way three miles northwest of downtown Bakersfield, adjacent to the unincorporated community of Oildale, approximately 1.5 miles southeast of the proposed project site. This airport is County-owned and operated, encompasses 1,357 acres, and supports two runways. Kern County has adopted an Airport Land Use Compatibility Plan (ALUCP) to comply with the State Aeronautics Act (Public Utilities Code commencing with Section 21670).

Local Setting

The approximately 739 acre proposed project site currently consists of vineyards and vacant, undeveloped land. As discussed previously and as shown on **Figure 4.16-1**, *Project Location Map*, the proposed project site is bordered by SR 99 to the west and access is proposed from Saco Road and Imperial Avenue. Burbank Street, Imperial Avenue, and the adjacent roads are unpaved and used primarily to access agricultural uses in the surrounding area. A list of surrounding roads in the area can be found below. Please refer to Appendix L of this EIR for a detailed description of each roadway.

Seventh (7th) Standard Road /Merle Haggard Drive

7th Standard Road /Merle Haggard Drive is a major east-west route in the north metropolitan Bakersfield area. It extends from west of Interstate 5 (I-5) to Chester Avenue and Manor Street in Oildale. It is

designated as an expressway between Santa Fe Way and SR 99 and as an arterial road for the remaining segments. It has interchanges at both I-5 and SR 99, intersection connections with SR 43 and SR 65 and grade separated crossings with the BNSF Railway and Union Pacific Railroad. This corridor provides access to residential, commercial, industrial and agricultural land uses, as well as, the William Thomas Terminal at Meadows Field.

Airport Drive

Airport Drive is an arterial road that extends north through Oildale from its interchange connection at State SR 99. It operates as a four-lane roadway with a raised median between SR 99 and West China Grade Loop. Airport Drive provides access to residential, commercial and industrial land uses.

Burbank Street/Future Beltway

Burbank Street/Future Beltway is designated as a future arterial road. The City of Shafter has planned for a "North Beltway" along the Burbank Street alignment west of State Route 99, with an interchange at State Route 99. The County has developed a conceptual plan for extension of this beltway from SR 99 to SR 65. The Kern Council of Governments has included this future facility in their (Kern Area Regional Goods-Movement Operations) KARGO study, which is currently in process (Ruettgers & Schuler 2023). Funding sources and construction timing have not been identified for this extension.

Calloway Drive

Calloway Drive is one of two major north-south arterial roads, which extends through the metropolitan area west of SR 99 from south of Taft Highway (SR 119) to 7th Standard Road (Calloway Drive extends south of Stockdale Highway asthe Old River Road alignment).

China Grade Loop

China Grade Loop is an east-west arterial road that extends from Airport Drive to the east. In the project vicinity, it is a four-lane fully improved facility and as a two-lane facility east of Manor Street. China Grade Loop provides access to residential and industrial land uses.

Coffee Road

Coffee Road is the second of the two major north-south arterial roads, which extend through the metropolitan area west of SR 99 from south of Taft Highway (SR 119) to 7th Standard Road (Coffee Road extends south of Stockdale Highway as the Gosford Road alignment). In the study area, it exists as a two-lane roadway with graded shoulders south of 7th Standard Road and at various stages of widening adjacent to development south of Snow Road.

Imperial Avenue

Imperial Avenue is designated as an east-west collector street from Saco Road to James Road. Imperial Avenue currently exists as a two-lane road at various street sections between Saco Road and SR 65. It is stop controlled at SR 65. East of SR 65, it exists as a dirt road for approximately one half mile. It provides access to agricultural and industrial land uses. It is anticipated that the project will construct Imperial Avenue improvements between Saco Road and SR 65 as needed to support project traffic operations. Future extension of Imperial Avenue from SR 65 to James Road is planned to occur with development; however, no timeframe is currently defined.

Industry Parkway Drive

Industry Parkway Drive is a north-south local roadway that provides access to commercial land uses. In the vicinity of the project, it exists as a two-lane roadway with curb and gutter installed.

James Road

James Road is a two-lane arterial road that extends northwest from the northerly terminus of North Chester Avenue to SR 65. It provides access primarily to industrial and oil production land uses. James Road has paved shoulders and is widened adjacent to development in the vicinity of the project.

Lerdo Highway

Lerdo Highway is an east-west two-lane arterial road that extends west from SR 65 to SR 33. It provides access to the City of Shafter and agricultural land uses. Landings Way is a north-south collector street, which extends along the east side of the Landings Logistic Center and Amazon fulfillment center. It is currently being improved north of Merle Haggard Drive adjacent to new development.

McCary Street

McCray Street is a fully improved two-lane collector street that extends north from Norris Road to North Chester Avenue. It provides access to residential land uses and North High School.

North Chester Avenue

North Chester Avenue is a major north-south arterial road, which crosses the Kern River. It provides access from central Bakersfield north through Oildale. North of Merle Haggard Drive it continues as the James Road alignment to SR 65.

Olive Drive

Olive Drive is an east-west arterial road with an interchange connection at SR 99. It is a major access route for traffic between SR 99 and commercial and residential areas to the west and the community of Oildale to the southeast.

Pegasus Drive

Pegasus Drive is a north-south collector street that extends from Norris Road to Merle Haggard Drive. It exists as a two-lane facility with curb and gutter installed in the vicinity of the project site and provides access to industrial and commercial land uses.

Quinn Road

Quinn Road is a north-south collector street that extends from Merle Haggard Drive to Imperial Avenue. It exists as a two-lane facility at various street sections with curb and gutter installed adjacent to development. Quinn Road provides access to industrial and agricultural land uses.

Wings Way

Wings Way is a collector street, which runs northeasterly of the Meadows Field Airport and intersects Merle Haggard Drive approximately 0.75 miles west of Airport Drive. It provides access to the William Thomas Terminal, industrial land uses south of Merle Haggard Drive and planned industrial uses to the north. A Specific Plan Line was recently adopted by the County for the ultimate alignment and connection to Imperial Avenue for a future connection to SR 65. The connection of Wings Way/Imperial Avenue from Merle Haggard Drive to SR 65 has been planned as a secondary route for east-west travel in the area due to the four-lane constraint on Merle Haggard Drive under the airport runway.

4.16.3 Regulatory Setting

Federal

Federal Aviation Administration (FAA)

The Federal Aviation Administration (FAA) regulates aviation at the Meadows Field Airport and other regional, public, and private airports. The FAA regulates objects affecting navigable airspace. According to Code of Federal Regulations Title 49, Part 77.9, any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA of:

- Any construction or alteration exceeding 200 feet above ground level;
- Any construction or alteration:
    - Within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway where the longest airport runway exceeds 3,200 feet in actual length;
    - Within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway where the longest airport runway is less than 3,200 feet in actual length; and,
    - Within 5,000 feet of a public use heliport which exceeds a 25:1 surface;
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed the above standards;
- When requested by the FAA; and,
- Any construction or alteration located on a public use airport or heliport regardless of height or location.

Failure to comply with the provisions of Federal Aviation Regulation Part 77 is subject to civil penalty under Section 902 of the Federal Aviation Act of 1958, as amended, and pursuant to United States Code (USC) Title 49, Section 46301(a).

State

California Department of Transportation (Caltrans)

Caltrans has jurisdiction over state highways and sets maximum load limits for trucks and safety requirements for oversized vehicles that operate on highways. The proposed project site is located in the portion of Kern County under the jurisdiction of Caltrans District No. 6. The following Caltrans regulations apply to potential transportation and traffic impacts of the proposed project:

- **California Vehicle Code (CVC), Division 15, Chapters 1 through 5 (Size, Weight, and Load).** Includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways.
- **California Street and Highway Code, Sections 660-711, 670-695.** Requires permits from Caltrans for any roadway encroachment during truck transportation and delivery, includes regulations for the care and protection of State and County highways, establishes provisions for the issuance of written permits, and requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.

Local

As discussed in the Section 3, *Project Description*, the proposed project contains 193 acres (approximately 26 percent of the project site) within the Kern County General Plan (KCGP) and approximately 545 acres (approximately 74 percent of the project site) within the Metropolitan Bakersfield General Plan (MBGP). The entire project is subject to the provisions of the Kern County Zoning Ordinance.

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the KCGP Circulation Element for traffic and transportation that are applicable to the proposed project are provided below. The KCGP contains additional policies, goals, and implementation measures that are more general in nature and are not specific to a particular development. Therefore, they are not listed below, but all policies, goals, and implementation measures in the KCGP are incorporated by reference. The design Level of Service (LOS) for Kern County is LOS C; the minimum LOS for conformance with the KCGP is LOS D.

Circulation Element

2.1 Introduction

Goals

Goal 4: Kern County will plan for a reduction of environmental effects without accepting a lower quality of life in the process.

Goal 5: Maintain a minimum (level of service) LOS D for all roads throughout the County.

2.3.3 Highway Plan

Goal

Goal 5: Maintain a minimum LOS D.

Policies

Policy 1: Development of roads within the County shall be in accordance with the Circulation Diagram Map. The charted roads are usually on section and midsection lines. This is because the road centerline can be determined by an existing survey.

Policy 3: This plan's road-width standards are listed below. These standards do not include state highway widths that would require additional right-of-way for rail transit, bike lanes, and other modes of transportation. Kern County shall consider these modifications on a case-by-case basis.

- Expressway (Four Travel Lanes) Minimum 110-foot right-of-way;
- Arterial (Major Highway) Minimum 110-foot right-of-way;
- Collector (Secondary Highway) Minimum 90-foot right-of-way;
- Commercial-Industrial Street Minimum 60-foot right-of-way; and
- Local Street (Select Local Road) Minimum 60-foot right-of-way.

Implementation Measure

Measure A: The Kern County Planning and Community Development Department shall carry out the road network policies by using the Kern County Land Division Ordinance and Zoning Ordinance, which implements the Kern County Development Standards that includes road standards related to urban and rural planning requirements. These ordinances also regulate access points. The Kern County Planning and Community Department can help developers and property owners in identifying where planned circulation is to occur.

2.3.4 Future Growth

Policies

Policy 2: The County should monitor development applications as they relate to traffic estimates developed for this plan. Mitigation is required if development causes affected roadways to fall below LOS D. Utilization of the California Environmental Quality Act (CEQA) process would help identify alternatives to or mitigation for such developments. Mitigation could involve amending the Land Use, Open Space, and Conservation Element to establish jobs/housing balance if projected trips in any traffic zone exceed trips identified for this Circulation Element. Mitigation could involve exactions to build off-site transportation facilities. These enhancements would reduce traffic congestion to an acceptable level.

Policy 4: As a condition of private development approval, developers shall build roads needed to access the existing road network. Developers shall build these roads to County standards unless improvements along state routes are necessary then roads shall be built to California Department of Transportation (Caltrans) standards. Developers shall locate these roads (width to be determined by the Circulation Plan) along centerlines shown on the circulation diagram map unless otherwise authorized by an approved Specific Plan Line. Developers may build local roads along lines other than those on the circulation diagram map. Developers would negotiate necessary easements to allow this.

Policy 5: When there is a legal lot of record, improvement of access to County, City or State roads will require funding by sources other than the County. Funding could be by starting a local benefit assessment district or, depending on the size of a project, direct development impact fees.

Policy 6: The County may accept a developer's road into the County's maintained road system. This is at Kern County's discretion. Acceptance would occur after the developer follows the above requirements. Roads are included in the County road maintenance system through approval by the Board of Supervisors.

Implementation Measure

Measure C: Project development shall comply with the requirements of the Kern County Zoning Ordinance, Land Division Ordinance, and Development Standards.

2.5.1 Trucks and Highways

The Kern County road network handles a high ratio of heavy truck traffic. State highways carry most of this traffic. Most of the trucks are interstate carriers. As such, interstate trucking is not under the direct control of County officials. In as much as this traffic affects County residents and taxpayers, they need actions to guarantee State highways in Kern County receive a fair share of California's transportation investment.

Goals

Goal 1: Provide for Kern County's heavy truck transportation in the safest way possible.

Goal 2: Reduce potential overweight trucks.

Goal 3: Use State Highway System improvements to prevent truck traffic in neighborhoods.

Policies

Policy 1: Caltrans should be made aware of the heavy truck activity on Kern County's roads.

Policy 2: Start a program that monitors truck traffic operations.

Policy 3: Promote a monitoring program of truck lane pavement condition.

Implementation Measure

Measure A: Caltrans should further detail the need for improvement of pavement conditions on the State Highway System. This would encourage Caltrans implementation of the above Policies.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The MBGP provides goals and policies for the design features of development within its plan area. According to the MBGP, the proposed project site is not identified as a significant scenic resource. The MBGP policies related to transportation and traffic that are applicable to the proposed project are provided below. The MBGP contains additional policies, goals, and implementation measures that are more general in nature and are not specific to development such as the proposed project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the MBGP are incorporated by reference.

Chapter III: Circulation/Public Streets

Goals

Goal 1: Provide a safe and efficient street system that links all parts of the area for movement of people and goods.

Goal 5: Provide a system of freeways which maintains adequate travel times in and around the metropolitan area.

Goal 7: Develop and maintain a circulation system that supports the land use plan shown in the general plan.

Policies

Policy 3: Provide additional right-of-way and pavement width to accommodate turn lanes at intersections.

Policy 5: Place traffic signals to minimize vehicular delay.

Policy 6: Design and locate site access driveways to minimize traffic disruption where possible considering items such as topography, past parcelization and other factors.

Policy 7: Minimize direct and uncontrolled property access from arterials.

Policy 8: Limit full access median breaks on arterials to a maximum of three per mile and include left-turn lanes at each.

Policy 9: Consider the construction of grade separations for intersections unable to meet minimum level of service standards.

Policy 10: Design local streets to conform to topography. Allow for deviation from "grid" system on local streets when they do not interfere with other traffic policies and traffic flows.

Policy 17: Require buildings expected to be serviced by delivery trucks to provide off-street facilities for access and parking.

Policy 23: Provide freeways in a manner similar to that shown on the Circulation Plan Map. Actual alignments to be determined by specific corridor studies.

Policy 24: Identify route alignments and right-of-way needs.

Policy 25: Identify interchange locations and preliminary designs.

Policy 26: Preserve freeway and interchange rights-of-way consistent with corridor study alignments and specifications.

Policy 34: Minimize the impacts of land use development on the circulation system. Review all development plans, rezoning applications, and proposed general plan amendments with respect to their impact on the transportation system, and require revisions as necessary.

Policy 35: Require new development and expansion of existing development in incorporated areas to fully provide for on-site transportation facilities including streets, curbs, traffic control devices, etc. Within unincorporated areas street improvements will be determined by County Ordinance.

Regional Transportation Improvement Program (RTIP)

The Kern Council of Governments (KernCOG) RTIP is intended to be a funding mechanism for roadway improvements which are regional in nature, and for which cost sharing by all new development is appropriate. The RTIP is a program jointly developed, approved and administered by the County and the City of Bakersfield. The program was adopted in the 1980's and has been updated periodically to reflect the latest development growth patterns and construction costs. The current version of the RTIP is the fourth update to the program and was adopted in 2009. The current version has been held in place for an extended period of time as a stable reference for projects within the Thomas Roads Improvement Program (TRIP). With the near conclusion of the TRIP program, the County is working on an update to the RTIP, which would reflect current development conditions, particularly in the vicinity of Meadows Field.

2022 Regional Transportation Plan/Sustainable Communities Strategy

The latest Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was prepared by the KernCOG and was adopted in 2022. The 2022 RTP/SCS is a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. It has been developed through a federally required continuing, comprehensive, and cooperative planning process, and provides for effective coordination between local, regional, state, and federal agencies. Included in the 2022 RTP is the Sustainable Communities Strategy (SCS) required by California's Sustainable Communities and Climate Protection Act of Senate Bill SB 375 (SB 375). The California Air Resources Board (CARB) set targets for Kern's greenhouse gas (GHG) emission reductions from passenger vehicles and light-duty trucks at 9 percent per capita by 2020 and 15 percent per capita by 2035 as compared to 2005 (KernCOG 2022b).

Kern County Airport Land Use Compatibility Plan (ALUCP)

The Kern County ALUCP establishes procedures and criteria to assist Kern County and affected incorporated Cities in addressing compatibility issues for the proposed project regarding airports and the land uses around them. The Meadows Field Airport is located approximately 1.5 miles southeast of the proposed project site. Southern portions of the project are in ALUCP Zone B2, which may require a dedication of avigation easement, and Zone C, which limits high-rise office buildings to no more than four stories.

4.16.4 Impacts and Mitigation Measures

Methodology

This section describes the impact analysis relating to transportation and traffic for the proposed project. It describes the methods used to determine the impacts of the proposed project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate significant impacts accompany each impact discussion, where applicable. Impacts were evaluated based on the *Traffic Study* prepared by Ruettgers & Schuler, originally dated June 2022 and updated in October 2023 (found in Appendix L).

Vehicle Miles Traveled (VMT)

In 2013, the State of California approved SB 743 to change the primary basis of evaluation of traffic deficiencies in CEQA from LOS to Vehicle Miles Traveled (VMT). CEQA Guidelines section 15064.3 was approved in December 2018 and became effective in early 2019. Section 15064.3 required agencies to begin implementing the new VMT requirement no later than July 1, 2020. The Governor's Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts In CEQA in December 2018, which provides guidelines and recommendations for VMT evaluation and thresholds. As of 2023, the Kern County Planning Department has not finalized or adopted any policies or thresholds for VMT analysis; therefore, OPR's Technical Advisory thresholds were used for this analysis. The Technical Advisory provides initial screening criteria and thresholds of significance for the VMT evaluation based on land use; however, no specific recommendations are provided for industrial land use. As the proposed project would consist of industrial use and office spaces, an office space land use was selected to represent the proposed project. Additionally, both industrial and office land uses would be anticipated to generate passenger vehicle trips primarily from employees. The Technical Advisory states that office projects that would generate vehicle travel exceeding 15 percent below existing VMT (baseline) per employee for the region may indicate a significant transportation impact.

KernCOG's regional transportation model was used to determine baseline VMT for the region and VMT for the region under proposed project conditions for analysis. See Section 4.16.4, *Impacts and Mitigation Measures* below.

Operational Analysis

The area analyzed for the proposed project's operational analysis is generally bounded by Lerdo Highway on the north, Imperial Avenue on the south, Quinn Road on the east, and SR 99 on the west. The Operational Analysis includes a total of 19 intersections (14 signalized and 5 unsignalized). The scope of the Operational Analysis was developed in association with the Kern County Public Works Department, the City of Bakersfield Public Works Department, the City of Shafter Planning Department, and Caltrans District 6.

Project Trip Generation and Design Hour Volumes

The trip generation and design hour volumes for all land uses were calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition. Trip generation and design hour volumes for all land uses are shown in Appendix L. A mix of different types of industrial/warehousing trip rates were used to represent the probable combination of businesses that would possibly operate within the proposed project site. The Average Daily Trip (ADT), AM and PM peak hour rate equations, and peak hour directional splits for ITE Land Use Codes 150 (Warehousing) and 154 (High-Cube Transload and Short-Term Storage) were used to estimate the project traffic. The peak hours of adjacent streets were determined to be 7:00 AM to 8:00 AM and 4:15 PM to 5:15 PM.

Trip Distribution and Assignment

The project trip distribution in Table 4.16-1, *Project Trip Distribution* represents the most likely travel routes for traffic accessing the project. According to the Traffic Study prepared by Ruettgers & Schuler (Appendix L), the project traffic distribution was estimated based on a review of the potential draw from population centers within the region and the types of land uses involved.

Table 4.16-1: Project Trip Distribution

Direction	Percent
North	25
East	10
South	45
West	20
Source: Traffic Study, Ruettgers & Schuler, 2022, 2023	

Intersection Analysis

The Traffic Study prepared by Ruettgers & Schuler (Appendix L) conducted a capacity analysis of the proposed project study intersections using Synchro 9 software from Trafficware. Trafficware software utilizes the 2010 capacity analysis methodology in the Transportation Research Board's Highway Capacity Manual. The intersection analysis was performed for each of the following traffic scenarios.

- Existing 2022
- Existing 2022 plus Phase 1
- Building year 2032

- Building year 2032 plus Phase 1
- Future 2042
- Future 2042 plus Phases 1 and 2

Criteria for intersection level of service LOS are shown in **Table 4.16-2**, *LOS Criteria* below.

Table 4.16-2: LOS Criteria

Unsignalized Intersection		
Average Control Delay (sec/veh)	**LOS**	**Expected Delay to Minor Street Traffic**
≤ 10	A	Little to none
> 10 and ≤ 15	B	Short
> 15 and ≤ 25	C	Average
> 25 and ≤ 35	D	Long
> 35 and ≤ 50	E	Very Long
> 50	F	Extreme
Signalized Intersections		
Control Delay (sec/veh)	**LOS**	**Volume/Capacity**
≤ 10	A	< 0.60
> 10 and ≤ 20	B	0.61 – 0.70
> 20 and ≤ 35	C	0.71 – 0.80
> 35 and ≤ 55	D	0.81 – 0.90
> 55 and ≤ 80	E	0.91 – 1.00
> 80	F	> 1.0
Source: Traffic Study, Ruettgers & Schuler, 2022, 2023		

Queue Length Analysis

The Traffic Study prepared by Ruettgers & Schuler (Appendix L) utilized Synchro 9 software to analyze que length analysis. The queue analysis was performed at the request of Caltrans; however, Kern County has not defined or adopted any criteria or thresholds for evaluation of queue lengths for specific turning movements at any intersection. Existing volumes and future volumes, both with and without project traffic, to analyze movements were performed at SR 65 and Imperial Avenue, Golden State Highway and 7th Standard Road, SR 99 northbound off ramp and Merle Haggard Drive, and SR 65 and Merle Haggard Drive. The results of the queue length analysis are provided for informational purposes in the Traffic Study, Appendix L.

Traffic Signal Warrant Analysis

The Traffic Study prepared by Ruettgers & Schuler analyzed peak hour signal warrants were evaluated for the unsignalized intersection within the study based on the California Manual on Uniform Traffic Control Devices (MUTCD). Peak hour signal warrants assess delay to traffic on the minor street approaches when entering or crossing a major street. Signal warrant analysis results for PM and AM peak hours are provided for informational purposes in the Traffic Study, Appendix L.

Roadway Analysis

Published ADT information and future projected traffic were used to calculate volume-to-capacity ratios. A volume-to-capacity ratio (v/c) of greater than 0.80 corresponds to a LOS of less than "C", as defined in the Highway Capacity Manual. As mentioned previously, a level of service "C" is the acceptable standard in Kern County within the metropolitan Bakersfield areas. LOS "D" is the County's standard outside of the metropolitan area.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identifies the following criteria, as established in Appendix G of the *CEQA Guidelines*, to determine if a project could potentially have a significant adverse effect on traffic and transportation.

A project could have a significant adverse effect on traffic and transportation if it would:

a. The Project Would Conflict with A Plan, Ordinance, Or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle, and Pedestrian Facilities

b. The Project Would Conflict or be Inconsistent with CEQA Guidelines Section 15064.3 Subdivision (b)

c. The Project Would Substantially Increase Hazards Due to a Geometric Design Feature (E.G., Sharp Curves or Dangerous Intersections) or Incompatible Uses (E.G., Farm Equipment)

d. The Project Would Result in Inadequate Emergency Access

Kern County determined in the Notice of Preparation/Initial Study (NOP/IS) that all of the above listed environmental issue areas require further review in this EIR. Please refer to Appendix A of this EIR for a copy of the NOP/IS.

Project Impacts

Impact 4.16-1: The Project Would Conflict with A Plan, Ordinance, or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle, and Pedestrian Facilities.

The proposed project, as currently designed, would include the construction of approximately 8,907,446 square feet of industrial use space, comprised of 24 buildings on 739 acres of existing vineyard and vacant land. The project would support mixed use office and warehouse operations. As discussed in Chapter 3.0, *Project Description*, implementation of the project as proposed would require the adoption of the Malibu Vineyards Industrial Parkway Specific Plan, adoption of a Precise Development Plan, amendments to the KCGP and MBGP from the existing agricultural land use designations to industrial, and a change in the Kern County Zoning Classification from A (Exclusive Agriculture) to M-2 PD (Medium Industrial, Precise Development) to facilitate the future construction and operation of a warehouse/distribution center at the proposed project site. The proposed project would generate short-term temporary trips during construction and permanent employee commuter, arrival and distribution trips during operation of the proposed project.

A summary of existing transportation conditions and projected proposed project impacts are provided in Appendix L.

Despite the fact that the State of California approved SB 743 to change the primary basis of evaluation of traffic deficiencies in CEQA LOS to VMT, the service goal for roadway facilities in Kern County is LOS "C" within the metropolitan Bakersfield area and LOS "D" outside of the metropolitan area. The Traffic Study prepared by Ruettgers & Schuler provides an operational analysis of the existing and future street system with the addition of project traffic. The operation analysis includes LOS analysis for peak hour intersection and daily roadway operations, as well as, queueing and signal warrant evaluation. The purpose of the operational analysis is to evaluate consistency with the County's planning goals relating to intersection and roadway level of service and identify potential LOS or geometric deficiencies.

The operation analysis determined existing traffic operates at or near acceptable levels within the proposed project study area with the existing roadway facilities. The addition of proposed project traffic to existing traffic would cause a deterioration in traffic operations on the existing street system along SR 65 between Merle Haggard Drive and Imperial Avenue and at the intersections of Imperial Avenue at SR 65, Lerdo Highway at SR 99 southbound ramps and 7th Standard Road at Coffee Road. The anticipated growth in traffic volumes along the 7th Standard Road/Merle Haggard Drive Corridor over the next 10 to 20 years is anticipated to result in a substantial increase in congestion, with several locations operating below LOS "C," with or without project traffic. The Traffic Study concludes that the proposed project should improve Imperial Avenue west of SR 65 to arterial standards, pay its proportionate fair share for local improvements, and pay into the RTIP program in accordance with the current fee schedule during the building permit process for those portions of the project located within the RTIP boundary, which applies to Phase 1 only, as Phase 2 is located outside of the RTIP boundary and not required to pay into the program. Additionally, the Traffic Study recommends that the proposed project should coordinate with the County on development and funding of additional regional capacity to relieve congestion along the 7th Standard Road/Merle Haggard Drive corridor, including the extension of Imperial Avenue east of SR 65 and construction of an additional freeway interchange(s) on SR 99 in the vicinity of the Burbank Street alignment between 7th Standard Road and Lerdo Highway.

Planned Improvements

Regional Transportation Impact Fee Program

The RTIP provides a funding mechanism for roadway improvements which are regional in nature and for which cost sharing by all new development is appropriate. The metropolitan RTIP is a program jointly developed, approved and administered by the County and the City of Bakersfield. The program was adopted in the 1980's and has been updated periodically to reflect the latest development growth patterns and construction costs. The current version of the RTIP is the fourth update to the program and was adopted in 2009 (KernCOG 2010). The current version has been held in place for an extended period of time as a stable reference for projects within the Thomas Roads Improvement Program (TRIP). With the near conclusion of the TRIP program, the County is working on an update of the RTIP, which would reflect current development conditions along the 7th Standard Road/Merle Haggard Drive corridor, particularly in the vicinity of Meadows Field.

As described in the existing setting section above, the 7th Standard Road/Merle Haggard Drive corridor is a major east-west route in the north metropolitan area. Over the past 15 years the local agencies have

implemented widening improvements from Wings Way to west of Santa Fe Way. These improvements have been implemented with a variety of funding sources, including the RTIP for metropolitan Bakersfield. There are two improvement projects within the RTIP, that have yet to be implemented, at 7th Standard Road/Merle Haggard Drive corridor. Additionally, there are projects identified for SR 65, Calloway Drive, Coffee Road and Norris Road. They are as follows:

- Merle Haggard Drive widening to four lanes, Wings Way to Airport Drive
- 7th Standard Road/SR 99 interchange - eastbound bridge replacement and new ramps
- SR 65 widening to four lanes, Merle Haggard Drive to James Rd
- Calloway Drive widening to four lanes, south of 7th Standard Road
- Coffee Road widening to four lanes, south of 7th Standard Road
- Norris Road widening to four lanes, west of Airport Drive

California High Speed Rail

The planned alignment for the California High Speed Rail (HSR) segment from Shafter to Bakersfield crosses 7th Standard Road between Coffee Road and the Union Pacific Railroad (UPRR). The current design for the HSR project places the HSR at "level 2", keeps UPRR at "level 1" and elevates 7th Standard Road over the top of both at "level 3". This arrangement will require the complete reconstruction of 7th Standard Road and the SR 99/7th Standard Road interchange from the Beardsley Canal to east of the SR 99 northbound ramps. The Environmental Document for this section of the HSR was approved in 2019. According to the Traffic Study prepared by Ruettgers & Schuler, the HSR Authority is currently in the selection process for a design consultant, with final design to be complete by 2027. The Traffic Study assumed that reconstruction of the 7th Standard Road interchange will be completed by 2030. Additionally, the Traffic Study determined the reconstruction will supersede the interchange improvement listed in the RTIP. Additionally, the County, City of Bakersfield and Caltrans need to coordinate closely with the HSR Authority to assure the reconstruction along 7th Standard Road includes adequate facilities to accommodate both existing and anticipated future traffic.

Proposed Project Study Area Improvements

Table 4.16-3, *Future Intersection Improvements- Phase 1*, **Table 4.16-4**, *Future Roadway Improvements – Phase 2* **Table 4.16-5**, *Future Intersection Improvements – Phase 2*, and **Table 4.16-6**, *Future Roadway Improvements – Phase 2* depict the intersection and roadway improvements needed by the year 2042 to maintain or improve the operational level of service of the street system in the vicinity of the project (Ruettgers & Schuler 2023). The RTIP Facilities List, which includes the improvements listed in the tables below, contains many of the facilities needed to maintain a level of service "C" or better for new growth or to prevent the degradation of facilities which are currently operating below LOS C. The RTIP program establishes the fees to be collected from new development to provide funding for those projects, which are on the RTIP list. Mitigation Measures **MM 4.16-6** and **MM 4.16-7** identify local improvements not covered by the RTIP program or anticipated by adjacent development, and an estimate of the project's proportionate fair share responsibility percentage for the improvement.

Table 4.16-3: Future Intersection Improvements - Phase 1

Intersection	Total Improvements Required	Local Improvements (Improvements not covered by RTIP or adjacent development)
SR 99 SB Ramps & Lerdo Hwy	Signal, Add SBR	Signal, Add SBR
SR 99 NB Ramps & Lerdo Hwy	Add NBL	Add NBL
Porterville Hwy (SR 65) & James Rd	Signal	Signal
Porterville Hwy (SR 65) & Imperial Ave	Signal	Signal
	Add EBR, NBL	Add EBR, NBL
Porterville Hwy (SR 65) & Merle Haggard Dr	Add NBR	Add NBR
Chester Ave & Manor St/Merle Haggard Dr	Change 1 SBT to SBTL[1], split phase timing N-S	Change 1 SBT to SBTL[1], split phase timing N-S

[1] Striping only

Notes:

NB = Northbound SB = Southbound WB = Westbound EB = Eastbound T = Through Lane R = Right-Turn Lane L = Left-Turn Lane

Source: Traffic Study, Ruettgers & Schuler, 2022, 2023

Table 4.16-4: Future Roadway Improvements - Phase 1

Roadway	Total Improvements Required	Local Improvements (Improvements not covered by RTIP or adjacent development)
Porterville Hwy (State Route 65): James Rd to Lerdo Hwy	Add 2 Lanes	Add 2 Lanes

Source: Traffic Study, Ruettgers & Schuler, 2022, 2023

Table 4.16-5: Future Intersection Improvements - Phase 2

Intersection	Total Improvements Required	Local Improvements (Improvements not covered by RTIP or adjacent development)
SR 99 SB Ramps & Lerdo Hwy	Signal, Add SBR	Signal, Add SBR
SR 99 NB Ramps & Lerdo Hwy	Add NBL	Add NBL
Porterville Hwy (SR 65) & Lerdo Hwy	Signal	Signal
Porterville Hwy (SR 65) & James Rd	Signal	Signal
Porterville Hwy (SR 65) & Imperial Ave	Signal	Signal
	Add EBR, NBL	Add EBR, NBL
Calloway Dr & 7th Standard Rd	Add EBT, EBR, NBR	-
Coffee Rd & 7th Standard Rd	Add WBT, 1 WBL, change NBT/R to NBT, 2NBR	-
Golden State Hwy & 7th Standard Rd	Add SBL, SBR, change NBT/R to NBT, NBR	-
Porterville Hwy (SR 65) & Merle Haggard Dr	Add NBR	Add NBR
Landings Way & Merle Haggard Dr	Change WBR to WBTR	-
Chester Ave & Manor St/Merle Haggard Dr	Change 1 SBT to SBTL[1], split phase timing N-S	Change 1 SBT to SBTL[1], split phase timing N-S

[1] Striping only

Notes:

NB = Northbound SB = Southbound WB = Westbound EB = Eastbound T = Through Lane R = Right-Turn Lane L = Left-Turn Lane

Source: Traffic Study, Ruettgers & Schuler, 2022, 2023

Table 4.16-6: Future Roadway Improvements - Phase 2

Roadway	Total Improvements Required	Local Improvements (Improvements not covered by RTIP or adjacent development)
Porterville Hwy (State Route 65): James Rd to Lerdo Hwy	Add 2 Lanes	Add 2 Lanes
Source: Traffic Study, Ruettgers & Schuler, 2022, 2023		

Summary and Conclusions

In conclusion, the addition of project traffic to the existing and future street system results in LOS deficiencies at several locations. Significant congestion is anticipated in the future along the 7th Standard Road/Merle Haggard Drive corridor, due to traffic associated with regional growth and development affecting several intersections, that roadways are anticipated to operate below LOS "C" in the future even with full standard widening and roadway improvements.

Each of these deficiencies shall be addressed with improvements as shown above in **Table 4.16-3**, *Future Intersection Improvements- Phase 1*, **Table 4.16-4**, *Future Roadway Improvements – Phase 2,* **Table 4.16-5**, *Future Intersection Improvements – Phase 2*, and **Table 4.16-6**, *Future Roadway Improvements – Phase 2*, and Mitigation Measures **MM 4.16-1** through **MM 4.16-7**, including payment into the RTIP program in accordance with the current fee schedule, improvements to Imperial Avenue west of SR 65, and payment of the project's proportionate fair share for local improvements as listed in Mitigation Measures **MM 4.16-6** and **MM 4.16-7**. However, the proposed project has the potential to conflict with the Kern County General Plan LOS standards by reducing existing acceptable LOS to unacceptable levels. Implementation of the following mitigation measures would reduce proposed project impacts.

Mitigation Measures

MM 4.16-1: Prior to the issuance of any building permit within Metropolitan Bakersfield, the project proponent shall pay the required Transportation Traffic Impact fees.

MM 4.16-2: Prior to the issuance of the first grading or building permit, whichever comes first, the project proponent shall provide a Traffic Index analysis, assuming full buildout of the project site for Imperial Avenue from SR 99 to SR 65 and Saco Road from the project frontage to Quinn Road.

MM 4.16-3: Prior to issuance of the first occupancy permit, the project proponent shall under street improvement plans approved by the Kern County Public Works Department/Development Review, construct the project frontage of Imperial Avenue to a Traffic Index to be determined by a Traffic Index analysis performed in Mitigation Measure MM 4.16-2.

MM 4.16-4: Prior to issuance of the first occupancy permit, the project proponent shall under street improvement plans approved by the Kern County Public Works Department/Development Review, construct Imperial Avenue project frontage from Saco Road to Quinn Road to Type A Subdivision Standards, half width Collector Highway, in accordance with the Kern

County Development Standards and Land Division Ordinance. These improvements shall include, but not be limited to, curb, gutter, , asphalt concrete, and the necessary tie-ins.

MM 4.16-5: Prior to issuance of the first occupancy permit, the project proponent shall prepare street improvement plans, approved by the Kern County Public Works Department/Development Review, and construct Imperial Avenue from Quinn Road to SR 65, with minimum, half width Collector Highway, in accordance with the Kern County Development Standards and Land Division Ordinance. These improvements shall include, but not be limited to, full build out of the intersection of Imperial Avenue at SR 65, asphalt concrete, and the necessary tie-ins.

MM 4.16-6: Prior to the issuance of the second and/or subsequent grading or building permit for the Phase 1 project area, the project proponent shall prepare a supplemental trip generation and distribution, in accordance with the requirements of the Kern County Public Works Department. The analysis shall identify which of the required off-site traffic improvements and/or payments for proportionate fair share improvements (as identified below) shall be implemented prior to issuance of any final occupancy permit. Estimated payments shown in tables below represent current (2024) costs associated with the fair share percentages. Final costs are subject to change due to the Consumer Price Index (CPI) fluctuations. The Kern County Public Works Department shall be consulted to determine final costs.

Future Intersection Improvements – Phase 1

Intersection	Total Improvements Required	Local Improvements (Improvements not covered by RTIF or adjacent development)	Estimated Cost (2024 CPI)	Project % Share for Local Improvements Phase 1	Estimated Payment (2024 CPI) for Project % Share for Local Improvements Phase 1
SR 99 SB Ramps & Lerdo Hwy	Signal, Add SBR	Signal, Add SBR	TBD by Caltrans	11.61%	TBD by Caltrans
SR 99 NB Ramps & Lerdo Hwy	Add NBL	Add NBL	TBD by Caltrans	27.32%	TBD by Caltrans
Porterville Hwy (SR 65) & James Rd	Signal	Signal	$1,200,000.	29.46%	$353,520.00
Porterville Hwy (SR 65) & Imperial Ave	Signal	Signal	$1,200,000.	74.32%	$891,840.00
	Add EBR, NBL	Add EBR, NBL	TBD by	100%	TBD by Caltrans

Intersection	Total Improvements Required	Local Improvements (Improvements not covered by RTIF or adjacent development)	Estimated Cost (2024 CPI)	Project % Share for Local Improvements Phase 1	Estimated Payment (2024 CPI) for Project % Share for Local Improvements Phase 1
Porterville Hwy (SR 65) & Merle	Add NBR	Add NBR	$1,500,000.	19.42%	$291,300.00
Chester Ave & Manor St/Merle Haggard Dr	Change 1 SBT to SBTL[1], split phase timing N-S	Change 1 SBT to SBTL[1], split phase timing N-S	$100,000.0	11.57%	$11,570.00

[1] Striping only

Notes:

NB = Northbound SB = Southbound WB = Westbound EB = Eastbound T = Through Lane R = Right-Turn Lane L = Left-Turn Lane

Future Roadway Improvements – Phase 1

Roadway	Total Improvements Required	Local Improvements (Improvements not covered by RTIP or adjacent development)	Estimated Cost (2024 CPI)	Project % Share for Local Improvements Phase 1	Estimated Payment (2024 CPI) for Project % Share for Local Improvements Phase 1
Porterville Hwy (State Route 65): James Rd to Lerdo Hwy	Add 2 Lanes	Add 2 Lanes	TBD by Caltrans	48.45%	TBD by Caltrans

MM 4.16-7: Prior to the issuance of any grading or building permit, whichever comes first, for the Phase 2 project area, the project proponent/operator shall pay the proportionate fair share of improvements (as identified below) not within the Transportation Traffic Impact Fee area. Estimated payments shown in tables below represent current (2024) costs associated with the fair share percentages. Final costs are subject to change due to the Consumer Price Index (CPI) fluctuations. The Kern County Public Works Department shall be consulted to determine final costs.

Future Intersection Improvements - Phase 2

Intersection	Total Improvements Required	Local Improvements (Improvements not covered by RTIF or adjacent development)	Estimated Cost (2024 CPI)	Project % Share for Local Improvements Phase 2	Estimated Payment (2024 CPI) for Project % Share for Local Improvements Phase 2
SR 99 SB Ramps & Lerdo Hwy	Signal, Add SBR	Signal, Add SBR	TBD by Caltrans	2.38%	TBD by Caltrans
SR 99 NB Ramps & Lerdo Hwy	Add NBL	Add NBL	TBD by Caltrans	7.85%	TBD by Caltrans
Porterville Hwy Lerdo Hwy	Signal	Signal	$1,200,000.00	11.70%	$140,400.00
Porterville Hwy (SR 65) & James Rd	Signal	Signal	$846,480.00	10.22%	$86,510.25
Porterville Hwy (SR 65) & Imperial Ave	Signal	Signal	$308,160.00	44.34%	$135,590.40
	Add EBR, NBL	Add EBR, NBL	TBD by	100%	TBD by Caltrans
Calloway Dr & 7th Standard Rd	Add EBT, EBR, NBR	-	TBD by City Bakersfield	2.56%	TBD by City of Bakersfield
Coffee Rd & 7th Standard Rd	Add WBT, 1 WBL, change NBT/R to NBT, 2NBR	-	$1,200,000.00	3.21%	$38,520.00
Golden State Hwy & 7th Standard Rd	Add SBL, SBR, change NBT/R to NBT, NBR	-	$1,200,000.00	3.11%	$37,320.00
Porterville Hwy (SR 65) & Merle Haggard Dr	Add NBR	Add NBR	$1,208,700.00	15.27%	$184,568.49
Landings Way & Merle Haggard Dr	Change WBR to WBTR	-	$50,000.00	7.81%	$3,905.00
Chester Ave & Manor St/Merle Haggard Dr	Change 1 SBT to SBTL[1], split phase timing N-S	Change 1 SBT to SBTL[1], split phase timing N-S	$88,430.00	2.67%	$2,361.08

[1] Striping only

Notes:

NB = Northbound SB = Southbound WB = Westbound EB = Eastbound T = Through Lane R = Right-Turn Lane L = Left-Turn Lane

Future Roadway Improvements - Phase 2

Roadway	Total Improvements Required	Local Improvements (Improvements not covered by RTIP or adjacent development)	Estimated Cost (2024 CPI)	Project % Share for Local Improvements Phase 2	Estimated Payment (2024 CPI) for Project % Share for Local Improvements Phase 2
Porterville Hwy (State Route 65): James Rd to Lerdo Hwy	Add 2 Lanes	Add 2 Lanes	TBD by Caltrans	17.00%	TBD by Caltrans

Level of Significance After Mitigation

Impacts remain significant and unavoidable.

Impact 4.16-2: The Project Would Conflict or Be Inconsistent with CEQA Guidelines Section 15064.3 Subdivision (b).

As discussed above, the State of California approved SB 743 to change the primary basis of evaluation of traffic deficiencies in CEQA from LOS to VMT. CEQA Guidelines Section 15064.3 was approved in December 2018 and became effective in early 2019. Section 15064.3 required agencies to begin implementing the new VMT requirement no later than July 1, 2020. The Governor's Office of Planning and Research (OPR) released a Technical Advisory On Evaluating Transportation Impacts In CEQA in December 2018, which provides guidelines and recommendations for VMT evaluation and thresholds. As of 2023, the Kern County Public Works Department has not finalized or adopted any policies or thresholds for VMT analysis; therefore, the OPR Technical Advisory was used as the basis for this evaluation (Appendix L).

As discussed in the Traffic Study, the OPR Technical Advisory provides initial screening criteria and thresholds of significance for the VMT evaluation based on land use. No specific recommendations are provided for industrial land use; therefore, the proposed project Traffic Study classified the proposed project as an office land use. The industrial use was evaluated as an office project because, like office projects, most of the passenger vehicle trips are generated by employees. The focus of the per employee evaluation is the home-based work trips.

The Technical Advisory states that office projects that would generate vehicle travel exceeding 15 percent below the existing VMT (baseline) per employee for the region may indicate a significant transportation impact. As discussed in the proposed project Traffic Study, KernCOG maintains a regional transportation model. The regional transportation model currently uses 2018 to generate baseline VMT estimates and cumulative VMT estimates for the year 2042. The regional transportation model was used to estimate an existing baseline VMT per employee and VMT per employee under project conditions for the years 2018 and 2042. As concluded in the proposed project Traffic Study, baseline (2018) VMT per employee within the region is estimated to be 19.17 miles without the project. Under project conditions, VMT per employee is estimated to be 15.49 miles under 2018 conditions, and 14.82 VMT per employee under 2042 conditions, as shown in **Table 4.16-7**, *Malibu Vineyards Employment and VMT*.

Table 4.16-7: Malibu Vineyards Employment and VMT

Year	Area	Employees	VMT Home-to-work	VMT per Employee
2018	Malibu Vineyards	8,825	136,672	15.49
2042	Malibu Vineyards	8,825	130,785	14.82

Compared to the 2018 baseline, VMT under project conditions would be 80.90 percent under 2018 conditions and 77.31 percent under 2042 conditions. Therefore, the project would not generate vehicle travel exceeding 15 percent below existing VMT per employee and the project traffic VMT impact would be considered less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant with mitigation.

Impact 4.16-3: The Project Would Substantially Increase Hazards Due to a Design Feature or Incompatible Uses.

During construction, the proposed project would require the delivery of heavy construction equipment using area roadways, some of which may require transport by oversize vehicles. Heavy equipment associated with these components would not be hauled to/from the site daily, but rather would be hauled in and out on an as-needed basis. Nevertheless, the use of oversize vehicles during construction can create a hazard to the public by limiting motorist views on roadways and by the obstruction of space, which is considered a potentially significant impact. During project construction and operation, the need for and number of escorts and California Highway Patrol escorts, as well as the timing of transport, would be at the discretion of Caltrans and Kern County and would be detailed in respective oversize load permits. Thus, potential impacts would be reduced to a less than significant level.

Additionally, as a requirement of Mitigation Measure **MM 4.16-12**, oversize vehicles used on public roadways during construction must obtain required permits and obtain approval of a Construction Traffic Control Plan; obtain all necessary encroachment permits; submit documentation that identifies the roads to be used during construction; and submit a post-construction video log and inspection report to the County within 30 days of completion of construction documenting any damage to County roads incurred during construction activities. This would ensure that construction-related oversize vehicle loads are in compliance with applicable California Vehicle Code sections and California Street and Highway Codes applicable to licensing, size, weight, load, and roadway encroachment of construction vehicles.

The proposed project Traffic Study provides an operational analysis of the existing and future street system with the addition of project traffic to the project study area. The purpose of the operational analysis is to evaluate consistency with Kern County's planning goals relating to intersection and roadway level of service and identify potential LOS (Ruettgers & Schuler 2023). As identified in the project Precise Development site Plan (**Figure 3-14** through **Figure 3-16** of this EIR) for the proposed project, project design includes access roads, sufficient parking areas, and access driveways along the perimeter of the site.

Access to Phase 1 of the proposed project site would be provided via Imperial Avenue and future arterial segment of Burbank Street, that may potentially become an expressway that would traverse east-west through the northern boundary of Phase 1. The Phase 2 location is currently isolated between SR 99 and the Lerdo Canal and would require the development of the future Burbank Street arterial or future expressway across one or both of these features to facilitate access.

The proposed project would develop roads adjacent to, and through the proposed project site, in accordance with Kern County standards for project access including development of the future arterial segment of Burbank Street, local streets, expressway, and interchange. Adjacent roads would be developed to half-width standards and roads through the site would be developed to full width standards. In addition, the project would develop local roads internally to the project to facilitate project access and internal circulation. Local roads would provide access to drive aisles and parking areas associated with each future parcel. The proposed project parking stalls would provide accessible parking spaces in compliance with the California Building Code standards and electric vehicle capable spaces per the California Green Code standards.

On-site circulation deficiencies would occur if proposed project designs do not meet appropriate standards, fail to provide adequate truck access, or would result in hazardous conditions. As the proposed project would conform to Kern County standards for proposed project access and street design, impacts associated with increased hazards due to a design feature would be less than significant. Implementation of Mitigation Measures **MM 4.16-8** through **4.16-11** would reduce impacts to less than significant levels. Completion of planned improvements, in addition to implementation of the mitigation measures described under Impact 4.16-1 and the additional mitigation measures provided below, would improve service levels at all study locations to acceptable levels and would reduce potential hazards associated with the proposed project.

Mitigation Measures

Implement Mitigation Measures **MM 4.16-1 through 4.16-7** as described above, and;

MM 4.16-8: Prior to issuance of the first occupancy permit, the project proponent shall under street improvement plans approved by the Kern County Public Works Department/Development Review, construct Saco Road from the project frontage to 980+/- feet southeast, minimum, full width Commercial Street (Plate R-13), in accordance with the Kern County Development Standards and Land Division Ordinance. These improvements shall include, but not be limited to, curb, gutter, asphalt concrete, and the necessary tie-ins.

MM 4.16-9: Prior to issuance of first occupancy permit, the project proponent shall perform a pavement analysis to identify whether portions of Saco Road and/or Imperial Avenue need an additional asphalt concrete overlay due to the increase in heavy trucks utilizing the roadways as determined by Kern County Public Works.

MM 4.16-10: Prior to the issuance of any grading or building permit, whichever comes first, the project proponent shall record an irrevocable offer of dedication to the Kern County for the project frontage of Imperial Avenue 45 feet in width per the Kern County Land Division Ordinance and Developments Standards.

MM 4.16-11: Prior to the issuance of any grading or building permit, whichever comes first, the project proponent shall acquire full 90-foot in width, off-site, right-of-way along Imperial Avenue alignment from the project frontage to SR 65. Maintenance of the required future alignments shall be the responsibility of the project proponent until such time as Kern County requests an irrevocable offer of dedication and roadway improvements are constructed.

MM 4.16-12: Prior to the issuance of construction or building permits, the project proponent shall:

a. Prepare and submit a Construction Traffic Control Plan to Kern County Public Works Department and the California Department of Transportation offices for District 6, as appropriate, for approval. The Construction Traffic Control Plan must be prepared in accordance with both the California Department of Transportation Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following issues:

   1. Timing of deliveries of heavy equipment and building materials. To the extent feasible, restrict deliveries and vendor vehicle arrivals and departures during the AM and PM peak periods;
   2. Directing construction traffic with a flag person;
   3. Placing temporary signing, lighting, and traffic control devices if required, including for pedestrians and bicyclist, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic;
   4. Ensuring access for emergency vehicles to the project sites;
   5. Temporarily closing travel lanes or delaying traffic during materials delivery or any utility connections;
   6. Maintaining access to adjacent property;
   7. Specifying both construction-related vehicle travel and oversize load haul routes, minimizing construction traffic during the AM and PM peak hour, distributing construction traffic flow across alternative routes to access the project sites, and avoiding residential neighborhoods to the maximum extent feasible; and
   8. Consult with the County to develop coordinated plans that would address construction-related vehicle routing and detours adjacent to the construction area for the duration of construction overland with neighboring projects. Key coordination meetings would be held jointly between applicants and contractors of other projects for which the County determines impacts could overlap.

b. Obtain all necessary encroachment permits for the work within the road right-of-way or use of oversized/overweight vehicles that will utilize county-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Kern County Planning and Natural Resources Department, the Kern County Public Works Department- Development Review, and CalTrans.

c. Enter into a secured agreement with Kern County to ensure that any County roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the state and/or Kern County.

d. Submit documentation that identifies the roads to be used during construction. The project proponent shall be responsible for repairing any damage to non-county-maintained roads that may result from construction activities. The project proponent shall submit a preconstruction video log and inspection report regarding roadway conditions for roads used during construction to the Kern County Public Work Department-Development Review and the Kern County Planning and Natural Resources Department.

e. Within 30 days of completion of construction, the project proponent shall submit a post-construction video log and inspection report to the County. This information shall be submitted in DVD format. The County, in consultation with the project proponent's engineer, shall determine the extent of remediation required, if any.

Level of Significance After Mitigation

Impacts would be less than significant with mitigation.

Impact 4.16-4: The Project Would Result in Inadequate Emergency Access.

Refer to Impact Discussions 4.16-1 and 4.16-3 above. As identified in the project plans for the proposed project, project design includes access roads, sufficient parking areas, and access driveways along the perimeter of the site, expected to provide adequate emergency access. Additional on-site access roadways would be constructed which would not physically interfere with emergency vehicle access or personnel evacuation from the site. However, congestion related to proposed project-related traffic could affect emergency access. Implementation of the planned improvements, in addition to Mitigation Measures **MM 4.16-1** through **MM 4.16-7** provided under Impact 4.16-1, would reduce potential access constraints associated with the proposed project.

Mitigation Measures

Implement Mitigation Measures **MM 4.16-1** through **MM 4.16-7**, as described above.

Level of Significance After Mitigation

Impacts would be less than significant with mitigation.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The geographic scope for transportation and traffic cumulative impacts is Kern County as a whole. This geographic scope of analysis is appropriate for transportation and traffic due to the regional nature of

transportation and traffic impacts that could occur within the entire Kern County transportation network. Cumulative conditions represent build-out of the land uses in the region, reflecting a 2042 horizon year.

The proposed project, along with anticipated regional growth, has the potential to result in cumulative impacts by reducing existing acceptable LOS to unacceptable levels.

Based on the analysis above, implementation of the proposed project could contribute to cumulative impacts on transportation and traffic by reducing existing acceptable LOS to unacceptable levels. Significant congestion is anticipated in the future along the 7th Standard Road/Merle Haggard Drive corridor, due to traffic associated with regional growth and development. As a result, several intersections and roadways are anticipated to operate below LOS "C" in the future scenarios (by 2042), even with full standard widening and roadway improvements.

Intersection and roadway improvements necessary by year 2042 to maintain or improve the operational LOS of the street system in the vicinity of the proposed project are shown in **Table 4.16-3**, *Future Intersection Improvements- Phase 1,* **Table 4.16-4**, *Future Roadway Improvements – Phase 2,* **Table 4.16-5**, *Future Intersection Improvements – Phase 2*, and **Table 4.16-6**, *Future Roadway Improvements – Phase 2*. Completion of planned improvements, in addition to implementation of the mitigation measures **MM 4.16.1** through **MM 4.16.11**, would improve LOS at all study locations to acceptable levels and would reduce potential hazards, access constraints, and VMT impacts associated with the proposed project; however, no feasible improvements have been identified to provide acceptable LOS "C" or better conditions at the proposed project study roadway segments.

Mitigation Measures

Implement Mitigation Measures **MM 4.16-1** through **MM 4.16-12**, as described above.

Level of Significance after Mitigation

Cumulative impacts are considered significant and unavoidable.

Section 4.17
Tribal Cultural Resources

Section 4.17

Tribal Cultural Resources

4.17.1 Introduction

This section provides an assessment of potential impacts related to tribal cultural resources that could result from implementation of the proposed project. Cultural resources include places, objects, and settlements that reflect group or individual religious, archaeological, architectural, or paleontological activities. By statute, "tribal cultural resources" are generally described as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and are further defined in Public Resources Code (PRC) Section 21074(a)(1)(A)–(B). The analysis in this section is based on the results of the Native American consultation conducted by the County for purposes of compliance with California Environmental Quality Act (CEQA) requirements prompted by Assembly Bill (AB) 52, as well as Senate Bill (SB) 18; see Appendix G of this EIR.

This section is also partially based on the *Phase 1 Cultural Resources Survey* prepared by Hudlow Cultural Resource Associates (2023) (Appendix G) and peer reviewed by Rincon Consultants Inc., which details the results of a cultural resources records search and pedestrian survey for the proposed project. Due to the confidential nature of the location of tribal cultural resources, information regarding locations of cultural resources has been redacted from the report and is not included in the appendix.

Tribal Cultural Resource Terminology

As explained in Section 4.5, *Cultural Resources*, historical resources can include areas determined to be important to Native Americans such as "sacred sites." Sacred sites are most often important to Native American groups because of the role of the location in traditional ceremonies or activities. "Cultural resources" generally refer to prehistoric and historical period archaeological sites and the built environment. Cultural resources can also include areas determined to be important to Native Americans.

For the purpose of this Tribal Cultural Resources section, the "project footprint" is defined as the area encompassing the project and associated infrastructure. See Section 4.5, *Cultural Resources*, for definitions of key tribal cultural resources terms used in this section.

4.17.2 Environmental Setting

Refer to Section 4.5, *Cultural Resources*, of this EIR for a greater discussion of the cultural resources environmental setting.

Existing Tribal Cultural Resources

Sacred Lands File Search

As part of the *Phase 1 Cultural Resources Survey* for the project (Appendix G), a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC) was requested on September 21, 2021, and completed on October 14, 2021. The results of the Sacred Lands File search did not identify sacred sites or tribal cultural resources in the project vicinity. Although no positive results were obtained from the Sacred Lands File search, Native American consultation letters were sent out on October 18, 2021, notifying each interested Kern County Native Contact, per the list provided by the NAHC. Ten parties were sent letters. These letters describe the project and provide maps for reference. None of the recipients returned responses.

Native American SB 18 and AB 52 Consultation

Per California Public Resources Code (PRC) Section 21080.3.1, Assembly Bill (AB) 52 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

As such, outreach letters were sent via certified mail on February 26, 2021 to appropriate contacts of California Native American Tribes affiliated with the geographic area of the project in accordance with PRC Section 21070. No responses were received as a result of the AB 52 outreach.

Similarly, as part of the County's government-to-government responsibilities pursuant to Senate Bill (SB) 18, the County sent the NAHC a Local Government Tribal Consultation List Request on February 24, 2021, to which a Native American Tribal Consultation List was provided on March 22, 2021, containing 24 tribal contacts. Consultation notification letters were sent via certified mail to the 24 California Native American tribal contacts representing 16 tribes on the list provided by the NAHC. Two responses were received, both indicating no comment.

Results of the outreach for AB 52 and SB 18 Consultation are summarized in **Table 4.17-1***, Summary of AB 52 and SB 18 Tribal Consultation Efforts,* below.

Table 4.17-1: Summary of AB 52 and SB 18 Tribal Consultation Efforts

Tribe/OrganizationContacted	Recipient(s)	Consultation Type	Date Letter Mailed	Response
AB 52				
San Manuel Band of Mission Indians	Ryan Nordness	AB 52	2/26/2021	No Response
Tejon Indian Tribe	Collin Rambo	AB 52	2/26/2021	No Response
Torres Martinez Desert Cahuilla Indians	Michael Mirelez	AB 52	2/26/2021	No Response
Twenty-Nine Palms Band of Mission Indians	Anthony Madrigal Jr. Darnell Mike,	AB 52	2/26/2021	No Response
SB 18				
Big Pine Paiute Tribe ofthe Owens Valley	Danielle Gutierrez, James Rambeau Sr., Sally Manning	SB 18	3/29/21	No Response
Chumash Council ofBakersfield	Julio Quair	SB 18	3/29/21	No Response
Coastal Band of the Chumash Nation	Mariza Sullivan	SB 18	3/29/21	No Response
Fernandeno Tataviam Band of Mission Indians	Jairo F. Avila	SB 18	3/29/21	No Response
Kern Valley Indian Community	Brandy Kendricks, Julie Turner, Robert Robinson	SB 18	3/29/21	No Response
Kitanemuk and Yowlumne Tejon Indians	Delia Dominguez	SB 18	3/29/21	No Response
Quechan Tribe of the Fort Yuma Reservation	Jill McCormick, Jordan D. Joaquin, Manfred Scott, Virgil S. Smith	SB 18	3/29/21	In an email dated April 6, 2021, H. Jill McCormick responded that the Quechan Indian Tribe has no comments on this project.
San Fernando Band of Mission Indians	Donna Yocum	SB 18	3/29/21	No Response
San Manuel Band of Mission Indians	Jessica Mauck, Ryan Nordness	SB 18	3/29/21	In an email dated April 13, 2021, Ryan Nordness responded that the project site is located outside of Serrano ancestral territory and the San Manuel Band of Mission Indians will not be requesting to receive consulting party status with the lead agency or to participate in the scoping, development, or review of documents created pursuant to legal and regulatory mandates.
Santa Rosa Rancheria Tachi Yokut Tribe	Leo Sisco	SB 18	3/29/21	No Response
Santa Ynez Band of Chumash Indians	Kenneth Kahn	SB 18	3/29/21	No Response
Tejon Indian Tribe	Octavio Escobedo III, Colin Rambo	SB 18	3/29/21	No Response
Tulatulabals of Kern Valley	Robert L. Gomez, Jr.	SB 18	3/29/21	No Response

Tribe/OrganizationContacted	Recipient(s)	Consultation Type	Date Letter Mailed	Response
Tule River IndianTribe	Neil Pevron	SB 18	3/29/21	No Response
Vak titvu titvu vak tilhini – Northern Chumash Tribe	Mona Olivas Tucker	SB-18	3/29/21	No Response
Waksache Indian Tribe/Eshom Valley Band	Kenneth Woodrow	SB-18	3/29/21	No Response

4.17.3 Regulatory Setting

Federal

There are no applicable federal regulations for this issue area.

State

Native American Heritage Commission

California Public Resources Code (PRC) Section 5097.91 established the NAHC, the duties of which include inventorying places of religiouso r social significance to Native Americans and identifying known graves and cemeteries of Native Americans on private lands. Section 5097.98 of the PRC specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a County coroner.

Senate Bill 18

SB 18 (Statutes of 2004, Chapter 905), which went into effect January 1, 2005, requires local governments (city and county) to consult with Native American tribes before making certain planning decisions and to provide notice to tribes at certain key points in the planning process. The intent is to "provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places" (California Governor's Office of Planning and Research 2005).

The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level, land use designations are made by a local government. The consultation requirements of SB 18 apply to general plan or specific plan processes proposed on or after March 1, 2005.

According to the Tribal Consultation Guidelines: Supplement to General Plan Guidelines (California Governor's Office of Planning and Research 2005), the following are the contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located

on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).

- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).
- In accordance with SB 18 and the California Tribal Consultation guidelines, the appropriate native groups were consulted with respect to the project's potential impacts on Native American places, features, and objects.

Assembly Bill 52 and Related Public Resources Code Sections

AB 52 was approved by the California Governor on September 25, 2014. The act amended PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) will be filed on or after July 1, 2015. The primary intent of AB 52 was to include California Native American tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources. PRC Section21074(a)(1) and (2) define tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a lead agency, in its discretion and supported by substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the *CEQA Guidelines*, which was approved by the Office of Administrative Law on September 27, 2016.

PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provides formal notification to the designated contact, or a tribal representative, of California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties

agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND (PRC Section 21082.3(d)(2) and (3)).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

California Native American Graves Protection and Repatriation Act (NAGPRA) of 2001

Codified in the California Health and Safety Code Sections 8010–8030, the California Native American Graves Protection and Repatriation Act is consistent with the federal NAGPRA. Intended to "provide a seamless and consistent state policy to ensure that all California Indian human remains and cultural items be treated with dignity and respect," Cal NAGPRA also encourages and provides a mechanism for the return of remains and cultural items to lineal descendants. Section 8025 established a Repatriation Oversight Commission to oversee this process. The Cal NAGPRA also provides a process for non-federally recognized tribes to file claims with agencies and museums for repatriation of human remains and cultural items.

California Public Records Act

Sections 6254(r) and 6254.10 of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the NAHC, another State agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a State or local agency."

California Health and Safety Code, Sections 7050 and 7052

California Health and Safety Code, Section 7050.5, declares that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease and the county coroner must be notified. Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

Local

Kern County General Plan

The policies, goals, and implementation measures in the Kern County General Plan for cultural resources applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and are not specific to development such as the proposed project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Chapter 1. Land Use, Open Space and Conservation Element

1.10.3 Archaeological, Paleontological, Cultural and Historical Preservation

Policies

Policy 25: The County will promote the preservation of cultural and historic resources that provide ties with the past and constitute a heritage value to residents and visitors.

Implementation Measures

Measure K: Coordinate with the California State University, Bakersfield's Archaeology Inventory Center.

Measure L: The County shall address archaeological and historical resources for discretionary projects in accordance with CEQA.

Measure N: The County shall develop a list of Native American organizations and individuals who desire to be notified of proposed discretionary projects. This notification will be accomplished through the established procedures for discretionary projects and CEQA documents.

Measure O: On a project-specific basis, the County Planning Department shall evaluate the necessity for the involvement of a qualified Native American monitor for grading or other construction activities on discretionary projects that are subject to a CEQA document.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The Metropolitan Bakersfield General Plan does not currently contain any policies, goals, or implementation measures related to cultural resources. However, a chapter "reservation" for the Historical Resources Element is included in Metropolitan Bakersfield General Plan. The Metropolitan Bakersfield

General Plan contains additional policies, goals, and implementation measures that are more general in nature and are not specific to development such as the project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Metropolitan Bakersfield General Plan are incorporated by reference.

4.17.4 Impacts and Mitigation Measures

Methodology

The project's potential impacts to tribal cultural resources have been evaluated using a variety of resources, including the Phase I Cultural Resource Survey (Hudlow Cultural Resource Associates, 2023) and SLF search conducted by the NAHC. SB 18 and AB 52 notification letters were sent to Native American groups and individuals indicated by the NAHC to solicit information regarding the presence of tribal cultural resources. Using the aforementioned resources and professional judgment, impacts were analyzed according to CEQA significance criteria described below.

Thresholds of Significance

As established in Appendix G of the *CEQA Guidelines*, the Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria to determine if a project could potentially have a significant impact with respect to tribal cultural resources. A project would have a significant impact on tribal cultural resources if it would:

a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

   i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or

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

Project Impacts

Impact 4.17-1a: The Project Would Cause A Substantial Adverse Change In The Significance Of A Tribal Cultural Resource, Defined In PRC Section 21074 As Either A Site, Feature, Place, Cultural Landscape That Is Geographically Defined In Terms Of The Size And Scope Of The Landscape, Sacred Place, Or Object With Cultural Value To A California Native American Tribe That Is Listed Or Eligible For Listing In The California Register Of Historic Places, Or In A Local Register Of Historical Resources As Defined In Public Resources Section 5020.1(K).

As part of the information-gathering process for the *Phase 1 Cultural Resources Study* (Appendix G), the NAHC was contacted to request a search of the Sacred Lands File in September 2021. The NAHC emailed a response on October 14, 2021, stating that the search was returned with negative results, which means the record search did not identify any sacred lands within the project boundary (Hudlow Cultural Resource Associates 2023). However, the absence of specific site information does not necessarily indicate the absence of cultural resources in the project area, as unknown cultural resources may be present.

In response to AB 52 tribal notification efforts, no comments were received. In addition, SB 18 tribal consultation letters were sent to 24 contacts representing 16 Native American Tribes. Two responses were received. Responses were received from the San Manuel Band of Mission Indians and Quechan Indian Tribe, both indicating that they have no comment and will not be requesting consulting party status.

No tribal cultural resources were identified within the project boundary as a result of the *Phase 1 Cultural Resources Study*. However, subsurface disturbances (e.g., trenching, excavation, grading) associated with project construction activities have the potential to unearth previously undiscovered, intact tribal cultural materials. If such materials, including human remains, are found, a potentially significant impact may occur. To ensure proper protection of any unknown resources, should they be encountered during project-related ground disturbance activities, Mitigation Measures **MM 4.5-1** through **MM 4.5-3** are proposed to require cultural resources sensitivity training, the presence of an on-site Archaeological Monitor during project grading and construction, and the cessation of any activities around any cultural finds, including tribal cultural and human remains. Monitoring would allow for discovery of unknown resources tobe readily managed in accordance with federal and State law to prevent potential damage to or loss of such resources. Additionally, Mitigation Measure **MM 4.5-2** requires the appropriate Native American Representatives be contacted and informed in the event that any cultural resources are discovered during project implementation, so as to allow for Tribal input with regards to significance and treatment. Should the find be deemed significant, consultation with the appropriate Native American representatives will occur to determine appropriate treatment measures.

Refer to Section 4.5, *Cultural Resources*, for the full text of Mitigation Measures **MM 4.5-1** through **MM 4.5-3**.

Human remains may be encountered during ground-disturbing activities. Although unlikely, if human remains are discovered, all work must stop in the immediate vicinity of the discovered remains and Mitigation Measure **MM 4.5-4** would be implemented. Mitigation Measure **MM 4.5-4** requires the Kern County coroner and a qualified archaeologist be notified immediately so that an evaluation can be

performed, pursuant to Health and Safety Code Section 7050. If the remains are deemed to be Native American, the NAHC must be contacted by the coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains provided. With implementation of Mitigation Measure **MM 4.5-4**, potential project impacts on undiscovered human remains would be reduced to less than significant. Refer to Section 4.5, *Cultural Resources*, for the full text of Mitigation Measure **MM 4.5-4**.

With implementation of Mitigation Measures **MM 4.5-1** through **MM 4.5-4** (see Section 4.5, *Cultural Resources*), project impacts on tribal cultural resources would be less than significant.

Mitigation Measures

Implement Mitigation Measures **MM 4.5-1** through **MM 4.5-4** (refer to Section 4.5, *Cultural Resources*).

Level of Significance After Mitigation

With the implementation of Mitigation Measures **MM 4.5-1** through **MM 4.5-4**, impacts would be less than significant with mitigation incorporated.

Impact 4.17-1b: The Project Would Cause A Substantial Adverse Change In The Significance Of A Tribal Cultural Resource, Defined In PRC Section 21074 As Either A Site, Feature, Place, Cultural Landscape That Is Geographically Defined In Terms Of The Size And Scope Of The Landscape, Sacred Place, Or Object With Cultural Value To A California Native American Tribe That Is A Resource Determined By The Lead Agency,In Its Discretion And Supported By Substantial Evidence, To Be Significant Pursuant To Criteria Set Forth In Subdivision (C) Of PRC Section 5024.1. In Applying The Criteria Set Forth In Subdivision (C) Of PRC Section 5024.1, The Lead Agency Shall Consider The Significance Of The Resource To A California Native American Tribe.

As noted above, tribal cultural resources were not identified as part of the County's government-to government notification and consultation efforts with interested Native American groups conducted pursuant to AB 52 and SB 18. However, as stated above in Impact 4.17-1a, construction, grading, and excavation activities have the potential to unearth previously undiscovered, intact tribal cultural materials, which could cause a significant impact on found materials, including human remains.

The project would implement **MM 4.5-1** through **MM 4.5-4** to reduce significant impacts to tribal cultural resources to a less than significant level. Adherence to **MM 4.5-2** requires that appropriate Native American tribes be consulted to evaluate the significance and recommended treatment measures of archaeological materials encountered during construction activities.

Mitigation Measures

Implement Mitigation Measures **MM 4.5-1** through **MM 4.5-4** (refer to Section 4.5, *Cultural Resources*).

Level of Significance After Mitigation

With the implementation of Mitigation Measures **MM 4.5-1** through **MM 4.5-4**, impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

An analysis of cumulative impacts takes into consideration the entirety of impacts that the project, as described in Chapter 3, *Project Description*, of this EIR, would have on tribal cultural resources. The geographic area of analysis for tribal cultural resources is the San Joaquin Valley, where the proposed project is located. This geographic scope of analysis is appropriate because the resources within this area are expected to be similar to those that occur on the project area because of their proximity, their similarities in environmentsand landforms, and their location within the same Native American tribal territories. The area considered is large enough to encompass any project effects on tribal cultural resources that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affectany such tribal cultural resources.

Relative to CEQA, the importance of a tribal cultural resource is the value of the resource to California Native American tribes culturally affiliated with a certain project area. On a cumulative level, the cumulative loss of the tribal cultural resource must therefore be evaluated. No impact would occur if development would avoid or otherwise preserve known tribal cultural resources within dedicated on-site open space. However, if such resources cannot be avoided or preserved, a significant impact would occur, and the loss of the resource, in combination with the potential loss of other tribal cultural resources within the region, requires evaluation on a cumulative level.

Cumulative projects evaluated in the EIR would have the potential to be considered in a cumulative context with the project's incremental contribution and are included in the analysis of cumulative impacts relative to tribal cultural resources. All of the cumulative projects identified in Section 3.10 *Cumulative Projects* of this EIR, are considered in the cumulative analysis for tribal cultural resources.

Development that has occurred over past decades in Kern County has resulted in adverse impacts on tribal cultural resources. However, the adoption of State and federal laws related to tribal cultural resources, such as AB 52 and SB 18, have provided a mechanism for consultation between California Native American tribes and lead agencies to address potential impacts of development activities on known and/or unknown tribal cultural resources. Although inadvertent discoveries and potential impacts may still result on a project-by-project basis based on location, development type, and/or availability of data, compliance with regulatory procedures generally mitigates potential impacts to tribal cultural resources. Federal, State, and local laws protect tribal cultural resources in most instances, but this is not always feasible, particularly when in-place preservation may complicate the implementation of a development project. Future development may conflict with these resources through inadvertent destruction or removal resulting from grading, excavation, or other construction activities.

Potential impacts to tribal cultural resources, in combination with other projects in the area, could contribute to a cumulatively significant impact due to the overall loss of resources unique to tribes present within the region. As discussed above, no tribal cultural resources were identified; however, there is potential for unanticipated and previously unidentified tribal cultural resource discovery during project construction or operation activities.

The project would implement Mitigation Measures **MM 4.5-1** through **MM 4.5-4**, as described in Section 4.5 *Cultural Resources* of this EIR, which address the discovery and recovery of unknown cultural and tribal cultural resources through construction monitoring, identification of potential cultural and tribal cultural resources(including human remains), and evaluation in consultation with the appropriate tribes of the significance of a discovery. Mitigation measures would be implemented to reduce potential impacts on undiscovered resources, if encountered, to less than significant. Similarly, with conformance to applicable federal, State, and local regulations, combined with the implementation of mitigation, it is anticipated that impacts resulting with implementation of other cumulative development projects would be adequately addressed and impacts on tribal cultural resources would be reduced to less than significant, or to the extent feasible.

In addition, the other projects identified in Section 3.10, *Cumulative Projects*, would also be expected to have Mitigation Measures that would reduce potential impacts on tribal cultural resources.

Therefore, impacts of the project would not have the potential to combine with impacts from past, present, or reasonably foreseeable projects to result in a cumulative impact to tribal cultural resources and cumulative impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measures **MM 4.5-1** through **MM 4.5-4** (refer to Section 4.5, *Cultural Resources*).

Level of Significance After Mitigation

With the implementation of Mitigation Measures **MM 4.5-1** through **MM 4.5-4**, impacts would be less than significant.

Section 4.18

Utilities and Service Systems

Section 4.18
Utilities and Service Systems

4.18.1 Introduction

This section of the Environmental Impact Report (EIR) describes the affected environment and regulatory setting of the proposed project pertaining to demand for operational utilities (water, stormwater control, wastewater, solid waste disposal, electricity, natural gas, and telecommunications). This section describes existing infrastructure and levels of service and evaluates whether any improvements are necessary to accommodate the proposed project. A *Water Supply Assessment* for the project was prepared by Ascent in 2023 and is included as Appendix M, of this EIR.

4.18.2 Environmental Setting

Water Supply

There are typically three sources of supply water: (1) natural sources; (2) manmade sources; and (3) reclamation. Natural sources include rivers, lakes, streams, and groundwater stored in aquifers. Manmade sources include runoff water that is treated and stored in reservoirs and other catchment structures. Reclaimed water is wastewater that has been conveyed to a treatment plant and then treated to a sufficient degree that it may again be used for certain uses (such as irrigation). However, reclaimed water is not potable (drinkable) and must be conveyed in a separate system to ensure that there is no possibility of direct human consumption.

As discussed in the Chapter Section 3, *Project Description*, the project site contains approximately 193 acres (approximately 26 percent of the project site) within the Kern County General Plan (KCGP) and approximately 545 acres (approximately 74 percent of the project site) within the Metropolitan Bakersfield General Plan (MBGP). The proposed project would be developed in two phases. Phase 1 of the proposed project is located within Cawelo Water District (Cawelo) and Phase 2 is located within the North Kern Water Services District (North Kern WSD). However, the proposed project would be annexed into the service boundary of, and be served by, Oildale Mutual Water Company (OMWC).

Oildale Mutual Water Company

The OMWC service area encompasses approximately 16,851 acres (approximately 26.3 square miles) north of the City of Bakersfield in Kern County at the south end of the San Joaquin Valley. The Kern River is the southern boundary. The west boundary generally follows State Route (SR) 99 and its frontage road north of the Kern River to Merle Haggard Drive (previously Seventh Standard Road) where it turns westerly to follow Merle Haggard Drive approximately five miles to Rudd Road. It then turns northerly approximately 1.5 miles. There it turns easterly and intersects the Kern River Oilfield, then turns southward to return to the Kern River generally parallel to and easterly of Manor Street.

OMWC was incorporated in October 1919 for the purpose of providing domestic water to its customers/stockholders at cost. The water service is primarily domestic with some commercial, industrial, and landscape irrigation customers. OMWC supplies potable water to a population of approximately 37,726 residents in North Bakersfield. The sources of potable water for the system are from pumped groundwater wells that are owned and operated by OMWC and also from the wholesale water supplier, North of the River Municipal Water District (NORMWD). In 2006, OMWC expanded its service area boundary to include southeast Shafter. OMWC currently serves approximately 1,000 single family residential homes in southeast Shafter, and it is anticipated that the number of services will continue to increase over the course of the next five to 10 years as the demand for new housing continues to remain strong.

In 2014, OMWC merged the retail portion of NORMWD's service area into OMWC's service area. This resulted in an increase of 2,095 single family residential units. The number of connections reported in the 2010 Urban Water Management Plan (UWMP) was 8,110. The addition of the above areas together with residential infill, brings the total number of services to 11,693. For more details discussing OMWC, please reference Appendix M.

OMWC's water supply is provided by both groundwater wells and treated surface water which is supplied to its service area from the Kern County Water Agency (KCWA) Improvement District No. 4 (ID4) Henry C. Garnett Water Purification Plant. OMWC currently operates five existing wells with a pumping capacity of about 7,500 gallons per minute (gpm) or about 4,033 acre-feet per year (AFY) assuming the five wells are running for approximately eight hours per day. Over the past five years of operation, groundwater extraction has averaged 584.9 AFY with a high of approximately 774 AFY. The current groundwater supply available to OMWC is approximately 8,500 acre-feet per year, which is pumped from the Kern County Subbasin (DWR Basin No. 5-022.14) of the San Joaquin Valley Groundwater Basin (OMWC 2022). However, the project site is located outside of the boundaries of the ID4 service area and would not be served by existing OMWC groundwater allocations. Therefore, allocations of water supply to serve the proposed project site would need to be provided by Cawelo and North Kern WSD for phases 1 and 2, respectively (Ascent 2023).

Cawelo Water District

Cawelo Water District encompasses 45,724 acres in the north-central portion of Kern County, between SR 99 on the west and SR 65 on the east, Oildale on the south and the community of McFarland on the north. Cawelo Water District was formed in 1965 under the provisions of Division 13 of the Water Code of the State of California for the purpose of obtaining water supplies to supplement the pumping of groundwater for irrigation. Cawelo Water District provided a public entity for entering a contract for the importation of supplemental surface water from the State Water Project (SWP) through the Kern County Water Agency (KCWA). In addition to SWP supplies, other water sources include the Kern River, the Friant Division of the Central Valley Project (CVP), Poso Creek, and water recycled from local oil extraction operations. These sources of supply have been used to supplement groundwater pumped in Cawelo (Ascent 2023).

North Kern Water Storage District (North Kern WSD)

North Kern WSD is located west of SR 99, southwest of the City of McFarland, northwest of the City of Bakersfield, and east of the cities of Shafter and Wasco. Most of the service area lies north of Seventh Standard Road, with the Rosedale Ranch Improvement District (RRID) areas lying south of Seventh

Standard Road (Appendix M). The North Kern WSD's service area is comprised of approximately 60,000 acres. North Kern WSD owns and operates about 100 wells, and approximately 200 privately-owned wells. For more details, please reference Appendix M.

Kern County Groundwater Subbasin

As discussed in Section 4-10, *Hydrology and Water Quality* of this EIR, the project site is located within the southern portion of the San Joaquin Valley Groundwater Basin, in the Kern County Subbasin (DWR Basin Number 5-022.14). Depth of water bearing formations is estimated to range from 300 to 600 feet below ground surface (bgs). The subbasin is estimated to support approximately 40,000,000 acre-feet of total water in storage and 10,000,000 acre-feet of dewatered aquifer storage. Average well depths within this groundwater basin range from 150 to 1,200 feet below grade. The primary source of groundwater recharge is typically from applied irrigation water (California Department of Water Resources [DWR] 2006). The primary aquifer system of the Subbasin is within the Tulare and Kern River formations and overlying alluvium. It includes differing zones of confined, semiconfined, and unconfined groundwater conditions, due to the presence of clays that act as local aquitards. The Corcoran Clay and other equivalent clays occur within the Tulare Formation in the central and southern parts of the Subbasin. Where extensive clays are present, some areas of the aquifer system may consist of a deeper confined zone and a shallower unconfined to semi-confined zone. Within the eastern portion of the Subbasin and in the vicinity of the Kern River Alluvial Fan, the aquifer system is made up of an unconfined to semi-confined zone. The project area overlies an area within the unconfined zone of the Eastside Alluvium and Kern River Formation in the east side main production zone, which characterizes the water quality as "good".

The Kern County Subbasin is not adjudicated; however, in its recent evaluation of California groundwater basins, DWR determined that the subbasin is in a condition of critical overdraft. The subbasin has been prioritized by DWR as high and 11 different Groundwater Sustainability Agencies (GSAs) formed within the subbasins and have since adopted Groundwater Sustainability Plans (GSPs) in accordance with the Sustainable Groundwater Management Act (SGMA). Groundwater levels are managed within a safe basin operating range to protect the long-term sustainability of the Kern County Subbasin and to protect against land subsidence by the KGA GSA, Kern River GSA, and the Cawelo GSA. For more details on the Kern County Groundwater Subbasin and specific conditions within the KGA GSA, Kern River GSA, and the Cawelo GSA, please reference Appendix M.

Sustainable Groundwater Management Act (SGMA)

The SGMA requires the formation of local-controlled Groundwater Sustainable Agencies (GSAs) in high- and medium-priority groundwater basins. These GSAs are responsible for developing and implementing a GSP to ensure the basin operates within its sustainable yield without causing undesirable results.

The project site is located within the Kern County Subbasin (Subbasin) of the San Joaquin Valley Groundwater Basin. The Subbasin encompasses a surface area of 1,792,000 acres (approximately 2,800 square miles) and contains approximately six miles of marine and continental sediments. The Subbasin has approximately 40,000,000 acre-feet of total groundwater storage and an additional 10,000,000 acre-feet of dewatered aquifer storage capacity. The Subbasin is bounded by the Sierra Nevada and San Emigdio Mountains on the east and south; the San Emigdio Mountains and Coast Ranges to the west; and the Kettleman Plain, Tulare Lake, and Tule Subbasin lie to the north (Ascent 2023).

As described above, DWR has identified the Subbasin as a "critically overdrafted basin." There are no adjudicated areas within the Subbasin. The Subbasin was determined or classified to be a "high" priority basin, which triggers the requirement of submittal of a GSP under the SGMA. According to the GSP prepared by the Kern Groundwater Authority (KGA), the Subbasin, as a whole, has an overdraft of 324,326 AFY over the baseline conditions. However, it is forecasted that the Subbasin will achieve sustainability by 2040 with an estimated 42,144 AFY of surplus (KGA 2022).

The Kern County Subbasin's 14 GSAs including: Buena Vista Waster Storage District GSA, Henry Miller Water District GSA, Cawelo Water District GSA, KGA GSA, City of McFarland GSA, Pioneer GSA, Semitropic Water Storage District GSA, West Kern Water District GSA, Greenfield County Water District GSA, Kern River GSA, Olcese Water District GSA, Arvin GSA, Wheeler Ridge-Maricopa GSA, and the Tejon-Castaic Water District GSA, must submit a GSP. The 14 GSAs have collaborated in the adoption of a Coordination Agreement, as required under SGMA, for the coordinated management and implementation of the six GSPs prepared in the Subbasin (KGA 2022). The project site is located within the boundaries of the Kern River GSA.

Wastewater

Wastewater collection would be provided by North of River Sanitary District No. 1. The nearest sewer main is a 36-inch line in Norris Road approximately three miles southeast from the project site. A new sewer main line is currently being installed from the existing 36-inch line to the future intersection of Imperial Avenue at Endes Street via Coffee Road and Seventh Standard Road.

Storm Water Drainage

The project site is characterized by mostly flat terrain used for cultivated agriculture. As the project site has been historically used for agricultural production, there are well-defined drainage patterns on the proposed project site. Surface waters flow toward dirt ditches bordering the project site along the existing unpaved private roads. However, most storm water percolates into the soil. In its existing state, there is no municipal drainage infrastructure within the public right-of-way. The proposed project is designed to include on-site retention basins on each of the 24 future parcels to control storm water drainage. Stormwater runoff would sheet flow across paved areas and landscaping into the various retention basins throughout the project site. Roof runoff would be captured via roof drains/downspouts and conveyed to the overall storm drainage system. The proposed retention basins would be designed to retain peak 10-year storm runoff flow. The proposed project would adhere to a 100 percent retention rate for stormwater captured on-site.

Solid Waste and Landfills

Solid waste generally refers to garbage, refuse, sludge, and other discarded solid materials that come from residential, industrial, and commercial activities. Construction, demolition, and inert wastes are also classified as solid waste. Such wastes include nonhazardous building materials such as asphalt, concrete, brick, drywall, fencing, metal, packing materials, pallets, pipe, and wood. The general waste classifications used for California waste management units, facilities, and disposal sites are outlined below. Nonhazardous solid waste consists of organic and nonorganic solid, semi-solid, and liquid wastes, including garbage, trash, paper, ashes, industrial wastes, demolition and construction wastes, manure, vegetable or animal solid and semi-solid wastes, provided that such wastes do not contain hazardous materials or soluble pollutants in

concentrations that would exceed applicable water quality objectives or cause a degradation of waters of the State.

California state law regulates the types of waste that can be disposed of at the different classes of landfills. Class I landfills may accept hazardous and nonhazardous wastes. Class II landfills may accept designated and nonhazardous waste, and Class III landfills may only accept nonhazardous wastes.

Kern County is responsible for meeting the California Integrated Waste Management Act of 1989 (AB 939). AB 939 required cities and counties to reduce the amount of solid waste being sent to landfills by 50 percent by January 1, 2000. It also required cities and counties to prepare solid waste planning documents. These documents include the Source Reduction and Recycling Element (SRRE), the Hazardous Waste Element (HHWE), and the Non-disposal Facility Element (NDFE). All three of these documents, as well as the Integrated Waste Management Plan, approved February 1998 by the California Integrated Waste Management Board, have been approved for Kern County. The Kern County Integrated Waste Management Plan is the long-range planning document for landfill facilities.

Construction and Demolition (C&D) waste is heavy, inert material. This material creates significant problems when disposed of in landfills. Because C&D waste is heavier than paper and plastic, it is more difficult for counties and cities to reduce the tonnage of disposed waste. For this reason, C&D waste has been specifically targeted by the State of California for diversion from the waste stream. Projects that generate C&D waste should emphasize deconstruction and diversion planning rather than demolition. Deconstruction is the planned, organized dismantling of a prior construction project, which allows maximum use of the deconstructed materials for recycling in other construction projects and sends a minimum amount of the deconstruction material to landfills.

The Kern County Public Works Department (KCPWD) administers or sponsors the following recycling programs, which contribute toward meeting State-mandated solid waste diversion goals:

- Recycling programs at landfills to recycle or divert a wide variety of products, such as wood waste, cathode ray tubes, tires, inert materials, appliances, etc.
- Drop-off recycling centers for household recyclables. The County- and City-operated drop-off recycling centers, which are located in the unincorporated metropolitan area and the city, may be used by both County and City residents.
- Financial assistance for operation of the City of Bakersfield Green Waste Facility.
- The Kern County Special Waste Facility for the disposal of household hazardous waste. Services are provided to all Kern County residents.
- Semi-annual “bulky waste” collection events, which are held in the Bakersfield area and available to both County and city residents (co-sponsor).
- Christmas tree recycling campaign (participates jointly with the City of Bakersfield).
- Telephone book recycling program (co-sponsors with Community Clean Sweep).
- Community Clean Sweep summer workshops called “Trash to Treasure,” which educate children about recycling and other Kern County Waste Management Department programs (sponsor).
- An innovative elementary school program called the “Clean Kids Hit the Road Puppet Show” (operates in collaboration with Community Clean Sweep).
- Recycling trailers for churches, schools, and nonprofit organizations.

Solid waste collection services are provided to the Metropolitan Bakersfield planning area by the City of Bakersfield Sanitation Division, contracted private haulers, and County franchise haulers in the unincorporated areas. All solid waste generated within Kern County is disposed of in County-operated landfills.

The KCPWD operates seven landfills throughout the County. As of 2023, there are 11 active solid waste landfills in Kern County (CalRecycle 2023b). The nearest Class III landfill to the proposed project site is the Shafter-Wasco Landfill, located approximately 17 miles northwest of the project site, located at 17621 Scofield Road in Shafter. The Shafter-Wasco landfill accepts clean inert waste, construction and demolition waste, electronic waste, green waste, ordinary household waste, tires, treated wood waste, and used motor oil. The facility is permitted to accept a maximum daily tonnage of 1,500 tons per day.

Electrical Service

There is no electrical service currently provided to the project site. Electrical service would be provided by Pacific Gas and Electric Company (PG&E). Accordingly, electric power for construction and operations would be brought to the site through a new substation and distribution system constructed to serve the proposed project.

Natural Gas

PG&E and the Southern California Gas Company (SoCal Gas), a subsidiary of Sempra Energy, are the natural gas providers in Kern County. Gas services would be provided by SoCal Gas. The nearest natural gas pipeline is a 24-inch high pressure transmission line, operated by SoCal Gas, in Petrol Road, 0.5 mile south of the project.

Telecommunications

There is no telecommunication service currently provided to the project site. Telephone services would be provided by AT&T and cable would be provided by Spectrum to the site.

4.18.3 Regulatory Setting

Federal

There are no applicable federal plans or policies for this issue area.

State

California Energy Commission

The California Energy Commission (CEC) is the State's primary energy policy and planning agency and regulates the provision of natural gas and electricity within the State. Created in 1974, the CEC has five major responsibilities: forecasting future energy needs and keeping historical energy data, licensing thermal

power plants 50 megawatts (MW) or larger, promoting energy efficiency through appliance and building standards, developing energy technologies and supporting renewable energy, and planning for and directing the State response to energy emergencies.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies, in addition to authorizing video franchises. In 1911, the CPUC was established by Constitutional Amendment as the Railroad Commission. In 1912, the State Legislature passed the Public Utilities Act, expanding the Railroad Commission's regulatory authority to include natural gas, electric, telephone, and water companies as well as railroads and marine transportation companies. In 1946, the Railroad Commission was renamed CPUC. It is tasked with ensuring safe, reliable utility service is available to consumers, setting retail energy rates, and protecting against fraud.

California Department of Resources Recycling and Recovery

CalRecycle, formerly the California Integrated Waste Management Board (CIWMB), is the State agency designated to oversee, manage, and track California's 76 million tons of waste generated each year. It is one of the six agencies under the umbrella of the California Environmental Protection Agency (CalEPA). CalRecycle develops regulations to control and manage waste, for which enforcement authority is typically delegated to the local government. The CalRecycle board works jointly with local government to implement regulations and fund programs.

The Integrated Waste Management Act of 1989 (Public Resources Code [PRC] 40050 et seq., or AB 939, codified in PRC 40000), administered by CalRecycle, requires all local and county governments to adopt a Source Reduction and Recycling Element to identify means of reducing the amount of solid waste sent to landfills. AB 341 introduced Mandatory Commercial Recycling and set a statewide goal for 75 percent disposal reduction by the year 2020. This is not written as a 75 percent diversion mandate for each jurisdiction. The 50 percent disposal reduction mandate still stands for cities, counties, and State agencies (including community colleges) under AB 939 and AB 75, respectively (Cal Recycle 2023a).

California Department of Toxic Substances Control (DTSC)

The DTSC regulates hazardous waste, cleans-up existing contamination, and researches ways to reduce the hazardous waste produced in California. Over one thousand scientists, engineers, and specialized support staff make sure that companies and individuals handle, transport, store, treat, dispose of, and clean-up hazardous wastes appropriately.

State Water Resources Control Board and Regional Water Quality Control Board

The primary responsibility for the protection of water quality in California rests with the California State Water Resources Control Board (State Water Board) and nine Regional Water Quality Control Boards (RWQCBs). The State Water Board sets statewide policy for the implementation of State and federal laws and regulations. The RWQCBs adopt and implement Water Quality Control Plans (Basin Plans), which recognize regional differences in natural water quality, actual and potential beneficial uses, and water

quality problems associated with human activities. The project site is within the jurisdiction of the Central Valley RWQCB.

California Department of Water Resources

DWR is a department within the California Resources Agency. DWR is responsible for protecting, conserving, developing, and managing much of California's water supply. These duties include preventing and responding to floods, droughts, and catastrophic events; informing and educating the public on water issues; developing scientific solutions; restoring habitats; planning for future water needs, climate change impacts, and flood protection; constructing and maintaining facilities; generating power; ensuring public safety; and providing recreational opportunities.

Sustainable Groundwater Management Act

In 2014, California enacted the SGMA (Water Code Section 10720 et seq.). This act, and related amendments to California law, require that all groundwater basins designated as high- or medium-priority in DWR California Statewide Groundwater Elevation Monitoring program and that are subject to critical overdraft conditions were/must have been managed under a new GSP, or a coordinated set of GSPs, by January 31, 2020. High- and medium-priority basins that are not subject to critical overdraft conditions must be managed under a GSP by January 31, 2022. Where GSPs are required, one or more local GSAs must have been formed to cover the basin and prepare and implement applicable GSPs. The SGMA does not apply to basins that are managed under a court-approved adjudication, or to low- or very low-priority basins.

A GSA has the authority to require registration of groundwater wells, measure and manage extractions, require reports and assess fees, and request revisions of basin boundaries, including establishing new subbasins. The preparation of a GSP by a GSA is exempt from CEQA. Each GSP must include a physical description of the covered basin, such as groundwater levels, groundwater quality, subsidence, information on groundwater–surface water interaction, data on historical and projected water demands and supplies, monitoring and management provisions, and a description of how the plan will affect other plans, including city and county general plans. The SGMA requires that a GSP ensure that, within 20 years after plan adoption, the following "undesirable results" are avoided:

- Chronic lowering of groundwater levels (not including overdraft during a drought, if a basin is otherwise managed);
- Significant and unreasonable reductions in groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degradation of water quality;
- Significant and unreasonable land subsidence; and
- Surface water depletions that have significant and unreasonable adverse impacts on beneficial uses (Water Code Section 10721(w)).

The current status of SGMA regulatory requirements in the Project Area, including basin and subbasin priority designations, basin boundary modifications approved by the DWR, the formation of GSAs, the

adoption of GSPs, and the adoption of the SGMA emergency regulations by the DWR in 2016, are discussed in detail in Section 4.10.3, *Hydrology and Water Quality*, *Regulatory Setting*, including the Sustainable Groundwater Management Act.

California Water Code Section 13260

California Water Code Section 13260 requires any person who discharges waste, other than into a community sewer system, or proposes to discharge waste that could affect the quality of waters of the State to submit a report of waste discharge to the applicable Regional Water Quality Control Board (RWQCB). Any actions of the projects that would be applicable under California Water Code Section 13260 would be reported to the Central Valley RWQCB.

Senate Bills 610 (Chapter 643, Statues of 2001) and 221 (Chapter 642, Statutes of 2001)

Senate Bill (SB) 610 and SB 221 are companion measures that seek to promote more collaborative planning among local water suppliers and cities and counties. They require that water supply assessment occur early in the land use planning process for all large-scale development projects. If groundwater is the proposed supply source, the required assessments must include detailed analyses of historic, current, and projected groundwater pumping and an evaluation of the sufficiency of the groundwater basin to sustain a new project's demands. They also require an identification of existing water entitlements, rights, and contracts, and a quantification of the prior year's water deliveries. In addition, the supply and demand analysis must address water supplies during single and multiple dry years presented in 5-year increments. An SB 610 Water Supply Assessment must be prepared if the following three conditions are met:

- The project is subject to the California Environmental Quality Act (CEQA) under Water Code Section 10910;
- The project meets criteria to be defined as a "Project" under Water Code Section 10912; and,
- The applicable water agency's current Urban Water Management Plan (UWMP) does not account for the water supply demand associated with the project.

A project would meet the definition of "Project" per Water Code Section 10912 if it is:

a. A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area; and,

b. A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project (DWR 2003).

The projected water supply may be determined to be sufficient or insufficient for the proposed project, per Water Code Section 10910, through evaluation of the following:

a. If the projected water demand associated with the proposed project was not accounted for in the most recently adopted UWMP, or the public water system has no UWMP, the water assessment for the proposed project shall include a discussion with regard to whether the public water system's

total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.

Assembly Bills 1881 and 2882

Assembly Bill (AB) 1881 expanded previous legislation related to landscape water use efficiency. AB 1881, the Water Conservation in Landscaping Act of 2006, enacted landscape efficiency recommendations of the California Urban Water Conservation Council for improving the efficiency of water use in new and existing urban irrigated landscapes in California. AB 1881 required the DWR to update the existing Model Water Efficient Landscape Ordinance and local agencies to adopt the updated model ordinance or an equivalent. The law also requires the California Energy Commission to adopt performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

AB 2882, passed in 2008, encourages public water agencies throughout California to adopt conservation rate structures that reward consumers who conserve water. AB 2882 clarifies the allocation-based rate structures and establishes standards that protect consumers by ensuring a lower base rate for those who conserve water.

California Integrated Solid Waste Management Act of 1989 or Assembly Bill 939

Pursuant to the California Integrated Solid Waste Management Act of 1989 [Public Resources Code (PRC) 40050, et seq.] or AB 939, all cities in California are required to reduce the amount of solid waste disposed in landfills. AB 939 required a reduction of 25 percent by 1995 and 50 percent by 2000. Contracts that include work that will generate solid waste, including C&D debris, have been targeted for participation in source reduction, reuse, and recycling programs. The contractor is urged to manage solid waste generated by the work to divert waste from disposal in landfills (particularly Class III landfills) and maximize source reduction, reuse, and recycling of C&D debris.

Assembly Bill 341

Since the passage of AB 939, diversion rates in California have been reduced to approximately 65 percent, the statewide recycling rate is approximately 50 percent, and the beverage container recycling rate is approximately 80 percent. In 2011, the State passed AB 341, which established a policy goal that a minimum of 75 percent of solid waste must be reduced, recycled, or composted by the year 2020. The State provided the following strategies to achieve that 75 percent goal:

- Moving organics out of the landfill;
- Expanding the recycling/manufacturing infrastructure;
- Exploring new approaches for State and local funding of sustainable waste management programs;
- Promoting State procurement of post-consumer recycled content products; and
- Promoting extended producer responsibility.

To achieve these strategies, the State recommended legislative and regulatory changes including mandatory organics recycling, solid waste facility inspections, and revised packaging. With regard to C&D, the State recommended an expansion of California Green Building Code standards that incentivize green building practices and increase diversion of recoverable C&D materials. Current standards require 50 percent waste diversion on construction and some renovation projects, although this may be raised to 65 percent for nonresidential construction in upcoming changes to the standards. The State also recommends promotion of the recovery of C&D materials suitable for reuse, compost or anaerobic digestion before residual wastes are considered for energy recovery.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (California PRC Chapter 18) addressed the State's lack of adequate areas for collecting and loading recyclable materials, which resulted in a significant impediment to diverting solid waste from landfills. This Act requires State and local agencies to tackle issues related to access to solid waste collecting and loading areas to promote source-reduction, recycling, and composting programs. It also requires local agencies to adopt ordinances pertaining to the provision of areas for collecting and loading recyclable materials from development projects.

Local

As discussed in the Section 3, *Project Description*, the proposed project contains 193 acres (approximately 26 percent of the project site) within the Kern County General Plan (KCGP) and approximately 545 acres (approximately 74 percent of the project site) within the Metropolitan Bakersfield General Plan (MBGP). The entire proposed project is subject to the provisions of the Kern County Zoning Ordinance.

Kern County General Plan (KCGP)

The proposed project site is located within the *Kern County General Plan* (KCGP). The goals, policies, and implementation measures in the KCGP for utilities applicable to the proposed project are provided below.

Chapter 1. Land Use, Open Space, and Conservation Element

1.4 – Public Facilities and Services

Goals

Goal 5: Ensure that adequate supplies of quality (appropriate for intended use) water are available to residential, industrial, and agricultural users within Kern County.

Goal 9: Serve the needs of industry and Kern County residents in a way that does not degrade the water supply and the environment and protect public health and safety by avoiding surface and subsurface nuisances resulting from the disposal of hazardous wastes, irrespective of the geographic origin of the waste.

Policies

Policy 1: New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.

Policy 3: Individual projects will provide availability of public utility service as per approved guideline of the serving utility.

Policy 13: The County shall ensure landfill capacity for the residents and industry of Kern County.

Implementation Measures

Measure C: Project developers shall coordinate with the local utility service providers to supply adequate public utility services.

Measure D: Involve utility providers in the land use and zoning review process.

1.10.1 – General Provisions, Public Services and Facilities

Policies

Policy 9: New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure which it generates and upon which it is dependent.

Policy 12: All methods of sewage disposal and water supply shall meet the requirements of the Kern County Public Health Services Department and the California Regional Water Quality Control Board. The County's Public Health Services Department shall periodically review and modify, as necessary, its requirements for sewage disposal and water supply, and shall comply with any new standards adopted by the State for implementation of Government Code Division 7 of the Water Code, Chapter 4.5 (Section 13290-13291.70 (Assembly Bill 885) (2000).

Policy 15: Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the California Environmental Quality Act (CEQA) documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.

Policy 16: The developer shall assume full responsibility for costs incurred in service extension or improvements that are required to ensure the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.

Implementation Measures

Measure E: All new discretionary development projects shall be subject to the Standards for Sewage, Water Supply and Preservation of Environmental Health Rules and Regulations administered by the County’s Public Health Services Department. Those projects having percolation rates of less than 5 minutes per inch shall provide a preliminary soils study and

site specific documentation that characterize the quality of upper groundwater in the project vicinity and evaluation of the extent to which, if any, the proposed use of alternative septic systems would adversely impact groundwater quality. If the evaluation indicates that the uppermost groundwater at the proposed site already exceeds groundwater quality objectives of the Regional Water Quality Control Board or would if the alternative septic system is installed, the applicant would be required to supply sewage collection, treatment, and disposal facilities.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The policies and implementation measures in the Metropolitan Bakersfield General Plan related to utilities and service systems that are applicable to the proposed project are provided below. The Metropolitan Bakersfield General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the proposed project. These measures are not listed below, but as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the Metropolitan Bakersfield General Plan are incorporated by reference.

Chapter X: Public Services and Facilities Element

A. General Utility Services

Goals

Goal 1: Maintain a coordinated planning and implementation program for the provision of public utilities to the planning area.

Goal 2: Coordinate the planning and implementation of planning area municipal-type utility facilities and services.

Policies

Policy 5: Require all new development to pay its pro rata share of the cost of necessary expansion in municipal utilities, facilities, and infrastructure for which it generates demand and upon which it is dependent.

B. Water Distribution

Goals

Goal 1: Ensure the provision of adequate water service to all developed and developing portions of the planning area.

Policies

Policy 3 Require that all new development proposals have an adequate water supply available.

C. Sewer Service

Goals

Goal 1: Ensure the provision of adequate sewer service to serve the needs of existing and planned development in the planning areas.

Goal 3: Provide trunk sewer availability to and treatment/disposal capacity for all metropolitan urban areas, to enable cessation or prevention of the use of septic tanks where such usage creates potential public health hazards or may impair groundwater quality, and to assist in the consolidation of sewerage systems. Provide sewer service for urban development regardless of jurisdiction.

Policies

Policy 1: Effect the consolidated collection, treatment, and disposal of wastewater from all urban development within the metropolitan area, discouraging the creation or expansion of separate systems and encouraging the consolidation and interconnection of existing separate systems.

D. Storm Drainage

Goals

Goal 1: Ensure the provision of adequate storm drainage facilities to protect planning area residents from flooding resulting from storm water excess.

Goal 2: Maintain a comprehensive storm drainage system which serves all urban development within the planning areas.

Implementation Measures

Measure 4: Use drainage area retention basins for drainages disposal when direct discharge to a waterway is not available. Combine storm drainage usage with recreational usage when feasible. Incorporate in such basins recessed areas for off-season retention of nuisance flows.

Maintain all basins with primary purpose of drainage disposal, with recreational usage as a secondary objective.

F. Solid Waste

Goals

Goal 1: Ensure the provision of adequate solid waste disposal services to meet the demand for these services in the planning area.

Policies

Policy 1: Comply with, and update as required, the adopted county solid waste management plan.

Groundwater Sustainability Plans (GSPs)

A Groundwater Sustainability Plan (GSP) is a roadmap for how a basin will avoid the adverse effects of groundwater overdraft and achieve balanced levels of groundwater to reach sustainability. As previously discussed, 11 different GSAs formed within the subbasins and have since adopted GSPs in accordance with the SGMA. Groundwater levels are managed within a safe basin operating range to protect the long-term sustainability of the Kern County Subbasin and to protect against land subsidence by the KGA GSA, Kern River GSA, and the Cawelo GSA. OMWC's service area lies within areas managed by the KGA GSA, Kern River GSA, and the Cawelo GSA.

Kern County Floodplain Management Ordinance (17.48)

Any construction that takes place within areas of special flood hazards, areas of flood-related erosion hazards, and areas of mudslide (i.e., mudflow) hazards within the jurisdiction of unincorporated Kern County will comply with the requirements and construction design specifications of this ordinance. Any required development permits will be obtained prior to commencement of construction activities. Sections 17.48.250 through 17.48.350 of the ordinance elaborate on the standards of construction in the special flood hazards area.

Kern County Integrated Regional Water Management Plan (Kern IRWMP)

The Tulare Lake Basin portion of Kern County Integrated Regional Water Management Plan (Kern IRWMP) is a collaboration of water suppliers, community and government representatives, environmental groups, businesses and a variety of other interested parties. The Kern IRWMP seeks to preserve the economic and environmental health of Kern County communities through comprehensive and efficient management of its water resources.

Kern County Development Standards

The Kern County Development Standards apply to all developments within Kern County that are outside of incorporated Cities. These standards establish minimum design and construction requirements that will result in improvements that are economical to maintain and will adequately serve the general public. The requirements set forth in these standards are considered minimum design standards and will require the approval of the entity that will maintain the facilities to be constructed prior to approval by Kern County.

Kern County – Applicability of NPDES Program for a Project Disturbing 1 Acre or Greater

As closed systems never contact the ocean, many of the waters within Kern County are technically not subject to protective regulations under the federal NPDES Program. The Kern County Engineering, Surveying, and Permit Services Department requires the completion of an NPDES applicability form for

projects with construction activities disturbing one or more acres, and requires the project proponent to provide information about construction activities and to identify whether stormwater runoff has the potential of discharging into waters of the United States, waters of the State, or a terminal drainage facility. The purpose of the form is to identify which water quality protection measure requirements apply to different projects (if any). Should stormwater runoff be contained on-site and not discharge into any waters, no special actions are required. Should stormwater runoff discharge into waters of the United States, compliance with the SWRCB Construction General Permit Storm Water Pollution Prevention Plan (SWPPP) requirements is required. Should stormwater runoff not be contained on-site and drains to waters of the State or a terminal drainage facility, the project proponent would be required to develop a SWPPP and Best Management Practices (BMPs).

Kern County Integrated Waste Management Plan

The Kern County Public Works Department (KCPWD) is required by the State to plan and implement waste management activities and programs in the County's unincorporated area to assure compliance with AB 939 and subsequent State mandates. The Kern County Regional Waste Management Plan was approved February 1998 and amended November 2015 by the California Integrated Waste Management Board (now CalRecycle). The 2015 Kern County Regional Waste Management Plan Amendment includes a Waste Characterization Component, Source Reduction Component, Recycling Component, Composting Component, Special Waste Component, Solid Waste Facility Capacity Component, Education and Public Information Component, Funding Component, and Integration Component.

Kern County Construction Diversion Requirements per the California Green Building Code

As part of compliance with the State of California Green Building Code Requirements (known as CALGreen) that took effect beginning January 2011, Kern County implemented the following construction waste diversion requirements:

- Submittal of a Construction Waste Management Plan prior to project construction for approval by the Kern County Building Department;
- Recycling and/or reuse of a minimum 50 percent of construction and demolition waste; and
- Recycling or reuse of 100 percent of tree stumps, rocks and associated vegetation and soils resulting from land clearing.

4.18.4 Impacts and Mitigation Measures

Methodology

Potential impacts to the water supply utilities and service systems associated with construction and operation of the proposed project have been evaluated using a variety of resources, including multiple online sources and published documents as well as the WSA prepared by OMWD in 2023 (Appendix M). In addition, current data obtained from Kern County and the State of California about the capacity of landfills was used to identify potential solid waste impacts. The evaluation of impacts is based on

professional judgment, analysis of the County's land use policies, and significance criteria established in Appendix G of the *CEQA Guidelines*, which the County has determined appropriate for the EIR.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the *CEQA Guidelines*, to determine if a project could potentially have a significant adverse effect on utilities and service systems:

A project would have a significant adverse effect on utilities and service systems if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- Not Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

The lead agency determined in the Notice of Preparation/Initial Study (NOP/IS) that all of the above listed environmental issue areas require further review in this EIR. Please refer to Appendix A of this EIR for a copy of the NOP/IS.

Project Impacts

Impact 4.18-1: The Project Would Require or Result In The Relocation Or Construction Of New Or Expanded Water, Wastewater Treatment Or Storm Water Drainage, Electric Power, Natural Gas, Or Telecommunications Facilities, The Construction Or Relocation Of Which Could Cause Significant Environmental Effects.

Water

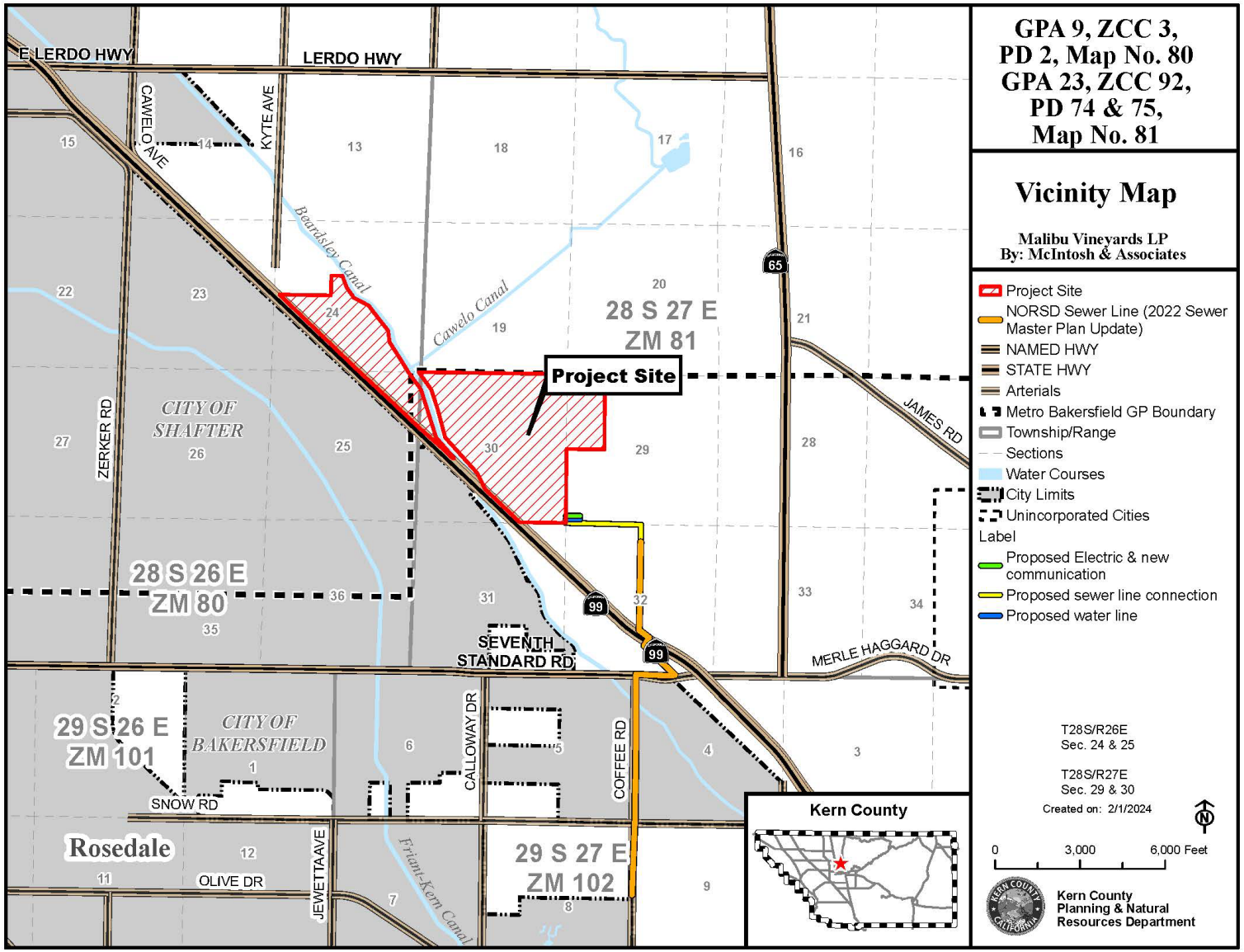
The project would require water during construction for common construction-related activities, including but not limited to grading, soil compaction, dust suppression, and fire safety. The water used for construction purposes is expected to be approximately 350,000 gallons over the 25-year buildout. Water required during construction would be pumped from the existing wells located on-site; water is not expected to require treatment for construction use. Potable water supply would not be required during construction, as restroom facilities would be provided by portable units to be serviced by licensed providers, and bottled

potable water would be provided to workers. For these reasons, project construction would not require or result in the construction of any new water facilities that could cause significant environmental effects and, thus, impacts during construction would be less than significant**.**

During project operation, OMWD would supply water to the site via the extension of an existing six-inch domestic water line and 12-inch non-potable water line from approximately one mile west of Quinn Road along Imperial Avenue, to the southeast corner of the proposed project. See **Figure 4.8-1**, *Offsite Improvements.* Mitigation Measure **MM 4.10-3** requires the project proponent to obtain a will-serve letter for operations of the project.

As discussed in more detail below under Impact 4.18-2, the OMWD prepared WSA (Appendix M) for the proposed project concluded that OMWD has sufficient groundwater supplies that will continue to be available during future normal, dry, and multiple dry years. According to the project specific WSA, the proposed project would require an annual demand of 591 acre-feet per year (AFY). Additionally, as detailed in the WSA, with the implementation of the proposed project, the conversion of agricultural land to an industrial use is projected to reduce the site's historical water use of 1,265 AFY by approximately 53 percent, see **Table 4.18-1,** *Water Demand With and Without Project Development* for a comparison of projected water usage by land use.

Figure 4.18-1: Offsite Improvements



Wastewater Treatment

Wastewater collection would be provided by the NORSD WWTP. Conservatively, it is assumed that projected water demand for the project [591 acre-feet per year (AFY) or 0.53 million gallons per day (MGD)] would be equal to the total amount of wastewater generated by the proposed project. As of 2022 the WWTP has a capacity of 7.5 MGD and an average monthly flow between 5.4 and 5.9 MGD (average 5.65 MGD), resulting in an approximate remaining capacity of 1.85 MGD (NORSD 2023). Therefore, the proposed project would use approximately 28.6 percent of the NORSD WWTP remaining capacity. However, NORSD has two WWTP expansion projects planned, the first of which would add an additional capacity of 12 MGD to be started in 2028. The second project is expected to add an additional capacity of 18 MGD and has an estimated start date of 2050 (NORSD 2023, NORSD 2022). As stated in Section 3, *Project Description*, a specific construction schedule has been identified for the proposed project, however the schedule is likely to be driven by market demand. It is assumed buildout of Phase 1 is anticipated by 2050 and Phase 2 is expected to be developed concurrently beginning as early as 2025, with buildout by 2031. Given the buildout dates of the proposed project and NORSD's planned expansion, the proposed project would not increase the demand for wastewater treatment services beyond NORSD WWTP's capacity and impacts would be less than significant.

The nearest sewer main is a 36-inch line in Norris Road approximately three miles southeast from the project site. A new sewer main line is currently being installed from the existing 36-inch line to the future intersection of Imperial Avenue at Endes Street via Coffee Road and Seventh Standard Road. Phase 1 of the project may require installation of a sewer lift station to reach the new sewer main line. If determined to be required, a new sewer lift station is likely to be located southeast of Phase 1.

Stormwater

The proposed project would be developed to collect stormwater via an onsite drainage system and conveyed to a detention basin to facilitate stormwater infiltration and metered discharge, emulating pre-development conditions. Each of the twenty-four future parcels would have its own basin that would be dedicated for stormwater retention. As discussed further in Section 4-10, Hydrology and Water Quality, **MM 4.10-2** would require the preparation and submittal of a final hydrologic study and drainage plan prior to the issuance of a grading permit. With implementation of **MM 4.10-2** impacts to existing stormwater facilities would be less than significant.

Electric

Currently, electrical service is not provided at the project site. As discussed in Section 3, *Project Description*, electric services would be provided by PG&E. During operational activities, the proposed project would require a connection to PG&E's electric distribution system. See **Figure 4.18-1**, *Offsite Improvements.* PG&E would construct an electrical substation and distribution system to serve the project site. The project operator would coordinate with PG&E as needed for power associated with the substation. Operation of the proposed project would increase on-site electricity demand compared to existing conditions. The CalEEMod was used to calculate the approximate annual electricity demand of the proposed project. The proposed project would be required to comply with Title 24 energy efficiency measures and sustainability features of the California Building Standards Code (CBC).

The supply and distribution network within the area surrounding the project site would remain essentially the same as exists currently, with the exception of off-site improvements to add a substation to serve the proposed project. These improvements would connect to the existing infrastructure and provide electrical service to the proposed project. There are sufficient planned electricity supplies in the PG&E service area for estimated net increases in energy demands. With implementation of Mitigation Measure **MM 4.18-1**, the project proponent would be required to coordinate with PG&E staff to determine the specific requirements regarding any potential electric service or facility issues needed to adequately accommodate the proposed Project. The project proponent shall comply with and adhere to all requirements identified by PG&E to fully mitigate impacts to electric services and facilities, as needed as project construction progresses.

Therefore, because there would be sufficient electricity supplies available, energy demand for the proposed project would be less than significant.

Natural Gas

As discussed in Section 3, *Project Description*, gas services would be provided by Southern California Gas Company (SoCal Gas). The nearest natural gas pipeline is a 24-inch high pressure transmission line, operated by SoCal Gas, on Petrol Road, 0.5 mile south of the project site. A 4-inch gas line also lies in the east portion of Quinn Road, south of Lencioni Avenue. See **Figure 4.18-1**, *Offsite Improvements.* Although the proposed project would result in a connection to the existing gas line, a new natural gas pressure reducing station and main extension and distribution laterals would be constructed within the project site. The construction the laterals would not cause significant environmental effect as they would be located within the disturbed project areas. Furthermore, the project proponent would be required to comply with **MM 4.18-2**, which requires coordination between the operators and SoCal Gas to determine any potential natural gas service or facility issues needed to adequately accommodate the proposed Project.The Project proponent shall comply with and adhere to all requirements identified by SoCal Gas to fully mitigate impacts to natural gas services and facilities, as needed as construction of the proposed project progresses. Impacts would be less than significant.

Telecommunications

Telephone services would be provided by AT&T and cable would be provided by Spectrum to the site. No expansions are anticipated. No impacts would occur associated with telecommunication facilities. Though the proposed project could result in new and expanded telecommunication facilities, given that the telecommunications line would follow along previously disturbed lands, the construction or relocation of telecommunication equipment would not cause significant environmental effects. Impacts would be less than significant.

Mitigation Measures

Implementation of Mitigation Measures **MM 4.10-2** and **MM 4.10-3** as described in 4.10, *Hydrology and Water Quality*, and the following mitigation measures:

MM 4.18-1: Prior to issuance of grading and building permits, the project proponent shall coordinate with PG&E staff to determine the specific requirements regarding any potential electric service or facility issues needed to adequately accommodate the proposed project. The

project proponent shall comply with and adhere to all requirements identified by PG&E to fully mitigate impacts to electric services and facilities, as needed as Project construction progresses.

MM 4.18-2: Prior to issuance of grading and building permits the project proponent shall coordinate with SoCal Gas staff to determine the specific requirements regarding any potential natural gas service or facility issues needed to adequately accommodate the proposed project. The project proponent shall comply with and adhere to all requirements identified by SoCal Gas to fully mitigate impacts to natural gas services and facilities, as needed as project construction progresses.

MM 4.18-3: All facilities of the water system shall be designed and constructed to comply with Kern County Development Standards and approved by the Kern County Public Works Department.

Level of Significance After Mitigation

With the implementation of Mitigation Measures **MM 4.10-2**, **MM 4.10-3**, and **MM 4.18-1** through **MM 4.18-3**, impacts would be less than significant.

Impact 4.18-2: The Project Would Have Sufficient Water Supplies Available to Serve the Project from Existing Entitlements and Resources or Require New or Expanded Entitlements.

The proposed project's water demand and potential sources of water supply were evaluated in the WSA included in Appendix M.

During construction of the proposed project, it is expected that limited quantities of non-potable water would be used for dust suppression and equipment cleaning purposes on the proposed project site. The water used for construction purposes is expected to be approximately 350,000 gallons over the 25-year buildout. Water to be used during the construction phase of the proposed project will be pumped from existing wells on-site or mobile water trucks and purified/potable water will be provided to the construction workers. Additionally, on-site restroom facilities for the construction workers would be provided by portable units to be serviced by licensed providers; no connection to a public sewer system is required for proposed project construction, and therefore, water for such purposes is not required. Therefore, construction of the proposed project would not substantially deplete groundwater supplies and impacts are considered less than significant.

The proposed project entails the development of 739 acres of agricultural land. Under existing conditions, Cawelo Water District provides water to Phase 1 and North Kern WSD provides water to Phase 2 of the project site for agricultural use. Phase 1 is allocated approximately 641 AFY and the Phase 2 site is allocated approximately 615 AFY under current agricultural conditions.

To calculate projected water demands, the WSA used data from the cities of Ventura, Santa Barbara, San Luis Obispo, Thousand Oaks, Oxnard, Santa Margarita Water District, Irvine Ranch Water District, and Ventura County Waterworks District Number 8. Based on this data it was concluded that the proposed project would use approximately 526,895 gallons per day, or approximately 591 AFY when operational, as shown in **Table 4.18-1,** *Water Demand With and Without Project Development*.

Table 4.18-1: Water Demand With and Without Project Development

Phase	Acre-Feet Per Year
Pre-Development Condition (agriculture)	
Phase 1	641
Phase 2	615
Total:	**1,256**
Project Condition (industrial)	
Phase 1	485
Phase 2	106
Total:	**591**
Total Change	**-665**
Source: Ascent 2023	

The estimated project demand of approximately 591 AFY would result in a reduction of 665 AFY when compared to existing agricultural use, resulting in an approximate 53 percent reduction in projected water use on site.

As previously discussed, OMWC would provide potable water service to the proposed project, and the water would be sourced from on-site water wells, Cawelo Water District and North Kern WSD. The most recently adopted UWMP for OMWC is the 2020 OMWC UWMP, which does not include the proposed project's projected water demand. The WSA prepared for the project assesses the availability of existing and projected water supply sources during normal, single-dry, and multiple-dry years within a 20-year projection consistent with the requirements of Senate Bill (SB) 610 and as detailed in Water Code Sections 10910 – 10912.

The WSA concluded that the implementation of GSPs in the project area will substantially increase the quantity of groundwater stored in the Subbasin and the KGA GSA (inclusive of its member agencies) and Cawelo GSA areas in future climate change conditions; thus, sufficient groundwater supplies will continue to be available during future normal, dry, and multiple dry years. OMWC has prepared a WSA based on the review of the project and Mitigation Measure **MM 4.10-3** requires a water will-serve letter for the project to be provided prior to any ground-disturbing activities. Furthermore, Mitigation Measure **MM 4.18-4** would require that water meters be installed on all facilities and the developer/proponent shall be required to submit annual reports to the Kern County Planning and Natural Resources Department and the Kern County Environmental Health Services Department detailing the annual water usage on site. Impacts would be less that significant after mitigation.

Mitigation Measures

Implementation of Mitigation Measure **MM 4.10-3** as described in 4.10 – *Hydrology and Water Quality* and;

MM 4.18-4: Prior to issuance of building permits, the operator shall provide information on any groundwater or reclaimed water that will be used for operational activity. Water meters shall be installed on all facilities. Unmetered water wells cannot be used as a source of groundwater for project operations. Groundwater may only be used for operations from a water well equipped with a water meter. Once operations of the first facility constructed

on-site have commenced, the Master Developer or subsequent future landowners shall be required to submit annual reports to the Kern County Planning and Natural Resources Department and the Kern County Environmental Health Services Department detailing the annual water usage on site. A copy shall be sent to all Groundwater Sustainability Agencies and the Kern County Water Agency. The information submitted shall include the following data:

a. The source and estimated amount of any groundwater being used in the permit activity.

b. Confirmation that any water well used in permit activity is metered.

c. The source and estimated amount of any reclaimed water used in the permit activity.

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM 4.10-3** and **MM 4.18-4**, impacts would be less than significant.

Impact 4.18-3: The Project would result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

As discussed above, wastewater collection would be provided by NORSD WWTP. The nearest sewer main is a 36-inch line in Norris Road approximately three miles southeast from the project site. A new sewer main line is currently being installed from the existing 36-inch line to the future intersection of Imperial Avenue at Endes Street via Coffee Road and Seventh Standard Road. Phase 1 of the proposed project may require installation of a sewer lift station to reach the new sewer main line.

Conservatively, it is assumed that projected water demand for the project (591 acre-feet per year (AFY) or 0.53 MGD) would be equal to the total amount of wastewater. As of 2022, the WWTP has a capacity of 7.5 million gallons per day (MGD) and an average monthly flow between 5.4 and 5.9 MGD (average 5.65 MGD), resulting in an approximate remaining capacity of 1.85 MGD (NORSD 2023). Therefore, the proposed project would use approximately 28.6 percent of the NORSD WWTP remaining capacity. However, NORSD has two WWTP expansion projects planned, the first of which would add an additional capacity of 12 MGD to be started in 2028. The second project is expected to add an additional capacity of 18 MGD and has an estimated start date of 2050 (NORSD 2023, NORSD 2022). As stated in Section 3, *Project Description,* a specific construction schedule has been identified for the proposed project, however the schedule is likely to be driven by market demand. Anticipated buildout of Phase 1 is by 2050 and Phase 2 is expected to be developed concurrently beginning as early as 2025, with buildout by 2031. Given the buildout dates of the project and NORSD's planned expansion, the proposed project would not increase the demand for wastewater treatment services beyond NORSD WWTP's capacity. Additionally, implementation of **MM 4.18-5** would require the project proponent to provide a will-serve letter for sewer services for the proposed project to Kern County Environmental Health for approval. Therefore, impacts would be less than significant.

Mitigation Measures

MM 4.18-5: Prior to the start of any ground-disturbing activities, the project proponent shall provide a will-serve letter for sewer services for the project, as approved by Kern County Environmental Health.

Level of Significance After Mitigation

With implementation of Mitigation Measure **MM 4.18-5**, impacts would be less than significant.

Impact 4.18-4: The Project would generate Solid Waste in Excess of State Or Local Standards, Or In Excess Of The Capacity Of Local Infrastructure, Or Otherwise Impair The Attainment Of Solid Waste Reduction Goals

Construction and operation of the proposed project would be expected to generate waste materials. Materials brought to the project site during construction would be used to construct facilities and minimal residual waste would be expected. As of 2023, there are 11 active solid waste landfills in Kern County (CalRecycle 2023b). The nearest landfill to the proposed project site is the Shafter-Wasco Landfill, located approximately 17 miles northwest of the project site, located at 17621 Scofield Road in Shafter. The Shafter-Wasco Landfill has a permitted throughput of 1,500 tons per day with remaining capacity of 7.9 million cubic yards and an estimated closure date of 2053 (CalRecycle 2023b). This facility is expected to be capable of accepting construction and operational waste generated by the proposed project.

On-site recycling would reduce waste materials generated during construction and operation of the proposed project. Mitigation Measure **MM 4.18-6** would require that during construction and operation, waste shall be recycled to the maximum extent feasible by requiring an onsite Recycling Coordinator, who will facilitate recycling of all construction waste through coordination with contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes and during project operation requiring that storage areas for recyclable materials be clearly marked and available. With the implementation of Mitigation Measure **MM 4.18-6**, impacts associated with solid waste would be less than significant.

Mitigation Measures

MM 4.18-6: During construction and operation, wastes shall be recycled to the extent feasible. Prior to issuance of grading or building permits:

a. An on-site Recycling Coordinator shall be designated by the project proponent/operator to facilitate recycling as part of the Trash Abatement Program required per MM 4.9-14.

b. The Recycling Coordinator shall facilitate recycling of all construction waste through coordination with contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes.

c. The onsite Recycling Coordinator shall also be responsible for ensuring wastes requiring special disposal are handled according to State and County regulations that are in effect at the time of disposal.

d. Contact information of the coordinator shall be provided to the Kern County Public Works Department – Waste Management Division prior to issuance of building permits.

e. The project proponent/operator shall provide a storage area for recyclable materials within the project area that is clearly identified for recycling. This area shall be maintained on the site during construction and operations. A site plan showing the recycling storage area shall be submitted to the Kern County Planning and Natural Resources Department prior to the issuance of any grading or building permit for the site.

Level of Significance After Mitigation

With implementation of Mitigation Measure **MM 4.18-6**, impacts would be less than significant.

Impact 4.18-5: The Project Would Comply With Federal, State, and Local Statutes and Regulations Related to Solid Waste.

The proposed project would generate solid waste during construction, operation and maintenance. Common construction waste may include metals, masonry, plastic pipes, rocks, dirt, cardboard, or green waste related to land development. The 1989 California Integrated Waste Management Act (AB 939) requires Kern County to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the proposed project. In 2011, the State passed AB 341, which established a policy goal that a minimum of 75 percent of solid waste must be reduced, recycled, or composted by the year 2020. In addition, as part of compliance with CALGreen requirements, Kern County implements the following construction waste diversion requirements:

- Submittal of a Construction Waste Management Plan
- Recycle and/or reuse a minimum 65 percent C&D waste; and
- Recycle or reuse 100 percent of tree stumps, rocks, and associated vegetation and soils resulting from land clearing.

Furthermore, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the project design. Implementation of Mitigation Measure **MM 4.18-6** would ensure compliance with all waste diversion and recycling requirements by requiring recycling during construction, operation, and decommissioning of the project. The proposed project would be required to comply with all federal, State, and local statutes and regulations related to the handling and disposal of solid waste. Therefore, implementation of the proposed project would result in less than significant impacts.

Mitigation Measures

Implementation of Mitigation Measure **MM 4.18-6**.

Level of Significance After Mitigation

With implementation of Mitigation Measure **MM 4.18-6**, impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

The proposed project's contribution to an increased need for utilities and service systems is considered in the context of other past, present, and reasonably foreseeable future projects in the area. The geographic scope for cumulative analysis of impacts to utilities and service systems includes related projects within the service area for each of the utility providers described above, which includes demand on water supply, stormwater drainage, sewer services, solid waste disposal, electricity, natural gas, and telecommunications. Also, known or foreseeable cumulative projects within a 6-mile radius of the project site include residential, commercial, and industrial uses and are described in Chapter 3.0, *Project Description*. If constructed, these projects could cumulatively contribute to impacts on utilities and service systems. Public agencies and utilities are given an opportunity to respond to inquiries for information regarding the potential increase in demand for their services. Significant cumulative impacts could occur if the proposed project, when considered cumulatively with the other projects, would overburden utilities and/or service systems in a manner which would render the agencies incapable of providing adequate services or require the development of new facilities.

Water Supply

OMWC prepared a WSA for the proposed project. The WSA (Appendix M) concluded that with implementation of the GSPs (which have been prepared in compliance with SGMA) applicable to the Kern County Subbasin, sufficient groundwater supplies will continue to be available during future normal, dry, and multiple dry years in the County. In addition, the conversion of agricultural land to industrial use is projected to reduce the site's water demand by approximately 53 precent. Mitigation Measure **MM 4.10-3** requires a will-serve letter to be provided for project activities and **MM 4.18-4** would require the proposed project to report annual water usage on site to Kern County Planning and Natural Resources Department and the Kern County Environmental Health Services Department. Regardless, as the Kern County Subbasin is currently over drafted and the District's GSP has been deemed inadequate along with the other Kern subbasin plans where the other similar known and unknown projects could occur, the cumulative impacts of any use of groundwater in the area are considered significant and unavoidable after all feasible and reasonable mitigation. Therefore, cumulative impacts related to water use would be significant and unavoidable.

Wastewater

NORSD has two improvement projects planned for the purpose of accommodating growth in the NORSD service area. Given NORSD's planned improvement projects, which would add an additional capacity of 12 MGD and 18 MGD, and the buildout dates of the project, the cumulative impact on NORSD WWTP's capacity would be less than significant. As discussed further in Section 4-10, *Hydrology and Water Quality*, **MM 4.10-2** would require the preparation and submittal of a final hydrologic study and drainage plan prior to the issuance of a grading permit. With implementation of **MM 4.18-5**, the project proponent would be required to provide a will-serve letter for sewer services for the proposed project and submit it to Kern County Environmental Health for approval. With implementation of **MM 4.18-5**, the project incremental

contribution to wastewater services would be less than cumulatively considerable. Furthermore, other cumulative projects would also be required to comply with similar requirements. Therefore, cumulative impacts related to wastewater would be less than significant.

Stormwater Drainage

As described above, no constructed stormwater drainage systems are present on-site and stormwater on the project site either percolates on-site or drains off-site by way of existing natural drainages. Parcels within the County are required to adhere to 100 percent stormwater retention per County requirements and standards. As such, the proposed project would install an on-site storm drainage system consisting of retention basins and storm drain systems. Runoff would drain to one of on-site retention basins located throughout the project site. The basins would be designed to accommodate a 10-year storm event and would detain runoff and release it at a rate no greater than the pre-development condition of the project site. Therefore, the cumulative impacts to stormwater drainage are less than significant, and the proposed project would not contribute to cumulatively considerable impacts related to stormwater drainage facilities.

Electricity

The proposed project would include construction of a substation to provide electric power to the project. The proposed substation would connect to existing infrastructure and operation of the proposed project would be consistent with the planned electricity demand. As such, the proposed project would not contribute to a cumulatively considerable impact related to electricity demand and facilities.

Natural Gas

The proposed project would include the connection to an existing gas line, a new natural gas pressure reducing station, and main extension and distribution laterals within the project site. The proposed infrastructure upgrades are proposed to be within disturbed areas. Furthermore, the project proponent would be required to comply with **MM 4.18-2**, which requires coordination between the operators and SoCal Gas to determine any potential natural gas service or facility issues needed to adequately accommodate the proposed Project. The project proponent shall comply with and adhere to all requirements identified by SoCal Gas to fully mitigate impacts to natural gas services and facilities, as needed as project construction progresses. With implementation of Mitigation Measure **MM 4.18-2**, the project's incremental contribution would be less than cumulatively considerable. Furthermore, other cumulative projects would also be required to comply with State and local policies.

Telecommunications

The proposed project in combination with cumulative projects would increase demand for telecommunication facilities. However, demand associated with and other cumulative development is expected to be within the planning forecasts of the affected telecommunications provider. Therefore, cumulative impacts related to telecommunications facilities would be less than significant.

Solid Waste

The proposed project would generate solid waste during construction and operation; however, implementation of Mitigation Measure **MM 4.18-6** would reduce the quantity of material destined for disposal at local landfills. As such, the proposed project's contribution to this cumulative impact would be

less than significant with mitigation. Similar to the proposed project, other planned projects are expected to comply with State and local waste-reduction policies. Therefore, the proposed project is not expected to result in a cumulative impact on Kern County landfills.

Mitigation Measures

Implementation of Mitigation Measures **MM 4.10-2** and **MM 4.10-3** as described in Section 4.10, *Hydrology and Water Quality,* and **MM 4.18-1** through **MM 4.18-6**

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM 4.10-3** and **MM 4.18-4**, cumulative impacts would be significant and unavoidable for water supply. Cumulative impacts would be less than significant for wastewater, stormwater drainage, solid waste, landfills, electricity, natural gas, and telecommunications with implementation of Mitigation Measures **MM 4.10-2** and **MM 4.18-1** through **MM 4.18-6**.

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Section 4.19

Wildfire

Section 4.19
Wildfire

4.19.1 Introduction

This section of the EIR describes the affected environment and regulatory setting for wildland wildfire. The section includes the physical and regulatory setting for the project, the methods used in evaluating potential impacts, the criteria used to evaluate the significance of potential impacts, and an analysis of potential impacts from wildfire. The analysis in this section is based on review of the project plans, information from the California Department of Forestry and Fire Protection (CAL FIRE) and Kern County Fire Hazards Severity Zone (FHSZ) Maps. Additionally, information from the *Biological Assessment – Malibu Vineyards,* prepared by Mesa Biological, LLC., provided in **Appendix F** of this Draft EIR, was relied upon to describe existing site conditions.

4.19.2 Environmental Setting

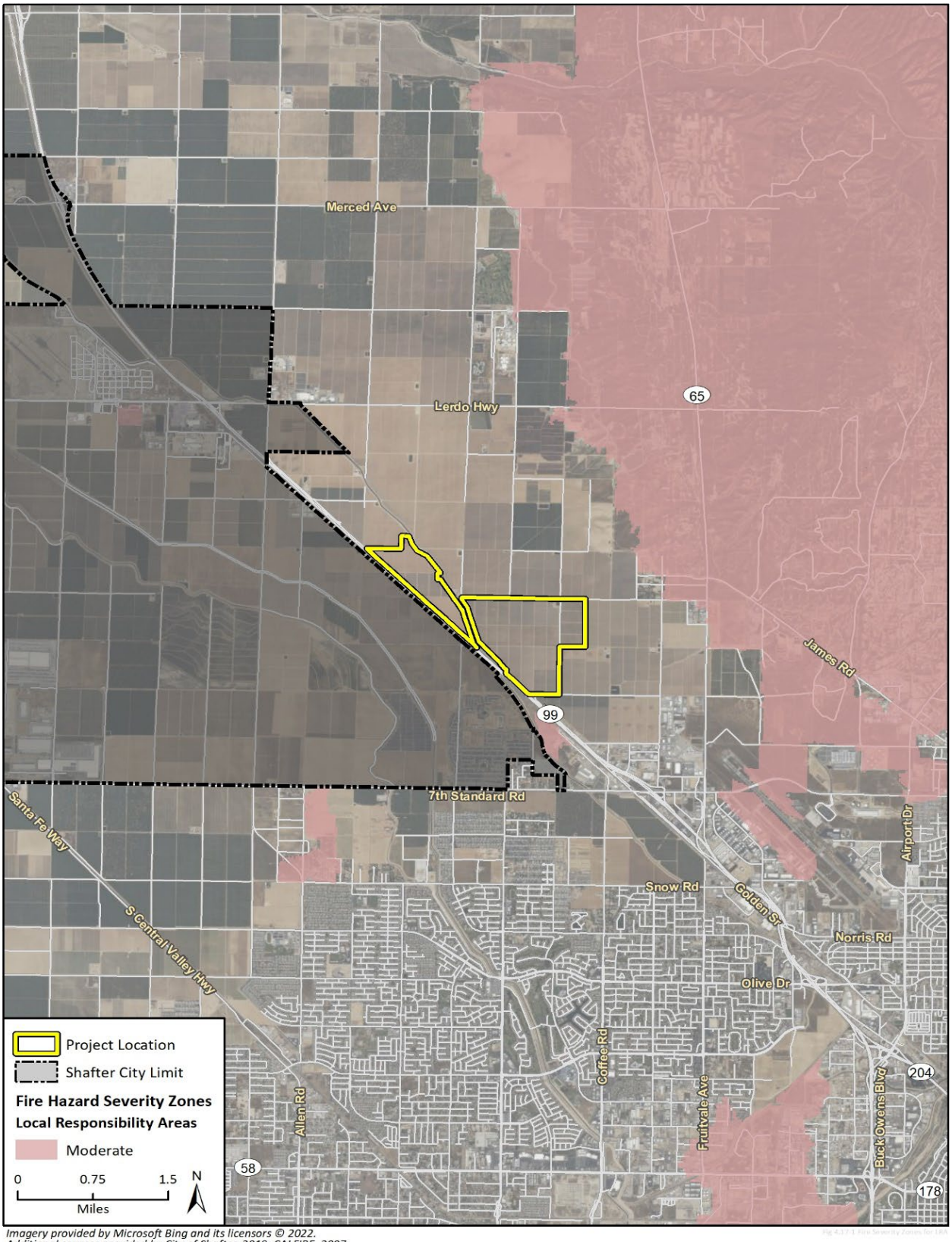
Site Characteristics and Fire Environment

The proposed project site is located on agricultural land within unincorporated Kern County. The parcels are currently owned by Malibu Vineyards, LP, with a portion of the property being utilized for growing table grapes. The project vicinity experiences high temperatures (85 degrees and up) for at least two months out of the year (July and August), with an average temperature of 86 degrees Fahrenheit during these months. The area experiences moderate average temperatures (65 to 85 degrees Fahrenheit) from April to June and September to October, and cooler average temperatures (below 65 degrees Fahrenheit) from November through March. The proposed project site is relatively flat and lacks significant topographical features, ranging in elevation from approximately 440 to 550 feet above mean sea level (msl) throughout the site. No slopes are located within proximity to the project site. The project site is situated in the San Joaquin Valley Air Basin (SJVAB). The SJVAB is approximately 250 miles long and 35 miles in width (on average) and is bordered by the Coast Range Mountains on the west, the Sierra Nevada mountains on the east, and the Tehachapi Mountains to the south. On the valley floor, the SJVAB is open only to the north, which heavily influences prevailing winds. Northwesterly winds are common during summer months, and air masses are often channeled towards the southeastern end of the San Joaquin Valley. Winds are often weaker in the winter, which contribute to stagnation events (San Joaquin Valley Air Pollution Control District [SJVAPCD] 2019).

CAL FIRE identifies FHSZs based on factors such as fuel, slope, and fire weather to identify the degree of fire hazard throughout California (e.g., moderate, high, or very high). While FHSZs do not predict when or where a wildfire will occur, they do identify areas where wildfire hazards could be more severe and are therefore of greater concern.

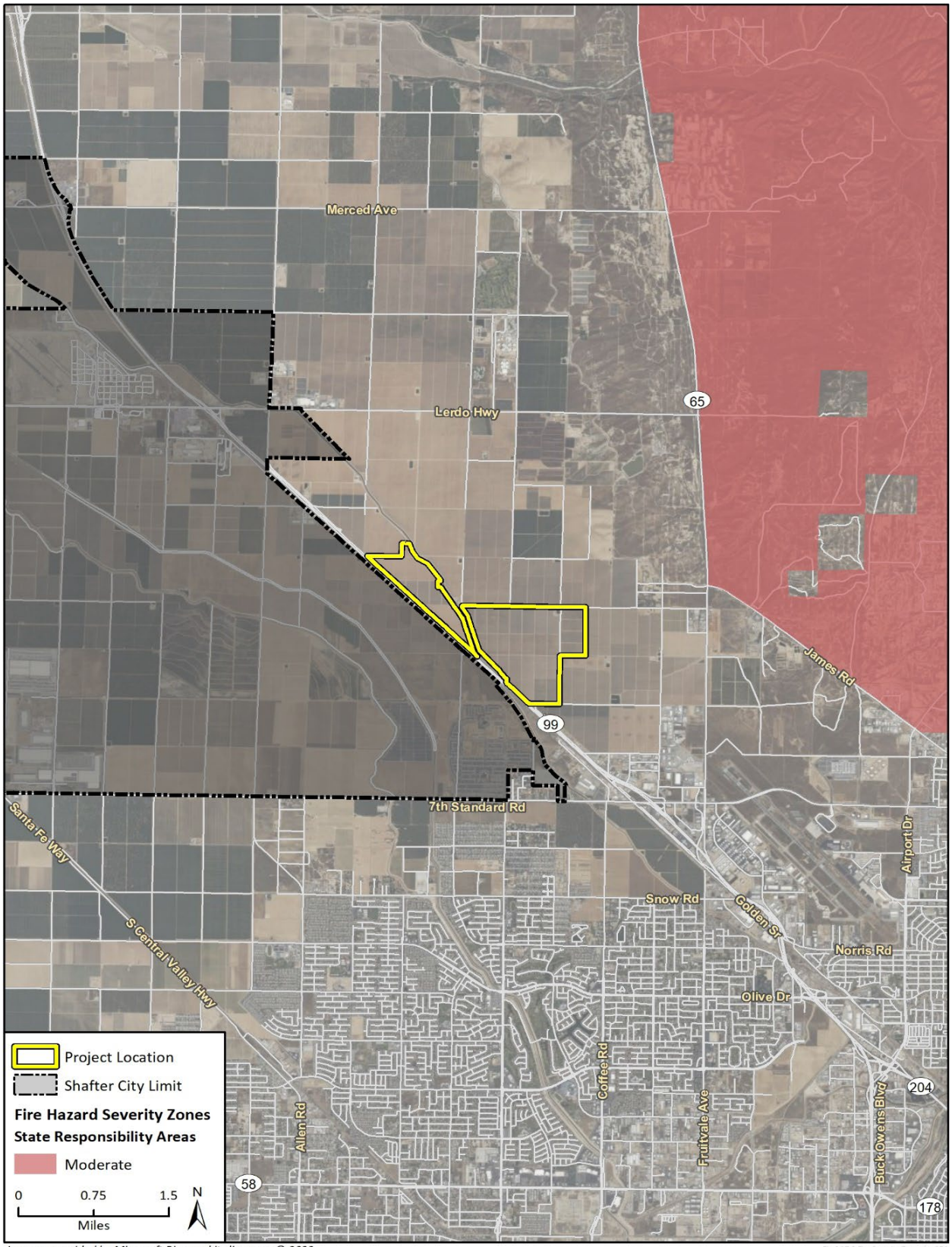
According to the FHSZ map published by CAL FIRE, the project site is not located within or near a state responsibility area (SRA) or lands classified as very high fire hazard severity zones. The project site is located outside of areas identified by CAL FIRE as having a substantial or very high risk for wildfire to occur. The project site is located 2.5 miles west of a SRA and is designated as Local Responsibility Area (LRA) (CAL FIRE 2023). In addition, the Kern County Fire Hazard Safety Zone (FHSZ) Maps for the LRA identify the project site as Unzoned. (Cal Fire 2024) SRAs are typically wildland supporting areas of low fire frequency and relatively modest fire behavior. Refer to **Figure 4.19-1** *Fire Severity Zones for Local Responsibility Areas*, and **Figure 4.19-2** *Fire Severity Zones for State Responsibility Areas*.

Figure 4.19-1: Fire Severity Zones for Local Responsibility



Imagery provided by Microsoft Bing and its licensors © 2022.
Additional sources provided by City of Shafter, 2019; CALFIRE, 2007.

Figure 4.19-2: Fire Severity Zones for State Responsibility Areas



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Additional sources provided by City of Shafter, 2019; CALFIRE, 2007.

Fire History

Fire history information can provide an understanding of fire frequency, fire type, most vulnerable project areas, and significant ignition sources. According to the Kern County Community Wildfire Protection Plan completed in 2022 (Kern County Fire 2022b), which assessed fire history data from 1898 through 2021, most of the fires within the County have been smaller than 100 acres and approximately 10 percent of all fires have been larger than 300 acres. Notably, the French Fire in 2021 burned 27,85 acres near Lake Isabella. Other large, destructive wildfires in recent history include the Cedar, Erskine, Breckenridge Complex and Comanche Fires, all of which burned areas exceeding 25,000 acres. Fires typically occur between May and September, when temperatures are high and dry winds are frequent (Kern County Fire 2022b). CAL FIRE's Incident Map shows wildfire incidents back through the 2016 wildfire season (CAL FIRE 2023b) and CAL FIRE's Fire and Resource Assessment Program (FRAP) provides a map of fire perimeters as far back as the 1950s (CAL FIRE 2023c). Based on a review of these maps, no fires in recorded history have burned across the project site.

Vegetation (Fuels)

The San Joaquin Valley Floristic Region is characterized by dry flora which covers the broad plain at the head of the San Joaquin Valley in the County. The regional flora is composed largely of fast-growing winter annuals adapted to low-precipitation conditions (Kern County General Plan EIR 2004). Regional vegetation on the valley floor is predominated by modern cultigens and other non-native species such as Russian thistle (Salsola tragus) (tumbleweed) and grasses, but also includes cheatgrass (*Bromus tectorum*) and doveweed (Murdannia nudiflora*)*.

A portion of the project site (313 acres) consists of agricultural lands in the form of vineyards, as described in Section 4.2, *Agriculture and Forestry Resources.* The remaining portion of the project site consists of vacant lands historically used for growing table grapes. The proposed project site is entirely composed of ruderal (disturbed) land, and the site is surrounded by the Lerdo Canal and SR 99 to the west and by active agriculture to the north, south, and east. Dominant herbaceous vegetation at the site includes red brome (Bromus madritensis ssp. rubens), fiddleneck (Amsinckia intermedia), field mustards (Brassica spp.), and Russian thistle (Salsola tragus). Telegraph weed (Heterotheca gradiflora), Horsetail (Equisetum sp.), allscale saltbush (Atriplex polycarpa), Rabbitbush (Ericameria paniculata), Puncture vine (Tribulus terrestris), Datura (Datura watsonii), Nightshade (Solanum elaegnifolium), Storksbill (Erdoium circularium), Goosefoot (Chenopodium sp.), and Cheese weed (Malva glecta) (Mesa Biological, LLC 2020).

4.19.3 Regulatory Setting

Federal

There are no applicable federal plans or policies for this issue area.

State

2022 California Fire Code

The 2022 California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. Chapter 6 (Building Services and Systems) of the Code focuses on building systems and services as they relate to potential safety hazards and when and how they should be installed. Building services and systems addressed include emergency and standby power systems, electrical equipment, wiring and hazards, and stationary storage battery systems. Chapter 33 (Fire Safety During Construction and Demolition) of the Code outlines general fire safety precautions to maintain required levels of fire protection, limit fire spread, establish the appropriate operation of equipment, and promote prompt response to fire emergencies. The Fire Code includes regulations regarding fire resistance-rated construction; fire protection systems such as alarm and sprinkler systems; fire service features, such as fire apparatus access roads, means of egress, fire safety during construction, and demolition; and wildland urban interface areas.

2022 California Building Code, Chapter 7A

Chapter 7 of the 2022 California Building Code (CBC) details the materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area. A Wildland-Urban Interface Area is defined in Section 702A of the CBC as a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. The CBC details the materials, systems, and assemblies used for structural fire resistance and fire resistance-rated construction separation of adjacent spaces to safeguard against the spread of fire and smoke within a building and the spread of fire to or from buildings. The County adopted the CBC into Chapter 17 of the Kern County Building Code through Ordinance No. G-8866.

Public Resources Code 4291-4299

California Public Resources Code Sections 4291-4299 requires that brush, flammable vegetation, or combustible growth within 100 feet of buildings be maintained. Vegetation that is more than 30 feet from the building, less than 18 inches high, and important for soil stability may be maintained, as may single specimens of trees or other vegetation that are maintained so as to manage fuels and not form a means of rapid-fire transmission from other nearby vegetation to a structure. Additionally, the Public Resources Code outlines infraction fees, certification, and compliance procedures applicable with state and local building standards, including those described in Subdivision (b) of Section 51189 of the Government Code.

Local

Kern County General Plan (KCGP)

The proposed project site is partially located within the *Kern County General Plan* (KCGP). The goals, policies, and implementation measures in the KCGP for wildfire applicable to the proposed project are provided below.

Chapter 4. Safety Element

4.6 – Wildland and Urban Fire

Policies

Policy 1: Require discretionary projects to assess impacts on emergency services and facilities.

Policy 4: Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.

Policy 6: All discretionary projects shall comply with the adopted Fire Code and the requirements of the Fire Department.

Implementation Measures

Measure A: Require that all development comply with the requirements of the Kern County Fire Department or other appropriate agency regarding access, fire flows, and fire protection facilities.

Metropolitan Bakersfield General Plan (MBGP) (Unincorporated Planning Area)

The proposed project site is also partially located within the *Metropolitan Bakersfield General Plan* (KCGP). Bakersfield is the largest incorporated area in Kern County. Bakersfield is the county seat and the focus of much of the business activity in the County. Accordingly, Kern County and the City of Bakersfield have jointly adopted a general plan for the metropolitan area (Metropolitan Bakersfield General Plan) that provides further information on planned land uses, policies, and implementation programs for the unincorporated portions of the metropolitan plan area. The policies, goals, and implementation measures in the Metropolitan Bakersfield General Plan for wildfire applicable to the proposed project are provided below.

Chapter VII: Safety/Public Safety

Goals

Goal 1: Ensure that adequate police and fire services and facilities are available to meet the needs of current and future metropolitan residents through the coordination of planning and development of metropolitan police and fire facilities and services.

Policies

Policy 1: Require discretionary projects to assess impacts on police and fire services and facilities.

Kern County Fire Code

Chapter 17.32 of the Kern County Municipal Code details the Kern County Fire Code, which is an adoption of the 2022 California Fire Code and the 20201 International Fire Code with some amendments made to address conditions more specifically in Kern County. The purpose of the Kern County Fire Code is to regulate the safeguarding of life, property, and public welfare to a reasonable degree from the hazards of fire, hazardous materials release, and/or explosion due to handling of dangerous and hazardous materials; conditions hazardous to life or property in the occupancy and use of buildings and premises; the operation, installation, construction, and location of attendant equipment; and the installation and maintenance of adequate means of egress. It also provides for the issuance of permits and collection of fees related to such activities.

Kern County Fire Department Wildland Fire Management Plan

The Kern County Fire Department (KCFD) Wildland Fire Management Plan was adopted in 2009 and assesses the wildland fire situation throughout the LRA within the County. The plan includes stakeholder contributions and priorities and identifies strategic targets for pre-fire solutions as defined by the people who live and work in the local area. The plan systematically assesses the existing levels of wildland protection services and identifies high-risk and high-value areas that may be potential locations for costly or damaging wildfires. The plan also ranks the areas in terms of priority needs and prescribes measures to reduce future fire management and protection costs and minimize potential loss from wildfire. According to the plan, the project site is located within an agricultural/ non-wildland (KCFD 2009).

Kern County Fire Department 2021 Strategic Fire Plan

The KCFD 2021 Strategic Fire Plan, updated in April 2022, is the current document that assesses the wildland fire situation throughout the SRA within Kern County. The document includes stakeholder contributions and priorities and identifies strategic targets for pre-fire solutions as defined by the people who live and work in the local area. The plan provides a comprehensive analysis of fire hazards, assets at risk, and level of services to systematically assess the existing levels of wildland protection services and identifies high-risk and high-value areas that are potential locations for costly and damaging wildfires. The plan gives an overview of KCFD battalions and ranks these areas in terms of priority needs, as well as identifying the SRA areas. According to the plan, 69 percent of the land area within Kern County is located within a SRA. The County is divided into six fuel management areas: Tehachapi, Western Kern, Northern Kern, Mt. Pinos Communities, Kern River Valley, and Valley. The project site is located within Battalion 4 & 6 (Valley/Foothill), which lies within a moderate fire hazard severity zone within the 2021 Strategic Fire Plan management area (KCFD 2022).

Kern County Community Wildfire Protection Plan

The Kern County Community Wildfire Protection Plan (CWPP) was developed in response to the federal Healthy Forests Restoration Act (HFRA). The CWPP addresses hazards and risks of wildland fire

throughout the County and makes recommendations for fuel reduction projects, public outreach and education, structural ignitability reduction, and fire response capabilities. The goal of the CWPP, adopted in March 2022, is to enable local communities to improve their wildfire-mitigation capacity, identify high fire-risk areas, and prioritize areas for mitigation, fire suppression, and emergency preparedness. The CWPP enhances public awareness by helping residents better understand the natural- and human-caused risk of wildland fires (SWCA 2022).

Kern County Emergency Operations Plan

The Kern County Emergency Operations Plan (EOP), adopted May 1, 2022, is an all-hazards document that provides for the integration and coordination of planning efforts of the County with those of its cities, special districts, and the State region. The purpose of the EOP is to provide the basis for a coordinated response before, during, and after a disaster affecting the County or other jurisdictions in the EOP's Operational Area. The EOP establishes policies, stipulates an emergency management organization, and assigns roles and responsibilities to ensure the effective management of emergency operations. The EOP also identifies sources of external support which might be provided through mutual aid and specific statutory authorities by other jurisdictions, State and federal agencies, and the private sector (County OES 2022).

Kern County Multi-Jurisdictional Hazard Mitigation Plan

The purpose of the Kern County Multi-Jurisdictional Hazard Mitigation Plan is to reduce or eliminate long-term risk to people and property from natural hazards and their effects in Kern County. The plan includes specific recommendations for actions that can mitigate future disaster losses, as well as a review of the County's current capabilities to reduce hazards impacts. This multi-jurisdictional plan includes Kern County, and the incorporated municipalities of Arvin, Bakersfield, California City, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, and Wasco. The plan also covers 53 special districts that include school, recreation and park, water, community service, and other districts. The plan has been formally adopted by each participating entity and is required to be updated a minimum of every 5 years (Kern County Office of Emergency Services 2023b).

4.19.4 Impacts and Mitigation Measures

Methodology

Wildfire impacts are considered on the basis of: (1) off-site wildland fires that could result due to the proposed project and (2) on-site generated combustion that could affect surrounding areas. The proposed project's potential impacts associated with wildfires were evaluated using a variety of resources, including CAL FIRE maps showing FHSZs, FRAP, and fire history; vegetation data from the *Biological Assessment* (Mesa Biological LLC 2020, Appendix F of this EIR); project location maps; potentially influencing wind and slope conditions; and project characteristics. Using the aforementioned resources and professional judgment, impacts were analyzed according to CEQA significance criteria described below.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the *CEQA Guidelines*, to determine if a project could potentially have a significant impact with respect to wildfires:

A project would have a significant impact with respect to wildfires if it would be located in or near SRAs or lands classified as very high FHSZs, and if it would:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan;

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment;

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes; Or

e. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes.

Project Impacts

Impact 4.19-1: The Project Would Not Substantially Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan.

The project site is not classified as being within a high FHSZ and is not anticipated to physically impede the existing emergency response plans, emergency vehicle access, or personnel access to the site. The site is located in a rural, sparsely developed area with limited population. The KCFD offers the Ready!Set!Go! Plan which provides guidance for evacuation during a wildfire event (Kern County 2020). Additionally, the County implements its Emergency Operations Plan (EOP) which establishes an emergency management organization and provides for the integration and coordination of efforts of the County with those of surrounding cities, special districts and the state for emergency response and short-term recovery. The Plan identifies an emergency management program, defines the County/Operational Area emergency management organization (i.e., local, regional, State, federal), provides standard operating procedures, and provides for public awareness and education (Kern County 2008). Furthermore, in compliance with the most recent and applicable Fire Code and CBC requirements, construction managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction would be maintained on-site. Finally, proposed construction and operation of the proposed project would comply with applicable existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Mitigation Measure **MM 4.9-13**, as described in *Hazards and Hazardous Materials,* requires the development of a Fire Safety Plan. Therefore, the proposed project would not conflict with the implementation of, or cause physical interference with, an adopted emergency response plan or emergency evacuation plan.

As noted in Section 4.16, *Transportation*, the need for and number of any escorts (i.e., from California Highway Patrol), as well as the timing of transport, would be at the discretion of California Department of Transportation and Kern County, and would be detailed in respective oversize load permits. Mitigation Measure **MM 4.16-12** (Refer to Section 4.16 *Traffic and Transportation*) would require that all oversize vehicles used on public roadways during construction obtain required permits and obtain approval of a Construction Traffic Control Plan, as well as identify anticipated construction delivery times and vehicle travel routes in advance to minimize construction traffic during AM and PM peak hours. This would ensure that the potential for project-related construction traffic to interfere with vehicular circulation or emergency access along local roadways would be minimized, including during any times of emergency evacuation.

Mitigation Measures

Implementation of Mitigation Measure MM 4.9-13 (see Section 4.9, *Hazards and Hazardous Materials*, for full mitigation measure text) and Mitigation Measure MM 4.16-12 (see Section 4.16, *Traffic and Transportation*) would be required.

Level of Significance After Mitigation

With implementation of Mitigation Measure **MM 4.9-13,** as described in *Hazards and Hazardous Materials,* and Mitigation Measure **MM 4.16-12**, as described in *Traffic and Transportation*, impacts would be less than significant.

Impact 4.19-2: The Project Would, Due to Slope, Prevailing Winds, And Other Factors, Exacerbate Wildfire Risks, And Thereby Expose Project Occupants To Pollutant Concentrations From A Wildfire Or The Uncontrolled Spread Of A Wildfire.

Slope and wind speed can influence the rate at which wildfire spreads. As described previously, the project site has low topographic relief and is relatively flat; no slopes are present on-site. Therefore, the project is not anticipated to expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to sloping topography.

As stated, the site is located in an area where blowing winds may occur. Such winds may have the potential to contribute to the uncontrolled spread of wildfire, as well as to carry pollutant concentrations from a wildfire occurring within the surrounding area to the site where project occupants may be exposed. Prevailing winds originate from the west and northwest and in in those directions, the landscape is mostly undeveloped except for roads and does not represent a source of air pollution during a wildfire event. During a wildfire occurring in the area onsite at the industrial park, pollutants may be released. However, it is anticipated that any employees occupying the site would be rapidly evacuated at the time of the event, and/or evacuated well in advance of an approaching wildfire, in conformance with applicable County evacuation directives put in place. Such measures would ensure that the exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire from prevailing winds would be minimized to the extent feasible.

The proposed project would introduce temporary on-site employees during construction and is conservatively estimated to have approximately 5,000 to 6,000 employees once operational. The project

site is classified as LRA Unzoned, a designation which is applied to areas with low fire frequency; thus, the potential for wildfire on the project site does exist, but the site is not considered to be high risk (CAL FIRE 2023c).

During construction, the proposed project would comply with applicable existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and the cleanup of spills of flammable materials. Given the low potential for fire, the project site's relatively flat topography, and adherence to applicable existing regulations, codes and ordinances, impacts would be less than significant.

Once operational, employees would be on-site daily. Because of the nature of the proposed project, employees would be on-site 24 hours a day, 7 days a week. Although employees would be on-site 24 hours a day, 7 days a week, the proposed project would comply with the 2022 California Fire Code and Kern County Fire Code to ensure special fire protection. In addition, the proposed project would be adequately served in terms of fire protection services by the KCFD. Furthermore, the project site is not located adjacent to populated communities. Therefore, the proposed project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors, and impacts would be less than significant.

As discussed in Section 4.9, *Hazards and Hazardous Materials*, Mitigation Measure **MM 4.9-13** would require the project proponent/operator develop and implement a Fire Safety Plan that identifies notification procedures and emergency fire precautions consistent with the 2022 California Fire Code and Kern County Fire Code for use during project construction and operation. As required by this Fire Safety Plan, project construction and maintenance personnel would be trained and equipped to extinguish small fires on-site, thus reducing the potential risk of damage from and/or spread of wildfire on-site. Given the low potential for fire to occur on the project site, the generally flat topography of the site, and implementation of Mitigation Measure **MM 4.9-13**, the project is not anticipated to expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire due to slope, prevailing winds, and other factors. Impacts would be less than significant.

Mitigation Measures

Implementation of Mitigation Measure MM 4.9-13 would be required (see Section 4.9, *Hazards and Hazardous Materials*, for full mitigation measure text).

Level of Significance After Mitigation

With the implementation of Mitigation Measure **MM 4.9-13**, as described in *Hazards and Hazardous Materials,* impacts would be less than significant.

Impact 4.19-3: The Project Would Require the Installation Or Maintenance Of Associated Infrastructure (Such As Roads, Fuel Breaks, Emergency Water Sources, Power Lines, Or Other Utilities) That May Exacerbate Fire Risk Or That May Result In Temporary Or Ongoing Impacts To The Environment.

The proposed project includes the construction of an industrial use space, comprised of 24 buildings on 739 acres of existing vineyard. New internal roads would be constructed connecting to Imperial Avenue and Burbank Street to serve as the access roads from the existing road network to the proposed project. All road improvements would be completed in accordance with California Department of Transportation (Caltrans) and/or County codes and regulations. The new perimeter road would be cleared and compacted for equipment and emergency vehicle access to the project site. The project site access road would be constructed for ongoing operations and maintenance activities. All new roads would comply with development requirements for emergency access and, therefore, would not exacerbate fire risk that could result in temporary or ongoing impacts to the environment.

The project site is generally lacking in domestic utilities, which would need to be developed in conjunction with the proposed project. Water service would be provided by Oildale Mutual Water District (OMWD). Off-site improvements would include extension of OMWD's six-inch domestic water line and 12-inch non-potable water line, from approximately one mile west of Quinn Road along Imperial Road, to the southeast corner of the proposed project. Electric services would be provided by Pacific Gas and Electric Company (PG&E). PG&E would construct an electrical substation and distribution system to serve the project site. All surrounding properties are used for agriculture or are vacant and undeveloped.

Common sources of fires within agricultural environments are most often caused by natural sources, such as lightning strikes, or vehicle. The use of delivery vehicles could increase fire risk due to driving heated mufflers over vegetated areas. Improvements to existing access roads would not be placed within a high fire hazard zone, and vegetation would be cleared to reduce the available fuel load and creates a defensible space; therefore, the proposed project would not result in increased fire risks that could result in temporary or ongoing impacts to the environment. As discussed in Section 4.9-13, *Hazards and Hazardous Materials*, Mitigation Measure **MM 4.9-13** would require the project proponent/operator to develop and implement a Fire Safety Plan that identifies notification procedures and emergency fire precautions consistent with the 2022 California Fire Code and Kern County Fire Code for implementation during project construction, operation, and decommissioning. As stated in Mitigation Measure **MM 4.9-13**, the Fire Safety Plan will include, but not be limited to, such measures as requiring that all internal combustion engines, both stationary and mobile, be equipped with spark arresters; maintaining spark arresters in good working order; limiting use of light trucks and cars with factory installed (type) mufflers only on roads where the roadway has been cleared of vegetation; and restricting the use of chainsaws, chippers, vegetation masticators, grinders, drill rigs, tractors, torches, and explosives to periods outside of the official fire season. Implementation of this plan would ensure that potential impacts related to installation or maintenance of project infrastructure are minimized and, thus, impacts would be less than significant.

The project will not expose people or structures to downslope or downstream flooding or landslides as a result of runoff, post-fire instability, or drainage changes. The proposed project area is generally topographically flat, with an existing elevation of 440 to 550 feet above msl. The proposed project is designed to control stormwater and drainage on-site, consistent with Waste Discharge Requirements and

state minimum standards of Title 27 of the California Code of Regulations. There are no natural streams or other natural waterways located on-site or in the immediate vicinity of the project area. No evidence of wetlands occurs on the project site, and jurisdictional waters are not present. The project is not located in or near State Responsibility Areas and lands are not classified as very high fire hazard severity zones. Therefore, no impacts on people or structures including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage change impacts would occur as a result of the proposed project.

Ongoing project maintenance and operations would comply with applicable existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. The Fire Safety Plan, as discussed above, would also address potential fire hazards for the various components of the project, including the energy storage system, and would include measures for fire suppression and extinguishment techniques if a fire were to occur. Implementation of this plan would ensure that potential impacts related to construction and operation of the proposed project would be reduced to less than significant.

Mitigation Measures

Implementation of Mitigation Measure **MM 4.9-13** would be required (see Section 4.9, *Hazards and Hazardous Materials*, for full mitigation measure text).

Level of Significance After Mitigation

With the implementation of Mitigation Measure **MM 4.9-13**, as described in *Hazards and Hazardous Materials*, impacts would be less than significant.

Impact 4.19-4: The project could expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes.

Development of the proposed project would maintain the existing drainage pattern. The proposed project would require implementation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with **MM** 4.10-1 (see **Section 4.10**, *Hydrology and Water Quality* for full mitigation measure), which would include erosion and sediment control Best Management Practices (BMPs) during construction, thereby reducing the potential of erosion and siltation during construction, and would control potential flooding events that could occur during construction.

Additionally, the proposed new impervious surfaces would generate additional stormwater runoff on-site, albeit in minor quantities compared to existing conditions. However, this could exacerbate potential erosion and sedimentation on-site or downstream. As discussed in **Section 4.10**, *Hydrology and Water Quality*, Kern County requires development of a drainage plan with the site development grading permit, which will manage stormwater and reduce the risk for off-site impacts due to erosion and impacts on water quality, as implemented by **MM 4.10-2**. Design measures are intended to minimize or manage flow concentration and changes in flow depth or velocity so as to minimize erosion, sedimentation, and flooding on- or off-site. The drainage plan would include recommendations from a civil engineer meant to offset increases in stormwater runoff and would incorporate them into the project sewer and storm drain design. Since the project site is entirely undeveloped under existing conditions, the proposed project would result in a net

increase in impervious surfaces overall as a result of constructing underground utilities, foundations, wastewater and substation facilities. Compliance with County requirements for a drainage plan, preparation of a SWPPP, and implementation of **MM 4.10-1** and **MM 4.10-2** would minimize potential increases in runoff and ensure that the proposed detention basins and other stormwater management features are implemented to minimize erosion and sedimentation.

The project site is located at the southern end of the San Joaquin Valley in a relatively flat lying plain at approximately 440 to 550 feet above mean sea level and is composed of alluvial soils derived from igneous and sedimentary rock The Lerdo Canal trends northwest to southeast through Phase 2 of the project site. The project site is not located within a flood hazard zone mapped by FEMA (FEMA 2024). Based on the fire history immediately surrounding the site, LRA Unzoned designation, soil types, and surface hydrology, there is a low potential for the project site to be at risk of post-fire instability or drainage changes.

While the proposed project would construct new structures on the project site, the structures would not be placed in a highly flammable landscape. Furthermore, with the implementation of **MM 4.10-1** and **MM 4.10-2**, any potential impacts from runoff and erosion would be minimized. Therefore, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant.

Mitigation Measures

Implementation of **MM** 4.10-1 and **MM** 4.10-2 (see **Section 4.10**, *Hydrology and Water Quality* for full mitigation measure) would be required.

Level of Significance After Mitigation

With implementation of **MM** 4.10-1 and **MM** 4.10-2 (see **Section 4.10**, *Hydrology and Water Quality* for full mitigation measure), impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

The geographic scope for cumulative wildfire impacts is considered for the southern San Joaquin Valley. This geographic scope was selected because the land within the region possesses relatively similar uses and environment, including agriculture, highway commercial, rural residential, mineral extraction, and industrial uses. Within this geographic scope, State Route (SR) 99, directly adjacent west of the project site, is a six-lane highway with three lanes for northbound traffic and three lanes for southbound traffic. SR-99 acts as a manmade fire break; a gap in vegetation and other fuels, which may stop or slow the spread of wildfires. Refer to **Table 3-4**, *Cumulative Projects List*, for a list of projects currently planned or approved within the cumulative study area that may have the potential to contribute to a significant cumulative impact to wildfire when considered together with the proposed project.

With regard to impairment of an adopted emergency response plan or emergency evacuation plan, all of the related projects would be required to demonstrate the provision of adequate emergency access in accordance with Kern County Fire Code and CBC requirements prior to the issuance of a building permit.

Furthermore, all cumulative projects would be subject to similar fire protection development standards and be required to comply with County ordinances and General Plan policies to assist in protecting life and property in the event of a wildfire. In addition, all cumulative projects would be required to comply with and be consistent with existing emergency response plans. Implementation of countywide plans, including the KCFD Strategic Fire plan, the Kern County CWPP, the Kern County EOP, and the Kern MJHMP, in nearby cities and throughout the adjacent unincorporated areas, would reduce cumulative impacts related to wildfire. Furthermore, similar to the proposed project, other cumulative projects would be required to comply with existing codes and ordinances related to maintenance of mechanical equipment, handling and storage of flammable materials, and the cleanup of flammable material spills. For these reasons, cumulative impacts with respect to wildfire hazards would be less than significant.

Cumulative impacts related to exposure of project occupants to pollutant concentrations from a wildfire would be minimal due to the proposed project location outside of an LRA, SRA, or Federal Responsibility Area (FRA) identified as having substantial or very high fire risk, but some related projects in the area may be located within these areas. Similar to the proposed project, all related projects would be required to implement a Fire Safety Plan (as required by Mitigation Measure **MM 4.9-13** for the proposed project) and would be required to implement building and landscape design features in accordance with the Kern County Fire Code and CBC to reduce potential wildfire risk and exposure of occupants to pollutant concentrations from a wildfire that may be exacerbated by existing conditions, such as on-site slopes or exposure to prevailing winds. Adherence to the Kern County Fire Code and CBC requirements would minimize potential impacts related to exposure to or the uncontrolled spread of a wildfire. Accordingly, cumulative impacts would be considered less than significant.

As concluded in the discussion of project impacts above, the proposed project would have a less than significant impact related to exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Nevertheless, given the location in a rural area and limited infrastructure as discussed above, the proposed project and related projects have the potential to result in a cumulative impact related to exposure of project occupants to pollutant concentrations from a wildfire. Cumulative projects would be required to adhere to similar requirements, thus reducing impacts associated with exposure to pollutant concentrations and the uncontrolled spread of wildfire. Therefore, cumulative impacts would be less than significant.

Related projects may require infrastructure improvements such as roads, fuel breaks, and relocation of power lines that could exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Such projects would be reviewed by Kern County during the discretionary process relative to land use and zoning consistency and compliance with applicable requirements, and potentially analyzed for environmental impacts. The placement of any infrastructure associated with these related projects would occur in conformance with applicable fire codes to minimize the potential fire risk through siting and design.

The proposed project includes the construction of an industrial use space, comprised of 24 buildings on 739 acres of existing vineyard. While the potential for wildfire to occur on-site is considered low, **MM 4.15-1** would be implemented to ensure that a Fire Safety Plan is prepared that contains notification procedures and emergency fire precautions consistent with the 2022 California Fire Code and Kern County Fire Code for use during construction and operation.

Some related projects could be proposed in areas that could expose people or structures to risks from downslope or downstream flooding or landslides as a result of post-fire instability. Based on the recent fire events in California, all projects would be required to adhere to Kern County's zoning and land use designations and codes, State and local fire codes, and regulations associated with drainage and site stability. These regulations, policies, and codes would reduce the potential for exposing people or structures to risks from downslope or downstream flooding or landslides as a result of post-fire instability. Each project would require site-specific hydrology and drainage studies for effective drainage design. As concluded in the discussion of project impacts above, with the implementation of **MM 4.10-1** and **MM 4.10-2**, the proposed project would not expose people or structures to significant risks due to post-fire slope instability or drainage changes and would have a less than significant impact. Nevertheless, given the location in a rural area with limited infrastructure, the proposed project and related projects have the potential to result in a cumulative impact related to exposing people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. With the implementation of similar mitigation, cumulative impacts would be less than significant.

Mitigation Measures

Implementation of Mitigation Measure **MM 4.9-13** (see Section 4.9, *Hazards and Hazardous Materials*, for full mitigation measure text), **MM 4.10-1** and **MM 4.10-2** (see Section 4.10, *Hydrology and Water Quality* for full mitigation measures) would be required.

Level of Significance After Mitigation

With implementation of Mitigation Measure **MM 4.9-13**, **MM 4.10-1**, and **MM 4.10-2**, cumulative impacts would be less than significant.

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Chapter 5

Consequences of Project Implementation

Chapter 5

Consequences of Project Implementation

5.1 Environmental Effects Found to Be Less than Significant

Section 15128 of the *CEQA Guidelines* requires that an EIR "contain a statement briefly indicatingthe reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."

Kern County has engaged the public in the scoping of the environmental document. Comments received during scoping have been considered in the process of identifying issue areas that shouldreceive attention in the EIR. The contents of this EIR were established based on an Initial Study (IS)/Notice of Preparation (NOP) prepared in accordance with the *CEQA Guidelines* and on publicand agency input received during the scoping process. Issues that were found to have no impact or less-than-significant impacts during preparation of the IS/NOP do not need to be addressed furtherin this EIR. The only issue that was found to have no impact that would require analysis in the EIR was Mineral Resources. The EIR must contain a comprehensive analysis of the remaining environmental issues identified in Appendix G of the *CEQA Guidelines*.

After further study and environmental review, as provided in this EIR, it was determined that project- level impacts in the following areas would be less than significant or could be reduced to less-than- significant levels with mitigation measures:

- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and HazardousMaterials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

5.2 Significant Environmental Effects that Cannot Be Avoided

Section 15126.2(b) of the *CEQA Guidelines* requires that the EIR describe any significant impacts,including those that can be mitigated but not reduced to less-than-significant levels. Potential environmental effects of the proposed project and proposed mitigation measures are discussed in detail in Chapter 4 of this EIR.

After further study and environmental review, as provided in this EIR, it was determined that project-level and cumulative impacts in the following areas would be significant and unavoidable for the proposed project, even with the incorporation of reasonable mitigation measures, which would attempt to reduce impacts to the greatest extent feasible.

As shown in **Table 5-1**, *Summary of Significant and Unavoidable Impacts of the Proposed Project*, impacts in the following areas would be significant and unavoidable, even with the incorporation of feasible mitigation measures that attempt to reduce impacts to the extent feasible.

Table 5-1: Summary of Significant and Unavoidable Impacts of the Proposed Project

Resources	Project Impacts	Cumulative Impacts
Aesthetics	Implementation of the proposed project would result in significant visualimpacts to the existing visual quality or character of the site as outlined in Section 4.1, *Aesthetics*. **Mitigation Measures MM 4.1-1** through **MM 4.1-3** would be incorporated to reduce visual impacts associated with the proposed project by color treating proposed buildings to blend with surrounding landscape, requiring rooftop screening features, and installing landscape structural elements. However, the site will substantially change the existing visual character of the project site from a primarily agricultural visual to a more industrialized visual from SR-99, impacts to visuals would be considered **significant and unavoidable**.	The proposed project would result in significant and unavoidable impacts related to visual character despite implementation of mitigation. While other projects in the region would also be required to implement various mitigation measures to reduce impacts, the conversion of a current agricultural visual area to a more industrial visual cannot be mitigated to a degree that impacts are less than significant. Even with implementation of **Mitigation Measures MM 4.1-1** through **MM 4.1-4**, the proposed project's contribution to significant impacts associated with visual character in the County of Kern would be **cumulatively significant and unavoidable**.
Agriculture and Forestry Resources	As detailed in Section 4.2, *Agricultura and Forestry Resources,* implementation of the proposed project would result in significant agricultural impacts to the 739 acres of existing farmland. Mitigation Measures **MM 4.2-1** through **MM 4.2-5** would be incorporated to reduce interference with agricultural operations, requiring the establishment of an agricultural easement or purchase of credits from an agricultural farmland mitigation bank at a one-to-one (1:1) ratio, signed forms from all future occupants of the facility, and ensure that project operations would utilize California compliant herbicides that are appropriate	The proposed project would result in significant and unavoidable impacts related to 739 acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). While other projects in the region would also be required to implement various mitigation measures to reduce impacts, the conversion of prime agricultural lands to urban uses will result in a reduction of the regional agricultural economy and is considered a significant adverse impact. Even with Implementation of **Mitigation Measures MM 4.2-1** through **MM 4.2-5**, the proposed project's contribution to significant impacts associated with prime agricultural land in the County of Kern would be **cumulatively significant and unavoidable.**

Resources	Project Impacts	Cumulative Impacts
	for application adjacent to natural vegetation areas and agricultural uses. However, since the proposed project relies on the conversion of prime agricultural lands to urban uses on the project site, impacts related to agriculture and forestry resources would be considered **significant and unavoidable.**	
Air Quality	N/A	The proposed project would have cumulatively significant and unavoidable impacts related to consistency with existing air quality plans due to the net increase of criteria pollutants emissions. Although the proposed project would implement Mitigation Measures **MM 4.3-1** through **MM 4.3-10**, the proposed project is expected to result in significant levels of criteria pollutants due to the lack of methodology to assess the specific correlation between mass emissions generated and the effect on the public health and welfare; therefore making it speculative to determine how the project's incremental increase in emissions would affect the number of days the region is in nonattainment, since mass emissions are not correlated with concentration of emissions or how many additional individuals in the air basin would be affected by the health impacts mentioned. As such, cumulative impacts for criteria pollutants, and the project's contribution to cumulative short-term and long-term regional and local air quality impacts would be considered **significant and unavoidable.**
Greenhouse Gas Emissions	N/A	As described in Section 4.8, *Greenhouse Gas Emissions*, the proposed project would implement Mitigation Measures **MM 4.3-1, MM 4.3-3, MM 4.3-4**, **MM 4.8-1, and MM 4.8-2**, would help reduce GHG emissions from the proposed project. However, cumulative impacts associated with the generation of GHG emissions would be **significant and unavoidable**, regardless of implementation of the aforementioned mitigation measures, as GHG impacts are exclusively cumulative.
Hydrology and Water Quality	N/A	Implementation of mitigation measures would reduce proposed project-specific impacts to less than significant. However, conditions of critical overdraft have the potential to cause a chronic lowering of water levels, inelastic land subsidence, and/or reduction of surface water supply (as a reduction in baseflow to streams or an increase in induced surface water recharge). The Subbasin was determined or classified to be a "high" priority basin, which triggers the requirement of submittal of a GSP under the SGMA. Although the Water Supply Assessment found that adequate water supplies are available to meet the demands of the proposed project and proposed project implementation, it would not cause undesirable results within the KGA GSA or Cawelo GSA Plan Areas due to groundwater pumping. Groundwater pumping from other projects in the Subbasin have the potential to create significant and unavoidable impacts. Therefore, even with implementation of Mitigation Measures **MM 4.9-1**, **4.9-3**, and **MM 4.10-1** through **MM 4.10-3**, cumulative impacts would be **significant and unavoidable**.

Resources	Project Impacts	Cumulative Impacts
Noise	N/A	The proposed project would contribute to significant cumulative noise impacts. Construction activities associated with other projects in proximity to the proposed project could occur at the same time as the proposed project. Although these projects would also be subject to Kern County noise standards and similar mitigation measures, the cumulative noise related impacts from these projects are undetermined. Therefore, even with implementation of Mitigation Measures **MM 4.11-3**, **MM 4.11-4**, and **MM 4.12-1** through **MM 4.12-4**, cumulative impacts would be **significant and unavoidable** for temporary construction impacts**.**
Population and Housing	As described in Section 4.13 *Population and Housing*, the proposed project would remove an "obstacle to population growth" and directly induce population growth in the proposed project area, by developing an industrial park with warehousing and distribution facilities. Since there are no feasible mitigation measures to minimize the impacts of the projected population growth, impacts would be considered **significant and unavoidable**.	The proposed project would contribute to significant cumulative population and housing impacts. Cumulative projects within a one- and six-mile radius of the project site would directly and indirectly induce population growth. In addition, project-level impacts associated with the development of the proposed project would be significant and unavoidable and the proposed project could induce significant population growth in the project area. Therefore, cumulative impacts to population and housing are **significant and unavoidable** due there being no feasible mitigation measures.
Transportation and Traffic	N/A	The proposed project would contribute to significant and unavoidable transportation and traffic impacts. The proposed project would implement Mitigation Measures **MM 4.16-1** through **MM 4.16-12**, which would require payment of Traffic Impact Fees, street improvements within the project vicinity, construction of project access roads, and intersections improvements such as signalization and turn lanes, a a construction Traffic Control Plan to improve impacts to traffic level of service. However, several intersections and roadways are anticipated to operate below Kern County Standards in the future anticipated by 2042, even with half and full standard widening and roadway improvements. As such, the cumulative impacts of the proposed project as it relates to transportation and traffic are considered **significant and unavoidable**.
Utilities and Service Systems	N/A	As described in Section 4.18, *Utilities and Service Systems,* with implementation of the project, sufficient groundwater supplies will continue to be available during future normal, dry, and multiple dry years in the County. In addition, the conversion of the existing agricultural use to industrial use is projected to reduce the site's water demand by approximately 53 precent. Regardless, as the Kern County Subbasin is currently over drafted and the District's GSP has been deemed inadequate, along with the other Kern subbasin plans where the other similar known and unknown projects could occur, the cumulative impacts of any use of groundwater in the area are considered **significant and unavoidable** after all feasible and reasonable mitigation. Therefore, cumulative impacts related to water use would be **significant and unavoidable** despite implementation of **MM 4.10-3** and **MM 4.18-4** requiring a will-serve letter and the annual reporting of annual water usage on site.

5.3 Irreversible Impacts

Section 15126.2(c) of the *CEQA Guidelines* defines an irreversible impact as an impact that uses nonrenewable resources during the initial and continued phases of the project. Irreversible impactscan also result from damage caused by environmental accidents associated with the proposed project. Irretrievable commitments of resources should be evaluated to ensure that such consumption is justified.

Build-out of the proposed project would commit nonrenewable resources during project construction. During project construction, oil, gas, and other fossil fuels would be consumed, primarily in the form of transportation fuel for project employees and construction equipment. The use of water during the construction phase is also required for activities such as dust suppression, soil compaction, and grading activities. Operations of the project can expect to also require gas and other fossil fuels in the form of transportation fuel for employees, as well as water for operational activities. Therefore, an irreversible commitment of nonrenewable resources would occur as a result of project construction and long-term project operations. However, assuming that those commitments occur in accordance with the adopted goals, policies, and implementation measures of the Energy Element and Land Use, Open Space, and Conservation Element of the Kern County General Plan, and Chapter V: Conservation Element of the Metropolitan Bakersfield General Plan as a matter of public policy, those commitments have been determined to be acceptable. Specific goals, policies, and implementation measures are discussed in detail in Section 4.10 *Hydrology and Water Quality* and Section 4.6 *Energy* of this EIR. The project's implementation of the Mitigation Monitoring and Reporting Program, as well as adherence to the provisions set forth in the Kern County General Plan and Metropolitan Bakersfield General Plan, ensure that any irreversible environmental changes associated with those commitments will be minimized.

Additionally, the proposed project would be required to adhere to the latest adopted edition of the California Building Code, which includes standards to reduce energy demand, water consumption, wastewater generation, and solid waste generation that would collectively reduce the demand for resources during construction and operation. This would result in the emission and generation of less pollution and effluent and would further lessen the impact of corresponding environmental effects. Although the proposed project would result in an irretrievable commitment of nonrenewable resources, the commitment of these resources would not be inefficient, unnecessary, or wasteful.

5.4 Growth Inducement

The Kern County General Plan recognizes that certain forms of growth are beneficial, both economically and socially. Section 15126.2(d) of the *CEQA Guidelines* provides the following guidance on growth-inducing impacts:

> *"A project is identified as growth-inducing if it "would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment."*

Growth inducement can be a result of new development that requires an increase in employment levels, removes barriers to development, or provides resources that lead to secondary growth. The proposed project does not include the construction of housing, and would therefore not result in direct population growth as a result of additional housing. As discussed in Section 4.11, *Land Use and Planning*, with respect to employment, the

proposed project could potentially induce substantial growth. Implementation of the proposed project would create temporary and permanent employment positions. The proposed project would require a temporary workforce to construct the industrial park with the warehousing and distribution facilities. The number of on-site workers needed would largely depend on the specific phase of construction, but would likely range between a few dozen workers to over a hundred; however, no specific end-use plans exist for the warehouse facilities at this time. During the operational phase, it is expected that the proposed project would employ approximately 5,000 to 6,000 permanent employment positions. This need for employees would induce population growth in the proposed project area, in the event that prospective employees relocate into the area to construct and operate the proposed project. The proposed project could potentially require the development of new housing to accommodate an increase in population and the proposed project could potentially induce substantial population growth. By developing an industrial park with warehousing and distribution facilities, the proposed project would remove an "obstacle to population growth" and indirectly induce population growth and construction of additional housing in the project area by providing jobs.

As described in Section 4.13, *Population and Housing*, the unemployment rate in the proposed project region was 10.2 percent in February 2024. This regional unemployment rate is still above the California unemployment rate (5.6 percent) and the national average (4.2 percent). Thus, the temporary and permanent employees required by the proposed project could come from the surrounding areas without the need for relocation. If employees do relocate, employees are likely to relocate to vacant housing units in the area. Regardless, the project could potentially require the development of new housing to accommodate an increase in population. By developing an industrial park with warehousing and distribution facilities, the proposed project may remove an "obstacle to population growth" and indirectly induce population growth in the proposed project area by providing jobs.

As described in Section 4.18, *Utilities and Service Systems*, the proposed project would connect to the Oildale Mutual Water Company (OMWC) service system for domestic water via the extension of an existing six-inch domestic water line and 12-inch non-potable water line from approximately one mile west of Quinn Road along Imperial Avenue to the southwest corner of the project site. The project's wastewater would be served by the North of the River Sanitary District (NORSD) wastewater treatment plan, which has two expansion projects planned, the first of which is planned to begin in 2028. With the project's full buildout anticipated to be in 2050 for Phase 1 and 2031 for Phase 2, the NORSD's planned expansion would be complete and the proposed project would not require additional expansion of wastewater services that may induce growth. A new sewer main line is currently being installed from the existing 36-inch line in Norris Road to the future intersection of Imperial Avenue at Endes Street via Coffee Road. Therefore, the project itself will not require additional sewer services that would be considered growth-inducing. The proposed project would include its own on-site stormwater drainage system, and therefore, would not require connection to an existing storm drain. Electricity would be provided by Pacific Gas & Electric (PG&E). PG&E would construct an electrical substation and distribution system to serve the project site. Natural gas for the site will be served via a connection to an existing 24-inch high-pressure transmission line 0.5 mile south of the project site and would not provide for growth-inducing activity. The proposed project would not create additional infrastructure or road extensions that would indirectly induce population growth.

Chapter 6
Alternatives

Chapter 6
Alternatives

6.1 Introduction

The California Environmental Quality Act (CEQA) requires that an EIR describe a range of alternatives to the project or to the location of the project that could feasibly avoid or lessen any significant environmental impacts of the project while attaining most of the project's basic objectives. An EIR also must compare and evaluate the environmental effects and comparative merits of the alternatives. This chapter describes alternatives considered but eliminated from further consideration (including the reasons for elimination) and compares the environmental impacts of several alternatives retained with those of the project.

The following are key provisions of the *CEQA Guidelines* (Section 15126.6):

- The discussion of alternatives shall focus on alternatives to the project or its site that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede, to some degree, the attainment of the project objectives, or would be more costly.
- The No Project Alternative shall be evaluated, along with its impacts. The no-project analysis shall discuss the existing conditions at the time the notice of preparation was published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- The range of alternatives required in an EIR is governed by a "rule of reason." Therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

The range of feasible alternatives is selected and discussed in a manner that fosters meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives (as described in *CEQA Guidelines* Section 15126.6(f)(1)) are environmental impacts, site suitability, economic viability, social and political acceptability,technological capacity, availability of infrastructure, General Plan consistency, specific plan consistency, regulatory limitations, jurisdictional boundaries, and whether the project proponent couldreasonably acquire, control, or otherwise have access to an alternative site. If an alternative has effects that cannot be reasonably identified, if its implementation is remote or speculative, and if it would not achieve the basic project objectives, it need not be considered in the EIR.

Significant Impacts of the Project after Mitigation

Implementation of the proposed project has the potential to have significant adverse effects on:

- Aesthetics (project and cumulative)
- Agriculture and Forestry Resources (project and cumulative)
- Air Quality (project and cumulative)
- Greenhouse Gas Emissions (cumulative only)
- Hydrology and Water Quality (cumulative only)
- Noise (cumulative only)
- Population and Housing (project and cumulative)
- Transportation (project and cumulative)
- Utilities and Service Systems (cumulative only)

Even with the mitigation measures described in **Chapter 4**, *Environmental Setting, Impacts, and Mitigation Measures*, of this EIR, impacts in these issue areas would be significant and unavoidable. Therefore, per the *CEQA Guidelines*, this section discusses alternatives that are capable of avoiding or substantially lessening effects on these resources. The significant and unavoidable impacts of the proposed project are discussed below.

Aesthetics

As explained in **Section 4.1**, *Aesthetics and Visual Resources,* the project has the potential to result in significant visual impacts to the existing visual quality or character of the site and surrounding area. The proposed project includes approximately 8,907,446 square-feet of industrial use space, compromised of 24 building son 739 acres on agricultural land within unincorporated Kern County. The visual character of the surrounding landscape would be altered from one that is characterized as a predominantly farming visual to a more industrial visual in nature. Native vegetation would be substantially cleared during ground disturbance and grading activities. As such, the proposed project would result in both project-specific and cumulative significant and unavoidable impacts related to aesthetics. The project specific significant and unavoidable impacts would consist of substantially degrading the existing visual character of the project site. To mitigate the project specific impacts, Mitigation Measures, **MM 4.1-1** through **MM 4.1-3** (see **Section 4.1**, *Aesthetics* for full mitigation measures) would be implemented to reduce visual impacts associated with the proposed project by color treating proposed buildings to blend with surrounding landscape, requiring rooftop screening features, and install landscape structural elements. Even with the implementation of Mitigation Measures **MM 4.1-1** through **MM 4.1-3**, impacts would be considered significant and unavoidable.

In addition, to the project-specific significant and unavoidable impacts, the proposed project would result in significant and unavoidable cumulative impacts. While other projects in the region would also be required to implement various mitigation measures to reduce impacts associated with visual character and quality, the conversion of a presently primarily agricultural visual area to a industrial visual cannot be

mitigated to a degree that impacts are not significant. Even with the implementation of Mitigation Measures **MM 4.1-1** through **MM 4.1-4**, the cumulative impacts would be significant and unavoidable.

Agriculture and Forestry Resources

The proposed project would result in both project-specific and cumulative significant and unavoidable impacts related to agricultural resources. As described in **Section 4.2** *Agriculture and Forestry Resources,* the proposed project would convert approximately 739 acres of Prime Farmland to nonagricultural use. While portions of the project site are within the boundaries of, but excluded from, Agricultural Preserve Number 8 and Number 14, it is not encumbered by a Williamson Act Land Use Contract. Implementation of the proposed project would result in significant agricultural impacts to the existing farmland. Project specific significant and unavoidable impacts would consist of the proposed project converting 739 acres of prime agricultural lands to urban industrial uses. To mitigate the project specific impacts, Mitigation Measures, **MM 4.2-1** through **MM 4.2-4** (see **Section 4.2** *Agriculture and Forestry Resources* for full mitigation measures) would be implemented to reduce interference with nearby surrounding agricultural operations, require signed forms from all future occupants of the city, and ensure that project operations would utilize California compliant herbicides that are appropriate for application adjacent to natural vegetation areas and agricultural uses. However, even with the implementation of Mitigation Measures **MM 4.2-1** through **MM 4.2-4**, project specific impacts would be considered significant and unavoidable due to the conversion of prime agricultural land to urban industrial uses.

In addition, to the project-specific significant and unavoidable impacts, the project would result in significant and unavoidable cumulative impacts. While other projects in the region would also be required to implement various mitigation measures to reduce impacts, the conversion of prime agricultural lands to urban uses will result in a reduction of the regional agricultural economy and is considered a significant adverse impact. Even with the implementation of Mitigation Measures **MM 4.2-1** through **MM 4.2-4**, the project's contribution to significant impacts associated with prime agricultural land in the County of Kern would be cumulatively considerable.

Air Quality

The proposed project would result in cumulative significant and unavoidable impacts related to air quality. With project implementation, short-term and long-term increases in construction and operational emissions of primary concern within the region (i.e., ROG, NOx, Co, Sox, PM10, and PM2.5) would be minimal and would not exceed applicable significance thresholds. To mitigate this impact, **Mitigation Measures MM 4.3-1** through **MM 4.3-4** (see **Section 4.3**, *Air Quality* for full mitigation measures) would reduce operational emissions from off-road equipment, contain a comprehensive fugitive dust control plan, and ensure construction equipment meets California standards. With implementation of **MM 4.3-1** through **MM 4.3-4**, the proposed project's is not expected to exceed SJAVAPCD CEQA significance thresholds, therefore impacts would be less than significant.

In addition to the project-specific significant and unavoidable impacts, the proposed project would result in significant and unavoidable cumulative impacts during the construction phase of the project, relating to NOx and PM10 emissions. On a cumulative level, potential cumulative impacts to air quality could occur from the construction and operation of the proposed project in combination with regional growth projections in the same air basin. It is speculative to determine how exceeding the regional thresholds would

affect the number of days the region is in nonattainment since mass emissions are not correlated with concentrations in emissions or how many additional individuals in the air basin would be affected by the health impacts mentioned. The SJVAPCD is the primary agency responsible for ensuring the health and welfare of sensitive individuals exposed to elevated concentrations of air pollutants in the San Joaquin Valley Air Basin at the present time and it has not provided methodology to assess the specific correlation between mass emissions generated and the effect on health. **Mitigation Measures MM 4.3-1** through **MM 4.3-4** include requirements for a Developer Mitigation Agreement (DMA) which will reduce all criteria emissions from both construction and operational emissions to the level of "no net increase". However, as determined by the SJVAPCD, ROG can not be directly reduced and therefore calculations include equivalencies of increased PM 10 and PM 2.5 and VOC reductions to ensure all emissions are addressed. Based on this science based issue and the uncertainty of the long term reductions in air pollution forecast by State policy and the SJVAPCD, the proposed project could result in some emissions not being mitigated although under threshold limits. The project's cumulative air quality impacts are therefore considered significant and unavoidable even after all feasible and reasonable mitigation.

Greenhouse Gas Emissions

The proposed project would result in both project-specific and cumulative significant and unavoidable impacts related to greenhouse gas emissions. Without the necessary science and analytical tools, it is not possible to assess, with certainty, whether the proposed project's contributions would be cumulatively considerable within the meaning of *CEQA Guidelines* Section 15065(a)(3) and 15130. CEQA, however, does note that more severe environmental problems have lower thresholds for determining that a project's contribution to cumulative impacts is significant. In order to mitigate this impact, Mitigation Measures MM 4.3-1, MM 4.3-3, and MM 4.3-4 (see **Section 4.3** *Air Quality* for full mitigation measures) and MM 4.8-1 (see **Section 4.8** *Greenhouse Gas Emissions* for full mitigation measures) would be implemented to reduce emissions associated with energy use, waste generation, off-road equipment operations, motor vehicles, and area sources. Impact analysis for the project follows the approach certified by SCAQMD in the Final Negative Declaration for the Phillips 66 Los Angeles Refinery Carson Plant – Crude Oil Storage Capacity Project on December 12, 2014 (SCAQMD 2014). In summary, this approach takes into account the cumulative nature of the energy industry and recognizes that consumers of electricity and diesel fuel are in effect regulated by higher level emissions restrictions on the producers of these energy sources. Therefore, the project's impacts to greenhouse gas emissions would not be considered significant.

The proposed project would also result in cumulative significant and unavoidable impacts related to greenhouse gas emissions. When the project is considered cumulatively with surrounding and nearby projects, the potential greenhouse gas emissions impacts (despite implementation of MM 4.3-1, MM 4.3-3, MM 4.3-4, and MM 4.8-1) are considered to be significant and unavoidable due to the already existing greenhouse gas emissions based on the already degraded air quality in the SJVAB.

Hydrology and Water Quality

As described in **Section 4.10,** *Hydrology and Water Quality,* the proposed project is expected to result in less-than-significant impacts on a project level. When viewed cumulatively with similar projects in the area, cumulative projects would not discharge to waters of the United States due to their location within the San Joaquin Valley, which is effectively a closed basin with no outlet to the Pacific Ocean. All such projects would be required to either retain all runoff on-site or would be required to prepare a SWPPP as required

by **Mitigation Measure MM 4.10-1** and Erosion and Sedimentation Control Plan as described by to **MM 4.7-3** (see **Section 4.7,** *Geology and Soils*), which would include BMPs designed to prevent the mixture of sediment and other pollutants with stormwater and degrading water quality. Furthermore, all other projects in the vicinity that would handle hazardous materials would also be required to comply with hazardous material regulations, similar to the proposed project's implementation of **Mitigation Measure MM 4.9-3 (**see **Section 4.9,** *Hazards and Hazardous Materials*). Therefore, cumulative impacts associated with water quality degradation would be less than significant, and moreover, the proposed project would not have a cumulatively considerable contribution to the less than significant cumulative impact on water quality.

With regard to water supply, the proposed project would be expected to result in a net reduction in water consumption relative to what is currently used on-site for agricultural operations. Though the Water Supply Assessment determined that there are sufficient supplies for both project construction and operation, **Mitigation Measure MM 4.10-3 and MM 4.18-4** (see **Section 4.18**, *Utilities and Service Systems*) would be implemented to ensure that any groundwater used is accounted for should the project require additional water supplies in excess of the allotment from the District. As a result, there would be no adverse project level effects to the groundwater subbasin.

With respect to erosion, drainage, and flooding, impacts from cumulative scenario projects would be primarily localized. It is anticipated that cumulative scenario projects would be required to implement BMPs and measures similar to **Mitigation Measures MM 4.10-1 and MM 4.7-3**, in order to avoid erosion, drainage, and flooding related impacts. However, implementation of the proposed project has the potential to contribute to cumulative impacts associated with the substantial depletion of groundwater supplies within the Kern County Subbasin. The DWR determined that the Subbasin is in a condition of critical overdraft. Conditions of critical overdraft have the potential to cause a chronic lowering of water levels, inelastic land subsidence, and/or reduction of surface water supply (as a reduction in baseflow to streams or an increase in induced surface water recharge). The Subbasin was determined or classified to be a "high" priority basin, which triggers the requirement of submittal of a Groundwater Sustainability Plan (GSP) under the SGMA. Although the Water Supply Assessment found that adequate water supplies are available to meet the demands of the proposed project and proposed project implementation would not cause undesirable results within the KGA GSA or Cawelo GSA Plan Areas due to groundwater pumping, groundwater pumping from other projects in the Subbasin have the potential to create significant and unavoidable impacts. Cumulative impacts of any use of groundwater in the area are considered significant and unavoidable after all feasible and reasonable mitigation.

Noise

The proposed project would result in cumulatively considerable impacts related to noise. Construction of the proposed project has the possibility of occurring at the same time as other projects near the project site. Although these projects would also be subject to Kern County noise standards and similar mitigation measures, the cumulative noise related impacts from these projects are undetermined. Mitigation Measures **MM 4.11-3**, **MM 4.11-4**, (see **Section 4.11** *Land Use and Planning* for full mitigation measures) and **MM 4.12-1** through **MM 4.12-4** (see **Section 4.12** *Noise* for full mitigation measures) would be implemented to reduce noise impacts related to construction. However, noise impacts during the construction phase in consideration with other construction activities and operational activities in the proposed project, would be considered cumulatively considerable during the anticipated 46 years of project construction.

Population and Housing

The proposed project would result in both project-specific significant and unavoidable impacts and cumulatively considerable impacts related to population and housing. Implementation of the proposed project would create temporary and permanent job opportunities. By developing an industrial park with logistics uses comprised of warehousing and distribution facilities, the proposed project would remove an "obstacle to population growth" and indirectly induce population growth in the proposed project area by providing employment opportunities. The project would potentially require the development of new housing in nearby communities in order to accommodate the increase in population brought about by increased employment opportunities. Therefore, the project-specific impacts for population and housing would be significant and unavoidable.

In addition, the proposed project would contribute to cumulative considerable population and housing impacts. Cumulative projects within a one- and six-mile radius of the project site would directly and indirectly induce population growth. In addition, project-level impacts associated with the development of the proposed project would be significant and unavoidable and the proposed project could induce significant population growth in the project area. Therefore, the cumulative impacts related to population and housing are considered cumulatively considerable because there are no feasible mitigation measures to reduce these impacts.

Transportation and Traffic

The proposed project is expected to result in a less than significant impact to transportation on a project level, with the implementation of Mitigation Measures **MM 4.16-1** through **MM 4.16-11** (See **Section 4.16**, *Transportation and Traffic*). As described in **Section 4.16** *Transportation and Traffic*, the proposed project is located within the Kern County Metropolitan Bakersfield General Plan (MBGP). As such, all study locations analyzed in this EIR are controlled by the City, which relies on level of service (LOS) to determine deficiencies. The design LOS for Kern County is LOC C; the minimum LOS for conformance with KCGP is LOS D.

The new *CEQA Guidelines* Section 15064.3(b) was adopted in December 2018 by the California Natural Resources Agency. With the passage of SB 747, Vehicle Miles Traveled (VMT) has become an important indicator for determining whether a new development would result in a "significant transportation impact" under CEQA. The MGBP does not identify target VMT thresholds and significance criteria. Therefore, the analysis was conducted based on the guidance from the Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA.

As described in **Section 4.16**, *Transportation and Traffic*, the addition of project traffic to the existing and future street system results in LOS deficiencies at several locations. Significant congestion is anticipated in the future along the 7th Standard Road/Merle Haggard corridor, due to traffic associated with regional growth and development and several intersections and roadway are anticipated to operate below LOS C in the future even with full standard roadway widening and improvements. As such, the proposed project would implement Mitigation Measures **MM 4.16-1** through **MM 4.16-7** would be implemented to bring project level impacts to a less than significant level. However, the proposed project would cause in increase in Countywide VMT that would exceed the County VMT threshold and thus result in cumulative significant and unavoidable impacts. Even with the implementation of Mitigation Measures **MM 4.16-1** through **MM**

4.16-7, impacts to transportation and traffic would be cumulative considerable, and therefore considered significant and unavoidable.

Utilities and Service Systems

As described in **Section 4.18,** *Utilities and Service Systems*, the proposed project is expected to result in a less than significant impact to utilities and service systems on a cumulative level. As described in **Section 4.19** *Utilities and Service Systems*, the proposed project would be serviced by Oildale Mutual Water Company (OMWC). OMWC prepared a WSA for the proposed project. The WSA (Appendix M) concluded that with implementation of the GSPs (which have been prepared in compliance with SGMA) applicable to the Kern County Subbasin, sufficient groundwater supplies will continue to be available during future normal, dry, and multiple dry years in the County. In addition, the conversion of agricultural land to industrial use is projected to reduce the site's water demand by approximately 53 percent. **Mitigation Measure MM 4.10-3** requires a will-serve letter to be provided for project activities and **Mitigation Measure MM 4.18-4** would require the proposed project to report annual water usage onsite to Kern County Planning and Natural Resources Department and the Kern County Environmental Health Services Department. Wastewater collection would be provided by the NORSD WWWTP. Conservatively, it is assumed that proposed water demand for the project [591 acre-feet per year (AFY) or 0.53 million gallons per day (MGD)] would be equal to the total wastewater generated by the proposed project. The nearest sewer main is a 36-inch line in Norris Road approximately three miles southeast of the project site. A new sewer main line is currently being installed from the existing 36-inch line to the future intersection of Imperial Avenue at Endes Street via Coffee Road and Seventh Standard Road. Phase 1 of the project may require the installation of a sewer lift station to reach the new sewer main line. If determined to be required, a new sewer lift is likely to be located southeast of Phase 1. Furthermore, the proposed project would be developed to collect stormwater via an onsite drainage system and conveyed to a detention basin to facilitate stormwater infiltration and metered discharge, emulating pre-development conditions. As such, the proposed project would implement **Mitigation Measures MM 4.10-2** (See **Section 4.10** *Hydrology and Water Quality*), which would require the preparation and submittal of a final hydrologic study and drainage plan prior to the issuance of a grading permit. With implementation of **MM 4.10-2**, impacts to existing stormwater facilities would be less than significant. Demands associated with energy and telecommunication facilities would be minimal and are expected to be within the planning forecasts of the affected providers, however the project proponent would coordinate with PG&E to determine specific requirements for the project prior to the issuance of a grading permit as required by **Mitigation Measures MM 4.18-1** through **MM 4.18-3**. Additionally, the proposed project would be required to adhere to all State and County regulations regarding solid waste and recycling, including appointing an on-site recycling coordinator as outlined in **Mitigation Measure MM 4.18-6**. Therefore, all the project's project-level and cumulative impacts associated with wastewater, stormwater, solid waste, electricity, natural gas, and telecommunication services would be less than significant. However, the Kern County Subbasin is currently over drafted and the District's GSP has been deemed inadequate, as have the other Kern subbasin plans where other similar known and unknown projects could occur, so the cumulative impacts of any use of groundwater in the area are considered significant and unavoidable after all feasible and reasonable mitigation. Therefore, cumulative impacts related to water use would be significant and unavoidable.

6.2 Applicant Submitted Project Objectives

As described in **Chapter 3**, *ProjectDescription*, of this EIR, State *CEQA Guidelines* Section 15124(b) requires that a project description include a clearly written statement of objectives. The statement of objectives should include the underlying purpose of the project and may discuss the project benefits. The following applicant submitted objectives have been established for the project.

- Reduce the current unemployment rate in Kern County by increasing the amount of square footage for new businesses by over eight million square feet and increase job opportunities. Distribution and fulfillment centers maintain a high rate of employment. The project would provide 5,000 to 6,000 full-time equivalents upon full buildout of both Phases 1 and 2, thereby stimulating local employment in the warehouse distribution industry.
- Support local budgets by replacing lost tax revenue from closed traditional brick and mortar retail locations with new tax revenues generated by industrial buildings.
- Meet the continued and expanding demand of the global e-commerce fulfillment services market that depend on warehousing and shipping capabilities to get products transported in the shortest amount of time.
- Generate tax revenue and boost the allocation of resources to improve infrastructure, utilities and public services throughout the county.

6.3 Overview of the Proposed Project

The project proposes to develop approximately 8,907,446 square-feet of industrial use space, comprised of 24 buildings on 739 acres of existing vineyard in central portion of unincorporated Kern County currently owned by the project proponent. The project proponent has submitted a proposed Precise Development Plan to allow for the construction and operation of an industrial park with warehousing and distribution facilities pursuant to Chapters 19.38.020(E)(2) and 19.38.020(E)(3) of the Kern County Zoning Ordinance on proposed M-2 PD (Medium Industrial, Precise Development) zoned parcels. The project would be developed over two phases.

Implementation of the project as proposed would require adoption of the Malibu Vineyards Industrial Parkway Specific Plan (included as Appendix B). Additionally, the project requires an amendment to the Kern County General Plan (KCGP) Land Use, Open Space and Conservation Element designation from Intensive Agriculture (8.1) to Service Industrial (7.2), an amendment to the Metropolitan Bakersfield General Plan Land Use Element designation from Intensive Agriculture (R-IA) to Service Industrial (SI), and a Zone Change from Exclusive Agriculture (A) to Medium Industrial, Precise Development (M-2 PD).

6.4 Overview of Alternatives to the Project

Under CEQA, and as indicated in California Public Resources Code (PRC) Section 21002.1(a), the identification and analysis of alternatives to a project is a fundamental aspect of the environmentalreview

process and is required to ensure the consideration of ways to mitigate or avoid the significant environmental effects of a project. Based on the significant environmental impacts of the proposed project, the aforementioned objectives established for the proposed project, and the feasibility of the alternatives considered, three alternatives, including the No Project Alternative asrequired by CEQA, are considered in this chapter and summarized in **Table 6-1**, *Summary of Development Alternatives*. The Environmentally Superior Alternative, as required by CEQA, is described in Section 6.8, *Environmentally Superior Alternative*, below.

Alternative 1: No Project Alternative

The *CEQA Guidelines* require EIRs to include a No Project Alternative for the purpose of allowingdecision makers to compare the effects of approving the proposed project versus a No Project Alternative. Accordingly, Alternative 1, the No Project Alternative, assumes that the development of 8,907,446 square-feet of industrial land uses to support a new Specific Plan creating an industrial park of distribution and fulfillment centers, compromised of 24 buildings, and other project components would not occur. The No Project Alternative would not require approval of Precise Development Plans, or the adoption of the Malibu Vineyards Industrial Parkway Specific Plan for construction and operation of the proposedproject and associated facilities. Amendments to the Kern County General Plan and Metropolitan Bakersfield General Plan land use maps and zone changes would also not be required. The No Project Alternative would maintain the current land usedesignations, zoning classifications, and existing land uses, which consist mostly of agricultural uses. The proposed project would not be developed and the site would remain under its currently agriculturally cultivated conditions or, under water limitations implemented by the Sustainable Groundwater Act (SGMA), become fallow and revert to natural habitat. No physical changes would be made to the project site.

Alternative 2: Reduced Size

Alternative 2, the Reduced Size Alternative, would eliminate Phase 1 of the proposed project. 534,-acres comprising 14 buildings totaling 7,242,106 square feet of industrial use space would not be developed compared to the proposed project. Alternative 2 would instead develop 1,665,340 square-foot of industrial uses compromised of 10 distribution and warehousing buildings on 205 acres. The remaining 534 acres would remain cultivated for agricultural uses. Alternative 2 would not be subject to the Metropolitan Bakersfield General Plan and only be subject to the Kern County General Plan and the Kern County Zoning Ordinance. As such, Alternative 2 would require adoption of a new Specific Plan, an amendment to the Kern County General Plan Land Use, Open Space and Conservation Element, a change in zone classification, approval of Precise Development Plan No. 75, Map 81 and adoption of the Malibu Vineyards Industrial Parkway Specific Plan. Alternative 3: Alternative Location

Alternative project sites are typically evaluated in CEQA documentation to avoid, reduce, or eliminate significant and unavoidable impacts associated with the proposed project by considering the proposed development in an entirely different location. To be considered, an alternative site must have the capability of fulfilling all or most of the objectives of the proposed project, and thus must be large enough to support a similar facility and have similar ease of access to transportation corridors. However, an alternative site may not meet the basic objectives of the proposed project, as listed in Section 6.2, *Proponent Submitted Project Objectives,* and likewise may not avoid or substantially reduce the environmental impacts of the proposed project.

Alternative 3: Alternative Site Location – Eastern Kern County

Alternative 3, the Alternative Site Location – Eastern Kern County, proposes the same project development and operation of a 8,907,446 square-foot industrial use space comprised of 24 buildings, but in a different area of Kern County, specifically eastern Kern County in the adopted Mojave Specific Plan. (Mojave Specific Plan 2003). The Mojave Specific Plan and Final Environmental Impact Report (2003) encompasses approximately 31,000 acres in eastern Kern County, including the unincorporated community of Mojave, and functions as the transportation and aviation hub of eastern Kern County. The intention of this project alternative is to find a project site adjacent to major freeway access, non-agriculture land use and reduce required travel distances for distribution trucks and related impacts to aesthetics, agricultural and forestry, air quality, GHG, and traffic associated with the proposed project. Impacts to water supply usage would be reduced to less than significant because the Mojave Specific Plan water basin is not subject to any adjudication or Groundwater Management Sustainability Act (GSMA). This alternative would be located in the Mojave Desert, rather than the San Joaquin Valley. The Specific Plan area has direct access off State Route 58 (SR 58) which connects in to the Riverside – San Bernadino and Ontario Metropolitan transportation corridors and connects to State Highway 14 (Antelope Valley Freeway) with direct access to Southern California Interstate 5 into the City of Los Angeles and San Diego. The East Kern Air Pollution Control District which covers the area is in attainment for emissions, the SJVAPCD is not. Alternative 3 would develop the same land area and all of the project components. Approval of Alternative 3 would be required to comply with the Mojave Specific Plan and entitlements for the project would be dependent on the site selected within the planning area. As a Specific Plan with an existing Final Environmental Impact Report, CEQA streamlining is available.

Table 6-1, *Summary of Development Alternatives*, provides a summary of the relative impacts andfeasibility of each alternative. A complete discussion of each alternative is also provided below.

Table 6-1: Summary of Development Alternatives

Alternative	Description	Basis for Selection and Summary of Analysis
Project	Construct and operate approximately 8,907,446square-feet of industrial use space with warehousing and distribution facilities, comprised of 24 buildings on 739 acres of existing land. Approval of a new Specific Plan, amendment to the Kern County General Plan, amendment to the Metropolitan Bakersfield General Plan, zone classification change, and Precise Development Plan would be required.	N/A
Alternative 1: No Project Alternative	No development would occur on the project site. The project site would remain unchanged.	• Required by CEQA • Avoids need for adoption of Specific Plan, GPAs, ZCC, and PD Plan • Avoids all significant andunavoidable impacts • Less impact in all remainingenvironmental issue areas • Does not meet any of the projectobjectives

Alternative	Description	Basis for Selection and Summary of Analysis
Alternative 2: Reduced Size	Project site would be developed with a footprint of 205-acres comprised of 10 buildings, totaling 1,665,340 square feet of industrial use space with warehousing and distribution facilities. By removing a total of 534 acres, 7,242,106 square feet, impacts associated with aesthetics, agriculture, air quality, and greenhouse gas emissions would be reduced, but these impacts would not be reduced to a less than significant impact level. Significant and unavoidable impacts to noise and population and housing would be reduced to a less than significant level under Alternative 2, because construction impacts associated with noise would occur over a small area and within a much smaller construction period and impacts associated with growth inducement would also be lessened. Although impacts would be reduced to its drastically reduced size, this alternative would not meet the project's objectives to the extent that the proposed project will. This alternative would provide fewer employment opportunities, less tax revenue, and would not support local budgets to the extent of the proposed project. Additionally, it would not meet the demand of the global e-commerce fulfilment services market.	• Avoids need for GPA to Metropolitan Bakersfield General Plan. • Similar significant and unavoidableimpacts to noise, population and housing • Reduced significant and unavoidable impact to air quality, aesthetics agriculture, and biological resources, and greenhouse gas emissions • Similar impacts in all remaining environmental issue areas • Meets project objectives to lesser extent than the proposed project
Alternative 3: Alternative Location-Eastern Kern County	Construction and operation of the project to a site in the adopted Mojave Specific Plan. The project would operate at the same capacity as intended. Required entitlements for the Alternative Site would be dependent on the site selected. Under Alternative 3, the severity of impacts related to aesthetics would be reduced to a less than significant level. As there is no active agricultural land use in the Mojave Specific Plan, the impacts would not be applicable. In addition, the severity of impacts related, air quality and greenhouse gas emissions would be reduced, but they would remain significant and unavoidable. This alternative would be located near SR 58, a major highway and transportation corridor, and State Highway 14 and due to the unchanged characteristics and size of the project, would meet the project's objectives.	• Similar significant and unavoidable impacts to noise, population and housing. • Reduced significant and unavoidable impacts to air quality, and greenhouse gas emissions. • Reduced impacts to aesthetics and water supply to a less than significant level • No impacts to agricultural or forestry land use. • Similar impacts in all remaining environmental issue areas • Meets all project objectives

6.5 Alternative Considered and Rejected

Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (*CEQA Guidelines* Section 15126.6(c)). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not need to be considered (*CEQA Guidelines* Section 15126(f)(2)). Kern County considered several alternatives to reduce impacts to aesthetics (project and cumulative), agriculture and forestry resources (project and cumulative), air quality (project and cumulative), greenhouse gas emissions (cumulative only), hydrology and water quality (cumulative), noise (cumulative), population and housing (project and cumulative), and transportation (cumulative). Per CEQA, the lead agency may make an initial determination as to which alternatives are feasible and warrant further consideration, and

which are infeasible. The following alternatives were initially considered but were eliminated from further consideration in this ER because they do not meet project objectives or were infeasible:

The Infill Alternative was considered and rejected, due to there being no suitable infill sites for the size of the land area located in Kern County for the proposed project, and impacts would potentially be more significant.

The Transit-Oriented Alternative was considered and rejected, due to there being no suitable transit-oriented sites within Kern County for the proposed project.

6.6 Analysis Format

In accordance with *CEQA Guidelines* Section 15126.6(d), each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less, similar, or greater than the corresponding impacts of the proposed project. Furthermore, each alternative is evaluated to determine whether the project objectives identified in **Chapter 3**, *Project Description*, of this EIR would be mostly attained by the alternative. The project's impacts that form the basis of comparison in the alternatives analysis are those impacts which represent a conservative assessment of project impacts. The evaluation of each of the alternatives follows the process described below.

a) The net environmental impacts of the alternative after implementation of reasonable mitigation measures are determined for each environmental issue area analyzed in this EIR.

b) Post-mitigation significant and less than significant environmental impacts of the alternative and the project are compared for each environmental issue area as follows:

   - Less: Where the impact of the alternative after feasible mitigation would be clearly less adverse than the impact of the project, the comparative impact is said to be "less."
   - Greater: Where the impact of the alternative after feasible mitigation would be clearly more adverse than the impact of the project, the comparative impact is said to be "greater."
   - Similar: Where the impacts of the alternative after feasible mitigation and the project would be roughly equivalent, the comparative impact is said to be "similar."

c) The comparative analysis of the impacts is followed by a general discussion of whether the underlying purpose for the project, as well as the project's basic objectives would be substantially attained by the alternative.

Table 6-2, *Comparison of Alternatives*, provides a summary and side-by-side comparison of the proposed project with the impacts of each of the alternatives analyzed. Please note that in Alternatives 1 through 3 in the table, the references to "less, similar, or greater," refer to the impact of the alternative compared to the proposed project, and the impacts "no impact (NI), less than significant (LTS), or significant and unavoidable (SU)," in the parentheses refer to the significant impact of the specific alternative.

This Alternative would involve parking management measures that promote transit use, alternative modes of transportation to and from the project site to reduce cumulative effect on traffic congestion. The project would include increased opportunities for travel to and from bus routes between the project and local low-income and minority communities to transport workers.

Table 6-2: Comparison of Alternatives

Environmental Resource	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Reduced Size	Alternative 3: Alternative Site Location-Eastern Kern County
Aesthetics	Significant and unavoidable impact (project and cumulative)	Less (NI)	Similar (SU)	Less (SU)
Agricultural and Forestry Resources	Significant and unavoidable impact (project and cumulative)	Less (NI)	Similar (SU)	Less (NI)
Air Quality	Significant and unavoidable (project and cumulative)	Less (NI)	Less (SU)	Less (SU)
Biological Resources	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Cultural Resources	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Energy	Less than significant impact with mitigation incorporated	Less (NI)	Less (LTS)	Similar (LTS)
Geology and Soils	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Greenhouse Gas Emissions	Significant and unavoidable impact (cumulative only)	Less (NI)	Less (SU)	Less (SU)
Hazards and Hazardous Materials	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Hydrology and Water Quality	Significant and unavoidable impact (cumulative)	Similar (SU)	Similar (SU)	Less (LTS)
Land Use and Planning	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Noise	Significant and unavoidable impact (cumulative)	Less (NI)	Similar (SU)	Similar (SU)
Population and Housing	Significant and unavoidable impact (project and cumulative)	Less (NI)	Similar (SU)	Similar (SU)
Public Services	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Recreation	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Transportation and Traffic	Significant and unavoidable impact (project and cumulative)	Less (NI)	Similar (SU)	Similar (SU)
Tribal Cultural Resources	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Utilities and Service Systems	Significant and unavoidable impact (cumulative only)	Less (NI)	Similar (SU)	Less (LTS)
Wildfire	Less than significant impact with mitigation incorporated	Less (NI)	Similar (LTS)	Similar (LTS)
Meet Project Objectives?	All	None	Most	All
Reduce Significant and Unavoidable Impacts?	N/A	All	Partially	Most

NI = No Impact
LTS = Less Than Significant
SU = Significant and Unavoidable

6.7 Impact Analysis

Alternative 1: No Project Alternative

Environmental Impact Analysis

Aesthetics

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. The project site would remain in its current state as undeveloped agricultural land and no change to the scenic vistas or existing visual character and quality of the site would occur. Impacts to scenic resources and daytime and nighttime views in the area would not occur. Therefore, there would be no impact and the No Project Alternative would result in less impact to aesthetics compared to the project.

Agricultural and Forestry Resources

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. The project site would remain in its current state, consisting of vineyards and vacant, undeveloped land. As such, the No Project Alternative would not involve changes to the existing environment which could result in the conversion of Farmland to nonagricultural. Therefore, there would be no impact and the No Project Alternative would result in less impact related to agriculture and forestry resources compared to the project.

Air Quality

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. No construction activities or operational activities that would generate air emissions would occur. No exceedance of the SJVAPCD's regional and localized significance thresholds or conflicts with the attainment of the standard would occur, nor would the No Project Alternative contribute to a cumulative net increase of criteria pollutants in the project region. Therefore, there would be no impact and the No Project Alternative would result in less impact to air quality compared to the project.

Biological Resources

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. Existing biological resources on the project site, including special-status and wildlife species, would remain undisturbed since no construction or operations would occur. The project site would remain in its current state as a vineyard and vacant, undeveloped land and would not contribute to a cumulative loss of wildlife species, As such the No Project Alternative would not have a substantial adverse effect on any species identified as a candidate, sensitive,

or special-status species, on any riparian habitat or other sensitive natural communities, on federally protected wetlands; interfere substantially with the movement of any native resident or migratory fish or wildlife species; conflict with any local policies or ordinances protecting biological resources; or conflict the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan. Therefore, there would be no impact and the No Project Alternative would result in less impact related to biological resources compared to the project.

Cultural Resources

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. The project site would remain undeveloped and no ground-disturbing activities would occur. As such, disturbance to potential historical resources, archaeological resources, or human remains located on-site would not occur. Therefore, there would be no impact and the No Project Alternative would result in less impacts related to cultural resources compared to the project.

Energy

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. No new energy consumption or activities would occur. As such, the No Project Alternative would not result in wasteful, inefficient, or unnecessary consumption of energy resources and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, there would be no impact and the No Project Alternative would result in less impacts related to energy compared to the project.

Geology and Soils

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. The project site would remain undeveloped and no ground disturbance would occur. As such, the No Project Alternative would not directly or indirectly cause potential substantial adverse effects involving rupture of a known earthquake fault, strong seismic ground shaking, seismic- related ground failure, and landslides; result in substantial soil erosion or loss of topsoil; result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse; be located on expansive soil; soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems; or directly or indirectly destroy a unique paleontological resource or unique geologic feature. Therefore, there would be no impact and the No Project Alternative would result in less impact related to geology and soils compared to the project.

Greenhouse Gas Emissions

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. Emissions associated with the construction and operation of a warehouse and distribution center would not occur. Therefore, those emission that contribute to GHGs would be eliminated and no impacts would occur related to generating emissions that may have a significant impact on the environment or consistency with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, there would

be no impact and the No Project Alternative would result in less impact related to GHGs compared to the project.

Hazards and Hazardous Materials

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. The project site would remain in its current condition. As such, this alternative would involve the routine transport, use, or disposal of hazardous materials associated with the project site; 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; emit hazardous waste within 0.25-mile of a school; be located on a site that is included on a list of hazardous materials sites; result in a safety hazard or excessive noise; impair implementation of an adopted emergency response plan; expose people or structures to significant risk of loss, injury, or death involving wildland fires; or generate vectors. Therefore, there would be no impact and the No Project Alternative would result in no impacts related to hazardous materials compared to the project.

Hydrology and Water Quality

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. The project site's existing hydrology and water quality would remain unchanged as no development or ground disturbance related to the proposed warehouse and logistics would occur at the project site. Agricultural uses would likely continue, however as noted previously, the basin is currently over drafted and the District's GSP has been deemed inadequate along with the other Kern subbasin plans where the other similar known and unknown projects would occur. As such, this alternative would violate water quality standards or waste discharge requirements; contribute to the existing decrease of groundwater supplies; substantially alter the existing drainage patterns of the site or area in a manner that would result in substantial erosion and/or sedimentation on-site or off-site, result in flooding on-site or off-site; create or contribute to substantial runoff water which would exceed the capacity of existing or planned stormwater drainage system, or impeded or redirect flood flows; result in flood hazards, tsunami, or seiche zones; or conflict with or obstruct implementation of a water quality plan. Therefore, the No Project Alternative would result in a similar impact related to hydrology and water quality compared to the project due to the existing status of the subbasin.

Land Use and Planning

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. The No Project Alternative would not develop any new uses at the project site, and consequently, would not require entitlements for a GPA, ZCC, CUP, Precise Development Plan, Exclusion from Agricultural Preserve, ZV and Tentative Parcel Map. As such, the No Project Alternative would not cause a significant environmental impact due to physically dividing an established community or conflicting with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, there would be no impact and the No Project Alternative would result in no impacts related to land use and planning compared to the project.

Noise

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. Noise sources from construction and operation would not be present on-site, and existing noise conditions would remain the same. As such, the No Project Alternative would not result in generation of a substantial temporary or permanent increase in ambient noise levels; generate excessive ground-borne vibration; or expose people residing or working in the project area to excessive noise levels. Therefore, there would be no impact and the No Project Alternative would result in less impact related to noise compared to the project.

Population and Housing

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. Without the influx of new jobs and work force resulting from the proposed project, no net increase of existing County population would occur and incidentally, new demand for housing and related services would need to be met. Therefore, there would be no impact and the No Project Alternative would result in less impact related to population and housing compared to the project.

Public Services

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. No new demand for fire or law enforcement protection services would occur. As such, the No Project Alternative would not result in the need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and law enforcement protection. Therefore, there would be no impact and the No Project Alternative would result in no impacts related to public services compared to the project.

Recreation

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. Without the occurrence of potential population increases incidentally increasing the demand and use of recreational places and facilities, there would be no impact and the No Project Alternative would result in less impact related to population and housing compared to the project.

Transportation and Traffic

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. No construction and operational-related trips would be generated. Existing traffic patterns and volumes on nearby roadways would remain unchanged. As such, the No Project Alternative would not conflict with a program, plan, or ordinance or policy addressing the circulation system, nor would the No Project Alternative conflict or be inconsistent with *CEQA Guidelines* Section 15064.3(b) related to VMT. In addition, the No Project Alternative would not substantially increase hazards due to geometric design features or result in inadequate access. Therefore,

there would be no impacts and the No Project Alternative would result in less impacts related to transportation and traffic compared to the project.

Tribal Cultural Resources

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. The project site would remain undeveloped and no ground-disturbing activities would occur. According to record searches and tribal resource consultations, no tribal resources are present on the project site. As such, the No Project Alternative would not cause a substantial adverse change in the significance of tribal cultural resources with cultural value to a California Native American tribe that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k) or as a resource determined by the lead agency. Therefore, there would be no impact and the No Project Alternative would result in less impact related to tribal cultural resources compared to the project.

Utilities and Service Systems

Under the No Project Alternative, no development would take place on the project site and the proposed warehouse and accompanying infrastructure would not be constructed. There would be no new demand for utilities and service systems on the project site. As such, the No Project Alternative would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects; generate solid waste in excess of state or local standards; or conflict with federal, State, and local management and reduction statues and regulations related to solid waste. Therefore, there would be no impact and the No Project Alternative would result in no impacts related to utilities and service systems compared to the project.

Wildfire

Under the No Project Alternative, the proposed warehouse and accompanying infrastructure would not be constructed. As such, the No Project Alternative would not substantially impair an adopted emergency response plan or emergency evacuation plan; expose occupants to pollutant concentrations from a wildfire; require the installation or maintenance of associated infrastructure; or expose people or structures to significant risks. Therefore, there would be no impact and the No Project Alternative would result in less impacts related to wildfire compared to the project.

Comparison of Impacts

The No Project Alternative would avoid the significant and unavoidable impacts associated with development of the project. This alternative would result in less impact to all environmental issues areas compared to the project.

Relationship to Project Objectives

The No Project Alternative would not achieve any of the project objectives listed in Section 6.2, Project Objectives. Although this alternative would create less environmental impacts overall, the objectives that shape the proposed project would not be realized under this alternative.

Alternative 2: Reduced Size Alternative

Alternative 2, the Reduced Size Alternative, would eliminate Phase 1 of the proposed project. 534,-acres comprising 14 buildings totaling 7,242,106 square feet of industrial use space would not be developed compared to the proposed project. Alternative 2 would instead develop 1,665,340 square-foot of industrial uses compromised of 10 distribution and warehousing buildings on 205 acres. The remaining 534 acres would remain cultivated for agricultural uses. Alternative 2 would not be subject to the Metropolitan Bakersfield General Plan and only be subject to the Kern County General Plan and the Kern County Zoning Ordinance. As such, Alternative 2 would require adoption of a new Specific Plan, an amendment to the Kern County General Plan Land Use, Open Space and Conservation Element, a change in zone classification, approval of Precise Development Plan No. 75, Map 81 and adoption of the Malibu Vineyards Industrial Parkway Specific Plan.

Environmental Impact Analysis

Aesthetics

With regard to impacts related to scenic vistas, there are no officially designated scenic vistas or state scenic highways or potentially eligible highways in the vicinity of the project site. However, the proposed project would substantially change the existing character of the project site from a primarily farming visual to a more industrialized visual seen from SR 99.

Similar to the project, the Reduced Size Alternative there are no officially designated scenic vistas or state scenic highways or potentially eligible highways in the vicinity of the project site. The Reduced Size Alternative would eliminate Phase 1 of the proposed project. As such, 534 -acres comprising 14 buildings totaling 7,242,106 square feet of industrial use space would not be developed compared to the proposed project. The Reduced Size Alternative would instead develop 1,665,340 square-foot of industrial uses comprised of 10 distribution and warehousing buildings on 205 acres, while the remaining 534 acres would remain cultivated for agricultural purposes.

While this alternative would avoid development on a portion of the project site, this alternative would still include the development of a warehouse, distribution facility, and associated infrastructure. Similar to the proposed project, the Reduced Size Alternative would be required to implement **Mitigation Measures MM 4.1-1** through **MM 4.1-3**, which would be incorporated to reduce visual impacts that would occur from project colors and features and ensure that the proposed project would utilize aesthetically pleasing landscaping. However, because there are no feasible mitigation measures that can be implemented to maintain the existing agricultural character of the project site, impacts to visual resources would remain significant and unavoidable, similar to the proposed project. Cumulative impacts to visual character under the Reduced Size Alternative would be significant and unavoidable as related projects coupled with

development of the Reduced Size Alternative would convert land in a present rural area to a degree that cannot be mitigation, similar to the project.

Despite the reduced size of the warehouse and associated infrastructure under the Reduced Size Alternative as compared with the proposed project, the potential for impacts related to light and glare during construction and operation would be similar to the project. As such, this alternative would be required to implement **Mitigation Measure MM 4.1-4**, which includes demonstrating consistency with the applicable provisions of the Outdoor Lighting – Dark Skies Ordinance (Chapter 19.81 of the Kern County Zoning Ordinance), demonstrating that the proposed project is designed to minimize glare, and demonstrating that on-site building utilizes non-reflective materials. Impacts related to light and glare under the Reduced Size Alternative would be less than significant. However, although light and glare can be minimized through use of outdoor lighting that limits glare, appropriate building design, and other measures, the significant cumulative impact cannot be fully mitigated.

The Reduced Size Alternative would have similar overall impacts to aesthetics compared to the project to the lesser extent of the project being implemented, due to the reduction in project size under this alternative; however, impacts would still remain significant and unavoidable.

Agricultural and Forestry Resources

As described in **Section 4.2,** *Agricultural Resources,* the project site is consists of agricultural land, with a portion of the project site currently being utilized for growing table grapes, and portions of the project site are within Agricultural Preserve Number 8. According to the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP), 314 acres of the project site are designated Prime Farmland, and there are no Williamson Act Contracts associated with the project site. Under the Reduced Size Alternative, the proposed project would still be required to apply for an Agricultural Preserve Exclusion. While this alternative would result in the conversion of 75 percent less land than would be converted by the proposed project, development of the Reduced Size Alternaitve would nevertheless result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to nonagricultural use.

With regard to forestry resources, the project site is currently used for active agricultural production, and there are no forestry resources or designated forest lands or timberlands located on the project site. No impacts would occur to forestry resources, and therefore impacts would be similar to the proposed project.

Similar to the proposed project, implementation of this alternative would still require an Agricultural Preserve Exclusion and implementation of similar **Mitigation Measures MM 4.2-1** through **MM 4.2-11** (See **Section 4.2**, *Agriculture and Forestry Resources*). Impacts related to the cancellation of an open space contract would be less than significant as the project site is not encumbered with a Land Use Contract, the Reduced Size Alternative would result in similar impacts to agriculture and forestry resources compared to the proposed project; however, the impact would remain significant and unavoidable.

Air Quality

The use of construction vehicles, heavy equipment operation, and worker carpool trips would be reduced by as compared to the proposed project due to significantly smaller demands as a result of the reduced project size. Similar to the proposed project, this alternative would also require implementation of

Mitigation Measures MM 4.3-1 through **MM 4.3-4** in order to reduce the severity of construction-related emissions. As similar heavy equipment would be required on a daily basis under this alternative, with a site plan reduced by 75 percent from the proposed project, construction impacts would be less than significant with mitigation. Overall, based on the above, with implementation of **Mitigation Measures MM 4.3-1** through **MM 4.3-4**, any potential impacts related to criteria pollutants designated as nonattainment within the SJVAPCD would be reduced and construction of the proposed project would not conflict with or obstruct implementation of applicable air quality plans. Therefore, impacts from construction would be less than significant. During operation of the Reduced Site Alternative, emissions would likewise be reduced as compared to the proposed project, as fewer commuting and truck trips would be required with the reduced project scale and number of employees on site. As such, operational impacts would be less than significant.

With regard to exposure to sensitive receptors, the Reduced Site Alternative would have a decreased impact compared to the proposed project due to its smaller size. While the proposed project has the potential to expose sensitive receptors to substantial pollutant concentrations during construction, implementation of **Mitigation Measures MM 4.3-5** through **MM 4.5-10** in addition to **MM 4.3-1** through **MM 4.3-4**, would reduce impacts to less than significant levels. The Reduced Size Alternative would reduce the operations and, in turn, the possible impacts on nearby sensitive receptors. As such, project-level impacts would be less than significant and less than the proposed project.

With regard to objectionable odors, neither construction nor long-term operations of the proposed project are anticipated to generate any significant objectionable odors. Given the smaller development footprint and reduced operational capacity of the Reduced Size Alternative, impacts would thus be less than the proposed project and less than significant on a project level.

As determined above, cumulative construction impacts would be significant and unavoidable because the County does not have jurisdiction and control over all potential projects in the San Joaquin Valley Air Basin. As cumulative construction impacts would be significant and unavoidable, the Reduced Size Alternative would also obstruct the air quality planning goals set forth by SJVAPCD. Therefore, similar to the project, impacts would be significant and unavoidable.

The Reduced Size Alternative would result in less overall impacts related to air quality compared to the project. However, even with implementation of similar mitigation as proposed for the project, impacts to cumulative air quality under this alternative would likely remain significant and unavoidable.

Biological Resources

The Reduced Size Alternative is not expected to have impacts on candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS). The proposed project site is entirely disturbed and devoid of vegetation due to ongoing tilling activities and does not support suitable habitats for sensitive, or special-status species. With implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-7**, which generally include conducting preconstruction surveys and implementing voidance procedures, along other measures, impacts would be less than significant. However, this alternative would avoid further disturbing 534 acres of land within the project site, the undeveloped land would remain under active agricultural use, continuing to constitute inhospitable habitats for candidate, sensitive, or special-status species. Therefore, impacts would remain less than significant.

With regards to impacts on any riparian habitat or other sensitive natural community, jurisdictional waters identified in local or regional plans, policies, or regulations or by CDFW or USFWS, the project site consists almost entirely of vineyards for table grapes and undeveloped agricultural land and contains no natural vegetation communities.

Sensitive natural communities and riparian habitats are absent from the project site. No impact would occur under the Reduced Size Alternative, similar to the project.

As it relates to the movement of any resident or migratory fish or wildlife species, there are no perennial water features present within the project site, and therefore no potential corridors for aquatic species. In addition, no wildlife nursery sites have been identified on or in the vicinity of the project site. The developed project site would not support suitable habitat for any of the special-status species, with the exception of potential foraging and nesting habitat in landscaped trees and vegetation for migratory birds. With implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-7**, the proposed project is not expected to adversely impact nesting birds and impacts would be less than significant, but similar to the project.

Implementation of the above-referenced mitigation measures would ensure consistency with local policies and ordinances protecting biological resources. The Reduced Size Alternative, as with the project, would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approval local, regional, or State Habitat Conservation Plan.

Based on the above, project-level impacts under the Reduced Size Alternative would be less than significant with implementation of mitigation. Similarly, cumulative impacts would be less than significant with the implementation of similar mitigation. While, this alternative would avoid disturbing an additional 534 acres, of land within the project site, all impacts related to biological resources would be similar compared to the project.

Cultural Resources

While no historical or archaeological resources were identified on the project site, ground-disturbing activities associated with he project have the potential to encounter undocumented archaeological resources that could qualify as historical resources. Similar to the project, the Reduced Size Alternative would implement **Mitigation Measures MM 4.5-1** through **MM 4.5-6**, which include measures to retain a Lead Archaeologist and measures to implement if paleontological resources, historical resources, and/or human remains are encountered during the course of grading or construction. In addition, there is no indication that any particular location within the project site has been used for purposes of human burial in the recent or distant past. In the unlikely event that human remains are inadvertently discovered during project construction activities, implementation of **Mitigation Measure 4.5-6**, provides measures to implement if human remains are uncovered during project construction, would ensure that any human remains encountered are appropriately addressed and impacts would be less than significant.

Based on the above, with implementation of mitigation similar to the proposed project, impacts to cultural resources under this alternative would be similar to the proposed project, and less than significant. As such, the Reduced Size Alternative would result in similar impacts related to cultural resources compared to the project due to the Reduced Size Alternative taking place on the same site as the proposed project.

Energy

With regard to significant consumption of energy resources, the proposed project's energy consumption would not be wasteful, inefficient or unnecessary, and will be in compliance with all State energy efficiency policies. Given the reduced size and energy demand of the Reduced Size Alternative, it is therefore assumed that impacts would be less than the proposed project and less than significant, similar to the proposed project.

Geology and Soils

Construction of the Reduced Size Alternative would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08). kern County has adopted the California Building Code 2022 Edition (California Code of Regulations Title 24). Adherence to all applicable regulations would mitigate any potential fault rupture-related impacts associated with this alternative. In addition, similar to the project, the Reduced Size Alternative would be required to implement **Mitigation Measure 4.7-2**, which requires that a geotechnical evaluation to evaluate soil conditions and geologic hazards be performed by a qualified geotechnical engineer and the adherence to the specifications, procedures, and site conditions contained within the geotechnical evaluation to be contained in the final design plans. Implementation of these mitigation measures, as with the project, would reduce impacts related to strong seismic ground shaking, unstable geologic unit, and expansive soils. In addition, with regard to soil erosion and loss of topsoil, the Reduced Size Alternative would implement **Mitigation Measure MM 4.7-3**, and **MM 4.10-1,** (refer to Section 4.10 *Hydrology and Water Quality*), which include incorporating Best Management Practices (BMPs) consistent with the National Pollutant Discharge Elimination System (NPDES) Program and limiting grading to the minimum area necessary for construction. Under the Reduced Size Alternative, the ground disturbance required would be similar to the proposed project, and thus the impacts related to soil erosion would remain similar to the proposed project. However, these impacts would remain less than significant.

As it relates to unique paleontological resource or site or unique geologic feature, similar to the project, under the Reduced Size Alternative any ground disturbance within the project site could result in a potentially significant impact to paleontological resources. As such, the Reduced Size Alternative would be required to implement **Mitigation Measures MM 4.7-4** through **MM 4.7-7**, which would include retention of a qualified paleontologist and implementation of measures if a paleontological resource is found during construction, to reduce impacts to paleontological resources. Therefore, impacts would be less than significant.

As discussed above, with implementation of mitigation similar to that required for the project, impacts to geology and soils would be less than significant, and impacts to geology and soils would be similar compared to the proposed project due to the reduction in ground disturbance required under this alternative.

Greenhouse Gas Emissions

With regard to generation of GHGs, the proposed project would result in the temporary generation of emissions associated with various activities, including site preparation, grading, paving, building construction, and the application of architectural coatings. GHG emissions would be largely associated with off-road equipment use, as well as on-road vehicle operations associated with workers commuting to and

from the proposed project site and haul-truck trips. Similar to the proposed project, the Reduced Size Alternative would be required to implement **Mitigation Measures 4.3-1, MM 4.3-3,** and **MM 4.3-4** (refer to Section 4.3 *Air Quality)* which would ensure the project remains consistent with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gas emissions. Similar to the proposed project, the Reduced Size Alternative would have a significant and unavoidable cumulative impact, however impacts of the Reduced Site Alternative would be less compared to the proposed project.

The Reduced Size Alternative would be required to implement **Mitigation Measures MM 4.8-1** which require the development of a focused Greenhouse Gas report that identifies the measures (regulatory or applicant implemented) for a target reduction of 29 percent of operational emissions of the project's mobile CO2e emissions. The Reduced Size Alternative would have similar impacts to greenhouse gas emissions as the proposed project. As such, the Reduced Size Alternative would have a significant and unavoidable impact related to GHG emissions and impacts would be similar to the proposed project.

Hazards and Hazardous Materials

Similar to the project, the Reduced Size Alternative would be required to implement **Mitigation Measures 4.9-1** through **MM 4.9-15**, and **MM 4.2-4** (refer to Section 4.2 *Agricultural Resources*). Which would require the preparation of a Hazardous Materials Business Plan; testing for leaks and remediation; provision of methods to be used to avoid spills and minimize impacts in the event of a spill by providing procedures for handling and disposing hazardous materials; the safe application of non-toxic approved herbicides, as well as require the preparation and approval of a Fire Safety Plan by Kern County Fire Department, and require that an on-site recycling coordinator be designated by the project proponent to facilitate recycling of all waste through coordination with the on-stie contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes, to the maximum extent feasible. Implementation of these mitigation measures would reduce impacts to the public or environment through the routine transport, use, or disposal of hazardous materials and through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

The project site is not within 0.25 mile of an existing or proposed school and is not included on a list of hazardous materials sites, nor is the project site within the Kern Country Airport Land Use Compatibility Plan.

Similar to the project, the Reduced Size Alternative is not anticipated to physically interfere with emergency vehicle access or personnel evacuation from the site during the construction or operation of this alternative. As with the project, the Reduced Size Alternative would implement **Mitigation Measure MM 4.17-1** (refer to Section 4.16 *Transportation and Traffic*), which requires the preparation and submittal of a Construction Traffic Control Plan and would provide further assurances for emergency access.

As it relates to wildland fires, the project site is not within an area of high or very high fire hazard. **Mitigation Measure MM 4.9-13** would be implemented to ensure the development of a fire safety plan for construction and operation of the project in the event of a fire on the project site. The Reduced Size Alternative would have less than significant impacts, similar to the proposed project.

Impacts under the Reduced Size Alternative and the proposed project would result in less than significant impacts after implementation of mitigation measures and the potential impacts from hazards and hazardous materials under the Reduced Size Alternative would be similar compared to the project.

Hydrology and Water Quality

Similar to the project, the Reduced Size Alternative would include completion of a NPDES completion form, and would be required to implement **Mitigation Measures MM 4.10-1** and **Mitigation Measures MM 4.10-2**, which would require the preparation of an Erosion and Sedimentation Control Plan and associated BMPs to prevent the occurrence of soil erosion and discharge. This alternative would also be required to implement **Mitigation Measure MM 4.9-3**, which requires the provision of a Hazardous Materials Business Plan. Implementation of these mitigation measures would reduce impacts related to violating water quality standards or waste discharge requirements; substantially altering drainage patterns; creating or contributing runoff water that would exceed the capacity of existing or planned stormwater drainage systems; and placing the project within a 100-year flood hazard area.

As it relates to groundwater supplies, overall construction and operation-related water requirements under the Reduced Size Alternative would be reduced under this alternative as compared to the project, as less grading would be required during construction, and operations would involve a smaller building as compared to the proposed project. As such, the Reduced Size Alternative would result in less impervious surfaces compared to the proposed project, but would nonetheless implement **Mitigation Measures MM 4.10-1** through **MM 4.10-3**. Therefore, the Reduced Size Alternative would not substantially deplete ground water supplies or interfere substantially with groundwater recharge. Furthermore, this alternative would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan as the Reduced Size Alternative would require implementation of BMPs and drainage control requirements that would be consistent with the Basin Plan.

The project site is located well-inland and far from the ocean or any enclosed or semi-enclosed water body such that there would be no potential threat from tsunami or seiche hazards and impacts would be less than significant.

Overall, impacts related to hydrology and water quality would be less than significant with implementation of mitigation measures similar to those implemented under the project and the Reduced Size Alternative would have a proportionally lessened impact on a project level related to hydrology and water quality compared to the project due to the reduced size, which would result in reduced grading activities and would reduce the amount of impervious surfaces compared to the proposed project. As such, the Reduced Size Alternative would result in similar impacts when compared to the proposed project. In addition, the basin is currently over drafted and the District's GSP has been deemed inadequate along with the other Kern County subbasin plans where the other similar known and unknown projects could occur, the cumulative impacts of any use of groundwater in the area are considered significant and unavoidable after all feasible and reasonable mitigation.

Land Use and Planning

The proposed project site has a General Plan designation of Intensive Agriculture and is zoned as A (Exclusive Agriculture). As part of the proposed project, the anticipated approvals needed for the proposed project include Adoption of a Specific Plan, General Plan Amendments, Zone Changes, and Precise Development Plans. While the project size would be reduced, development of the Reduced Size Alternative would still require the same entitlement approvals in order to operate a warehouse and distribution facility on the project site. Impacts would be less than significant under this alternative. Land use and planning impacts would be similar under the Reduced Size Alternative when compared to the project.

Noise

The amount of on-site construction equipment for the Reduced Size Alternative is assumed to be similar to the proposed project. As with the proposed project, construction and operation activities associated with the Reduced Size Alternative would not result in any impacts related to noise levels and would not exceed existing thresholds. Under the Reduced Size Alternative, the extent and duration of construction activities would be reduced, in turn reducing the level and duration of noise associated with the proposed project. As such, noise impacts under the Reduced Size Alternative would be less than significant and similar to the proposed project. In regard to operational activities, the proposed project would not generate noise that would surpass any standards or thresholds set by the County. Under the Reduced Size Alternative, project operations would be reduced, and thus operational noise would be reduced as well. Therefore, operational noise impacts under the Reduced Size Alternative would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards with similar implementation of **Mitigation Measures MM 4.12-1** through **4.12-4**. Impacts would be less than significant.

The vibration levels at the nearest residences would not reach the vibrational level threshold for older residential structures during construction. Operation of the Reduced Size Alternative would involve worker truck trips and agricultural equipment use that would be a sufficient distance from structures (i.e., 100 feet away from structures). As such, vibration impacts would be minimal and are not expected to have any measurable effect on the adjacent off-site sensitive receivers.

Based on the above, this alternative is expected to result in less than significant construction noise, construction, vibration and operational noise impacts. These impacts would be similar to the proposed project.. Furthermore, similar to the proposed project, noise impacts during the construction phase in consideration with other construction activities and operational activities in Reduced Size Alternative would be considered cumulatively considerable during project construction.

Population and Housing

Similar to the proposed project, the Reduced Size Alternative would require a temporary workforce that is assumed to be similar in size to that required for the proposed project. It is anticipated that the construction workforce would commute to the project site from local communities. It is likewise assumed, as for the proposed project, that given the unemployment rate and vacant housing rate in unincorporated areas of Kern County, sufficient workers and housing would be available to accommodate any direct population growth induced by the proposed project. Therefore, impacts under the Reduced Size Alternative would be less compared to the proposed project.

With regard to displacing housing units or people, the project site is an active agricultural field with no existing structures within the boundaries for proposed development. There are no residences or people living on the project site, or residential uses located in close proximity to the project site. As such, the Reduced Size Alternative would not displace any houses or people. No impact would occur, and impacts would be similar compared to the proposed project.

Public Services

Similar to the project, construction of the Reduced Size Alternative would result in a number of construction workers on the project site and a corresponding increase in fire service demands. However, the Reduced Size Alternative would result in a shortened construction period due to the alternative's reduced size. The alternative would be required to implement **Mitigation Measure MM 4.14-1** (refer to Section 4.14 *Hazards and Hazardous Materials*), which would require the preparation of a fire safety plan. During operation, the Reduced Size Alternative would require fewer employees to be on-site on a permanent basis as compared to the proposed project. Implementation of **Mitigation Measure MM 4.14-1** would also reduce fire risks on-site during operation of the Reduced Size Alternative. Impacts related to fire protection would be less than significant with mitigation.

With regard to law enforcement protection, the project site is located in a relatively remote location. The increase in traffic would be temporary and thus would not have a significant adverse effect on the Kern County Sheriff's Office's (KCSO's) protective service provision or the California Highway Patrol's (CHP's) ability to patrol the highways. In addition, security fencing would be installed around the perimeter of the northwestern and eastern parcels. During operation of this alternative, the additional volume of vehicles associated with workers commuting to the project site during routine maintenance would be minor and is not expected to adversely affect traffic. Therefore, impacts to the CHP are not anticipated.

Furthermore, the Reduced Size Alternative would similarly implement **Mitigation Measures MM 4.14-1 and MM 4.14-2**, requiring coordination with the County of Kern to pay necessary sales and use taxes, as well as make efforts to hire 50 percent of its workforce from the local communities. Based on the above, impacts would be less than significant under this alternative, similar to the proposed project, following the implementation of similar mitigation measures of the proposed project. Impacts related to public services would be similar compared to the proposed project.

Recreation

Similar to the proposed project, it is assumed the construction workforce would commute to the project site each day from local communities under the Reduced Size Alternative. As a result, the Reduced Size Alternative would similarly not induce an increase in resident population that would result in increased use of existing neighborhood or regional parks or other recreational facilities. The Reduced Size Alternative would likewise also not include the construction of residences and would therefore not induce a substantial population increase. Impacts would be less than significant and similar to the proposed project.

With regard to the inclusion of the construction or expansion of recreational facilities, the Reduced Size Alternative would, like the proposed project, consist of a warehouse facility and accompanying structures and would not include recreational facilities or require the construction or expansion of facilities. No impact would occur, and impacts would be similar to the proposed project.

Based on the above analysis, impacts would be less than significant. Given that both the proposed project and the Reduced Size Alternative would not include the construction of residences or recreational facilities, impacts related to recreation would be similar compared to the project.

Transportation and Traffic

Similar to the proposed project, construction of the Reduced Size Alternative is not anticipated to result in significant impacts to local traffic with implementation of **Mitigation Measures MM 4.16-1** through **MM 4.16-7**, which would require necessary road improvements and Traffic Index analyses in order to reduce project-related VMT. With regard to consistency with *CEQA Guidelines* Section 15064.3(b), as regulations of SB 743 have not been finalized or adopted by the County, traffic congestion remains the measure used to determine the significance of a transportation impact.

Durin operation, day-to-day trips would be reduced compared to the proposed project as a result of the reduced size of the facility. Similar to the project, the number of added vehicles to the roadway network would not have a discernible effect on roadway operations or levels of service. Under the proposed project, project VMT would result in an increase over exiting levels, and would result in a significant and unavoidable impact. Because of the reduced footprint, however, VMT is expected to be reduced significantly, due to the Reduced Size Alternative using less land., thus reducing the project's total VMT. As such, impacts related to *CEQA Guidelines* Section 15064.3(b) would be less than significant under the Reduced Size Alternative with mitigation incorporated, similar to the proposed project.

Similar to the proposed project, the Reduced Size Alternative is not anticipated to substantially increase hazards due to a design feature or incompatible uses. Under the Reduced Size Alternative, the project would only implement Phase I of the proposed project, which would include Imperial Avenue, which would serve as a future arterial segment of Burbank Street, and potentially an expressway that would traverse east-west through the northern Boundary of the Phase I project area. As with the proposed project, the Reduced Size Alternative would be required to implement **Mitigation Measures MM 4.16-1** through **MM 4.16-7**, and **MM 4.16-8** through **MM 4.16-11** in order to improve service levels at all study locations to acceptable levels and would reduce potential hazards associated with the proposed project. As such, the Reduced Size Alternative, would have similar impacts to increased hazards due to a project design feature compared to the proposed project, however these impacts would be less than the proposed project.

With regard to emergency access, the Reduced Size Alternative is not anticipated to cause a significant increase in congestion or significantly worsen he existing service levels at intersection roadways, the Reduced Size Alternative would have a less than significant impact on emergency access during construction and operation, similar to the proposed project. Furthermore, the Reduced Size Alternative would also be required to implement **Mitigation Measures MM 4.16-1** through **MM 4.16-7**, which would provide further assurances for emergency access.

Based on the above, impacts would be less than significant with mitigation incorporated. Given the reduction in operational trips and project VMT under the Reduced Size Alternative as compared to the proposed project, the Reduced Size Alternative impacts related to transportation would be similar compared to the project, however the Reduced Size Alternative would still result in significant and unavoidable cumulative impacts.

Tribal Cultural Resources

Under the Reduced Size Alternative, overall construction and operational methods, workforce, and timing would be reduced when compared to the project. There are no tribal cultural resources within the proposed project site or the surrounding area, and as such it is determined that the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resources. With implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-4** (refer to Section 4.5, *Cultural Resources)* similar to the mitigation for the proposed project, impacts to tribal cultural resources under this alternative would be less than significant. Since, the Reduced Size Alternative would take place in the same location as the proposed project, potential impacts related to tribal cultural resources compared to the proposed project would be similar to the proposed project.

Utilities and Service Systems

Eliminating 534 acres from project development would result in reduced demand for utilities and service systems due to the smaller size of the development and associated infrastructure. Therefore, all construction and operational methods, workforce, and timing for the Reduced Size Alternative would be reduced in comparison with the proposed project.

As with the project, the construction of a warehouse, distribution facility, and associated infrastructure would require water usage for dust suppression as well as minimal generation of wastewater, usage of electrical power, natural gas, and telecommunication. In addition, construction of the Reduced Size Alternative would not substantially alter stormwater drainage. As with the proposed project, the Reduced Size Alternative would be required to implement **Mitigation Measure 4.10-2** and **MM 4.10-3** (refer to Section 4.10 *Hydrology and Water Quality*), which would require the preparation of an Erosion and Sedimentation Control Plan during construction, including BMPs designed to prevent the occurrence of soil erosion and discharge of other construction-related pollutants that could contaminate water quality. The Reduced Size Alternative would be required to implement **Mitigation Measures MM 4.10-2** and **MM 4.18-1** through **MM 4.18-6**, in order to reduce all impacts to water, stormwater, wastewater, natural gas, electricity, and telecommunications services. Similar to the proposed project, the Reduced Size Alternative would be required to report any groundwater usage associated with project operation and to equip all groundwater wells on-site with water meters as outlined in **Mitigation Measures MM 4.10-3** and **MM 4.18-4**. The Reduced Site Alternative would generate less solid waste compared to the proposed project. However, the Reduced Size Alternative would be required to implement **Mitigation Measure 4.18-6**, which would require the provision of a recycling coordinator to ensure the separation and proper disposal of recyclable materials and solid waste during construction.

The Reduced Size Alternative would reduce the size and operational demands in comparison to the proposed project. As described in **Section 4.19** *Utilities and Service Systems*, the proposed project would be serviced by Oildale Mutual Water Company (OMWC). According to the WSA prepared by OMWC for the proposed project, OMWC would be able to meet the proposed project's water demand under projected normal, single dry, and multiple dry years. Therefore, OMWC would be able to meet the reduced demands of the Reduced Size Alternative, providing sufficient supply to the project site. However, as the basin is currently over drafted and the District's GSP has been deemed inadequate along with the other Kern subbasin plans where the other similar known and unknown projects could occur, the cumulative impacts of any use of groundwater in the area are considered significant and unavoidable after all feasible and reasonable mitigation, similar to the proposed project.

The Reduced Size Alternative is expected to result in similar impacts compared to the proposed project to utilities and service systems with implementation of **Mitigation Measures MM 4.18** though **MM 4.18-6** and impacts would be less compared to the proposed project, as water, wastewater, and solid waste generation would be less than the project due to the reduced size and number of employees. Yet, the proposed project would still be located within the critically over drafted Kern Subbasin. Impacts would be utilities and service systems would be similar to the proposed project.

Wildfire

As with the proposed project, this alternative is not classified as being within a high fire hazard severity zone and is not anticipated to physically impede the exiting emergency response plans, emergency vehicle access, or personnel access to the site. The site is located in a rural, sparsely developed area with limited population. Also, in compliance with applicable Fire Code and Building Code requirements, construction managers and personnel would be trained in fire prevention and emergency response. Therefore, the Reduced Size Alternative would not substantially impair an adopted emergency response plan or emergency evacuation plan, similar to the proposed project.

The project site is designated as Local Responsibility Area (LRA) Unzoned designation, soil types, and surface hydrology, there is a low potential for the project site to be at risk of post-fire instability or drainage changes. The potential for wildfire on the project site is not considered high. Similar to the proposed project, the Reduced Size Alternative would be required to implement **Mitigation Measure MM 4.9-13**, (refer to Section 4.19 *Hazards and Hazardous Materials*) which would require the development and implementation of a fire safety plan or use during construction and operation, which would further reduce the fire risks on-site. As such, impacts under this alternative related to exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be less than significant.

With regard to the installation or maintenance of associated infrastructure, the proposed project would construct new internal roads from the existing road network to the proposed project that would act as access roads in the event of an emergency.

Similar to the proposed project, development of the Reduced Site Alternative would maintain existing drainage patterns that currently exist on-stie. The Reduced Size Alternative would be required to implement a sedimentation Stormwater Pollution Prevention Plan and drainage plan as outlined in **Mitigation Measures MM 4.10-1** and **MM 4.10-2** (Refer to Section 4.10 *Hydrology and Water Quality*) in order to minimize or manage flow concentration and changes in flow depth or velocity so as to minimize erosion, sedimentation, and flooding on- or off-site. As such, similar to the project, the Reduced Size Alternative would not include significant risks related to downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

With implementation of similar mitigation proposed for the project, the Reduced Size Alternative is expected to result in less than significant impacts to wildfire, similar to the proposed project. The Reduced Size Alternative would likely result in similar impacts due to the Reduced Size Alternative reduction in project size compared to the proposed project.

Comparison of Impacts

Because of the proportional reduction in project size, all construction and operational methods, workforce, and timing for the Reduced Size Alternative would be reduced in comparison with the project. Accordingly, the Reduced Size Alternative would result in less or similar impacts for a majority of the environmental issue areas. Notably, this alternative would not eliminate significant and unavoidable impacts associated with aesthetics (project and cumulative), agriculture and forestry resources (project and cumulative), air quality (project and cumulative), GHG emissions (project and cumulative) and hydrology and water quality (cumulative only), noise (cumulative only), population and housing (project and cumulative) transportation and traffic (cumulative only).

Relationship to Project Objectives

The Reduced Size Alternative would still result in the development of a new industrial land use that meets regional demand for a warehouse and logistics facility near SR-99. The alternative would be a similar visually industrial project that maximizes land use intensity and contributes to the local economy, improves circulation through the construction of new roads and improvements of existing roads, and would be sited in a location that minimizes conflicts with residential, conservation, and agricultural uses. As such, the Reduced Size Alternative would achieve most of the project objectives listed above in *Section 6.2,* although to a lesser extent than the proposed project, due to the project size being reduced.

Alternative 3- Alternative Site Location: Eastern Kern County

Alternative project sites are typically evaluated in CEQA documentation to avoid, reduce, or eliminate significant and unavoidable impacts associated with the proposed project by considering the proposed development in an entirely different location. To be considered, an alternative site must have the capability of fulfilling all or most of the objectives of the proposed project, and thus must be large enough to support a similar facility and have similar ease of access to transportation corridors. However, an alternative site may not meet the basic objectives of the proposed project, as listed in Section 6.2, *Proponent Submitted Project Objectives,* and likewise may not avoid or substantially reduce the environmental impacts of the proposed project.

Alternative 3, the Alternative Site Location – Eastern Kern County, proposes the same project development and operation of a 8,907,446square-foot industrial use space comprised of 24 buildings, but in a different area of Kern County, specifically eastern Kern County in the Adopted Mojave Specific Plan area. The Mojave Specific Plan Area encompasses approximately 31,000 acres in eastern Kern County, including the unincorporated community of Mojave, and functions as the transportation hub of eastern Kern County. Alternative 3 would operate at the same capacity as intended. Required entitlements for Alternative 3 would be dependent on the site selected. Under Alternative 3, the severity of impacts related to aesthetics would be reduced to less than significant level. Furthermore, there are no present cultivated agricultural lands in the Mojave Specific Plan area; as such, impacts related to agriculture and forestry resources would not be applicable. In addition, while the severity of impacts related to air quality, GHG, and traffic associated with the proposed project would be reduced, they would remain significant and unavoidable. This alternative would be located near State Route 58 (SR 58) in the Mojave Desert, rather than the San Joaquin Valley. Alternative 3 would develop the same land area and all of the project components. Approval of Alternative

3 would be required to comply with the Mojave Specific Plan and entitlements for the project would be dependent on the site selected within the planning area.

Environmental Impact Analysis

Aesthetics

With regard to impacts related to scenic vistas, there are no officially designated scenic vistas or state scenic highways or potentially eligible highways in the vicinity of the project site. However, the proposed project would substantially change the existing character of the project site to a more industrial visual seen from SR 58.

Similar to the project, for Alternative 3, there are no officially designated scenic vistas or state scenic highways, or potentially eligible highways in the vicinity of the project site. Alternative 3 would propose the same project development and operation of a 8,907,446 square-foot industrial use space comprised of 24 buildings, but in a different area of Kern County, specifically eastern Kern County in the Mojave Specific Plan Area.

Alternative 3 would be required to implement **Mitigation Measures MM 4.1-1** through **MM 4.1-3,** which would be incorporated to reduce visual impacts that would occur from the collection of which would be incorporated to reduce visual impacts that would occur from project colors and features and ensure that the proposed project would utilize aesthetically pleasing landscaping. Furthermore, the Mojave Specific Plan area is characterized by industrial, commercial, and resource land uses. As such, Alternative 3 would maintain the existing character of eastern Kern County and would not introduce a new offensive aesthetic feature. However, due to the size of the proposed Project, impacts would still be considered less than significant, because there are no feasible mitigation measures that can be implemented to maintain the existing character of the project site, impacts to visual resources would remain significant and unavoidable, similar to the proposed project. However, impacts would be less than the proposed project under Alternative 3. Cumulative impacts under Alternative 3 would be significant and unavoidable as related projects coupled with the development of Alternative 3 would convert land to an industrial degree that cannot be mitigating, similar to the proposed project, however, impacts under the Reduced Size Alternative to aesthetics would be less.

Despite the new location of the warehouse and associated infrastructure under Alternative 3 as compared with the proposed project, the potential for impacts related to light and glare during construction and operation would be similar to the project. As such, this alternative would be required to implement **Mitigation Measure MM 4.1-4**, which includes demonstrating consistency with the applicable provisions of the Outdoor Lighting – Dark Skies Ordinance (Chapter 19.81 of the Kern County Zoning Ordinance), demonstrating that the proposed project is designed to minimize glare, and demonstrating that on-site building utilizes non-reflective materials. Impacts related to light and glare under Alternative 3 would be less than significant.

Alternative 3 would have less overall impacts to aesthetics compared to the project, due to the existing industrial and commercial uses in eastern Kern County; impacts would remain significant and unavoidable, but to a lesser extent.

Agricultural and Forestry Resources

With regard to agricultural resources, impacts would be less than the proposed project, due to Alternative 3 not requiring the conversion of Prime Farmland to nonagricultural uses. In the Mojave Specific Plan Area, there are no cultivated agricultural lands nor are there any forestry lands; as such the proposed project would not require the conversion of agricultural or forestry lands to urban uses. With regard to forestry resources, there are currently no forestry resources or designated forest lands or timberlands located in the Mojave Specific Plan. Therefore, impacts to agricultural and forestry uses under Alternative 3 are not applicable, and there would be no impacts. Alternative 3 would have less impacts compared to the proposed project because Alternative 3 would not require the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural uses. Project and cumulative impacts would be less than the proposed project, and would have no impact on agricultural or forestry resources.

Air Quality

The use of construction vehicles, heavy equipment operation, and worker carpool trips would be similar compared to the project. This alternative would also require the implementation of **Mitigation Measures MM 4.3-1** through **MM 4.3-4**, adjusted with respect to the requirements of Eastern Kern Air Pollution Control District (EKAPCD) in order to reduce the severity of construction-related emissions. As similar heavy equipment on a daily basis would be required under this alternative as with the project, impacts would be less than significant with mitigation for project-level construction impacts. Overall, based on the above, with implementation of **Mitigation Measure MM 4.3-1** through **MM 4.3-4**, any potential impacts to criteria pollutants designated as nonattainment within the EKAPCD would be reduced and construction of the proposed project would not result in a conflict with or obstruct implementation of applicable air quality plans. Therefore, impacts from construction would be less than significant. Operational emissions would be similar to the proposed project and the alternative is assumed to create a similar number of daily passenger and truck trips. These emissions would be below the EKAPCD's regional significance threshold for all pollutants. As such, operational impacts would be less than significant and similar to the proposed project.

With regard to exposure to sensitive receptors, the impact of Alternative 3 cannot be predicted without knowledge of the specific alternative site and the locations of nearby sensitive receptors. While the proposed **Mitigation Measures MM 4.3-5** through **MM 4.5-10** in addition to **MM 4.3-1** through **MM 4.3-4**, would reduce impacts to pollutant concentrations during construction, it is conservatively assumed that impacts would be significant and unavoidable and greater than the proposed project.

With regard to objectionable odors, neither construction nor long-term operations of the proposed project are anticipated to generate any significant objectionable odors. Alternative 3 would construct and operate the same business activities as the proposed project, and, as such, would similarly not generate any significant objectionable odors. Impacts would thus be less than the proposed project and less than significant.

Similar to the proposed project, cumulative construction impacts would be significant and unavoidable. However, Alternative 3 would fall under the jurisdiction of the EKAPCD, which has higher thresholds for air quality impacts. As such, Alternative 3 would still result in significant and unavoidable impacts, however impacts would be less than the proposed project.

Overall, even with implementation of similar mitigation proposed for the project, impacts to project and cumulative air quality under this alternative would likely remain significant and unavoidable. However, Alternative 3 would result in less overall impacts related to air quality compared to the project.

Biological Resources

With regard to biological resources, impacts could be greater than the proposed project due to the lack of detailed biological resource surveys and field reconnaissance. Without knowledge of the specific site and accompanying biological resources surveys and field reconnaissance, it is conservatively assumed that impacts would be significant and unavoidable due to the likely undisturbed nature of the proposed project site having a greater potential of habitable land for sensitive species. However, under the Mojave Specific Plan, Alternative 3 would be required to comply with **Policy 4.4.3**, which requires a biological survey be conducted, alternatively a project applicant may demonstrate urbanized, nonsensitive status through the identification of applicable studies. Therefore, impacts to special-status and native plants, as well as special-status or migratory fish and wildlife would be similar to the proposed project, both for the project-level and cumulative impacts.

With regard to conflicts with local policies or Habitat Conservation Plans, impacts would be site-specific based on the location chosen for the proposed project. As such, Alternative 3 would be required to comply with **Policy 4.4.1** through **Policy 4.4.4**. Which ensure new developments carried out under the Mojave Specific Plan would not conflict with local policies or Habitat Conservation Plans. As such, project and cumulative impacts would be similar to the proposed project.

Overall, project and cumulative impacts under Alternative 3 would be assumed to be less than significant, with compliance of the Mojave Specific Plan. Although, there is a lack of associated biological resources surveys and field reconnaissance, Alternative 3 would be required to comply with the policies set forth in the Mojave Specific Plan, designated to promote the retention of natural settings and use of native or adaptable vegetation. Impacts would be similar to the proposed project.

Cultural Resources

In order to convert the project site to industrial uses and construct a warehouse and associated infrastructure, this alternative would require surface level ground disturbance throughout the project site. Under the Alternate Site Location Alternative, ground disturbance within the project site would be shallow and would be unlikely to result in a potentially significant impact to historical or archaeological resources. This alternative would be required to implement similar mitigation measures as described in **Mitigation Measures MM 4.5-1** through **MM 4.5-6** for the proposed project, as well as to adhere to all federal, state, and local regulations governing cultural resources, including California Penal Code, Section 622.5. In addition, Alternative 3 would be required to comply with **Policy 7.2.1** and **7.2.2** of the Mojave Specific Plan, which support private efforts to enhance and promote historical and community resources, and encourage participation by all members of the community in activities which promote the community and create local pride. Although Alternative 3 lacks accompanying historical or archaeological literature reviews and site surveys, impacts to cultural resources under Alternative 3 are assumed to be less than significant, with compliance of the Mojave Specific Plan.

As described above, without accompanying historical and archaeological literature reviews and site

reconnaissance, it is unknown whether Alternative 3 would have been used for purposes of human burial in the recent or distant past. However, in the unlikely event that human remains are inadvertently discovered during project initial implementation activities, this alternative would comply with Health and Safety Code Section 7050.5, which includes requirements similar to **Mitigation Measure 4.5-6**, and would ensure that any human remains encountered are appropriately addressed and impacts would be less than significant and similar to the proposed project.

Overall, Alternative 3 would result in similar cultural resources impacts compared to the proposed project, with the compliance of the policies set forth in the Mojave Specific Plan, as well as the implementation of similar mitigation measures. Impacts would less than significant, similar to the proposed project.

Energy

With regard to significant consumption of energy resources, the proposed project is anticipated to have a less than significant impact to energy consumption during construction and operational activities, as well as to be in compliance with all State energy efficiency policies. Alternative 3 would be expected to implement similar energy efficient technologies within the project design. Given the similar size and activities planned under Alternative 3, it is therefore assumed that impacts would be similar to the proposed project and less than significant.

Geology and Soils

With regard to direct or indirect potential substantial effects involving earthquakes, ground shaking, ground failure, and landslides, Alternative 3 would have similar effects to the proposed project. According to the DOC, the Mojave Specific Plan Area is not located along an Alquist Priolo Fault Trace, in a CGS Liquefaction Zone, or a CGS Landslide Zone. As such, Alternative 3 would be located in an area similar to the proposed project, and impacts would likewise be similar to the proposed project and less than significant.

Furthermore, Alternative 3 would adhere to requirements of the NPDES, which includes requirements similar to **Mitigation Measure MM 4.7-3**, and **MM 4.10-1** (refer to Section 4.10 *Hydrology and Water Quality*) and would comply with Kern county Grading Code (Section 17.28.070), which includes requirements to address potential soil erosion and loss of topsoil. Additionally, no septic tanks are proposed under this alternative, similar to the proposed project. Impacts would be less than significant and similar to the proposed project.

As it relates to unique paleontological resource or site or unique geologic feature, under Alternative 3, any ground disturbance within the project site would be shallow and would be unlikely to result in a potentially significant impact to paleontological resources. Alternative 3 would adhere to all applicable federal, state, and local regulations governing paleontological resources, including Public Resources Code Section 5097.5 and Section 30244. In addition, Alternative 3 would be required to adhere to **Policy 4.5-1** through **Policy 4.5.2** of the Mojave Specific Plan, which will ensure the conservation of known areas of mineral resources by limiting encroachment of incompatible urban uses. Therefore, impacts to paleontological resources would be less than significant and similar to the proposed project. Based on the above, impacts to geology and soils would be less than significant under Alternative 3 due to this Alternative maintaining all characteristics of the proposed project. Impacts would be similar to the proposed project.

Greenhouse Gas Emissions

With regard to generation of GHGs, the proposed project would result in the temporary generation of emissions associated with various activities, including site preparation, grading, paving, building construction, and the application of architectural coatings. GHG emissions would be largely associated with off-road equipment use, as well as on-road vehicle operations associated with workers commuting to and from the proposed project site and haul-truck trips. Similar to the proposed project, the Alternative Location Alternative would be required to implement **Mitigation Measures 4.3-1, MM 4.3-3,** and **MM 4.3-4** (refer to Section 4.3 *Air Quality)* which would ensure the project remains consistent with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gas emissions. Similar to the proposed project, the Alternative Location Alternative will have significant and unavoidable cumulative impacts, however project level impacts are anticipated to be less than the proposed project, since Alternative 3 would be located on/near a major highway or transportation corridor, similar to the proposed project. Furthermore, Alternative 3 would fall under the jurisdiction of the Eastern Kern County Air Pollution Control District (EKAPCD), which has higher thresholds for air quality and greenhouse gas emissions. As such, impacts would still be significant and unavoidable, however impacts would be to a lesser extent when compared to the proposed project.

Hazards and Hazardous Materials

With hazardous materials, Alternative 3 would be similar to the proposed project in the scope of its handling of hazardous materials and exposure of the public to emissions or vectors. Alternative 3 would require limited use and production of hazardous materials, and these activities would adhere to **Mitigation Measure 4.9-3**, which includes the preparation of a Hazardous Materials Business Plan. The Mojave Specific Plan Area is designated Unzoned LRA by the uses of Alternative 3 would be similar to the proposed project, it would not generate vectors or include agricultural waste. In addition, Alternative 3 would be required to comply with **Policy 4.2.3** of the Mojave Specific Plan, which requires industrial and commercial businesses to comply with the County Hazardous Waste Management Plan. As such, with adherence to the policies set forth in the Mojave Specific Plan, and implementation of similar mitigation measures of the proposed project, Alternative 3 would result in less than significant impacts, similar to the proposed project.

Additionally, the Mojave Air and Space Port is located within the boundaries of the Mojave Specific Plan. It is similarly assumed that, due to the lack of a specific alternative site Alternative 3 could be located within 0.25 mile of the active airport. However, any development within the jurisdiction of the Airport Land Use Compatibility Plan (ALUCP) would be subject to the standards and requirements held within it. As such, impacts would be reduced to a less than significant level, and would be similar to the proposed project. Overall, Alternative 3 would have a similar impact as compared to the proposed project, with the implementation of similar mitigation measures, and with the adherence of the Mojave Specific Plan. Impacts would be less than significant, and similar to the proposed project.

Hydrology and Water Quality

Similar to the project, Alternative 3 would include the completion of a NPDES completion form and would be required to implement **Mitigation Measure MM 4.10-1** and **MM 4.10-2**, which would require the preparation of an Erosion and Sedimenation Control Plan, including BMPs to prevent the occurrence of

soil erosion and discharge. This alternative would also be required to implement **Mitigation Measure MM 4.9-3**, which would require the provision of a Hazardous Materials Business Plan. Implementation of these mitigation measures would serve to reduce potential impacts related to impacts related to violating water quality standards or waste discharge requirements, substantially altering drainage patterns; or creating substantial soil erosion. Impacts would be less than significant and similar to the proposed project.

As it relates to groundwater supplies, it is impossible to know the impacts that Alternative 3 would have on the groundwater basin and existing drainage patterns without a site-specific Geotechnical Evaluation and field survey. As such, impacts are conservatively considered to be significant and unavoidable. Similar to the proposed project, Alternative 3 would feature retention basins to facilitate groundwater recharge. Alternative 3 would be located well inland and far from the ocean or any enclosed or semi-enclosed water body such that there would be no potential threat from tsunami or seiche hazards and impacts would be less than significant. Overall, impacts related to hydrology and water quality would be less than significant, with the implementation of similar mitigation measures, and is unlikely to result in effects to stormwater runoff or existing drainage patterns.

Land Use and Planning

With regard to land use consistency, Alternative 3 would be located in Eastern Kern County, which is characterized by commercial and industrial uses. As such, Alternative 3 would not have a high possibility of physically dividing an existing community or conflict with an existing land use plan, policy, or regulation. Although the project site chosen in the Mojave Specific Plan might require changes in underlying Specific Plan or zoning, it may not depending on the location. It is therefore assumed that the impacts associated with Alternative 3 would be similar to the proposed project, and therefore less than significant.

Noise

Under this alternative, the number of on-site construction equipment is assumed to be the same as the proposed project, and construction activities under Alternative 3 would not result in any impacts related to noise levels and would not exceed existing thresholds. As with the project, operational activities under Alternative 3 would similarly result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards with similar implementation of **Mitigation Measures MM 4.12-1** through **MM 4.12-4**. Impacts would be less than significant.

The vibration levels at the nearest residences would not reach the vibration level threshold for older residential structures during construction or decommissioning. Due to the fact that the specific alternative site is not known, it is impossible to know fully whether operation of Alternative 3 would involve worker truck trips and agricultural equipment use that would be a sufficient distance from structures (i.e., over 100 feet away from structures). However, Alternative 3 would be required to comply with **Policy 3.8.4** of the Mojave Specific Plan, which minimizes potential noise and health hazards, through buffering, which would be utilized to separate service and heavy industry uses from surrounding residences. As such, it is conservatively assumed that impacts would be less than significant, and similar to the proposed project. However, cumulative impacts would remain significant and unavoidable, similar to the proposed project.

Population and Housing

Similar to the proposed project, Alternative 3 would require a temporary workforce that is assumed to be similar in size to that required for the proposed project. It is anticipated that the construction workforce would commute to the project site from local communities. It is likewise assumed, as for the proposed project, that given the unemployment rate and vacant housing rate in unincorporated areas of Kern County, a sufficient workforce and housing would be available to accommodate any direct population growth induced by the proposed project. Therefore, impacts under Alternative 3 would be similar compared to the proposed project.

Public Services

Similar to the project, construction of Alternative 3 would result in a number of construction workers on the project site and increased fire service demands would occur during construction of this alternative. However, Alternative 3 would be required to implement **Mitigation Measure MM 4.14-1** (refer to Section 4.14 Hazards and Hazardous Materials) which would require the preparation of a fire safety plan. During operation, the project site would not require any additional employees to be on-stie on a permanent basis. Implementation of Mitigation Measure MM 4.14-1 would also reduce fire risks on-site during operation of the Reduced Size Alternative. Impacts related to fire protection would be less than significant with mitigation.

With regard to law enforcement protection, the project site would be located in a relatively remote location. As with the proposed project, the increase in traffic associated with Alternative 3 would be temporary and thus would not have a significant adverse effect on the KCSO protective service provision or CHP's ability to patrol the highways. In addition, security fencing would be installed around the perimeter of the project site. During operation of this alternative, the additional volume of vehicles associated with workers commuting to the project site during routine maintenance would be minor and is not expected to adversely affect traffic. Therefore, impacts to the CHP patrol are not anticipated.

Furthermore, Alternative 3 would similarly implement **Mitigation Measures MM 4.14-1** and **MM 4.14-2**, requiring coordination with the County of Kern to pay necessary sales and use taxes, as well as make efforts to hire 50 percent of its workforce from the local communities. However, based on the above, impacts would be less than significant under this alternative following implementation of similar mitigation measures proposed for the project. Impacts related to public services would be similar compared to the project.

Recreation

Similar to the proposed project, it is assumed the construction workforce would commute to the project site each day from local communities under Alternative 3. As a result, Alternative 3 would similarly not induce an increase in resident population that would result in increased uses of existing neighborhood or regional parks or other recreational facilities. Alternative 3 would likewise also not include residences and would therefore not induce a substantial population increase. Impacts would be less than significant and similar to the proposed project.

With regard to the inclusion of the construction or expansion of recreational facilities, Alternative 3 would,

like the proposed project, consist of a warehouse facility and accompanying structures and would not include recreational facilities or require the construction or expansion of facilities. No impact would occur, and impacts would be similar to the proposed project.

Based on the above, impacts would be less than significant. Given that both the proposed project and Alternative 3 do not include residences or recreational facilities, impacts related to recreation would be similar compared to the project and less than significant.

Transportation and Traffic

Similar to the proposed Project, Alternative 3, would require similar construction trips for the construction of the warehouse and associated infrastructure., however it is anticipated that local traffic would not be significantly impacted with the addition of construction traffic generated under this alternative. During operation, it is impossible to determine the full effects of Alternative 3 without site-specific traffic and VMT analyses. As a result, it is conservatively assumed that impacts would be greater than the proposed project and considered to be significant and unavoidable.

With regard to consistency with *CEQA Guidelines* Section 15064.3(b), regulations regarding SB 743 compliance have not been finalized or adopted by the County. As discussed in the Traffic Study, the OPR Technical Advisory provides initial screening criteria thresholds of significance for the VMT evaluation based on land use. No specific recommendations are provided for industrial land use; therefore the proposed project Traffic Study classified the proposed project as an office land use. The industrial use was evaluated as an office project because, like office projects, most of the passenger vehicle trips are generated by employees.

As it relates to increasing hazards due to a geometric design feature or incompatible use, similar to the project, Alternative 3 would be required to implement **Mitigation Measures MM 4.16-1** through **MM 4.16-11**. Alternative 3 would conform to Kern County standards for site access and street design, impacts associated with increased hazards due to a design feature would be less than significant, similar to the proposed project. However, since Alternative 3 would maintain the same project characteristics, Alternative 3 would not result in lesser impacts than the proposed project.

With regard to emergency access, it is unknown whether the proposed project would cause a significant increase in congestion or worsen the exiting service levels at nearby intersection and roadway segments without a site-specific traffic analysis. However Alternative 3 would be required to comply with **Policy 6.1.1** and **6.1.2** of the Mojave Specific Plan, which ensure a circulation system that supports the types and intensities of land uses in the Mojave, as well as a roadway network that is consistent with the County's circulation grid policy. As a result, it is conservatively assumed that impacts would be similar to the proposed project.

Overall, impacts to hazards caused by geometric design features would be similar to the proposed project and less than significant. Since, Alternative 3 would maintain all characteristics of the proposed project. As such, it is reasonably assumed that Alternative 3 would have similar impacts to the proposed project, and considered to be less than significant with mitigation incorporated. However, cumulative impacts would remain significant and unavoidable, similar to the proposed project.

Tribal Cultural Resources

To convert the project site to industrial uses and construct a warehouse and associated infrastructure, this alternative would require surface level ground disturbance throughout the project site. Under Alternative 3, ground disturbance within the project site would be shallow and would be unlikely to result in potentially significant impacts to tribal cultural resources. This alternative would be required to implement similar mitigation measures as described in **Mitigation Measures 4.5-1** through **MM 4.5-4** (refer to Section 4.5, *Cultural Resources*) for the proposed project, as well as to adhere to all federal, state, and local regulations governing cultural resources, including California Penal Code, Section 622.5. Furthermore, Alternative 3 would be required to adhere to **Policy 7.2.1** and **7.2.2** which would preserve and expand historical and community resources. As such, impacts to cultural resources under Alternative 3 are assumed to be similar to the proposed project and result in impacts that are less than significant.

Utilities and Service Systems

As with the proposed project, the construction of a warehouse, distribution facility, and associated infrastructure would require water usage for dust suppression as well as minimal generation of wastewater, usage of electrical power, natural gas, and telecommunications. It is unknown the extent to which Alternative 3 would alter stormwater drainage in the absence of a specific site and site plan. However, as with the project, Alternative 3 would be required to implement **Mitigation Measure 4.10-2** and **MM 4.10-3** (refer to Section 4.10 *Hydrology and Water Quality*), which would require the preparation of an Erosion and Sedimentation Control Plan during construction, including BMPs designed to prevent the occurrence of soil erosion and discharge of other construction-related pollutants that could contaminate water quality. An increase in solid waste generation under Alternative 3 as compared to the proposed project is not anticipated. However, Alternative 3, would be required to implement **Mitigation Measure 4.18-6**, which would require the provisions of a recycling coordinator to ensure the separation and proper disposal of recyclable materials and solid waste during construction.

With regard to operations, Alternative 3 would generate similar water, wastewater, stormwater, electricity, solid waste, and telecommunications demands as the proposed project, implementation of **Mitigation Measures MM 4.10-2** and **MM 4.18-1** through **MM 4.18-6** under Alternative 3 would require the provision of a recycling coordinator to ensure the separation and proper disposal of recyclable materials and solid waste generated during project operation, similar to the proposed project.

The Alternative site is located in an area that is not an adjudicated water basin or is not a basin subject to the Groundwater Sustainability Management Act (GSMA). Impacts to water supply are, therefore, less than the project site in the San Joaquin Valley.

Alternative 3 would result in similar impacts to utilities and service systems compared to the proposed project, with regard to wastewater, stormwater, electricity, and solid waste utility providers in the area. Impacts would be less than the proposed project, and less than significant with mitigation incorporated.

Wildfire

As with the project, this alternative is not classified as being within a high fire hazard severity zone and is not anticipated to physically impede the existing emergency response plans, emergency vehicle access, or

personnel access to the site. Alternative 3 is anticipated to be located in a rural, sparsely developed area with limited population. Furthermore, the proposed project would be required to comply with **Policy 9.4.1** through **9.4.4** of the Mojave Specific Plan, which ensure that new development does not degrade fire and law enforcements service levels. Although, the specific Alternative Site is not known, Alternative 3 is not anticipated to be located along an identified emergency evacuation route or in any identified adopted emergency evacuation plan. As such, is it conservatively assumed that impacts regarding the impairment of an adopted emergency response plan or emergency evacuation plan would be similar to the proposed project, and less than significant.

Alternative 3 is designated as LRA Unzoned, which are considered areas with low fire frequency. The potential for wildfire on the project site is not considered high. Similar to the project, Alternative 3 would be required to implement **Mitigation Measures MM 4.9-13** (refer to Section 4.9 *Hazards and Hazardous Materials*), requiring the development and implantation of a fire safety plan for use during construction and operation, which would further reduce the fire risks on-stie. As such, impacts under this alternative related to exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be less than significant.

With regard to the installation or maintenance of associated infrastructure, the proposed project would construct new internal roads from the existing road network to the proposed project that would act as access roads in the event of an emergency. A new substation would be located on-site and would provide power generation for the proposed project.

However, without a specific alternative site and knowledge of the existing drainage patterns, it is unknown if and to what extent Alternative 3 would impact existing drainage patterns. However, Alternative 3 would be required to implement a sedimentation Stormwater Pollution Prevention Plan and drainage plan as outlined in **Mitigation Measures MM 4.10-1** and **MM 4.10-2** (Refer to Section 4.10 *Hydrology and Water Quality*) in order to minimize or manage flow concentration and changes in flow depth or velocity so as to minimize erosion, sedimentation, and flooding on- or off-site. As such, similar to the project, the Reduced Size Alternative would not include significant risks related to downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Overall, it is assumed that Alternative 3 would result in less than significant wildfire impacts, similar to the proposed project, due to the low probability of Alternative 3 impairing an emergency evacuation route or being in any adopted emergency evacuation plan. Impacts to wildfire under Alternative 3 would be less than significant, and similar to the proposed project.

Comparison of Impacts

Alternative 3 would potentially result in less or similar impacts for a majority of the environmental issue areas. Notably, Alternative 3 would reduce the significant and unavoidable impacts of agricultural and forestry resources to a less than significant level. However, this alternative would not eliminate significant and unavoidable impacts associated with aesthetics (project and cumulative), air quality (project and cumulative), GHG emissions (project and cumulative), hydrology and water quality (cumulative only), noise (cumulative only), population and housing (project and cumulative) transportation and traffic (cumulative only).

Relationship to Project Objectives

Alternative 3 would achieve all of the project objectives listed above in *Section 6.2,* including the project objective related to assisting California in meeting its GHG emissions reduction goals and supporting California's Renewable Portfolio Standards Program. This alternative would be a similar visually industrial project that maximizes land use intensity and contributes to the local economy, improves circulation through the construction of new roads and improvements of existing roads, and would be sited in a location that minimizes conflicts with residential, conservation, and agricultural uses. As such, Alternative 3 would achieve all project goals listed above in *Section 6.2* and would reduce environmental impacts as well.

6.8 Environmentally Superior Alternative

As presented in the comparative analysis above, and as shown in **Table 6-2**, *Comparison of Alternatives*, there are a number of factors in selecting the environmentally superior alternative. An EIR must identify the environmentally superior alternative to the project. Alternative 1, the No Project Alternative, would be environmentally superior to the proposed project on the basis of its minimization or avoidance of physical environmental impacts. However, *CEQA Guidelines* Section 15126.6(e)(2) states:

> *The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.*

Because the No Project Alternative cannot be the Environmentally Superior Alternative under CEQA, the Environmentally Superior Alternative is considered to be Alternative 3: Alternative Location – Eastern kern County. This alternative would avoid one significant impact associated with the proposed project, specifically for agricultural and forestry resources. However, this alternative would not avoid the other significant impacts of many cumulative impacts. This alternative would result in less impacts to aesthetics, agricultural and forestry resources, air quality, greenhouse gas emissions, hydrology and water quality, and utilities and service systems.

Chapter 7

Response to Comments

Chapter 7

Response to Comments

This chapter is being reserved for, and will be included with, the Final EIR.

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Chapter 8

Organizations and Persons Contacted

Chapter 8

Organizations and Persons Contacted

8.1 Federal

- Federal Aviation Administration
- United States Air Force
- United States Army
- United States Army Corps of Engineers
- United States Department of Agriculture, Natural Resources Conservation Science
- United States Fish and Wildlife Service
- United States Bureau of Land Management
- United States Environmental Protection Agency Region IX
- United States Fish and Wildlife Services
- United States Marine Corps
- United States Navy
- United States Postal Service

8.2 State of California

- California Air Resources Board
- California Department of Conservation
- California Department of Fish and Wildlife
- California Department of Resources, Recycling, and Recovery
- California Department of Transportation, District 6
- California Department of Water Resources
- California Regional Water Quality Control Board, Central Valley Region
- California State Clearinghouse
- California State University, Bakersfield
- Native American Heritage Commission
- State Water Resources Control Board

8.3 Regional and Local

- City of Arvin
- City of Bakersfield Planning Department
- City of Bakersfield Public Works Department
- Ventura County RMA Planning Division
- South San Joaquin Valley Arch Info Center
- Kern County Agriculture Department

- California City Planning Department
- Delano City Planning Department
- City of Maricopa
- City of McFarland
- City of Ridgecrest
- City of Shafter
- City of Taft
- City of Tehachapi
- City of Wasco
- Inyo County Planning Department
- Kings County Planning Agency
- Los Angeles County Regional Planning Department
- San Bernardino County Planning Department
- San Luis Obispo County Planning Department
- Santa Barbara County Resource Management Department
- Tulare County Planning & Development Department
- Shafter Parks & Rec Department
- North of the River Rec & Parks District
- Rosedale-Rio Bravo Water District
- Kern Mosquito Abatement District
- Bakersfield Municipal Airport
- California City Airport
- Delano City Planning Department
- Minter Field Airport District
- Mojave Airport
- East Kern Airport District
- East Kern Airport District Engineer
- Kern County Airports Department
- Kern County Administrative Officer
- Kern County Public Works Department/Building & Development
- Kern County Environmental Health Services Department
- Kern County Fire Department
- Kern County Library/Beale
- Kern County Museum
- Kern County Sheriff's Department
- Kern County Public Works Department
- Wasco Union High School District
- Kern High School District
- Kern County Superintendent of Schools
- KernCOG
- Local Agency Formation Comm/LAFCO
- Cawelo Water District
- Oildale Mutual Water Co
- Kern County Water Agency
- Sierra Club/ Kern Kaweah Chapter
- Southern California Gas Co
- Southern California Gas Co Transportation Department
- Joyce LoBasso
- Leadership Council for Justice & Accountability
- Mojave Foundation
- Northcutt and Associates
- Thomas Roads Improvement Program
- A E Corporation
- California Resources Corporation
- Lozeau Drury

- Northcutt and Associates
- Mountain Valley Airport
- Aero Sports Skypark Corporation
- Roasamond Skypark/Airport
- Tehachapi City Hall/Airport
- AT&T California
- Kern Audubon Society
- Los Angeles Audubon
- Center on Race, Poverty & The Environment
- Defenders of Wildlife
- California Farm Bureau
- Native American Heritage Council of Kern County

8.4 Other

- Big Pine Paiute Tribe of the Owens Valley
- Chumash Council of Bakersfield
- David Laughing Horse Robinson
- Kern Valley Indian Council
- Kitanemuk and Yowlumne Tejon Indians
- Lone Pine Paiute-Shoshone Reservation
- Native American Heritage Council of Kern County
- San Fernando Band of Mission Indians
- Santa Rosa Rancheria
- Tejon Indian Tribe
- Tubatulabals of Kern County
- Tule River Indian Tribe

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Chapter 9

List of Preparers

Chapter 9
List of Preparers

9.1 Lead Agency

Kern County Planning and Natural Resources Department

Lorelei H. Oviatt, AICP – Director

Craig M. Murphy – Assistant Director

Katrina A. Slayton – Advanced Planning Division Chief

9.2 Technical Assistance

Rincon Consultants, Inc.

Deanna Hansen– Principal-in-Charge

Danielle Griffith – Director

Greg Martin – Project Manager

Justin Ramsthaler – Planning Analyst

Rachel Irvine – Planning Analyst

Yasaman Samsamshariat – Planning Analyst

Gina Gerlich – GIS Analyst

Alvin Flores – Publishing

Yari Rameriez – Publishing

Ascent

Water Supply Assessment

Bollard Acoustical Consultants, Inc.

Environmental Noise & Vibration Assessment

Hudlow Cultural Resource Associates

Cultural Resources Report

Krazan & Associates, Inc.

Geotechnical Feasibility Study

McIntosh & Associates

Farmland Conversion Study

Energy Study

Hazardous Materials Evaluation Report

Mesa Biological, LLC

Biological Resources Report

Ruettgers & Schuler

Traffic Study

Trinity Consultants

Air Quality and Greenhouse Gas Study

VisionScape Imagery

Visual Simulation

Chapter 10

Bibliography

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Bibliography

Air & Waste Management Association. 2006. Health Effects of Fine Particulate Air Pollution: Lines that Connect. Volume 56, June 2006.

AMBIENT Air Quality and Noise Consulting. 2017. Air Quality and Greenhouse Gas Impact Analysis for the Proposed Kern County Warehouse Project. February 2017.

Ascent Environmental. 2023. Water Supply Assessment SCH# 2019060111 Malibu Vineyards Industrial Parkway Project.

ASTM International (ASTM). 2021. ASTM E 1527-21, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. https://www.astm.org/e1527-21.html. Accessed November 2023.

Baldwin, B., D. Goldman, D. Keil, R. Patterson, and T. Rosatti (editors). 2012. The Jepson Manual: Vascular Plants of California. 2nd Ed. Berkeley, California: University of California Press.

Beardsley School District (BSD). 2024. Beardsley School District Homepage. https://www.beardsleyschool.org/. Accessed March 2024.

Bollard Acoustical Consultants, Inc. 2021. Environmental Noise & Vibration Assessment: Malibu Vineyards Rezone Project – Phases 1 & 2.

California Air Pollution Control Officers Association (CAPCOA). 2009. Health Risk Assessments for Proposed Land Use Projects.

2019. What is Nitrogen Oxide. http://www.capcoa.org/health-effects/#What_is_Nitrogen_Oxide. Accessed January 2022.

California Air Resources Board (CARB) and American Lung Association of California. 2007. Recent Research Findings: Health Effects of Particulate Matter and Ozone Air Pollution, November 2007.

California Air Resources Board (CARB). 2005. Air Quality and Land Use Handbook: A community Health Perspective. http://www.aqmd.gov/docs/default-source/ceqa/handbook/california-air-resources-board-air-quality-and-land-use-handbook-a-community-health-perspective.pdf. Accessed February 2022.

———. 2008. Climate Change Scoping Plan. December 2008. https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed June 2016.

———. 2014. First Update to the Climate Change Scoping Plan. https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed June 2016.

———. 2008. Climate Change Scoping Plan. December 2008. https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed in June 2016.

———. 2015. Ambient Air Quality Standards. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed April 2016.

———. 2018a. AB 32 Global Warming Solutions Act of 2006. https://ww2.arb.ca.gov/resources/fact-sheets/ab-32-global-warming-solutions-act-2006. November 2020.

———. 2022. Sulfate and Health. https://ww2.arb.ca.gov/resources/sulfate-and-health. Accessed February 2023.

California Building Standards Commission (CBSC). 2016. California Building Standards Code (California Code of Regulations, Title 24). http://www.bsc.ca.gov/Codes.aspx. Accessed June 2017.

California Climate Change Center. 2012. Our Changing Climate 2012. http://www.energy.ca.gov/2012publications/CEC-500-2012-007/CEC-500-2012-007.pdf. Accessed June 2016.

California Department of Conservation (DOC). 2000. A General Location Guide for Ultramafic Rocks in California- Areas More Likely to Contain Naturally Occurring Asbestos. https://www.arb.ca.gov/toxics/asbestos/ofr_2000-019.pdf. Accessed February 2022.

———. 2006. Williamson Act Questions and Answers. http://www.conservation.ca.gov/dlrp/lca/Documents/WA%20fact%20sheet%2006.pdf. Accessed December 2017.

———. 2016. Farmland Mapping and Monitoring Program Important Farmland Map. ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/ker16_w.pdf. Accessed December 2017.

———. 2017. California Sustainable Agricultural Lands Conservation Program. Draft Program Guidelines, Funded by the Greenhouse Gas Reduction Fund. http://www.conservation.ca.gov/dlrp/SALCP/Documents/DRAFT%20FY2016%20SALCP%20Guidelines_2%207%202017.pdf. Accessed December 2016.

———. 2020. Farmland Mapping and Monitoring Program, Kern County, Important Farmland Data Availability, Historic Land Use Conversion 2004-Present. www.conservation.ca.gov/dlrp/fmmp/Pages/Kern.aspx. Accessed December 12, 2023.

———. 2022. California Important Farmland Finder. www.conservation.ca.gov/dlrp/fmmp/Pages/Kern.aspx. Accessed June 2024.

———. 2023. Williamson Act Program Overview. https://www.conservation.ca.gov/dlrp/wa/Pages/wa_overview.aspx. Accessed June 2024.

California Department of Conservation, California Geological Survey (CGS). 2010. Geologic Map of California – 2010. https://maps.conservation.ca.gov/cgs/DataViewer/. Accessed November 2022.

California Department of Conservation, Division of Land Resource Protection (DLRP). 2015. California Farmland Conversion Report 2015. http://www.conservation.ca.gov/dlrp/fmmp/Documents/fmmp/pubs/2010-2012/FCR/FCR%202015_complete.pdf. Accessed June 2016.

———. 2023. Historic Land Use Conversion 2018 to present. https://www.conservation.ca.gov/dlrp/fmmp/Documents/fmmp/pubs/1984-present/ker_1988-Present.xlsx. Accessed June 2024.

California Department of Conservation, Division of Mines and Geology (CDMG). 2015. Official Earthquake Fault Zones Map. http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps. Accessed January 2016.

California Department of Finance (DOF). 2022. Total Population Projections for California and Counties: July 1, 2020 to 2060 in 5-year Increments. https://dof.ca.gov/Forecasting/Demographics/projections/. Accessed November 2023.

———. 2023. Total Population Projections for California and Counties. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/. Accessed June 2024.

———. 2023a. New State Population Report, E-1: City/County/State Population Estimates with Annual Percent Change January 1, 2015 and 2016. California Department of Finance Demographic Research Unit. https://dof.ca.gov/forecasting/demographics/estimates-e1/. Accessed November 2023.

———. 2023b. New State Population Report, Table 2: E-5 City/County Population and Housing Estimates, 1/1/2023. California Department of Finance, Demographic Research Unit. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/. Accessed November 2023.

California Department of Fish and Wildlife (CDFW). 2010. California Habitat Connectivity Project. http://www.dfg.ca.gov/biogeodata/bios/. Accessed November 2022.

2020. California Natural Diversity Database (CNDDB): Nine quad query for Lost Hills Quadrangle and eight surrounding quads. http://www.dfg.ca.gov/biogeodata/bios/. Accessed October 2022.

———. 2022a. Special Animals List. http://www.dfg.ca.gov/wildlife/nongame/list.html. Accessed October 2022.

———. 2022b. Special Vascular Plants, Bryophytes, and Lichens List. http://www.dfg.ca.gov/wildlife/nongame/list.html. Accessed October 2022.

California Department of Forestry and Fire Protection (CAL FIRE). 2023b. Incident Map. https://www.fire.ca.gov/incidents. Accessed March 2024.

———. 2023c. Fire and Resource Assessment Program GIS Mapping and Data Analytics. https://www.fire.ca.gov/Home/What-We-Do/Fire-Resource-Assessment-Program/GIS-Mapping-and-Data-Analytics. Accessed March 2024

———. 2024. Fire Hazard Severity Zones Viewer: Kern County. https://egis.fire.ca.gov/FHSZ/. Accessed November 2023.

California Department of Housing and Community Development (HCD). 2023. State Housing Element Law Overview. https://www.hcd.ca.gov/planning-and-community-development/housing-elements. Accessed November 2023.

California Department of Parks and Recreation. 2023. GIS. https://csparks.maps.arcgis.com/apps/webappviewer/index.html?id=f96a883ff4154455b23bdc119f4574a9. Accessed December 2023.

California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. (CT-HWANP-RT-13-069.25.2) https://www.dtsc-ssfl.com/files/lib_ceqa/ref_draft_peir/Chap4_10-Noise/Caltrans_2013a_Tech_Noise_Supplement.pdf. Accessed January 2022.

———. 2014. Kern 46/99 Separation Bridge Replacement Project Initial Study with Negative Declaration. July 2014. http://dot.ca.gov/d6/environmental/envdocs/d6/sr46-99_separation_bridge_replacement_20140729.pdf. Accessed June 2016.

———. 2016. California Scenic Highway Mapping System: Kern County. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed March 2016.

———. 2020. Transportation and Construction Vibration Guidance Manual. April 2020. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed December 2022.

———. 2023. California Scenic Highway Mapping System. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed November 2023

———. 2023. Centennial Corridor Southbound State Route 99 and Westbound State Route 58 Connector. https://dot.ca.gov/caltrans-near-me/district-6/district-6-projects/06-48468. Accessed November 2023.

California Department of Water Resources (DWR). 2006. San Joaquin Valley Groundwater Basin Kern County Subbasin. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/5_022_14_KernCountySubbasin.pdf. Accessed December 2022.

California Employment Development Department (EDD). 2024a. Bakersfield Metropolitan Statistical Area (MSA) (Kern County) Industry Employment and Labor Force. https://labormarketinfo.edd.ca.gov/file/lfmonth/bake$pds.pdf. Accessed March 2024.

———. 2024b. California Employment Department Homepage. https://edd.ca.gov/. Accessed March 2024.

California Energy Commission (CEC). 2015. 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf. Accessed June 2016.

California Geological Survey (CGS). 1975. Geologic Map of California: Olaf P. Jenkins Edition – Bakersfield Sheet. Third Printing 1975. http://ngmdb.usgs.gov/Prodesc/proddesc_477.htm. Accessed October 2016.

———. 2016. Alquist-Priolo Earthquake Fault Zoning Map. CGS Information Warehouse: Regulatory Maps. http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps. Accessed April 2016.

California Governor's Office of Emergency Services. 2021. HazMat Business Plan. https://www.caloes.ca.gov/individualsfamilies/hazardous-materials/hazmat-business-plan. Accessed November 2023.

California Highway Patrol (CHP). 2022. California Highway Patrol Central Division Offices. https://www.chp.ca.gov/find-an-office/central-division/offices. Accessed November 2023.

California Native Plant Society (CNPS). 2022. Rare Plant Inventory Database Results: Nine quad query for Lost Hills Quadrangle and eight surrounding quads. http://www.rareplants.cnps.org/. Accessed October 2022.

California Office of Historic Preservation (OHP). 1992. California Points of Historical Interest. http://ohp.parks.ca.gov/?page_id=21750. Accessed October 2016.

California Office of Historic Preservation (OHP). 1990. California Historical Landmarks by County – Kern. http://ohp.parks.ca.gov/?page_id=21423. Accessed October 2016.

California State University, Stanislaus. 2002. Endangered Species Recovery Program, Endangered Species Profiles: Species Featured in Recovery Plan for San Joaquin Valley Arid Upland and Riparian Communities. Turlock, California: California State University, Stanislaus, Endangered Species Recovery Program. http://esrp.csustan.edu/speciesprofiles/. Accessed November 2022.

CalRecycle. 2023a. Frequently Asked Questions. https://calrecycle.ca.gov/recycle/commercial/faq/. Accessed March 2024.

———. 2023b. SWIS Facility/Site Activity Search. https://www2.calrecycle.ca.gov/SolidWaste/Activity. Accessed March 2024.

Cao, T., W. Bryant, B. Rowshandel, D. Branum, and C. Wills. 2003. The Revised 2002 California Probabilistic Seismic Hazard Maps. Appendix A, 2002 California Fault Parameters. http://www.conservation.ca.gov/cgs/rghm/psha/fault_parameters/pdf/Documents/a_flt.pdf. Accessed December 2017.

Center for Disease Control and Prevention (CDC). 2020a. Symptoms of Coronavirus. https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html. Accessed June 2020.

———. 2020b. How COVID-19 Spreads. https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html. Accessed June 2020.

Central Coast Transportation Consulting (CCTC). 2016. Kern County Warehouse Transportation Impact Study. Prepared for SWCA Environmental Consultants. November 2016.

City of Bakersfield. 2002. Metropolitan Bakersfield General Plan. https://content.civicplus.com/api/assets/37a2e20d-e610-431f-a222-9f4f2ecd2ddd#:~:text=The%20general%20plan%20is%20a,economic%2C%20social%20and%20environmental%20goals. Accessed February 2024

———. 2007. Isabella Dam Break: Peak Inundation Depth Map. http://esps.kerndsa.com/images/pdf/flood/Main_Dam_Full_Peak_Inundation_Depth_Full_Study_View.pdf. Accessed May 2016.

Congress. 2018. Public Law No: 115-307. https://www.congress.gov/bill/115th-congress/senate-bill/1768#:~:text=This%20bill%20amends%20the%20Earthquake,recover%20from%2C%20and%20adapt%20to. Accessed February 2024

County Office. 2022. Post Offices in Kern County. https://www.countyoffice.org/ca-kern-county-post-office/. Accessed December 2022.

Federal Emergency Management Agency (FEMA). 2008. Flood Insurance Rate Map (FIRM) Number 06029C1200E. Effective Date: September 26, 2008. https://msc.fema.gov/portal/search?AddressQuery=Lost%20Hills%2C%20CA#searchresultsanchor. Accessed January 2016.

———. 2021. FEMA Flood Map Service Center. https://msc.fema.gov/portal/search. Accessed December 2022.

———. 2024. FEMA Flood Map Service Center. https://msc.fema.gov/portal/search?AddressQuery=Malibu%20Vineyards. Accessed March 2024.

Federal Highway Administration (FHWA). 2015. Guidelines for the Visual Impact Assessment of Highway Projects. https://www.environment.fhwa.dot.gov/guidebook/documents/VIA_Guidelines_for_Highway_Projects.asp. Accessed May 2016.

Federal Transportation Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf Accessed December 2021.

Fierro, Maria A., et al. 2001. Adverse Health Effects of Exposure to Ambient Carbon Monoxide, September 2001.

Garcia and Associates. 2006. Kern County Valley Floor Habitat Conservation Plan. https://psbweb.co.kern.ca.us/planning/pdfs/vfhcp_dec06.pdf

Governor's Office of Planning and Research. 1998. CEQA: The California Environmental Quality Act. State of California Governor's Office of Planning and Research, Sacramento, California. http://resources.ca.gov/ceqa/. Accessed July 2014.

———. 2005. Tribal Consultation Guidelines, Supplement to General Plan Guidelines. https://www.parks.ca.gov/pages/22491/files/tribal_consultation_guidelines_vol-4.pdf. Accessed October 2016.

Haro Environmental. 2016. Phase I Environmental Site Assessment for the Highway 46 Warehouse Project in Kern County, California. Prepared for Kern County Planning and Natural Resources Department. April 7, 2016.

Harvard. 2020. Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study. https://projects.iq.harvard.edu/covid-pm. Accessed June 2020.

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Sacramento, California: California Department of Fish and Game.

Holshue et al. 2020. First Case of 2019 Novel Coronavirus in the United States, March 5, 2020. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7092802/. Accessed June 2020.

Intergovernmental Panel on Climate Change (IPCC). 2001. Working Group II Impacts, Adaptation, and Vulnerability. https://www.ipcc.ch/working-group/wg2/?idp=326. Accessed February 2022.

———. 2023. Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (Eds.)]. IPCC, Geneva, Switzerland. First. Intergovernmental Panel on Climate Change (IPCC). doi:10.59327/IPCC/AR6-9789291691647.

International Conference of Building Officials (ICBO). 1994. Uniform Building Code. http://digitalassets.lib.berkeley.edu/ubc/UBC_1994_v2.pdf. Accessed January 2016.

KCFD Office of Emergency Services. 2020. Kern Multi-Jurisdiction Hazard Mitigation Plan. https://mitigatehazards.com/county-of-kern/kern-hmp-docs/

Kern Council of Governments (Kern COG). 2009a. Kern County General Plan. Kern County Planning Department. https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed November 2023.

———. 2010. Regional Transportation Facilities List - FY 2008-2035 Metropolitan Bakersfield Transportation Impact Fee Program. https://www.kerncog.org/wp-content/uploads/2021/01/Transportation_Impact_Fees_Kern.pdf.

———. 2016b. County of Kern 2015–2023 Housing Element Update. Resolution No. 2016-088. https://psbweb.co.kern.ca.us/planning/pdfs/he/KCHE_2015-2023.pdf. Accessed April 2016.

———. 2022. Kern Council of Governments Conformity Analysis for the 2023 Federal Transportation Improvement Program (FTIP) and 2022 Regional Transportation Plan (RTP), November 16. https://www.kerncog.org/wp-content/uploads/2022/08/Kern_2022_2023_FTIP-RTP_Conformity.pdf. Accessed January 2023.

———. 2022a. Regional Housing Needs Allocation Plan. https://www.kerncog.org/wp-content/uploads/2022/06/Final-Draft-RHNA-Plan_06-28-22.pdf. Accessed November 2023.

———. 2022b. 2022 Regional Transportation Plan/Sustainable Communities Strategy. https://www.kerncog.org/wp-content/uploads/2022/12/2022_RTP.pdf. Accessed November 2023.

Kern County. 1978. Lost Hills General Plan. Kern County Planning Commission. http://www.co.kern.ca.us/planning/pdfs/SPs/lost_hills_gp.pdf. Accessed February 2016.

———. 1985. The Kern River Plan Element, An Integral Part of the Kern County General Plan. https://content.civicplus.com/api/assets/4670305f-5c18-4e95-b467-3fd2401afa55?cache=1800 Accessed December 2022.

———. 2002. Metropolitan Bakersfield General Plan. https://content.civicplus.com/api/assets/37a2e20d-e610-431f-a222-9f4f2ecd2ddd. Accessed November 2023.

———. 2006. Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports. http://www.kernair.org/Documents/CEQA/AirQualityAssessmentPreparationGuidelines.pdf. Accessed July 2022.

———. 2007. Metropolitan Bakersfield General Plan. https://psbweb.kerncounty.com/planning/pdfs/mbgp/mbgp_complete.pdf. Accessed November 2023.

———. 2009. Kern County General Plan. https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed December 2022.

———. 2009a. Kern County General Plan. Kern County Planning Department. http://pcd.kerndsa.com/planning/planning-documents/general-plans. Accessed February 2016.

———. 2011. County of Kern Airport Land Use Compatibility Plan. https://www.co.kern.ca.us/planning/pdfs/ALUCP2011.pdf. Accessed December 2021.

———. 2012. Airport Land Use Compatibility Plan. https://psbweb.co.kern.ca.us/planning/pdfs/ALUCP2012.pdf. Accessed December 2021.

———. 2015. Title 19, Zoning Ordinance. http://www.co.kern.ca.us/planning/pdfs/KCZODec15.pdf. Accessed February 2016.

———. 2018. 2018 Regional Transportation Plan and Sustainable Communities Strategy. https://www.kerncog.org/wp-content/uploads/2018/10/2018_RTP.pdf. Accessed December 2021.

———. 2021. Kern County GIS. https://maps.kerncounty.com/H5/index.html?viewer=KCPublic. Accessed December 2021.

———. 2022a. Kern County Agricultural Crop Report. http://www.kernag.com/caap/crop-reports/crop-reports.asp.

———. 2022b. Kern Multi-Jurisdictional Hazard Mitigation Plan. https://mitigatehazards.com/county-of-kern/. Accessed November 2023.

———. 2022c. Lake Isabella Flood Area. https://kernpublicworks.com/building-and-code/floodplain-management/lake-isabella-flood-area/. Accessed December 2022.

———. 2023. Municipal Code. https://library.municode.com/ca/kern_county/codes/code_of_ordinances?nodeId=TIT13PAREARPUPL_CH13.04USREGE. Accessed December 2023.

Kern County Fire Department (KCFD). 2009. Wildland Fire Management Plan. https://www.dropbox.com/s/wzoxztjz83nezpt/Kern%20County%20Fire%20Department%20Wildland%20Fire%20Management%20Plan.pdf?dl=0 Accessed November 2023.

———. 2021. Kern County Fire Department 2021 Annual Report. https://kerncountyfire.org/wp-content/uploads/2021-Annual-Report.pdf. Accessed November 2023.

———. 2022. Kern County Fire Department 2021 Strategic Fire Plan. https://osfm.fire.ca.gov/media/rl1j40en/2022-kern-county-unit-fire-plan.pdf. Accessed March 2024.

———. 2022b. Kern County Wildfire Protection Plan. https://kerncountyfire.org/wp-content/uploads/Kern-CWPP_final_combined_11March2022.pdf. Accessed March 2024.

———. 2023. Department Profile. https://kerncountyfire.org/about-kcfd/. Accessed November 2023.

Kern County Library. 2022. Kern County Library Homepage. https://kerncountylibrary.org/. Accessed November 2023.

Kern County Office of Emergency Services (OES). 2021. Kern Multi Jurisdiction Hazard Mitigation Plan Comprehensive Update. https://www.dropbox.com/s/qkzvw49poktpgb0/Kern-MJHMP-VOL-1.pdf?dl=0. Accessed November 2023.

———. 2022. Kern County Emergency Operations Plan. https://www.kerncounty.com/community/emergency/emergency-operations-plan. Accessed November 2023.

Kern County Parks and Recreation. 2010. Parks and Recreation Masterplan. https://www.kerncounty.com/home/showpublisheddocument/2148/637127126894370000. Accessed December 2023.

———. 2023. Parks and Recreation Website. https://www.kerncounty.com/government/parks. Accessed December 2023.

———. 2024. Kern County Neighborhood Parks Homepage. https://www.kerncounty.com/government/parks/facilities/neighborhood-parks. Accessed March 2024.

Kern County Public Health Department (Kern County Public Health). 2023. Emergency Medical Services Homepage. https://kernpublichealth.com/ems-services-and-certification/. Accessed November 2023.

Kern County Sheriff's Office (KCSO). 2024. Kern County Sheriff's Office Homepage. http://www.kernsheriff.org/. Accessed November 2023.

Kern Economic Development Corporation (KEDC). 2023. 2023-Market-Overview-and-Member-Directory. https://kernedc.com/wp-content/uploads/2024/01/AC8918-KEDC-2023-Market-Overview-and-Member-Directory-DIGITAL-6.pdf

Kern Groundwater Authority (KGA). 2022. Groundwater Sustainability Plan.https://kerngwa.com/wp-content/uploads/2022/07/kga-amended-gsp-submitted-july-2022.pdf. Accessed June 2023.

Kern High School District (KHSD). 2024. Kern High School District's Homepage. https://www.kernhigh.org. Accessed March 2024.

McConnell, R., Berhane, K., Gilliland, F., London, S.J., Islam, T., Gauderman, W.J., Avol, E., Margolis, H.G., and J.M. Peters. 2012. Asthma in exercising children exposed to ozone: a cohort study. Lancet 359:386–91.

McIntosh and Associates. 2023. Hazardous Materials Evaluation Report.

Mojave Specific Plan. 2003. Mojave Specific Plan Final Environmental Impact Report. https://psbweb.kerncounty.com/planning/pdfs/SPs/mojave_SP.pdf

National Parks Service. 2023a. Antiquities Act of 1906. https://www.nps.gov/subjects/archeology/antiquities-act.htm#:~:text=An%20Act%20for%20the%20Preservation,scientific%20interest%20on%20federal%20lands. Accessed December 2016.

———.2023b. California Parks. https://www.nps.gov/state/ca/index.htm. Accessed December 2023.

———. 2023c. Historic Sites Act of 1935. https://www.nps.gov/subjects/archeology/historic-sites-act.htm#:~:text=The%20Historic%20Sites%20Act%20established,people%20of%20the%20United%20States.%E2%80%9D. Accessed December 2016.

———. 2023d. National Historic Preservation Act. https://www.nps.gov/subjects/historicpreservation/national-historic-preservation-act.htm#:~:text=The%20act%20established%20permanent%20institutions,the%20Secretary%20of%20the%20Interior. Accessed December 2016.

Natural Resources Conservation Service (NRCS). 1988. Soil Survey of Kern County, California Northwestern Part. U.S. Department of Agriculture, Soil Conservation Service. http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/CA666/0/kern.pdf. Accessed February 2016.

———. 2016. Web Soil Survey. http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed February 2016.

———. 2022. Web Soil Survey. U.S. Department of Agriculture, Soil Conservation Service. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed October 2022.

North of River Sanitary District. 2022. Treatment Plant Expansion Project Engineering Design. https://www.norsd.com/files/69c48be46/FINAL_RFQ_WWTP+Expansion_022222.pdf

———. 2023. Sanitary Sewer Master Plan. https://www.norsd.com/files/678aed6f8/NORSD+2023+Sewer+Master+Plan+reduced.pdf

Peters, A., D. Dockery, J.E. Muller, and M.A. Mittleman. 2001. Increased Particulate Air Pollution and the Triggering of Myocardial Infarction. Circulation 103:2810–2815. http://circ.ahajournals.org/content/103/23/2810. Accessed June 2016.

Pope, C. A. and D. W. Dockery. 2006. Health effects of fine particulate air pollution: lines that connect. Journal of the Air & Waste Management Association 56:709–742. http://www.tandfonline.com/doi/pdf/10.1080/10473289.2006.10464485?needAccess=true. Accessed June 2016.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009. Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf. Accessed June 2016.

———. 2012. Ambient Air Quality Standards and Valley Attainment Status. https://www.valleyair.org/aqinfo/attainment.htm. Accessed January 2016.

———. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf. Accessed November 2022.

———. 2015b. 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., California Supreme Court, Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno and Friant Ranch, L.P., Appeal from the Superior Court of California, County of Fresno, Case No. 11CECG00726, Filed April 2, 2015.

———. 2019. Record Setting Air Quality in 2019. https://www.valleyair.org/documents/achievements/2019.pdf. Accessed March 2024.

Shafter Recreation and Park District. 2023. Facilities. https://shafterrecreation.recdesk.com/Community/Facility. Accessed December 2023.

Sierra Forest Legacy 2008. National Forest Management Act (NFMA). https://www.sierraforestlegacy.org/FC_LawsPolicyRegulations/FPP_NFMA.php#:~:text=The%20National%20Forest%20Management%20Act,legality%20of%20clear%2Dcutting%20forests. Accessed December 2023.

South Coast Air Quality Management District (SCAQMD). 2014. High Cube Warehouse Trip Rate Study for Air Quality Analysis. http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/high-cube-warehouse. Accessed June 2016.

Southern California Earthquake Data Center (SCEDC). 2015. Significant Earthquakes and Faults: Fort Tejon Earthquake. http://scedc.caltech.edu/significant/forttejon1857.html. Accessed December 2015.

Stacker. 2022. Closest national parks to Bakersfield. https://stacker.com/california/bakersfield/closest-national-parks-bakersfield. Accessed December 2023.

State Water Resources Control Board (SWRCB). 2018. Draft California 2018 Integrated Report (303(d) List/305(b) Report) Supporting Information. https://www.waterboards.ca.gov/water_issues/programs/tmdl/2018state_ir_reports_draft/apx_c_state_factsheets/01329.shtml. Accessed December 2022.

Superior Court of California. 2024. Superior Court of California Homepage. https://www.kern.courts.ca.gov/general-information/locations-contact-info. Accessed March 2024.

SWCA Environmental Consultants (SWCA). 2022. Kern County, Community Wildfire Protection Plan. https://www.swca.com/sites/default/files/kern_cwpp.pdf

SWCA Wildfire Planning Services (SWCA). 2022. https://www.swca.com/services/climate-driven-services/wildfire-planning services#:~:text=The%20Kern%20County%20Community%20Wildfire,reduction%2C%20and%20fire%20response%20capabilities. Accessed November 2023.

U.S. Bureau of Land Management (BLM). 1986. BLM Handbook: Manual H-8410-1: Visual Resource Inventory. http://www.blm.gov/style/medialib/blm/wo/Information_Resources_Management/policy/blm_handbook.Par.31679.File.dat/H-8410.pdf. Accessed March 2016.

U.S. Census Bureau. 2002. Bakersfield Census Data. https://data.census.gov/profile/Bakersfield_city,_California?g=160XX00US0603526. Accessed July 2024.

U.S. Department of Agriculture (USDA). 2012. 2012 Census of Agriculture, Kern County. http://www.agcensus.usda.gov/Publications/2012/Online_Resources/County_Profiles/California/cp06029.pdf. Accessed February 2016.

U.S. Department of Agriculture, Soil Conservation Service. 1988. Soil Survey of Kern County, California Northwestern Part. http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/CA666/0/kern.pdf. Accessed February 2016.

U.S. Department of the Interior. 1995. National Register Bulletin Guidelines for Evaluating and Registering Archaeological Properties. https://www.nps.gov/nr/publications/bulletins/arch/pt4.htm. Accessed June 2016.

———. 2005. NPS Organic Act. https://www.doi.gov/ocl/nps-organicact#:~:text=The%20Organic%20Act%2C%20enacted%20in,with%20a%20resource%20protection%20goal. Accessed December 2023.

———. 2011. Archeology And Historic Preservation: Secretary of the Interior's Standards and Guidelines [As Amended and Annotated] Professional Qualifications Standards. https://www.nps.gov/history/local-law/arch_stnds_9.htm. Accessed October 2016.

U.S. Energy Information Administration (USEIA). 2006. 2003 Commercial Buildings Energy Consumption Survey: Building Characteristics Tables – Table B1..

U.S. Environmental Protection Agency (USEPA). 2007. Tulare Lake Basin Hydrology and Hydrography: A Summary of the Movement of Water and Aquatic Species. U.S. Environmental Protection Agency, Document Number 909R07002. https://www.epa.gov/sites/default/files/2018-05/documents/tulare-fullreport.pdf. Accessed December 2022.

———. 2012. Integrated Science Assessment for Lead (Third External Review Draft), November 2012. http://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=242655#Download. Accessed February 2022.

———. 2020a. Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2018. April 13, 2020.

———. 2020. Vinyl Chloride, updated in March 2020. https://www.epa.gov/sites/default/files/2020-05/documents/vinyl_chloride_march_26_2020.pdf. Accessed February 2022.

U.S. Fish and Wildlife Service (USFWS). 1967. 32 Federal Register 4001: Endangered Species List. https://ecos.fws.gov/docs/federal_register/fr18.pdf. Accessed November 2022.

———. 1998. Recovery Plan for Upland Species of the San Joaquin Valley, California. https://ecos.fws.gov/docs/recovery_plan/980930a.pdf. Accessed November 2022.

———. 2010a. Tipton kangaroo rat (Dipodomys nitratoides nitratoides): 5-year Review: Summary and Evaluation. https://ecos.fws.gov/docs/five_year_review/doc3228.pdf. Accessed November 2022.

———. 2010b. San Joaquin Kit Fox (Vulpes macrotis mutica): 5-year Review: Summary and Evaluation.: https://ecos.fws.gov/docs/five_year_review/doc3222.pdf. Accessed November 2022.

———. 2022a. Information for Planning and Conservation: Database Results for Malibu Vineyards Industrial Parkway Project. https://ecos.fws.gov/ipac/. Accessed October 2022.

———. 2022b. USFWS Critical Habitat Mapper. https://www.arcgis.com/home/item.html?id=2c2453ee613f47cdae9dbd0ed7939409. Accessed October 2022.

———. 2022c. National Wetlands Inventory Mapper. http://www.fws.gov/wetlands/Data/Mapper.html. Accessed October 2022.

U.S. Forest Service (USFS). 1995. Landscape Aesthetics: A Handbook for Scenery Management. http://www.fs.fed.us/cdt/carrying_capacity/landscape_aesthetics_handbook_701_no_append.pdf. Accessed March 2016.

———. 2023. Find A Forest. https://www.fs.usda.gov/ivm/. Accessed December 2023.

U.S. Geological Survey (USGS). 2015. Fault Hazards Map. http://earthquake.usgs.gov/hazards/qfaults/map/. Accessed January 2016.

United States Department of Agriculture (USDA). 2017. Census of Agriculture, County Profile, Kern County California. https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/California/cp06029.pdf. Accessed November 2022.

———. 2022. Land Capability Classification. https://efotg.sc.egov.usda.gov/references/Delete/2015-11-14/123_land_capability_10232014.pdf. Accessed November 2022.

United States Postal Service (USPS) 2024. Post Office Finder Homepage. https://about.usps.com/who/profile/history/postmaster-finder/post-offices-by-county.htm. Accessed March 2024.

University of California Museum of Paleontology (UCMP). 2016. UC Museum of Paleontology Specimens Query: Kern County. http://ucmpdb.berkeley.edu/cgi/ucmp_query2. Accessed October 2016.

University of California, Davis (UC Davis). 2022. California Water Indicators Portal. https://indicators.ucdavis.edu/cwip/huc/1803001208. Accessed December 2022.

Valley Fever Center for Excellence. 2010a. Consider the Diagnosis. http://vfce.arizona.edu/valley-fever-people/consider-diagnosis. Accessed February 2016.

———. 2022a. Initiate Management. http://vfce.arizona.edu/valley-fever-people/initiate-management. Accessed January 2023.

———. 2022b. Order the Right Tests. http://vfce.arizona.edu/valley-fever-people/order-right-tests. Accessed August 2022.

Valley Tech Ag Lab Services. 2012. Lab results for property soils. Prepared by Brian Blackwell.

Western Regional Climate Center (WRCC). 2016. Wasco, California (049452) Period of Record Monthly Climate Summary: 01/05/1901 to 01/20/2015. http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca9452. Accessed May 2024.

———. 2022. Wasco, California (049452) Period of Record Monthly Climate Summary: 01/05/1901 to 06/10/2016. http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca9452. Accessed November 2022.

Wheaton, R., A. Vaish, C.B. Crouse, and R. Guzman. 1979. Probabilistic Evaluation of the SSE Design Spectrum for a Nuclear Power Plant Site: A Case Study. https://repository.lib.ncsu.edu/bitstream/handle/1840.20/26795/K2-3.pdf?sequence=1&isAllowed=y. Accessed December 2017.