

CITY OF MERCED

City Council Chamber Merced Civic Center 678 W. 18th Street Merced, CA 95340

Meeting Agenda

Planning Commission

Wednesday, April 5, 2023

7:00 PM

City Council Chamber, 2nd Floor, Merced Civic Center, 678 W. 18th Street, Merced, CA 95340

NOTICE TO PUBLIC

WELCOME TO THE MEETING OF THE MERCED PLANNING COMMISSION

At least 72 hours prior to each regular Planning Commission meeting, a complete agenda packet is available for review on the City's website at www.cityofmerced.org or at the Planning Division Office, 678 W. 18th Street, Merced, CA 95340. All public records relating to an open session item that are distributed to a majority of the Commission will be available for public inspection at the Planning Division Office during regular business hours. The Planning Commission also serves as the Board of Zoning Adjustment and the Design Review/Historic Preservation Commission.

PUBLIC COMMENT: OBTAIN SPEAKER CARD FROM THE CLERK

Members of the audience who wish to address the Planning Commission are requested to complete a speaker card available at the podium against the right-hand side of the Council Chamber. Please submit the completed card to the Clerk before the item is called, preferably before the meeting begins. Speakers will be called up, 3 to 5 at a time, in the order in which the forms are received. Please use the microphone and state your name and city of residence for the record. For permits, licenses, and other entitlements, the applicant will be allowed 15 minutes (including rebuttal), the appellant/leader of the opposition will be allowed 15 minutes (including rebuttal), and all other speakers shall have 5 minutes each, unless the number of speakers is over 3, which in that case, comments shall be limited to 3 minutes each. For all other issues, for 3 or less speakers, 5 minutes each and for over 3 speakers, 3 minutes each shall be allotted. A timer clock is located above the City Council dais illuminating the remaining time. Once the buzzer sounds, please be courteous and conclude your remarks.

Material may be emailed to www.planningweb@cityofmerced.org and should be limited to 300 words or less. Please specify which portion of the agenda you are commenting on, for example, Item # or Oral Communications. Your comments will be presented to the Planning Commission at the appropriate time. Any correspondence received after 1 PM will be distributed to the Planning Commission and retained for the official record.

You may provide telephonic comments via voicemail by calling (209) 388-7390 by no later than 1 PM on the day of the meeting to be added to the public comment. Voicemails will be limited to a time limit of one (1) minute. Please specify which portion of the agenda you are commenting on, for example, Item #, Consent item #, or Oral Communications. Your comments will be played during the Planning Commission meeting at the appropriate time.

INDIVIDUALS WITH DISABILITIES

Accommodation for individuals with disabilities may be arranged by contacting the Planning Division at (209) 385-6858. Assisted hearing devices are available for meetings held in the Council Chamber.

A. CALL TO ORDER

- A.1. Moment of Silence
- A.2. Pledge of Allegiance to the Flag

B. ROLL CALL

C. ORAL COMMUNICATIONS

Members of the public who wish to speak on any matter not listed on the agenda may speak during this portion of the meeting and will be allotted 5 minutes. The Chairperson may, at their discretion, reduce the time to 3 minutes if there are more than 3 speakers, in order to accommodate as many speakers as possible. State law prohibits the Planning Commission from acting at this meeting on any matter raised during the public comment period. Members of the public who wish to speak on a matter that is listed on the agenda will be called upon to speak during discussion of that item. Please submit a Request to Speak card prior to the item being called.

D. CONSENT CALENDAR

Adoption of the Consent Calendar may be made with one motion of the Planning Commission provided that any Planning Commission member, individual, or organization may request removal of an item from the Consent Calendar for separate consideration. If a request for removal of an item from the Consent Calendar has been received, the item will be discussed and voted on separately. With Consent items, there is generally no staff presentation but staff is available for questions.

D.1 23-312 SUBJECT: Planning Commission Minutes of March 22, 2023

ACTION:

Approving and filing the Planning Commission Minutes of March 22, 2023

D.2 23-238 SUBJECT: Planning Commission Annual Attendance Report

ACTION

Reviewing and approving the Annual Attendance Report.

E. PUBLIC HEARINGS AND ACTION ITEMS

Members of the public who wish to speak on public hearings listed on the agenda will be heard when the Public Hearing is opened, except on Public Hearing items previously heard and closed to public comment. After the public has commented, the item is closed to further public comment and brought to the Commission for discussion and action. Further comment will not be received unless requested by the Commission.

E.1 23-227

SUBJECT: Vesting Tentative Subdivision Map #1322 and Minor Modification #22-01 for the Renaissance 154 Subdivision, initiated by Benchmark Engineering, on behalf of Likwid Asset Management, LLC, property owner. This application involves a request to subdivide 25.59 acres of land into 154 single-family lots ranging in size from 4,121 square feet to 9,663 square feet. The Minor Modification would allow six lots to be less than the minimum 4,400-square-foot lot size. This property is generally located north of Merced Avenue, approximately 1,300 feet east of Coffee Street and has General Plan designation of Low Density (LD) Residential and a Zoning designation of Residential Planned Development (RP-D) #56. **PUBLIC HEARING**

ACTION: Approve/Disapprove/Modify

1) Environmental Review #22-31 (Categorical

Exemption)

2) Vesting Tentative Subdivision Map #1322

3) Minor Modification #22-01

SUMMARY

The project site is located north of Merced Avenue, approximately 1,300 feet east of Coffee Street. The proposed subdivision would subdivide 25.59 acres of land into 154 single-family lots. The Minor Modification would allow six of the lots to be less than the minimum lot size of 4,400 square feet. Planning staff, along with other City staff, have reviewed the project and recommend approval subject to conditions.

RECOMMENDATION

Planning staff recommends that the Planning Commission approve Environmental Review #22-31 (Categorical Exemption), Vesting Tentative Subdivision Map #1322 "Renaissance 154," and Minor Modification #22-01, (including the adoption of the Draft Resolution) subject to the conditions in Exhibit A and the findings/considerations in Exhibit B of Draft Resolution #4108 at Attachment A.

E.2 23-289 SUBJECT: General Plan Amendment #22-05, Fahrens Creek Specific

Plan Amendment #5, Zone Change #432, Establishment of Residential Planned Development (RP-D) #78, and Vesting Tentative Subdivision Map #1326 initiated by ISEA International, property owner, for an approximately 10.76 acre parcel generally located on the south side of Cardella Road, between El Redonndo Drive and Horizons Avenue (1250 Cardella Road). The General Plan Amendment would change the General Plan land use designation from Office Commercial (CO)/Neighborhood Commercial (CN) to Low Density Residential (LD). The Fahrens Creek Specific Plan Amendment would change the land Plan designation for the Specific use from Office Commercial/Neighborhood Commercial to Low Density Residential. The Zone Change would change the Zoning designation from Planned Development (P-D) #50 to Residential Planned Development (RP-D) #78. The Vesting Tentative Subdivision Map would subdivide the parcel into 53 single-family lots, ranging in size from 5,000 square feet to 6,718 square feet, *PUBLIC HEARING*

ACTION PLANNING COMMISSION:

Recommendation to City Council

- 1) Environmental Review #22-50 (Negative Declaration)
- 2) General Plan Amendment #22-05
- 3) Fahrens Creek Specific Plan Amendment #5
- 4) Zone Change #432
- 5) Residential Planed Development (RP-D) #78

Approve/Disapprove/Modify:

- 1) Environmental Review #22-50 (Negative Declaration)
- 2) Tentative Subdivision Map #1326 (subject to City Council approval of General Plan Amendment #22-05, Fahrens Creek Specific Plan Amendment #5, Zone Change #432, and Establishment of Residential Planned Development (RP-D) #78)

CITY COUNCIL:

Approve/Disapprove/Modify:

- 1) Environmental Review #22-50 (Negative Declaration)
- 2) General Plan Amendment #22-05
- 3) Fahrens Creek Specific Plan Amendment #5
- 4) Zone Change #432
- 5) Establishment of Residential Planned Development (RP-D) #78

SUMMARY

The subject site is an undeveloped 10.76-acre lot located in Northwest Merced at 1250 Cardella Road. The subject site is generally located on the south side of Cardella Road, between El Redondo Drive and Horizons Avenue (Location Map at Attachment C). The General Plan Amendment would change the General Plan land use designation from Office Commercial (CO)/Neighborhood Commercial (CN) to Low Density Residential (LD). The Fahrens Creek Specific Plan Amendment would Specific Plan land designation change the use from Office Commercial/Neighborhood Commercial to Low Density Residential. The Zone Change would change the Zoning designation from Planned Development (P-D) #50 to Residential Planned Development (RP-D) #78. The Tentative Subdivision Map would subdivide the parcel into 53 single-family lots, ranging in size from 5,000 square feet to 6,718 square feet. The proposed density of the subdivision would be approximately 4.93 dwelling units per acre. This density would comply with the proposed General Plan designation of Low Density (LD) Residential, which allows between 2 to 6 dwelling units per acre.

RECOMMENDATION

Planning staff is neutral with this proposal and is not recommending approval or denial. The Planning Commission may recommend approval or denial of Environmental Review #22-50 [Negative Declaration], General Plan Amendment #22-05, Fahrens Creek Specific Plan Amendment #5, Zone Change #432. and Establishment of Residential Development #78; and approve or deny Tentative Subdivision Map #1326 (subject to City Council adopting the General Plan Amendment, Fahrens Creek Specific Plan Amendment, Zone Change, and Establishment of Residential Planned Development #78) including the adoption of the Draft Resolutions at Attachments A and B of Staff Report #23-289, subject to the conditions in Exhibit A and the findings/considerations in Exhibit B of each attachment.

E.3 23-283

SUBJECT: General Plan Amendment #22-03 (Amended), initiated by Eric Pluim on behalf of Gateway Park Development Partners, LLC, property owners. This application involves a request to change the General Plan roadway classification from Divided Arterial to Collector for a portion of Mission Avenue from Coffee Street east to the end of the City Limits at Tower Road (extended)**PUBLIC HEARING**

ACTION: PLANNING COMMISSION:

Recommendation to City Council
1) Environmental Review #22-25 (Addendum to

General Plan EIR)

2) General Plan Amendment #22-03

CITY COUNCIL:

Approve/Disapprove/Modify

- 1) Environmental Review #22-25 (Addendum to General Plan EIR)
- 2) General Plan Amendment #22-03

SUMMARY

This is an amended request to amend the General Plan Circulation Element by changing the roadway classification from Divided Arterial to Collector for a portion of Mission Avenue from Coffee Street east to the end of the City Limits at Tower Road (extended). This change is requested to improve the circulation for future development in the area. Staff is recommending approval.

RECOMMENDATION

Planning staff recommends that the Planning Commission recommend approval to the City Council of Environmental Review #22-25 (*Addendum to the General Plan EIR*) and General Plan Amendment #22-03 (including the adoption of the Draft Resolution at Attachment A) subject to the conditions in Exhibit A and the findings/considerations in Exhibit B of the Draft Resolution.

E.4 23-309 SUBJECT: Cancellation of April 19, 2023, and May 3, 2023, Planning

Commission Meetings due to lack of items

ACTION:

Cancel the Planning Commission Meetings of April 19, 2023, and May 3, 2023

F. INFORMATION ITEMS

F.1 23-310 SUBJECT: Report by Director of Development Services of Upcoming
Agenda Items

ACTION

Information only.

F.2 <u>23-311</u> SUBJECT: <u>Calendar of Meetings/Events</u>

April 3 City Council, 6:00 p.m.

5 Planning Commission, 7:00 p.m.

17 City Council, 6:00 p.m.

	19 25	Planning Commission, 7:00 p.m. (To be cancelled) Bicycle and Pedestrian Advisory Commission, 4:00 p.m.
May	1 3	City Council, 6:00 p.m. Planning Commission, 7:00 p.m. (To be cancelled)
	15 17	City Council, 6:00 p.m. Planning Commission, 7:00 p.m.

G. ADJOURNMENT



CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

ADMINISTRATIVE REPORT

File #: 23-312 Meeting Date: 4/5/2023

Report Prepared by: Kayla Abarca, Administrative Assistant I, Planning Division

SUBJECT: Planning Commission Minutes of March 22, 2023

ACTION:

Approving and filing the Planning Commission Minutes of March 22, 2023



CITY OF MERCED

City Council Chamber Merced Civic Center 678 W. 18th Street Merced, CA 95340

Minutes Planning Commission

Wednesday, March 22, 2023

7:00 PM

A. CALL TO ORDER

Vice Chair CAMPER called the Regular Meeting to order at 7:01 PM.

A.1. Moment of Silence

A.2. Pledge of Allegiance to the Flag

Commissioner GONZALEZ led the Pledge of Allegiance to the Flag.

B. ROLL CALL

Clerk's Note: Chairperson HARRIS was absent, excused. Commissioner GREGGAINS arrived at 7:03 PM. The Planning Commission has 1 vacancy at this time.

Present: 5 - Member Dorothea White, Member Jose Delgadillo, Vice Chair Mary Camper,

Member Jeremiah Greggains, and Member Anthony Gonzalez

Absent: 1 - Chairperson Michael Harris

C. ORAL COMMUNICATIONS

There were no public comments.

D. CONSENT CALENDAR

D.1 SUBJECT: Planning Commission Minutes of March 8, 2023

ACTION:

Approving and filing the Planning Commission Minutes of March 8, 2023

A motion was made by Member Delgadillo, seconded by Member White and carried by the following vote, to approve the Consent Agenda.

Aye: 5 - Member White

Member Delgadillo Vice Chair Camper Member Greggains Member Gonzalez

No: 0

Absent: 1 - Chairperson Harris

E. PUBLIC HEARINGS AND ACTION ITEMS

E.1

SUBJECT: Conditional Use Permit #1270, initiated by Hamid Yahya, property owner. This application involves a request to establish a food truck parking area to allow two food truck vendors within a parking lot located at 1150 Martin Luther King Jr. Way, generally located at the southeast corner of W. 12th Street and Martin Luther King Jr. Way, within a zoning classification of General Commercial (C-G), and a General Plan designation of General Commercial (CG). **PUBLIC HEARING**

ACTION: Approve/Disapprove/Modify

1) Environmental Review #23-04 (Categorical Exemption)

2) Conditional Use Permit #1270

SUMMARY

Hamid Yahya is requesting conditional use permit approval to establish a food truck parking area to allow two food truck vendors, located at 1150 Martin Luther King Jr. Way. Food truck parking areas are considered a conditional use within a General Commercial (C-G) Zone. The proposed parking area is shared with the Merced Food Center. The Planning Commission will be reviewing this proposal to ensure that the provided site plan is designed in a manner that minimizes negative impacts to the existing site and promotes compatible and orderly development. Staff is recommending approval with conditions.

RECOMMENDATION

Planning staff has reviewed this request and recommends that the Planning Commission approve Environmental Review #23-04 (Categorical Exemption) and Conditional Use Permit #1270, including the adoption of the Draft Resolution at Attachment A subject to the conditions in Exhibit A and the findings/considerations in Exhibit B.

Development Services Technician II DAVIS reviewed the report on this item. For further information, refer to Staff Report #23-253.

There was no one present wishing to speak regarding the project; therefore, public testimony was opened and closed at 7:15 PM.

A motion was made by Member Greggains, seconded by Member White and

carried by the following vote, to adopt a Categorical Exemption regarding Environmental Review #23-04 and approve Conditional Use Permit #1270, subject to the Findings and thirty (30) Conditions set forth in Staff Report #23-253 (RESOLUTION #4107).

Aye: 5 - Member White

Member Delgadillo Vice Chair Camper Member Greggains Member Gonzalez

No: 0

Absent: 1 - Chairperson Harris

F. INFORMATION ITEMS

F.1 SUBJECT: Report by Director of Development Services of Upcoming

Agenda Items

ACTION

Information only.

Director of Development Services MCBRIDE went over items for the next several Planning Commission meetings.

F.2 SUBJECT: Calendar of Meetings/Events

March	20	City Council, 6:00 p.m.
	22	Planning Commission, 7:00 p.m.
April	3	City Council, 6:00 p.m.
	5	Planning Commission, 7:00 p.m.
	17	City Council, 6:00 p.m.

19 Planning Commission, 7:00 p.m. (To be cancelled)

25 Bicycle and Pedestrian Advisory Commission, 4:00 p.m.

May 1 City Council, 6:00 p.m.

3 Planning Commission, 7:00 p.m. (To be cancelled)

15 City Council, 6:00 p.m.

17 Planning Commission, 7:00 p.m.

G. ADJOURNMENT

Clerk's Note: The Regular Meeting adjourned at 7:22 PM.

A motion was made by Member White, seconded by Member Delgadillo and carried by the following vote, to adjourn the Regular Meeting.

Aye: 5 - Member White

Member Delgadillo Vice Chair Camper Member Greggains Member Gonzalez

No: 0

Absent: 1 - Chairperson Harris

BY:

APPROVED:

SCOTT MCBRIDE, SECRETARY
MERCED CITY PLANNING COMMISSION

Julie Melson for

MICHAEL HARRIS, CHAIRPERSON MERCED CITY PLANNING COMMISSION



CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

ADMINISTRATIVE REPORT

File #: 23-238 Meeting Date: 4/5/2023

Planning Commission Staff Report

Report Prepared by: Kayla Abarca, Administrative Assistant I, Planning Division

SUBJECT: Planning Commission Annual Attendance Report

ACTION

Reviewing and approving the Annual Attendance Report.

DISCUSSION

Attached for your review are the annual Attendance Records, Attendance Policy, and Roster. Please remember that the attendance record is not based on the fiscal year, but rather from April 1, 2022, through March 31, 2023. All Commissioners have met the 70% attendance requirement.

Commissioner Gonzalez was appointed on July 18, 2022, to fill the District 5 vacancy.

The terms for Commissioner Greggains and Commissioner White expire on July 1, 2023.

Chairperson Harris and Commissioner Camper are not eligible for reappointment, as they have served two full terms.

Questions or comments can be addressed at the meeting.

ATTACHMENTS

- Roster
- 2. Attendance Summary
- 3. Attendance Record
- 4. Board and Commission Attendance Policy



Board Roster



Jose J Delgadillo

1st Term Jul 01, 2019 - Jul 01, 2023

Appointing Authority City Council

Position Commissioner

Category District 6



Jeremiah Greggains

1st Term Jul 01, 2019 - Jul 01, 2023

Appointing Authority City Council

Position Commissioner

Category District 1



Dorothea "lynn" White

1st Term Jul 01, 2019 - Jul 01, 2023

Appointing Authority City Council

Position Commissioner

Category District 3



Mary K Camper

2nd Term Jul 01, 2017 - Jul 01, 2024

Appointing Authority City Council

Position Vice-Chair

Category At-Large



Michael J Harris

2nd Term Jul 01, 2018 - Jul 01, 2025

Appointing Authority City Council

Position Chair

Category District 4

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Anthony Gonzalez

1st Term Jul 01, 2022 - Jul 01, 2026

Appointing Authority City Council
Position Commissioner
Category District 5



Vacancy

Appointing Authority City Council
Position Commissioner
Category District 2

PLANNING COMMISSION

ATTENDANCE SUMMARY

April 1, 2022 through March 31, 2023

Total # of Meetings Held <u>During Reporting Year</u>: 18

NAME	# of Mtgs <u>Attended</u> *	# of Mtgs <u>Held</u> *	# of Mtgs Absent **	# of Mtgs Excused	% of Mtgs Attended
HARRIS, M. (full year)	16	18	2	2	100%
CAMPER, MARY (full year)	16	18	2	2	100%
DELGADILLO, JOSE (full year)	17	18	1	1	100%
WHITE, DOROTHEA LYNN (full year)	17	18	1	1	100%
JEREMIAH GREGGAINS (full year)	16	18	2	1	94%
ANTHONY GONZALEZ (appt. 8/18/22)	11	11	0	0	100%

^{*} If a member has less than a full year, please indicate the # of meetings held since their appointment.

Formula for computing percentage of meetings attended:

- a. Member for full year # of meetings attended (include excused) divided by total # of meetings held
- b. Member for partial year # of meetings attended (include excused) divided by total # of meetings held since their appointment.

^{**} This # includes excused meetings.

PLANNING COMMISSION ATTENDANCE – 2022-2023

April 2022 to March 2023

									7 1/2					_										
NAME	4/6/22	4/20/22	5/4/22	5/18/22	6/8/22	6/22/22	7/6/22	7/20/22	8/3/22	8/17/22	9/7/22	9/21/22	10/5/22	10/19/22	11/9/22	11/23/22	12/7/22	12/21/22	1/4/23	1/18/23	2/8/23	2/22/23	3/8/23	3/22/23
HARRIS	X	X	С	X	X	С	X	С	X	X	X	X	X	X	X	С	X	X	С	X	F	С	X	Е
CAMPER	X	X	С	X	X	С	X	С	X	X	X	X	E	E	X	С	X	X	С	X	X	С	X	X
DELGADILLO	X	X	С	X	X	С	F	С	X	X	X	X	X	X	X	С	X	X	С	X	X	С	X	X
WHITE	X	X	С	X	F	С	X	С	X	X	X	X	X	X	X	С	X	X	С	X	X	С	X	X
GREGGAINS	X	0	С	X	X	С	X	С	X	X	X	E	X	X	X	С	X	X	С	X	X	С	X	X
GONZALEZ (appt. 08-18-2022)	-	-	-	-	-	-	-	-	-	X	X	X	X	x	X	С	X	X	С	X	X	С	X	х

^{*} SPECIAL MEETING

X = ATTENDED MEETING
O = ABSENT
E = EXCUSED
C=CANCELED

E = EXCUSED *NO
C=CANCELED
F=FREE EXCUSED VAC ONCE/YEAR

*NOTE: City Charter states that any Commissioner absent from 3 consecutive regular meetings without permission of the Commission expressed in its official minutes shall relinquish seat on Commission.

Appointed Commission, Committee, and Board Member Attendance Policy

The City Council, at its July 15, 1996, August 4, 1997, August 20, 2007, and September 20, 2021 meetings, adopted motions amending the original policy adopted October 3, 1994, regarding attendance, absences, and excused absences for City Council appointed commissions, committee, and board members:

- 1. If a member of a board or commission is absent from three regularly scheduled meetings of such board or commission, consecutively, or is convicted of a crime involving moral turpitude, or ceases to be a qualified elector of the City, the office shall become vacant and shall be declared by the City Council.
- 2. A commission, committee, or board member shall be required to attend 70 percent of scheduled meetings during a fiscal year. When attending other City of Merced business meetings and subcommittee meetings as a Board representative, absence shall be recorded as being present at the meeting.
- 3. Excused absences shall be recognized for illness, family emergencies, business conflicts and one vacation per each one-year period.
- 4. Department Heads or staff liaisons to appointed commissions, committees, or boards shall monitor attendance requirements for non-compliance. Upon notification of such non-compliance, the City Clerk may submit a recommendation to the City Council for appropriate action.
- 5. The City Clerk shall prepare a report annually to the City Council of an attendance report for every commission, committee, and board. The report shall include number of meetings attended, meetings missed (excused or unexcused), and a delineation of three consecutive absences or less than 70 percent attendance.
- 6. Prior to the annual report being submitted for City Council review, the City Clerk shall provide the report to each committee/board/commission for review and comment. Staff shall notify those Committee Members whose attendance is below 70 percent of the need for improvement.
- 7. The City Council may remove those commission, committee, or board members who do not meet the requirement of appointment.
- 8. All applicants for commissions, committees, and boards shall be notified prior to City Council appointment regarding time requirements for serving and the policy regarding removal.



CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

ADMINISTRATIVE REPORT

File #: 23-227 Meeting Date: 4/5/2023

Planning Commission Staff Report

Report Prepared by: Julie Nelson, Senior Planner, Development Services Department

SUBJECT: Vesting Tentative Subdivision Map #1322 and Minor Modification #22-01 for the Renaissance 154 Subdivision, initiated by Benchmark Engineering, on behalf of Likwid Asset Management, LLC, property owner. This application involves a request to subdivide 25.59 acres of land into 154 single-family lots ranging in size from 4,121 square feet to 9,663 square feet. The Minor Modification would allow six lots to be less than the minimum 4,400-square-foot lot size. This property is generally located north of Merced Avenue, approximately 1,300 feet east of Coffee Street and has General Plan designation of Low Density (LD) Residential and a Zoning designation of Residential Planned Development (RP-D) #56. **PUBLIC HEARING**

ACTION: Approve/Disapprove/Modify

- 1) Environmental Review #22-31 (Categorical Exemption)
- 2) Vesting Tentative Subdivision Map #1322
- 3) Minor Modification #22-01

SUMMARY

The project site is located north of Merced Avenue, approximately 1,300 feet east of Coffee Street. The proposed subdivision would subdivide 25.59 acres of land into 154 single-family lots. The Minor Modification would allow six of the lots to be less than the minimum lot size of 4,400 square feet. Planning staff, along with other City staff, have reviewed the project and recommend approval subject to conditions.

RECOMMENDATION

Planning staff recommends that the Planning Commission approve Environmental Review #22-31 (Categorical Exemption), Vesting Tentative Subdivision Map #1322 "Renaissance 154," and Minor Modification #22-01, (including the adoption of the Draft Resolution) subject to the conditions in Exhibit A and the findings/considerations in Exhibit B of Draft Resolution #4108 at Attachment A.

DISCUSSION

Project Description

The proposed project would subdivide approximately 25.59 acres of land into 154 single-family lots (Attachment C). Primary access to the subdivision would be from Merced Avenue. The proposed subdivision could also be accessed from Childs Avenue through the Renaissance Phase 1 Subdivision that would provide connection on Sable Street (refer to Location Map at Attachment B)

File #: 23-227 Meeting Date: 4/5/2023

and from Coffee Street through the Sierra Vista Subdivision to the east via Bodie Street. The street system within the subdivision has three streets that connect to Merced Avenue (Dylan Street, Nadine Street, and Sable Street). Bodie Street is an east/west street that bisects the subdivision with five cul-de-sacs to the north of Bodie Street and the three through streets previously mentioned and two cul-de-sacs to the south of Bodie Street (refer to the Tentative map at Attachment C).

The 154 lots within the subdivision would range in size from 4,121 to 9,663 square feet. The table below provides a breakdown of the number of lots and the size of the lots. Six of the 154 lots are smaller than the minimum lot size of 4,400 square feet. Minor Modification #22-01 addresses this exception to the minimum lot size.

Number of Lots	Lot Size (S.F)				
6	4,121 to 4,370*				
35	4,414 to 4,500				
50	4,501 to 4,991				
44	5,101 to 5,890				
19	6,160 to 9,663				
*Less than the Minimum Lot Size					

The proposed subdivision would provide a gross density of 6 units per acre, which is consistent with Low Density (LD) Residential General Plan land use designation.

Design standards for Residential Planned Development (RP-D) #56 were established in 2005 (refer to Attachment D). All construction shall comply with these standards, unless otherwise approved by Minor Modification #22-01.

Surrounding uses as noted in Attachment B.

Surrounding Land	Existing Use of Land	City Zoning Designation	City General Plan Land Use Designation
North	Single Family Dwellings/Drainage Basin	R-1-5	Low Density (LD) Residential
South	Single Family Dwellings (across Merced Avenue)	R-1-5 & R-1-6	Low Density (LD) Residential
East	Open Space/Campus Parkway	Heavy Industrial	Manufacturing/ Industrial
West	Single Family Dwellings	Planned Development (P-D) #54	Low Density (LD) Residential

File #: 23-227 Meeting Date: 4/5/2023

Background

The project site was part of the Weaver Annexation which was approved in 1997. At that time the site was zoned R-1-5 (Low Density Residential). In 2005, the city approved Zone Change #392 and the Establishment of Residential Planned Development (RP-D) #56 to allow for a smaller lot subdivision.

Also in 2005, a tentative subdivision was approved that was very similar in design to the proposed subdivision. Unfortunately, this map expired prior to development occurring.

Regional Housing Needs Allocation Unit Production Policy

On April 4, 2022, the City Council adopted Resolution 2022-15 which implements a Regional Housing Needs Allocation (RHNA) Unit Production Policy. This policy is intended to assist in the development affordable housing. The policy applies to all new development entitlements that require the execution of a Pre-Annexation Development Agreement, Development Agreement, or Legislative Action Agreement. This project is not subject to any of the above listed agreements.

Findings/Considerations

Please refer to Exhibit B of the Draft Planning Commission Resolution at Attachment A.

- A) Draft Planning Commission Resolution #4108
- B) Location Map
- C) Vesting Tentative Subdivision Map #1322
- D) Development Standards for RP-D #56
- E) Lots for Minor Modification
- F) MMC 18.16.080 (Tentative Subdivision Maps)
- G) Comments from MID and PG&E
- H) Environmental Review (Categorical Exemption)

CITY OF MERCED Planning Commission

Resolution #4108

WHEREAS, the Merced City Planning Commission at its regular meeting of April 5, 2023, held a public hearing and considered Vesting Tentative Subdivision Map #1322 and Minor Modification #22-01, initiated by Benchmark Engineering, on behalf of Likwid Assets Management, LLC., property owner. This application involves a request to subdivide 25.6 acres of land into 154 single-family lots ranging in size from 4,121 square feet to 9,663 square feet. The Minor Modification would allow 6 lots to be smaller than the minimum allowed size of 4,400 square feet. The project site is generally located on the north side of Merced Avenue, approximately 1,300 feet east of Coffee Street. The site has a General Plan Designation of Low Density (LD) Residential and a Zoning designation of Residential Planned Development (P-D) #56; also known as Assessor's Parcel No. 061-310-017; and,

WHEREAS, the Merced City Planning Commission concurs with Findings/Considerations A through M of Staff Report #23-227 (Exhibit B); and,

WHEREAS, the Merced City Planning Commission concurs with the Findings for Tentative Subdivision Map Requirements in Merced Municipal Code Section 18.16.80, 18.16.90, and 18.16.100 as outlined in Exhibit B; and,

NOW THEREFORE, after reviewing the City's Draft Environmental Determination, and discussing all the issues, the Merced City Planning Commission does resolve to hereby adopt a Categorical Exemption regarding Environmental Review #22-31 and approve Vesting Tentative Subdivision Map #1322 and Minor Modification #22-01, subject to the Conditions set forth in Exhibit A attached hereto and incorporated herein by this reference.

Upon mot Commission	ion by Commissioner ner	 by
AYES:	Commissioner(s)	
NOES:	Commissioner(s)	
ABSENT:	Commissioner(s)	
ABSTAIN:	Commissioner(s)	

PLANNING COMMISSION RESOL Page 2 April 5, 2023	UTION #4108
Adopted this 5th day of April 2023	
	Chairperson, Planning Commission of the City of Merced, California
ATTEST:	
Secretary	_
Secretary	
Exhibits: Exhibit A – Conditions of Approval Exhibit B – Findings/Considerations	

Conditions of Approval Planning Commission Resolution # 4108 Vesting Tentative Subdivision Map #1322

- 1. The proposed project shall be constructed/designed as shown on Exhibit 1 (Vesting Tentative Subdivision Map for "Renaissance 154")—Attachment C of Planning Commission Staff Report #23-227, except as modified by the conditions herein.
- 2. Minor Modification #22-01 is approved as proposed to allow Lots 2, 3, 12, 13, 80, and 93 be less than 4,400 square feet. These lots shall not be more than 10% below the minimum lot size of 4,400 square feet.
- 3. All conditions contained in Resolution #1175-Amended ("Standard Tentative Subdivision Map Conditions") shall apply.
- 4. The proposed project shall comply with all standard Municipal Code and Subdivision Map Act requirements as applied by the City Engineering Department.
- 5. All other applicable codes, ordinances, policies, etc., adopted by the City of Merced shall apply.
- 6. The project shall comply with the conditions set forth in Resolution #2800 for the Zone Change #392 and the Establishment of Residential Planned Development (RP-D) #56, unless otherwise modified by this approval.
- The developer/applicant shall indemnify, protect, defend (with counsel 7. selected by the City), and hold harmless the City, and any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof, from any and all claims, actions, suits, proceedings, or judgments against the City, or any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof to attack, set aside, void, or annul, an approval of the City, or any agency or instrumentality thereof, advisory agency, appeal board, or legislative body, including actions approved by the voters of the City, concerning the project and the approvals granted herein. Furthermore, developer/applicant shall indemnify, protect, defend, and hold harmless the City, or any agency or instrumentality thereof, against any and all claims, actions, suits, proceedings, or judgments against any governmental entity in which developer/applicant's project is subject to that other governmental entity's approval and a condition of such approval is that the City indemnify and defend (with counsel selected by the City) such

governmental entity. City shall promptly notify the developer/applicant of any claim, action, suits, or proceeding. Developer/applicant shall be responsible to immediately prefund the litigation cost of the City including, but not limited to, City's attorney's fees and costs. If any claim, action, suits, or proceeding is filed challenging this approval, the developer/applicant shall be required to execute a separate and formal defense, indemnification, and deposit agreement that meets the approval of the City Attorney and to provide all required deposits to fully fund the City's defense immediately but in no event later than five (5) days from that date of a demand to do so from City. In addition, the developer/applicant shall be required to satisfy any monetary obligations imposed on City by any order or judgment.

- 8. The developer/applicant shall construct and operate the project in strict compliance with the approvals granted herein, City standards, laws, and ordinances, and in compliance with all State and Federal laws, regulations, and standards. In the event of a conflict between City laws and standards and a State or Federal law, regulation, or standard, the stricter or higher standard shall control.
- 9. Community Facilities District (CFD) formation is required for annual operating costs for police and fire services as well as storm drainage, public landscaping, street trees, street lights, parks, and open space. This property was designated as a "Future Annexation" area with CFD Annexation No. 2. Prior to recording a final map, the property shall be fully annexed into the CFD.
- 10. All lots shall be designed to meet the Development Standards for Residential Planned Development (RP-D) #56 as shown on Attachment D of Planning Commission Staff Report #23-227. However, the driveway shall have a minimum length of 20 feet behind the sidewalk to prevent vehicles form overhanging the sidewalk.
- 11. The homes constructed within the subdivision shall be constructed of high-quality materials consistent with or exceeding the materials used for the homes in the Renaissance Phase 1 subdivision to the south. The architecture shall also be consistent with or exceed the designs of the homes in the Renaissance Phase 1 subdivision to the south. If the Director of Development Services determines the materials and architecture are not of the same character and quality as the existing homes, a Site Plan Review Permit may be required to approve the proposed home design and materials.

- 12. The project shall comply with all requirements of the California Building Code and all flood requirements of the Federal Emergency Management Agency (FEMA), as well as the requirements for the California Urban Level of Flood Protection (CA 200-year flood).
- 13. All necessary documentation related to the construction of the residential uses shall be provided at the building permit stage.
- 14. The project shall comply with all the Post Construction Standards required to comply with state requirements for the City's Phase II MS-IV Permit (Municipal Separate Storm Sewer System).
- 15. All landscaping within the public right-of-way shall comply with state and local requirements for water conservation. All irrigation provided to street trees or other landscaping shall be provided with a drip irrigation or microspray system and shall comply with the City's Water Efficient Landscape Ordinance (MMC Section 20.36.030). Landscape plans for all public landscaping shall be provided with the Improvement Plans.
- 16. Prior to final inspection of any home, all front yards and side yards exposed to public view shall be provided with landscaping to include, ground cover, trees, shrubs, and irrigation in accordance with Merced Municipal Code Section 20.36.050. Irrigation for all on-site landscaping shall be provided by a drip system or micro-spray system in accordance with the State's Emergency Regulation for Statewide Urban Water Conservation or any other state or City mandated water regulations dealing with the current drought conditions. All landscaping shall comply with the City's Water Efficient Landscape Ordinance (MMC Section 20.36.030).
- 17. Compliance with the "corner vision triangle" per MMC 20.30.030 is required for corner lots, and may result in the applicant constructing smaller homes on these lots or increasing the front yard setbacks.
- 18. All streets within the subdivision shall comply with City Standards. All turning radii shall comply with City Standards and applicable Fire Department Standards, including the minimum diameter of 96 feet for cul-de-sac bulbs. Sable Court may be reduced to a 49-foot right-of-way (consistent with City Standards for a cul-de-sac) if the developer so chooses.
- 19. Any missing and/or damaged frontage improvements on the north side of Merced Avenue shall be installed per City Standards.

- 20. Traffic calming measures are required on Merced Avenue and Bodie Street. The developer shall work with the City Engineer to determine the type of calming measure to be installed and the placement of the calming measure.
- 21. All abutters rights to Merced Avenue shall be relinquished prior to or as part of the final map approval.
- 22. The water system shall be a looped system to ensure adequate flow can be provided. The developer shall work with the City Engineer and the Water Department to determine the most efficient way of accomplishing this.
- 23. Fire hydrants shall be installed along street frontages to provide fire protection to the area. The hydrants shall meet all City of Merced standards and shall comply with all requirements of the City of Merced Fire Department. Final location of the fire hydrants shall be determined by the Fire Department.
- 24. Traffic control signs, street markings, and striping shall be as directed by the City Engineer.
- 25. The developer shall use proper dust control procedures during site development in accordance with San Joaquin Valley Air Pollution Control District rules.
- 26. The developer shall provide all utility services to each lot, including sanitary sewer, water, electric power, gas (if designed to use gas), telephone, and cable television. All new utilities are to be undergrounded, except on-ground transfer boxes for cable, telephone, and/or power, as necessary.
- 27. At the Final Map stage, Lot A shall be dedicated to the City of Merced for the existing sewer lift station.
- 28. Lot B shall be dedicated to the City of Merced. An easement over Lot B shall be dedicated on the final map to accommodate the Merced Irrigation District (MID) and PG&E facilities. The type of easement to be dedicated shall be determined prior to recording the final map. The easement area shall be included in the CFD for maintenance. The Hartley Lateral (Lot B) shall be placed in an underground pipeline as per the developer's agreement with MID.
- 29. The developer shall install appropriate street name signs and traffic control signs with locations, names, and types approved by the City Engineer.
- 30. Developer shall provide construction plans and calculations for all landscaping and public maintenance improvements. All such plans shall conform to City standards and meet approval of the City Engineer.

- 31. Dedication by Final Map of all necessary easements will be made as shown on Vesting Tentative Subdivision Map #1322 and as needed for irrigation, utilities, drainage, landscaping, open space, and access.
- 32. The developer shall be responsible for construction and dedication of all interior collector and local streets within the Project Boundaries.
- 33. Developer shall provide storm drainage calculations as required by the City Engineer to confirm that the existing basin north of the project site constructed as part of the Renaissance Phase I Subdivision, has sufficient volume to serve this development.
- 34. As required by Mitigation Measure 3.02 of the Weaver Annexation, to reduce the noise impacts from the railroad track, a concrete block wall or other material approved by the Director of Development Services shall be constructed along the northern property line adjacent to the existing dwellings and shall extend along the existing drainage basin and along the eastern property line adjacent to Lot B.
- 35. All mechanical equipment shall be screened from public view.

Findings and Considerations Planning Commission Resolution #4108 Vesting Tentative Subdivision Map #1322

FINDINGS/CONSIDERATIONS:

General Plan Compliance and Policies Related to This Application

A) The proposed project complies with the General Plan designation of Low Density (LD) Residential and the Zoning designation of Residential Planned Development (RP-D) #56.

The proposed subdivision would be constructed on approximately 25.6 acres of vacant land. The gross density for the site, would be 6 units/acre. The Low Density (LD) Residential land use designation requires a density of 2 to 6 dwelling units per acre.

The proposed subdivision would achieve the following General Plan Land Use Policies:

- L-1.2 Encourage a diversity of building types, ownership, prices, designs, and site plans for residential areas throughout the City.
- L-1.3 Encourage a diversity of lot sizes in residential subdivisions.
- L-1.6 Continue to pursue quality single-family and higher density residential development.
- L-1.8 Create livable and identifiable residential neighborhoods.

Zoning Code Compliance

B) Residential Planned Development (RP-D) #56 was established in 2005 and incorporated specific development standards (refer to Attachment D of Planning Commission Staff Report #23-227). All the lots within the subdivision shall be developed to meet these minimum standards, the exception of 6 lots (Attachment E of Planning Commission Staff Report #23-227) that would be slightly smaller than the minimum lot size. This exception is addressed through Minor Modification #22-01 as described in Finding L. Additionally, the homes shall be constructed with high-quality materials to match or exceed the construction of the homes in adjacent subdivision (Renaissance Phase 1) (refer to Conditions # 9 and #10).

Traffic/Circulation

C) The subdivision has access from Merced Avenue or from the south via Childs Avenue through Childs Avenue through the Renaissance Phase 1 Subdivision with connection to Sable Street (refer to Location Map at Attachment B of Planning Commission Staff Report #23-227). Additional access is available from Coffee Street through the Sierra Vista Subdivision to the east via Bodie Street. The internal street system has three streets that connect to Merced Avenue (Dylan Street, Nadine Street, and Sable Street). Bodie Street is an east/west street that bisects the subdivision with five cul-de-sacs to the north of Bodie Street and the three through streets previously mentioned and two cul-de-sacs to the south of Bodie Street (refer to the Tentative Map at Attachment C of Planning Commission Staff Report #23-227.

According to the Institute of Traffic Engineers (ITE) Manual, a condominium/townhouse generates 5.81 trips per weekday. Based on the proposed 106 lots within this subdivision, a total of 895 trips per weekday would be generated. This would be consistent with the estimates made in the *Merced Vision 2030 General Plan* for this area.

Both Merced Avenue and Bodie Street have relatively long stretches of road with no stops or other traffic calming measures. In order to prevent issues in the future with speeding traffic on these streets, Condition #20 requires traffic calming measures to be installed on these streets.

Parking

D) Each lot is provided with a driveway that would lead to a two-car garage for parking as required by the Development Standards for RP-D #56 (Attachment D of Planning Commission Staff Report #23-227). Although the front setback for the homes is 15 feet per the Development Standards, Condition #10 requires the driveway to be 20 feet behind the sidewalk to ensure enough room for cars to park in the driveway without overhanging the sidewalk and impeding pedestrians.

Public Improvements/City Services

E) The developer would be required to install all streets, utilities, and other improvements within the subdivision bring any damaged or missing improvements along Merced Avenue up to City Standards (Condition #18 and #19). City water and sewer lines would be extended from Merced Avenue to serve this subdivision. Each lot would be required to pay the required connection fees for sewer and water connections at the building permit stage.

The water system shall be a looped system as required by the City's Water Department (Condition #22).

Each lot within the subdivision would be required to meet the City's storm drainage and run-off requirements for the City's MS-IV permit (Condition #14). All storm water would ultimately be delivered to the storm drain basin constructed to the east currently serving the Stoneridge South subdivision.

Building Design

F) The developer has not submitted building designs at this time. It is the developer's intent to construct homes that are consistent with the character of the neighborhood to the south (Renaissance Phase 1). However, if staff determines the design is not of the same quality and character as the Renaissance Phase 1, a Site Plan Review may be required to approve the architecture and design (Condition #11).

Site Design

G) As previously described, the internal circulation of the subdivision includes an east/west street (Bodie Street) extending from the subdivision to the west, east to the end of the street at the end of the subdivision (Sable Street). There are five cul-de-sacs north of Bodie Street. There are two through streets connecting to Merced Avenue south of Bodie Street and two additional cul-de-sacs south of Bodie Street. Each lot would be connected by sidewalks throughout the subdivision. The cul-de-sacs south of Bodie Street would have open ended cul-de-sacs to allow access to Merced Avenue.

As shown on the Vesting Tentative Subdivision Map (Attachment C of Planning Commission Staff Report #23-227), Sable Court is 59 feet wide which matches Sable Street south of Bodie Street. Because the City Standard allows cul-de-sacs to be a minimum of 49 feet wide, the final map may reduce the width of this cul-de-sac to 49 feet (Condition #18). In order to meet Fire Department Standards, all cul-de-sacs must have a diameter of 96 feet (Condition #18).

Lot A as shown in the southwest corner of the tentative map (Attachment C of Planning Commission Staff Report #23-227) is an existing sewer lift station. This lot would be dedicated to the City (Condition #27).

Lot B as shown on the eastern edge of the tentative map is the Hartley Lateral, a Merced Irrigation District (MID) Canal. Per an agreement between the developer and MID the canal would be placed in an underground pipeline. Lot B would be dedicated to the City of Merced (Condition #28). A concrete

block wall (or other material approved by the Director of Development Services) would be constructed along the eastern property line of the subdivision adjacent to Lot B (Condition #34).

The project site was part of the Weaver Annexation. Mitigation Measure 3.2 of the Weaver Annexation requires "acoustical treatment" to reduce the noise from the railroad track to the north below 65 dB. Additionally at build out of the General Plan, the noise from Hwy 140 is expected to be greater than 65dB. Therefore, Condition #34 also requires a concrete block wall (or other material approved by the Director of Development Services) to be installed along the north property line.

Residential Planned Development (RP-D #56) has a minimum lot size of 4,400 square feet. The proposed lots range in size from 4,121 to 9,663 square feet. The table below shows the mixture of lot sizes in the subdivision. There are 6 lots that are smaller than the required 4,400 square feet. If approved, the Minor Modification application would allow these smaller lots (refer to Finding L for information on the Minor Modification.)

Number of Lots	Lot Size (S.F)
6	4,121 to 4,370
35	4,414 to 4,500
50	4,501 to 4,991
44	5,101 to 5,890
19	6,160 to 9,663

The specific design standards for the construction of each house on the individual lots shall comply with the Development Standards adopted for RP-D #56 (Attachment D of Planning Commission Staff Report #23-227).

Landscaping

H) Each lot within the subdivision shall be provided with front yard landscaping in compliance with Zoning Ordinance Section 20.36 – Landscaping. Section 20.36.050 requires all exterior setback areas, excluding areas required for access to the property to be landscaped (Condition #16).

Merced Avenue has a 7-foot-wide park strip. The through streets (Dylan Street, Nadine Street, and Sable Street) would have 7-foot-wide park strips as well. The cul-de-sacs would not have park strips. The park strip along Merced Avenue would ultimately be maintained by the Community Facilities District (CFD).

Neighborhood Impact/Interface

I) As shown on the location map at Attachment B of Planning Commission Staff Report #23-277, the site is adjacent to the Renaissance Subdivision to the south, across Merced Avenue and the Sierra Vista Subdivision to the east.

The proposed subdivision would add additional homes to the area, but the use is consistent with the General Plan and Zoning designations. Additionally, this subdivision was originally planned and approved in 2007, but never constructed. The requirement for traffic calming measures on Merced Avenue should address any traffic impacts from the additional traffic generated from the subdivision.

Public hearing notices were sent to all property owners within 300 feet of the project site. At the time of this report, the City had not received any comments regarding this project.

Land Use/Density Issues

J) As discussed in Finding A of this resolution, the density is found to be consistent with the Low-Density (LD) Residential land use designation.

Tentative Subdivision Map Requirements/Public Comments Received

K) Per Merced Municipal Code (MMC) Section 18.16.080 – Information Required, a tentative subdivision map shall include all of the requirements shown at Attachment F of Planning Commission Staff Report #23-227. Said requirements include stating the location of the subject site, the name of the subdivision, and showing the layout of the proposed lots. MMC 18.16.090 – Required Statement requires the applicant to provide a statement that explicitly states any deviations from tentative subdivision map requirements, standard drawings, or Zoning laws. MMC 18.16.100 - Public Hearing – Generally, requires a public hearing to review and approve a tentative subdivision map in conformance with the Subdivision Map Act.

Per the California Environmental Quality Act a public hearing notice was mailed to property owners within 300 feet of the subject site and published in a qualifying newspaper, Merced County Times, three weeks prior to this meeting. In addition, staff reached out to local utility companies, local school districts, and other relevant government agencies to solicit comments. At the time this report was prepared, staff had received comments from PG&E and the Merced Irrigation District (MID). Their comments are provided at Attachment G of Planning Commission Staff Report #23-227.

Minor Modification

L) As previously described, the minimum lot size for RP-D #56 is 4,400 square feet. The proposed subdivision includes 6 lots that are below this minimum size (Lots 2, 3, 12, 13, 80, and 93 - Attachment E of Planning Commission Staff Report #23-227). Merced Municipal Code (MMC) Section 20.20.020 (O) allows minor changes to a Planned Development to be approved as described in MMC Section 20.72.050. This section authorizes the Director of Development Services to approve minor changes to an approved project (such as the small reduction in the minimum lot size for six lots). However, consistent with MMC Section 20.66.040 (C) which states that if a project requires multiple approvals by both the Planning Commission and Development Services Department, the Planning Commission shall act on all permits as a single application.

The requested reduction to the minimum lot size for the six lots listed above is considered a minor change as it would only affect 4% of the total number of lots. Additionally, the proposed reduction in lot size ranges from a 3% reduction to a 10% reduction which is considered minor. The change would not change the character of the neighborhood and is considered consistent with the spirit and intent of the original approval.

Environmental Clearance

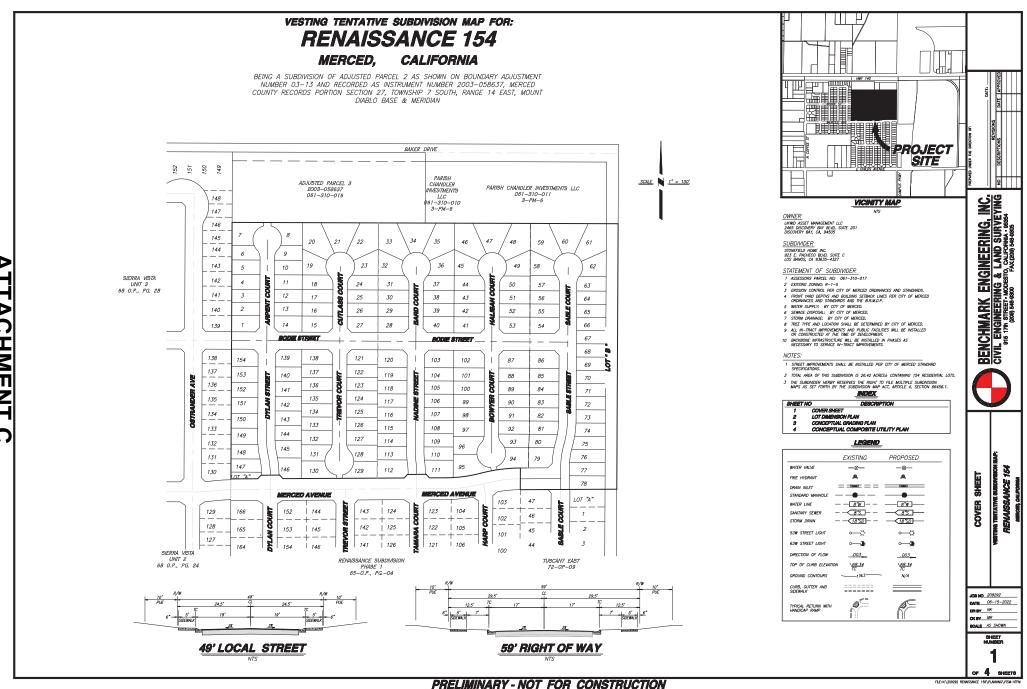
M) Planning staff has conducted an environmental review of the project (Environmental Review #22-21) in accordance with the requirements of the California Environmental Quality Act (CEQA), and a Categorical Exemption (i.e., no further environmental review is needed) is being recommended (Attachment H of Staff Report #23-227).

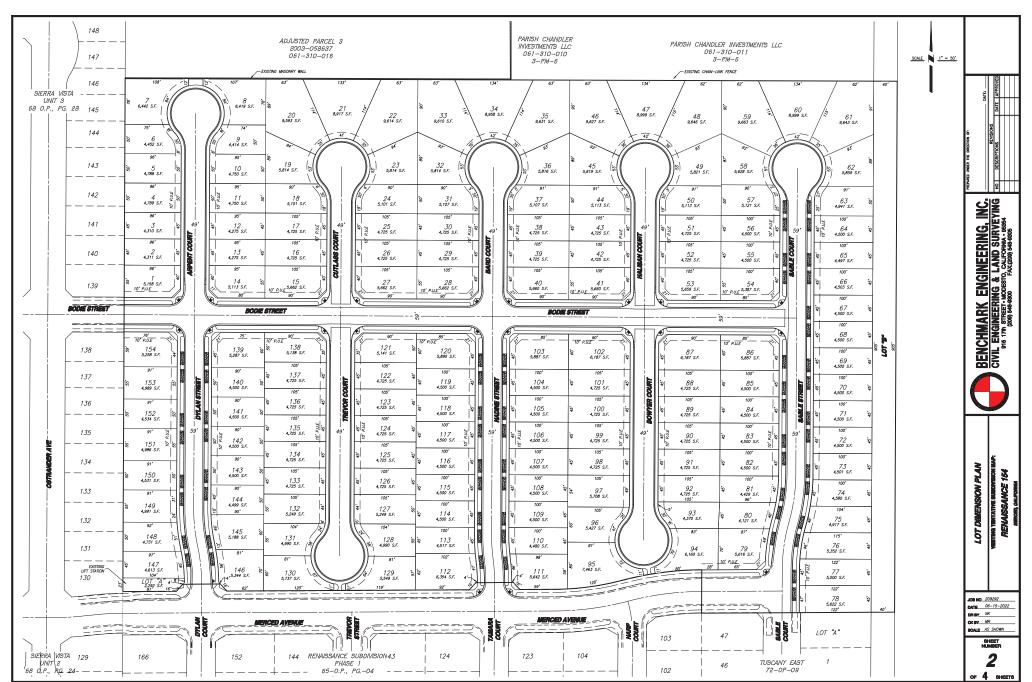


Disclaimer: This document was prepared for general inquiries only. The City of Merced is not liable for errors or ommissions that might occur. Official information concerning specific parcels should be obtained from recorded or adopted City documents.

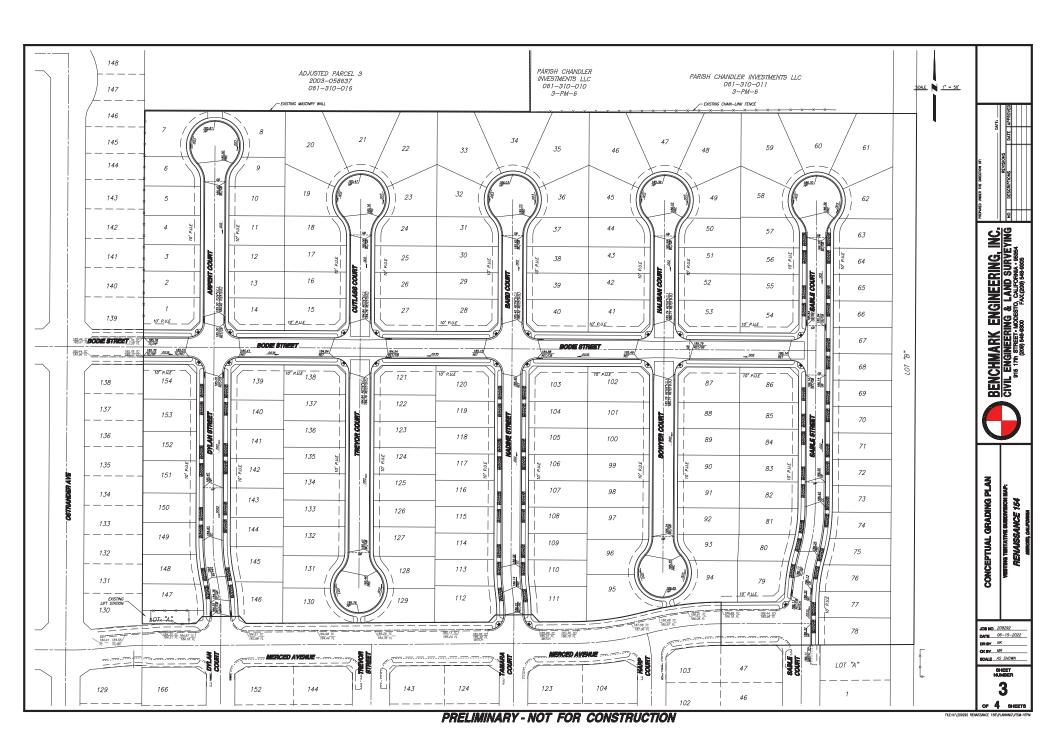
Vesting Tentative Subdivision Map #1322

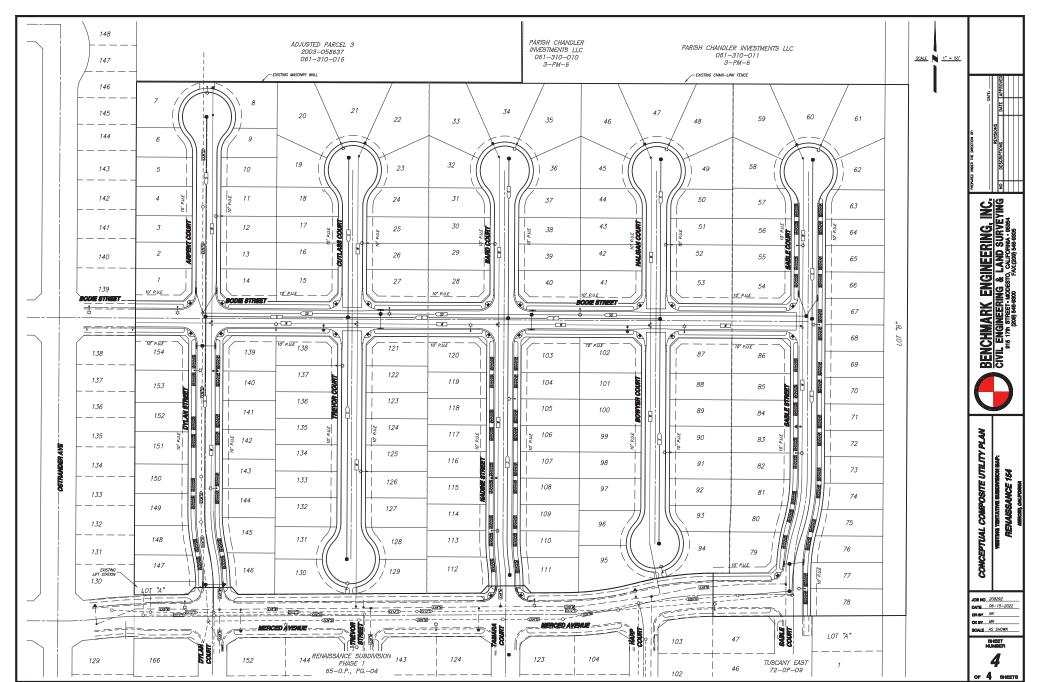






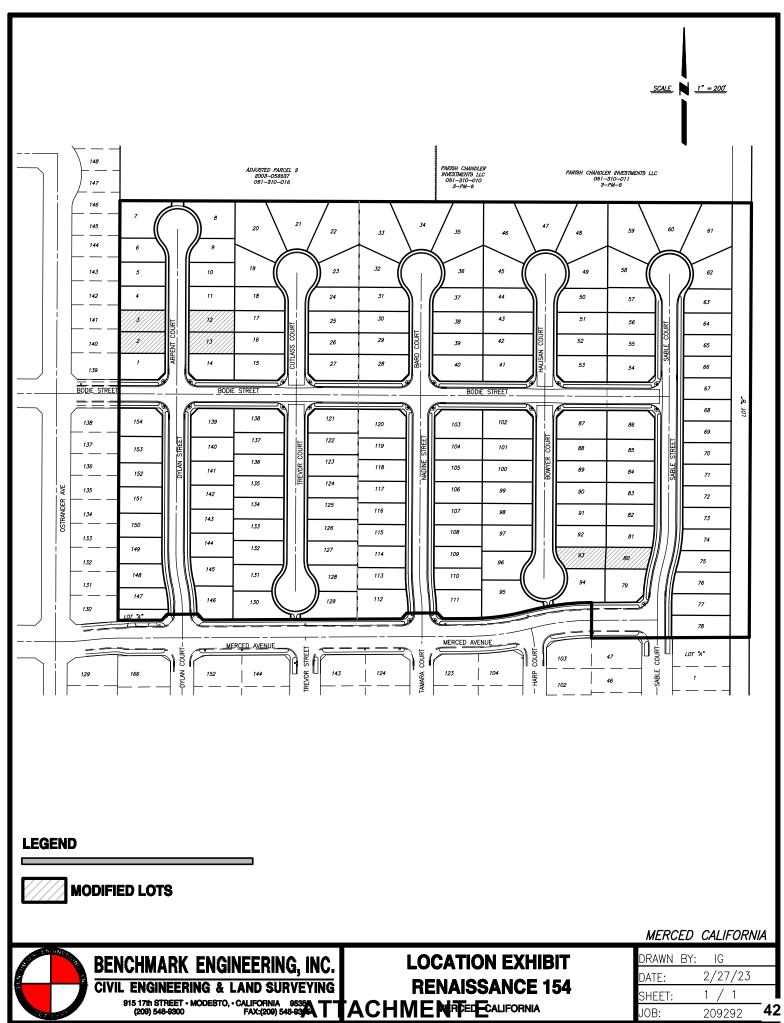
PRELIMINARY - NOT FOR CONSTRUCTION

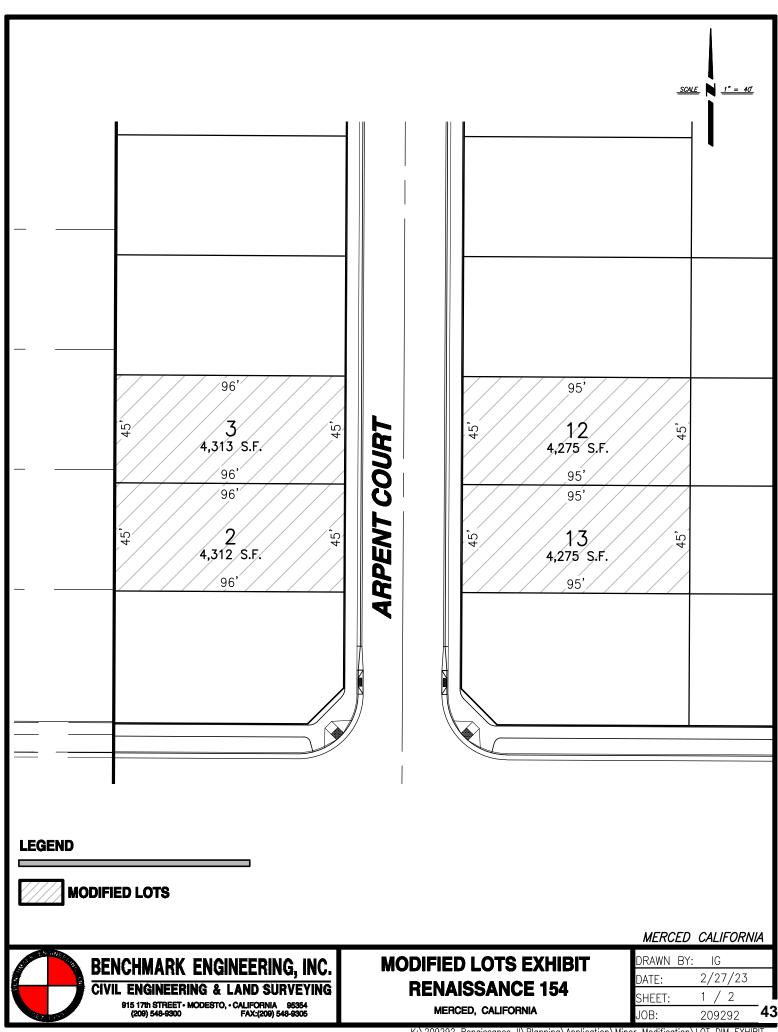


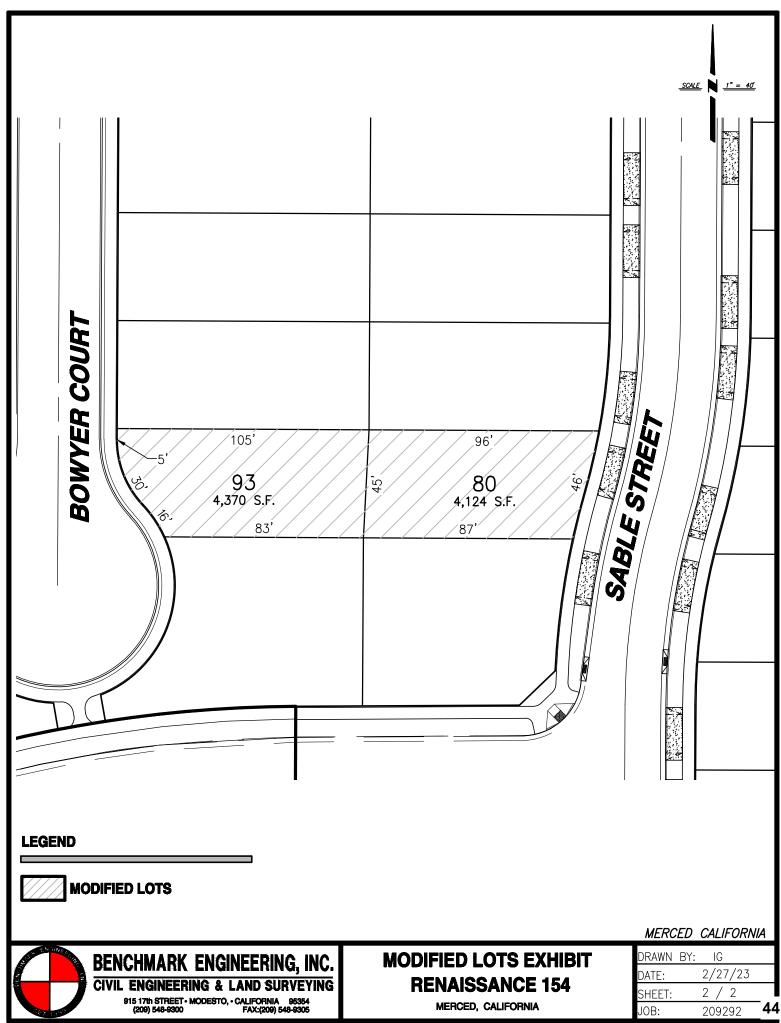


PRELIMINARY - NOT FOR CONSTRUCTION

RESIDENTIAL PLANNED DEVELOPMENT (RP-D) #56 DEVELOPMENT STANDARDS			
Minimum Lot Size	4,400		
Minimum Density	5.89 units/acre		
Minimum Setbacks	Front Yard: 15 ft.		
	Side Yard: 5 ft.		
	Rear Yard: 10 ft.		
Building Height	35 ft. (Maximum)		
Distance Between Buildings	10 ft. house side to house side		
Maximum Lot Coverage	40%		
Parking Required	2-car garage with a double-wide driveway		
Landscaping Requirements	All plants and materials appropriate for Sunset Zones 8 & 9; focus on low water plants; programmable automatic sprinkler controllers; mixed species trees; reduced water and maintenance focus for turf.		







Merced Municipal Code Tentative Subdivision Map 18.16.080 - Information required.

Every tentative map shall be clearly and legibly reproduced. The following information shall be shown on, or accompanying, the map:

- 1. A key or location map on which is shown the general area including adjacent property, subdivisions and roads;
- 2. The tract name, date, north point, scale and sufficient legal description to define location and boundaries of the proposed subdivision;
- 3. Name and address of recorded owner or owners;
- 4. Name and address of the subdivider;
- 5. Name and business address of the person who prepared the map;
- 6. Acreage of proposed subdivision to the nearest tenth of an acre;
- 7. Contours at six-inch intervals to determine the general slope of the land and the high and low point thereof;
- 8. The locations, names, widths, approximate radii of curves and grades of all existing and proposed roads, streets, highways, alleys and ways in and adjacent to the proposed subdivision or subdivision to be offered for dedication;
- 9. Proposed protective covenants;
- 10. Location and description of all easements;
- 11. Locations and size of all existing and proposed public utilities;
- 12. Proposed method of sewage and stormwater disposal;
- 13. Location and character of all existing and proposed public open space in and adjacent to the subdivision and a statement of intention with regard to park land dedication or payment of a fee in lieu thereof;
- 14. Lot layout, approximate dimensions and area in square feet of each irregular lot and lot numbers;
- 15. City limit lines occurring within the general vicinity of the subdivision;
- 16. Classification of lots as to intended land use, zone, and density;
- 17. Approximate bearings and distances to quarter-section bounds within the general vicinity of the subdivision;
- 18. Proposed public improvements;
- 19. Statement as to whether the subdivision is to be recorded in stages;
- 20. Existing use and ownership of land immediately adjacent to the subdivision;
- 21. Preliminary title report issued not more than sixty days prior to filing of the tentative map;

- 22. The outline of any existing buildings and indication of any to remain in place and their locations in relation to existing or proposed street and lot lines;
- 23. Location of all existing trees and indication of those proposed to remain in place, standing within the boundaries of the subdivision;
- 24. Location of all areas subject to inundation or storm water overflow, the location, width and direction of flow of all watercourses and indicate flood zone classification;
- 25. Elevations of sewers at proposed connection.

(Ord. 1533 § 1, 1984: Ord. 1358 § 3, 1980: Ord. 1342 § 2 (part), 1980: prior code § 25.32(c)).



August 5 2022

Julie Nelson, Associate Planner City Of Merced 678 West 18th Street Merced, California 95340

Subject: Vesting Tentative Map #1322 (Renaissance 154)

Dear Ms. Nelson:

The Merced Irrigation District (MID) has reviewed the above referenced application and offers the following comments that mirror the MID response to the development in November 21, 2003, September 13, 2004 and again March 21, 2005 (see attached). The undergrounding of MID facilities are described in the Deferment of Construction Agreement, Document Number 2004-061753 and the Storm Drainage Agreement, Document Number 2006-023993.

MID respectfully requests that the City require the following, as conditions of approval:

- 1. That the Deferment of Construction Agreement be addressed per the attached document or as directed by MID.
- 2. If the owner desires to discharge storm drainage into MID facilities, owner must enter into a "Subdivision Drainage Agreement" with Merced Irrigation District Drainage Improvement District No. 1 (MIDDID No. 1), paying all applicable fees.
- 3. That the development be subject to the same comments as described in the MID responses on November 21, 2003, September 13, 2004 and again on March 21, 2005.

Attached are copies of the original responses for your use.

Thank you for the opportunity to comment on the above referenced application. If you have any questions, please contact me at (209) 617-0207.

Sincerely,

Ronald L. Price

Ronald L. Price Associate Engineer March 21, 2005

Jack Lesch, Director of Development Services City of Merced Planning and Permitting Division 678 West 18th Street Merced, CA 95340

Re: Tentative Subdivision Map No. 1262 - California Homes - "Renaissance II"

Dear Mr. Lesch:

The Merced Irrigation District (MID) has reviewed the above referenced application and offers the following comments:

- 1. MID operates and maintains the Hartley Lateral "C" in an open, earthen channel located within an unspecified width easement by water contract (currently utilized as 30-foot wide); adjacent to the north line of Lot 2, "Merced Colony", as described in that certain Contract To Furnish Water recorded in Volume "L", Agreements, Page 331, April 15, 1910, Merced County Records.
- 2. MID operates and maintains the Hartley Lateral in an open, concrete lined channel located within an unspecified width easement by water contract (currently utilized as 40-foot wide); adjacent to the east line of Lot 1, "Merced Colony", as described in that certain Contract To Furnish Water recorded in Volume "L", Agreements, Page 334, April 15, 1910, Merced County Records.

MID respectfully requests the City require, as condition of approval, the following:

- 1. According to the Tentative Map submitted, it appears that storm drainage will be directed north to a new basin adjacent to the Hartley Lateral "C" and ultimately into the Hartley Lateral. This acceptance of the storm drainage by MID will require the owner/applicant to enter into a "Subdivision Drainage Agreement" with the Merced Irrigation District Drainage Improvement District No. 1 (MIDDID No. 1), paying all applicable fees.
- 2. It will also require placing both the Hartley Lateral and the Hartley Lateral "C" within the project in an underground pipeline meeting MID standards.
- The property owner must obtain a "Non-exclusive Driveway License Agreement" for all crossings over or under any MID facilities, including utilities, bridges, driveways and pipelines.

- 4. A signature block will be provided for MID on all Improvement Plans associated with MID facilities and the subdivision's Final Map.
- 5. MID would ask for an appropriate width deeded easement pertaining to both under grounded facilities from the owner/developer. MID will execute a quitclaim for the open canals after MID facilities are pipelined.
- 6. A "Joint Use Agreement" is required between the MID and the City of Merced to cover any shared easements which may arise depending upon where the new pipelines and roads are located (this should be the subject of a 3-way discussion).
- 7. No structures or trees would be allowed within the MID easements.
- 8. There is a private irrigation facility south of the southeast corner of the project that must not be compromised and other irrigation water deliveries through the subject property must be protected.
- 9. The City of Merced should require the property to the east to enter into a reimbursement agreement to pay their fair share of pipelining the Hartley Lateral.
- 10. Other requirements may surface if unforeseen circumstances arise.

MID is a local provider of electrical services and was granted such rights as an irrigation district through the California Water Code as of 1919. As of today, MID-Electric Services has over 4500 meters including 3500 residential customers with a system load over 80 MW's. As the developer, should you choose MID electric services and install energy efficient appliances, windows, air conditioners, etc., you may qualify for MID-Electric Services Energy-Rebate Programs to offset your costs and deliver to your clients an energy efficient product resulting in a win-win situation. For more information, please contact Isaias Franco at 722-5761.

Thank you for the opportunity to comment on the above referenced application. If you have any questions, please contact me at 722-5761.

Sincerely,

Rory Randol

Facilities Specialist

cc: Garith Krause, General Manager Ted Selb, Deputy General Manager

Robert Acker, Director of Facilities and Streams

Hicham ElTal, Assistant General Manager - Water Resources Engineering

Ron Price, Associate Engineer - Water Resources

Charlie Crandall, Account Representative - Electrical Services

MIDDID No. 1

California Homes, Applicant

From: PGE Plan Review
To: Nelson, Julie

Subject: Automatic reply: Plan review

Date: Wednesday, July 27, 2022 5:08:37 PM

Hello,

Thank you for contacting PG&E's Plan Review Team. Due to high volumes of requests for review, expect delays in receiving comments or a project specific response from PG&E. Please see PG&E's general construction restrictions and guidelines for proposed projects around gas and electric facilities and incorporate these preliminary notes into your project design.

Gas Facilities

There could be gas transmission pipelines in this area which would be considered critical facilities for PG&E and a high priority subsurface installation under California law. Care must be taken to ensure safety and accessibility. So, please ensure that if PG&E approves work near gas transmission pipelines it is done in adherence with the below stipulations. Additionally, the following link provides additional information regarding legal requirements under California excavation laws: https://www.usanorth811.org/images/pdfs/CA-LAW-2018.pdf

- 1. Standby Inspection: A PG&E Gas Transmission Standby Inspector must be present during any demolition or construction activity that comes within 10 feet of the gas pipeline. This includes all grading, trenching, substructure depth verifications (potholes), asphalt or concrete demolition/removal, removal of trees, signs, light poles, etc. This inspection can be coordinated through the Underground Service Alert (USA) service at 811. A minimum notice of 48 hours is required. Ensure the USA markings and notifications are maintained throughout the duration of your work.
- 2. Access: At any time, PG&E may need to access, excavate, and perform work on the gas pipeline. Any construction equipment, materials, or spoils may need to be removed upon notice. Any temporary construction fencing installed within PG&E's easement would also need to be capable of being removed at any time upon notice. Any plans to cut temporary slopes exceeding a 1:4 grade within 10 feet of a gas transmission pipeline need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.
- 3. Wheel Loads: To prevent damage to the buried gas pipeline, there are weight limits that must be enforced whenever any equipment gets within 10 feet of traversing the pipe.

Ensure a list of the axle weights of all equipment being used is available for PG&E's Standby Inspector. To confirm the depth of cover, the pipeline may need to be potholed by hand in a few areas.

Due to the complex variability of tracked equipment, vibratory compaction equipment, and cranes, PG&E must evaluate those items on a case-by-case basis prior to use over the gas pipeline (provide a list of any proposed equipment of this type noting model numbers and specific attachments).

No equipment may be set up over the gas pipeline while operating. Ensure crane outriggers are at least 10 feet from the centerline of the gas pipeline. Transport trucks must not be parked over the gas pipeline while being loaded or unloaded.

- 4. Grading: PG&E requires a minimum of 36 inches of cover over gas pipelines (or existing grade if less) and a maximum of 7 feet of cover at all locations. The graded surface cannot exceed a cross slope of 1:4.
- 5. Excavating: Any digging within 2 feet of a gas pipeline must be dug by hand. Note that while the minimum clearance is only 12 inches, any excavation work within 24 inches of the edge of a pipeline must be done with hand tools. So to avoid having to dig a trench entirely with hand tools, the edge of the trench must be over 24 inches away. (Doing the math for a 24 inch wide trench being dug along a 36 inch pipeline, the centerline of the trench would need to be at least 54 inches [24/2 + 24 + 36/2 = 54] away, or be entirely dug by hand.)

Water jetting to assist vacuum excavating must be limited to 1000 psig and directed at a 40° angle to the pipe. All pile driving must be kept a minimum of 3 feet away.

Any plans to expose and support a PG&E gas transmission pipeline across an open excavation need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

6. Boring/Trenchless Installations: PG&E Pipeline Services must review and approve all plans to bore across or parallel to (within 10 feet) a gas transmission pipeline. There are stringent criteria to pothole the gas transmission facility at regular intervals for all parallel bore installations.

For bore paths that cross gas transmission pipelines perpendicularly, the pipeline must be potholed a minimum of 2 feet in the horizontal direction of the bore path and a minimum of 12 inches in the vertical direction from the bottom of the pipe with minimum clearances measured from the edge of the pipe in both directions. Standby personnel must watch the locator trace (and every ream pass) the path of the bore as it approaches the pipeline and visually monitor the pothole (with the exposed transmission pipe) as the bore traverses the pipeline to ensure adequate clearance with the pipeline. The pothole width must account for the inaccuracy of the locating equipment.

7. Substructures: All utility crossings of a gas pipeline should be made as close to perpendicular as feasible (90° +/- 15°). All utility lines crossing the gas pipeline must have a minimum of 12 inches of separation from the gas pipeline. Parallel utilities, pole bases, water line 'kicker blocks', storm drain inlets, water meters, valves, back pressure devices or other utility substructures are not allowed in the PG&E gas pipeline easement.

If previously retired PG&E facilities are in conflict with proposed substructures, PG&E must verify they are safe prior to removal. This includes verification testing of the contents of the facilities, as well as environmental testing of the coating and internal surfaces. Timelines for PG&E completion of this verification will vary depending on the type and location of facilities in conflict.

- 8. Structures: No structures are to be built within the PG&E gas pipeline easement. This includes buildings, retaining walls, fences, decks, patios, carports, septic tanks, storage sheds, tanks, loading ramps, or any structure that could limit PG&E's ability to access its facilities.
- 9. Fencing: Permanent fencing is not allowed within PG&E easements except for perpendicular crossings which must include a 16 foot wide gate for vehicular access. Gates will be secured with PG&E corporation locks.
- 10. Landscaping: Landscaping must be designed to allow PG&E to access the pipeline for maintenance and not interfere with pipeline coatings or other cathodic protection systems. No trees, shrubs, brush, vines, and other vegetation may be planted within the easement area. Only those plants, ground covers, grasses, flowers, and low-growing plants that grow unsupported to a maximum of four feet (4') in height at maturity may be planted within the easement area.
- 11. Cathodic Protection: PG&E pipelines are protected from corrosion with an "Impressed Current" cathodic protection system. Any proposed facilities, such as metal conduit, pipes, service lines, ground rods, anodes, wires, etc. that might affect the pipeline cathodic protection system must be reviewed and approved by PG&E Corrosion Engineering.
- 12. Pipeline Marker Signs: PG&E needs to maintain pipeline marker signs for gas transmission pipelines in order to ensure public awareness of the presence of the pipelines. With prior written approval from PG&E Pipeline Services, an existing PG&E pipeline marker sign that is in direct conflict with proposed developments may be temporarily relocated to accommodate construction work. The pipeline marker must be moved back once construction is complete.
- 13. PG&E is also the provider of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs which may endanger the safe operation of its facilities.

Electric Facilities

It is PG&E's policy to permit certain uses on a case by case basis within its electric transmission fee strip(s) and/or easement(s) provided such uses and manner in which they are exercised, will not interfere with PG&E's rights or endanger its facilities. Some examples/restrictions are as follows:

- 1. Buildings and Other Structures: No buildings or other structures including the foot print and eave of any buildings, swimming pools, wells or similar structures will be permitted within fee strip(s) and/or easement(s) areas. PG&E's transmission easement shall be designated on subdivision/parcel maps as "RESTRICTED USE AREA NO BUILDING."
- 2. Grading: Cuts, trenches or excavations may not be made within 25 feet of our towers. Developers must submit grading plans and site development plans (including geotechnical reports if applicable), signed and dated, for PG&E's review. PG&E engineers must review grade changes in the vicinity of our towers. No fills will be allowed which would impair

ground-to-conductor clearances. Towers shall not be left on mounds without adequate road access to base of tower or structure.

- 3. Fences: Walls, fences, and other structures must be installed at locations that do not affect the safe operation of PG&'s facilities. Heavy equipment access to our facilities must be maintained at all times. Metal fences are to be grounded to PG&E specifications. No wall, fence or other like structure is to be installed within 10 feet of tower footings and unrestricted access must be maintained from a tower structure to the nearest street. Walls, fences and other structures proposed along or within the fee strip(s) and/or easement(s) will require PG&E review; submit plans to PG&E Centralized Review Team for review and comment.
- 4. Landscaping: Vegetation may be allowed; subject to review of plans. On overhead electric transmission fee strip(s) and/or easement(s), trees and shrubs are limited to those varieties that do not exceed 10 feet in height at maturity. PG&E must have access to its facilities at all times, including access by heavy equipment. No planting is to occur within the footprint of the tower legs. Greenbelts are encouraged.
- 5. Reservoirs, Sumps, Drainage Basins, and Ponds: Prohibited within PG&E's fee strip(s) and/or easement(s) for electric transmission lines.
- 6. Automobile Parking: Short term parking of movable passenger vehicles and light trucks (pickups, vans, etc.) is allowed. The lighting within these parking areas will need to be reviewed by PG&E; approval will be on a case by case basis. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications. Blocked-up vehicles are not allowed. Carports, canopies, or awnings are not allowed.
- 7. Storage of Flammable, Explosive or Corrosive Materials: There shall be no storage of fuel or combustibles and no fueling of vehicles within PG&E's easement. No trash bins or incinerators are allowed.
- 8. Streets and Roads: Access to facilities must be maintained at all times. Street lights may be allowed in the fee strip(s) and/or easement(s) but in all cases must be reviewed by PG&E for proper clearance. Roads and utilities should cross the transmission easement as nearly at right angles as possible. Road intersections will not be allowed within the transmission easement.
- 9. Pipelines: Pipelines may be allowed provided crossings are held to a minimum and to be as nearly perpendicular as possible. Pipelines within 25 feet of PG&E structures require review by PG&E. Sprinklers systems may be allowed; subject to review. Leach fields and septic tanks are not allowed. Construction plans must be submitted to PG&E for review and approval prior to the commencement of any construction.
- 10. Signs: Signs are not allowed except in rare cases subject to individual review by PG&E.
- 11. Recreation Areas: Playgrounds, parks, tennis courts, basketball courts, barbecue and light trucks (pickups, vans, etc.) may be allowed; subject to review of plans. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear

PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications.

12. Construction Activity: Since construction activity will take place near PG&E's overhead electric lines, please be advised it is the contractor's responsibility to be aware of, and observe the minimum clearances for both workers and equipment operating near high voltage electric lines set out in the High-Voltage Electrical Safety Orders of the California Division of Industrial Safety (https://www.dir.ca.gov/Title8/sb5g2.html), as well as any other safety regulations. Contractors shall comply with California Public Utilities Commission General Order 95 (http://www.cpuc.ca.gov/gos/GO95/go_95_startup_page.html) and all other safety rules. No construction may occur within 25 feet of PG&E's towers. All excavation activities may only commence after 811 protocols has been followed.

Contractor shall ensure the protection of PG&E's towers and poles from vehicular damage by (installing protective barriers) Plans for protection barriers must be approved by PG&E prior to construction.

13. PG&E is also the owner of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs that may endanger the safe and reliable operation of its facilities.

Thank you,

Pacific Gas and Electric Company Plan Review Team

Email: pgeplanreview@pge.com

[NOTICE: This message originated outside of City of Merced -- DO NOT CLICK on links or open attachments unless you are sure the content is safe.]

Notice of Exemption

Appendix E

То:	Office of Planning and Research P.O. Box 3044, Room 113 Sacramento, CA 95812-3044	From: (Public Agency): 678 W. 18th Street	City of Merced	
		Merced, CA 95340		
	County Clerk	Merced, CA 93340		
	County of: Merced		(Address)	
	Merced, CA 95340			
Proje	ect Title: VTSM #1322 & Minor Modification	on #22-01 (Environn	nental Review #22-31)	
Proje	ect Applicant: Likwid Asset Mange LLC		*	
Proje	ect Location - Specific:			
No	rth of Merced Ave., approximately 1,	300 feet east of Co	ffee St.	
Proie	ect Location - City: Merced	Project Location - (Sounty: Merced	
-	ription of Nature, Purpose and Beneficiaries		Jounty	
Vesting Tentative Subdivision Map to subdivide 25.59 acres into 154 single-family lots and allow a minor modification to the minimum lot size for 4 lots within the subdivision.				
Nam	e of Public Agency Approving Project: City o	f Merced		
	e of Person or Agency Carrying Out Project:			
	npt Status: (check one): Ministerial (Sec. 21080(b)(1); 15268); Declared Emergency (Sec. 21080(b)(3); 1 Emergency Project (Sec. 21080(b)(4); 152 Categorical Exemption. State type and se Statutory Exemptions. State code number	269(b)(c)); ction number:151	83	
Reas	ons why project is exempt:			
The	project is consistent with the Gener re are no significant changes to the evaluated as part of the General Pla	project that would o	Designations for the site. reate impacts that were	
	Agency act Person:	Area Code/Telepho	ne/Extension: 209-385-6967	
1	d by applicant: Attach certified document of exemption findi Has a Notice of Exemption been filed by the ture: Da Signed by Lead Agency Signed by	e public agency approving te: 2/2-7/3 T	g the project? Yes No litle: Sevin Planna	
uthority eferen	v cited: Sections 21083 and 21110, Public Resources ce: Sections 21108, 21152, and 21152.1, Public Reso	Code. Date Rece	ived for filing at OPR:	

The California Environmental Quality Act (CEQA) Section 15183 Findings:

Application: Vesting Tentative Subdivision Map #1322 & Minor Modification #22-01

Location: North of Merced Avenue, approximately 1,300 feet east of Coffee Street

Environmental Review #22-31

Assessor's Parcel Number: APN: 061-310-017

General Plan Designation: Low Density Residential (LD)

Zoning: Residential Planned Development (RP-D) #56

rev	nich an environmental impact report (EIR) has been certified "shall not require additional environmental view, except as might be necessary to examine whether there are project-specific significant effects nich are peculiar to the project or its site."			
res (Lo ado her	The Merced Vision 2030 General Plan and its associated EIR (SCH# 2008071069) were certified in January 2012. The document comprehensively examined the potential environmental impacts that may occur as a result of build-out of the 28,576-acre Merced SUDP/SOI. For those significant environmental impacts (Loss of Agricultural Soils and Air Quality) for which no mitigation measures were available, the City adopted a Statement of Overriding Considerations (City Council Resolution #2011-63). This document herein incorporates by reference the Merced Vision 2030 General Plan, the General Plan Program EIR (SCH# 2008071069), and Resolution #2011-63.			
	The following findings are made in compliance with CEQA Section 15183 – Project consistent with a Community Plan or Zoning.			
exa	approving a project meeting the requirements of CEQA Section 15183, a public agency shall limit its amination of environmental effects to those which the agency determines, in an initial study or other alysis:			
1.	1. Is the project consistent with the General Plan and Zoning designations for the site (including density for residential developments)? Yes X No			
	If yes, please explain below. If no, the project does not qualify for this exemption.			
	Comment/Finding: As indicated above, the General Plan designation for this site is Low Density (LD) Residential which allows a density of 2 to 6 dwelling units per acre. The proposed tentative map and minor modification would provide a gross density of 6 units/acre which is consistent with the General Plan.			
	The site is zoned Residential Planned Development (RP-D) #56 and has a residential land use designation. The proposed tentative map is consistent with the zoning.			
2.	Are there any impacts that weren't evaluated in the General Plan EIR that are peculiar to the project or the parcel on which the project would be located? Yes No_ X			

State CEQA Guidelines Section 15183 (Public Resources Code §21083.3), provides that projects which are consistent with the development density established by a Community Plan, General Plan, or Zoning for

The California Environmental Quality Act (CEQA) Section 15183 Findings Page 2

If yes, an initial study or detailed analysis is necessary to determine if specific impacts will need to be mitigated.

If no, continue with CEQA Section 15183 Exemption.

Comment/Finding:

All potential impacts from this development were evaluated with the General Plan EIR. The site is consistent with the General Plan and zoning and has no unique features that were not evaluated with the General Plan EIR.

3.	Are there project specific impacts which the General Plan EIR failed to	analyze as	significant	effects.
		Yes_	No:	<u>X</u>

If yes, an initial study or other detailed analysis is necessary to determine if the impacts are considered to be significant and if mitigation is required.

If no, continue with CEQA Section 15183 Exemption.

Comment/Finding:

The proposed tentative map and minor modification would not result in any additional impacts that were not evaluated with the General Plan EIR.

4. Is there substantial new information which would result in more severe impacts than anticipated by the General Plan EIR?

Yes____ No_<u>X_</u>

If yes, an initial study or other detailed analysis is necessary to determine if the impacts are considered to be significant and if mitigation is required.

If no, continue with CEQA Section 15183 Exemption.

Comment/Finding:

There is no new information as a result of the proposed tentative map that would result in more severe impacts. This tentative map and proposed minor modification is consistent with the General Plan density and circulation element and the land use designation for Residential Planned Development (RP-D) #56. All potential impacts were evaluated with the General Plan EIR.

On the basis of this evaluation, in accordance with the requirements of Section 15183 of the CEQA Guidelines:

- 1				
Ī		2. It is found that an addendum Negative Declaration will n	need to be prepared.	
ľ		3. That a subsequent EIR will need to be prepared.		
	X	4. No further documentation is required.		
Γ	Date:	2/27/23	Prepared By:	
			////	

1. It is found that subsequent negative declaration will need to be prepared.

Julie Nelson, Senior Planner

Prepare a notice of exemption using CEQA section 15183 based on this analysis.

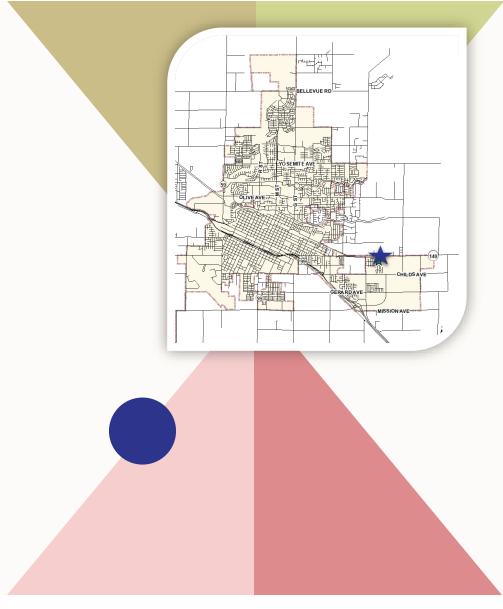
RENAISSANCE 154

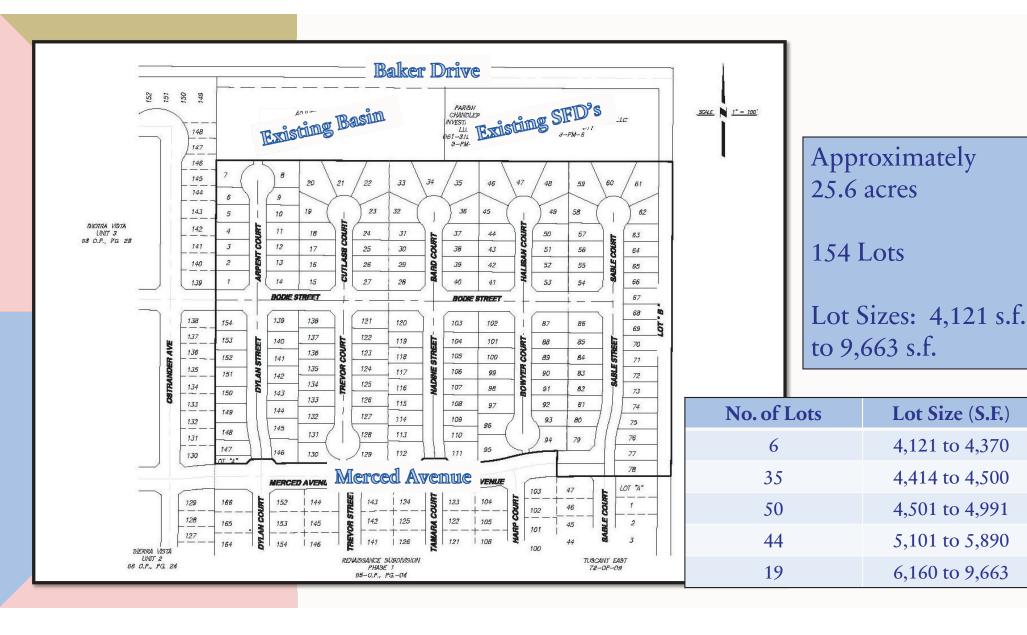
Vesting Tentative Subdivision Map #1322

&

Minor Modification #22-01





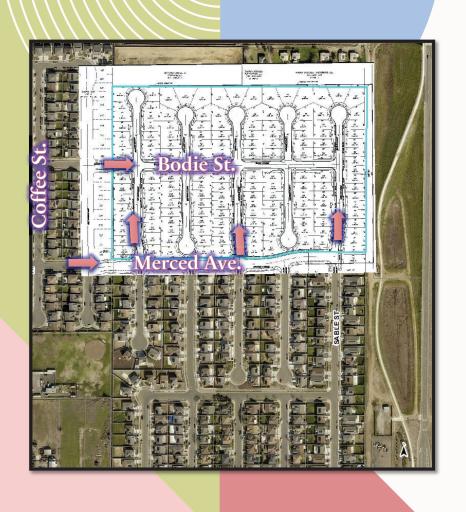


GENERAL PLAN DESIGNATION LOW DENSITY RESIDENTIAL

☐ ZONING RP-D #56

Zoning Code Compliance

- ➤ The proposed density complies with the General Plan.
- ➤ With the approval of Minor Modification #22-01, the project complies with the Zoning designation of RP-D #56.
- > RP-D #56 requires the minimum lot size to be 4,400 s.f.
- ≥ 6 of the proposed lots are less than 4,400 s.f.
- Approval of the Minor Modification would allow the smaller lot size for the 6 lots.



TRAFFIC/CIRCULATION

Access to the subdivision from:

- Merced Avenue (3 street connections)
- Bodie Street (via Coffee Street)

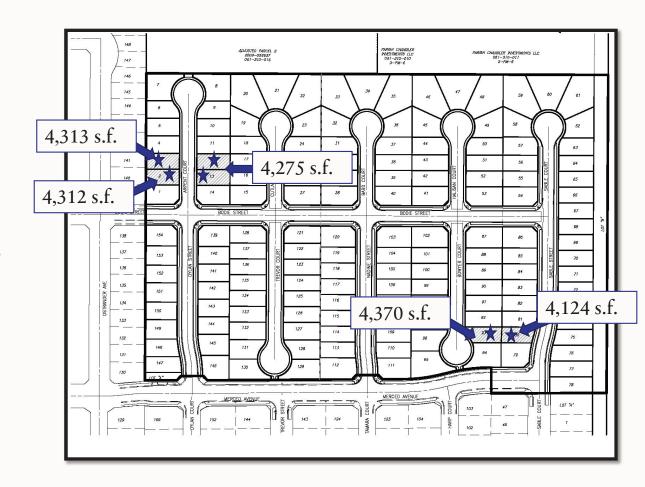
Traffic calming required on Merced Avenue and Bodie Street (Condition #20).

SITE DESIGN

- ❖ The subdivision consists of a mixture of cul-de-sacs and through streets connecting to Merced Avenue.
- ❖ All cul-de-sac bulbs are required to meet Fire Department Standards and have a minimum diameter of 96 feet (Condition #17).
- ❖ Lot A as shown at the southwest corner of the site is an existing sewer lift station. Lot A shall be dedicated to the City with the Final Map (Condition #26).
- ❖ Lot B is the Hartley Lateral.
- ❖ A concrete block wall (or other approved material) is required along the eastern property line adjacent to the Hartley Lateral and along the norther property line adjacent to the existing residential (Condition #34).
- ❖ A concrete block wall (or other approved material) is required along the northern property line to mitigate noise from the railroad track and Hwy 140 (Condition #34).

SITE DESIGN (RP-D #56)

- Residential Planned Development requires a minimum lot size of 4,400 s.f.
- Lots Range in size from 4,121 s.f. to 9,663 s.f.
- 6 of the proposed lots are less than 4,400 s.f.
- Minor Modification #22-01 would allow the smaller lots.
- Setbacks shall comply with the Design Standards for RP-D #56 (Attachment D).



MINOR MODIFICATION #22-01



- Lots 2, 3, 12, 13, 80, and 93 are smaller than the 4,400 s.f. required by RP-D #56.
- MMC Section 20.20.020 allows minor changes to a Planned Development.
- The reduced lot size affects 4% of the total lots.
- The reduction varies from 3% to 10% below the required 4,400 s.f.
- The change was determined to be minor and could be approved with the Minor Use Permit process along with the Tentative Map.

TENTATIVE SUBDIVISION MAP

- Finding K of the Staff Report addresses the Findings required for a Tentative Subdivision Map.
- All requirements were met with the proposed map.
- Comments were received from MID and PG&E. There comments were reviewed and if appropriate included in the conditions of approval.



ENVIRONMENTAL REVIEW

The project site is consistent with the General Plan and Zoning Density requirements.

There are no impacts not previously analyzed by the General Plan or that are peculiar to this project.

A Categorical Exemption based on CEQA Section 15183 is recommended.

PLANNING COMMISSION ACTION

Approve/Disapprove/Modify:

- □ Environmental Review #22-31 (Categorical Exemption
- □ Vesting Tentative Subdivision Map #1322
- Minor Modification #22-01





CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

ADMINISTRATIVE REPORT

File #: 23-289 Meeting Date: 4/5/2023

Planning Commission Staff Report

Report Prepared by: Francisco Mendoza-Gonzalez, Associate Planner, Development Services Department

SUBJECT: General Plan Amendment #22-05, Fahrens Creek Specific Plan Amendment #5, Zone Change #432, Establishment of Residential Planned Development (RP-D) #78, and Vesting Tentative Subdivision Map #1326 initiated by ISEA International, property owner, for an approximately 10.76 acre parcel generally located on the south side of Cardella Road, between El Redonndo Drive and Horizons Avenue (1250 Cardella Road). The General Plan Amendment would change the General Plan land use designation from Office Commercial (CO)/Neighborhood Commercial (CN) to Low Density Residential (LD). The Fahrens Creek Specific Plan Amendment would change the land use designation for the Specific Plan from Office Commercial/Neighborhood Commercial to Low Density Residential. The Zone Change would change the Zoning designation from Planned Development (P-D) #50 to Residential Planned Development (RP-D) #78. The Vesting Tentative Subdivision Map would subdivide the parcel into 53 single-family lots, ranging in size from 5,000 square feet to 6,718 square feet, *PUBLIC HEARING*

ACTION PLANNING COMMISSION:

Recommendation to City Council

- 1) Environmental Review #22-50 (Negative Declaration)
- 2) General Plan Amendment #22-05
- 3) Fahrens Creek Specific Plan Amendment #5
- 4) Zone Change #432
- 5) Residential Planed Development (RP-D) #78

Approve/Disapprove/Modify:

- 1) Environmental Review #22-50 (Negative Declaration)
- 2) Tentative Subdivision Map #1326 (subject to City Council approval of General Plan Amendment #22-05, Fahrens Creek Specific Plan Amendment #5, Zone Change #432, and Establishment of Residential Planned Development (RP-D) #78)

CITY COUNCIL:

Approve/Disapprove/Modify:

- 1) Environmental Review #22-50 (Negative Declaration)
- 2) General Plan Amendment #22-05

File #: 23-289 Meeting Date: 4/5/2023

- 3) Fahrens Creek Specific Plan Amendment #5
- 4) Zone Change #432
- 5) Establishment of Residential Planned Development (RP-D) #78

SUMMARY

The subject site is an undeveloped 10.76-acre lot located in Northwest Merced at 1250 Cardella Road. The subject site is generally located on the south side of Cardella Road, between El Redondo Drive and Horizons Avenue (Location Map at Attachment C). The General Plan Amendment would change the General Plan land use designation from Office Commercial (CO)/Neighborhood Commercial (CN) to Low Density Residential (LD). The Fahrens Creek Specific Plan Amendment would change the Specific Plan land use designation from Office Commercial/Neighborhood Commercial to Low Density Residential. The Zone Change would change the Zoning designation from Planned Development (P-D) #50 to Residential Planned Development (RP-D) #78. The Tentative Subdivision Map would subdivide the parcel into 53 single-family lots, ranging in size from 5,000 square feet to 6,718 square feet. The proposed density of the subdivision would be approximately 4.93 dwelling units per acre. This density would comply with the proposed General Plan designation of Low Density (LD) Residential, which allows between 2 to 6 dwelling units per acre.

RECOMMENDATION

Planning staff is neutral with this proposal and is not recommending approval or denial. The Planning Commission may recommend approval or denial of Environmental Review #22-50 [Negative Declaration], General Plan Amendment #22-05, Fahrens Creek Specific Plan Amendment #5, Zone Change #432, and Establishment of Residential Planned Development #78; and approve or deny Tentative Subdivision Map #1326 (subject to City Council adopting the General Plan Amendment, Fahrens Creek Specific Plan Amendment, Zone Change, and Establishment of Residential Planned Development #78) including the adoption of the Draft Resolutions at Attachments A and B of Staff Report #23-289, subject to the conditions in Exhibit A and the findings/considerations in Exhibit B of each attachment.

DISCUSSION

Project Description

The proposed project is located in Northwest Merced on the south side of Cardella Road, between El Redondo Drive and Horizons Avenue (1250 Cardella Road) (Location Map at Attachment C). The project consists of a General Plan Amendment, Specific Plan Amendment, Zone Change, and the Establishment of Residential Planned Development (RP-D) #78. The General Plan Amendment would change the General Plan land use designation from Neighborhood Commercial (CN)/Commercial Office (CO) to Low Density Residential. The Specific Plan Amendment would change the land use designation of the Fahrens Creek Specific Plan from Neighborhood Commercial/Commercial Office to Low Density Residential. The Zone Change would change the Zoning designation from Planned Development (P-D) #50 to Residential Planned Development (RP-D) #78 would establish a Site

File #: 23-289 Meeting Date: 4/5/2023

Utilization Plan for approximately 10.76 acres with a land use designation of Low Density (LD) Residential. Refer to the Map at Attachment D for the proposed land use changes.

In addition to the applications above, the applicant is proposing to subdivide the approximately 10.76 acres into a residential subdivision with 53 single-family homes. The proposed subdivision does not include the creation of any courts or cul-de-sacs, but it will require creating three new streets, expanding two streets with frontage improvements (Gaucho Drive, and Cardella Road) and extending two roads (El Redondo Drive and Horizons Avenue) up to Cardella Road as shown on the map at Attachment D. Given that the proposed subdivision is under 60 units, the development would not be subject to the City's recently adopted Regional Housing Needs Allocation Unit Production Plan.

The applicant has not proposed any elevations or sample site plans. The applicant is proposing that the development be subject to the development standards of the R-1-5 Zone found in the Zoning Ordinance under Table 20.08-2 Development Standards for Single-Family Residential Zoning Districts. The development standards include requirements for minimum lot sizes, lot dimensions, maximum lot coverage, minimum building setbacks, maximum building height, etc. (Attachment F). These standards would be adopted as the standards for Residential Planned Development (RP-D) #78. Even though the applicant does not have proposed elevations, the exterior design would be required to comply with the City's standard design requirements for single-family homes as shown under Merced Municipal Code Section 20.46.020 - Design Standards for Single-Family Dwellings and Mobile Homes (Attachment G). These standards cover different design elements such as roof pitch, roofing material, exterior materials, window treatment, etc. These standards would also be adopted as standards for RP-D #78.

Surrounding uses as noted in Attachment C.

Surrounding Land	Existing Use of Land	City Zoning Designation	City General Plan Land Use Designation
North	Agriculture (across Cardella Road)	County Jurisdiction	Office Commercial (CO)
South	Undeveloped Land (pending residential subdivision)	Planned Development (P-D) #50	Village Residential (VR)
East	Undeveloped Land	Planned Development (P-D) #50	Village Residential (VR)
West	Undeveloped Land	Planned Development (P-D) #57	Village Residential (VR)

Background on the Urban Village Concept

File #: 23-289 Meeting Date: 4/5/2023

The subject site is currently part of a planned urban village residential neighborhood. The Urban Village Concept goes back to 1990 with the Merced 2030 - How Should We Grow?, a process which analyzed the various growth and expansion options available to the City. As a result of this study, it was determined that Merced's growth pattern for new growth areas should be based on mixed-use, pedestrian friendly, and transit-friendly design principles, known as the Urban Village Concept. As a follow-up to this planning process, the City commissioned an urban design study for an 8,000-acre portion of Northern Merced which resulted in the publication of the North Merced Conceptual Land Use Plan and Merced Villages Design Guidelines in late 1991. This established the basic "urban design" policy direction used in preparation of the Merced Vision 2015 General Plan published in 1997, and the Merced Vision 2030 General Plan (Chapter 6 Urban Design Concepts is provided at Attachment J).

Approval of this proposal would prevent the creation of the Urban Village Residential Neighborhood that was originally intended for this neighborhood when it was annexed into the City in 2003. The urban village neighborhood concept is intended to create a high-density neighborhood (through multifamily, town houses, small single-family lots, etc.) that surround a regional commercial center (minimum of 10 acres) as is currently reserved for this site. The high-density residential surrounding the commercial is called an Inner Village. These Inner Villages allow a density between 10-36 dwelling units per acre. Surrounding the Inner Village is the Outer Village which has a reduced density between 4-12 dwelling units per acre. The commercial land is the central part of the Urban Village Residential concept which is intended to be sustained by the surrounding high density residential units because it creates a neighborhood where residents can easily walk to work, commercial amenities (retail/restaurants), and entertainment opportunities. This is similar to the mixed-use developments found in Downtown Merced. This land use development concept is intended to promote active/walkable neighborhoods with accessible amenities that would not be cardependent resulting in less pollution and more environmentally friendly development. The approval of this land use change would eliminate the commercial uses that are needed for the Urban Village Residential concept to function. With the loss of commercial land there would also be a loss in job creation and amenities to the community, but an increase in housing.

The property owner has indicated that there has been minimal interest from commercial developers to develop this land. They noted a challenge for commercial developers is the subject site being located on the edge of the City limits in a part of town that is mostly undeveloped with low traffic counts. Due to these challenges, the property owner is requesting a land use change to low density residential for a single-family home subdivision to fulfill a high housing demand in Merced having vacancy rates under 1% over the past few years.

Surrounding Projects

The subject site (approximately 10.7 acres) was annexed into the City in 2003, as part of the Fahrens Creek North Annexation which incorporated approximately 152.19 acres into the City limits. This annexation followed the annexation of the Fahrens Creek II annexation, approved earlier in 2003. Both annexations were approved with a land use policy that would support the Urban Village concept with 10-acres of commercial surrounded by an inner village residential (minimum 10 dwelling units per acres) and subsequently surrounded by outer village residential with densities between 2 and 6 dwelling acres.

File #: 23-289 Meeting Date: 4/5/2023

Surrounding the project site are some recently approved entitlements, many of which have not been constructed yet. To the east is the Sage Creek Apartment Complex (248 units on 13.5 acres), to the south is Sage Creek subdivision (103 single-family homes on 16 acres), and to the west is the Royal Woods Estates (113 single-family lots on 16 acres with 3.60 acres reserved for future multifamily). Building permits have not been submitted for any of the surrounding projects. A final map has been approved for the Sage Creek subdivision and grading work/construction is in progress. Approving this subdivision would connect the surrounding sites up to an arterial road in Cardella Road via extension of two collector roads (El Redondo Drive and Horizons Avenue), further developing the street network in the area - along with extending utilities such as sewer and water main lines to other parts of north Merced.

Findings/Considerations

Please refer to Exhibits B of the Draft Planning Commission Resolutions at Attachment A and Attachment B of Staff Report #23-289.

ATTACHMENTS

- A. Draft Planning Commission Resolution General Plan Amendment/Fahrens Creek Specific Plan Amendment/Zone Change/Establishment of Residential Planned Development (RP-D) #78
- B. Draft Planning Commission Resolution Tentative Subdivision Map
- C. Location Map
- D. Land Use Map
- E. VTSM #1326 Layout
- F. Table 20.08 1 Permitted Land Uses in the Residential Zoning Districts
- G. Land Use Table 20.08-2- Development Standards for Single-Family Residential Zoning Districts
- H. Section MMC 20.46.020 Design Standards for Single-Family Dwelling and Mobile Home
- I. MMC 18.16.080 Information Required (for Tentative Subdivision Maps)
- J. Urban Design (Portion of Chapter 6 from General Plan)
- K. Initial Study (Negative Declaration)
- L. Presentation

CITY OF MERCED Planning Commission

Resolution #4109

WHEREAS, the Merced City Planning Commission at its regular meeting of April 5, 2023, held a public hearing and considered General Plan Amendment #22-05, Fahrens Creek Specific Plan Amendment #5, Zone Change #432, and the Establishment of Residential Planned Development (RP-D) #78, initiated by ISEA International, property owner, for an approximately 10.76 acre parcel generally located on the south side of Cardella Road, between El Redondo Drive and Horizons Avenue (1250 Cardella Road). The General Plan Amendment would change the General Plan land use designation from Office Commercial (CO)/Neighborhood Commercial (CN) to Low Density Residential (LD). The Fahrens Creek Specific Plan Amendment would change the land use designation for the Specific Plan from Office Commercial/Neighborhood Commercial to Low Density Residential. The Zone Change would change the Zoning designation from Planned Development (P-D) #50 to Residential Planned Development (RP-D) #78. These changes would allow the subdivision of the parcel into 53 single-family lots, ranging in size from 5,000 square feet to 6,718 square feet. The subject site is more particularly described as Parcel 1 as shown on the map entitled "Parcel Map for YCH" recorded in Volume 102, Page 16, in Merced County Records; also known as a portion of Assessor's Parcel Number (APN) 206-030-017; and,

WHEREAS, the Merced City Planning Commission concurs with Findings/Considerations A through F of Staff Report #23-289 (Exhibit B of Planning Commission Resolution #4109); and,

NOW THEREFORE, after reviewing the City's Initial Study and Draft Environmental Determination, and fully discussing all the issues, the Merced City Planning Commission does resolve to hereby recommend to City Council adoption of a Negative Declaration regarding Environmental Review #22-50, and recommend approval of General Plan Amendment #22-05, Fahrens Creek Specific Plan Amendment #5, Zone Change #432, and Establishment of Residential Planned (RP-D) #78, subject to the Conditions set forth in Exhibit A attached hereto and incorporated herein by this reference.

Upon mot	ion by Commissione	er, seconded	by
Commission	ner	and carried by the following vote:	
AYES:	Commissioner(s)		
NOES:	Commissioner(s)		
ABSENT:	Commissioner(s)		
ABSTAIN:	Commissioner(s)		

PLANNING COMMISSION RESOI Page 2 April 5, 2023	LUTION #4109
Adopted this 5 th day of April 2023	
	Chairperson, Planning Commission of the City of Merced, California
ATTEST:	
Secretary	_
Exhibits: Exhibit A – Conditions of Approval Exhibit B – Findings/Considerations	

Conditions of Approval

Planning Commission Resolution # 4109

General Plan Amendment #22-05, Fahrens Creek Specific Plan Amendment #5, Zone Change #431, Establishment of Residential Planned Development (RP-D) #78

- 1. The proposed General Plan Amendment, Fahrens Creek Specific Plan Amendment and Zone Change shall be as shown on the Proposed Land Use Map at Attachment D of Planning Commission Staff Report #23-289.
- 2. Approval of the General Plan Amendment, Fahrens Creek Specific Plan Amendment, Zone Change, and Residential Planned Development Establishment is subject to the applicant(s) entering into a written (developer) agreement that they agree to all the conditions and shall pay all City and school district fees, taxes, and/or assessments, in effect on the date of any subsequent subdivision and/or permit approval, any increase in those fees, taxes, or assessments, and any new fees, taxes, or assessments, which are in effect at the time the building permits are issued, which may include public facilities impact fees, a regional traffic impact fee, Mello-Roos taxes whether for infrastructure, services, or any other activity or project authorized by the Mello-Roos law, etc. Payment shall be made for each phase at the time of building permit issuance for such phase unless an Ordinance or other requirement of the City requires payment of such fees, taxes, and/or assessments at an earlier or subsequent time. Said agreement to be approved by the City Council prior to the adoption of the ordinance, resolution, or minute action.
- 3. The proposed project shall comply with all standard Municipal Code and Subdivision Map Act requirements as required by the City Engineering Department.
- 4. The Project shall comply with all applicable conditions set forth in the resolutions for Annexation No. 190 (Fahrens Creek North Annexation) previously approved for this site as well as all applicable conditions of the Fahrens Creek Specific Plan.
- 5. All other applicable codes, ordinances, policies, etc., adopted by the City of Merced shall apply.
- 6. Community Facilities District (CFD) annexation is required for annual operating costs for police and fire services as well as storm drainage, public

EXHIBIT A
OF PLANNING COMMISSION RESOLUTION #4109
Page 1

- landscaping, street trees, street lights, parks and open space. CFD procedures shall be initiated before final map approval. Developer/Owner shall submit a request agreeing to such a procedure, waiving right to protest and post deposit as determined by the City Engineer to be sufficient to cover procedure costs and maintenance costs expected prior to first assessments being received.
- The developer/applicant shall indemnify, protect, defend (with counsel 7. selected by the City), and hold harmless the City, and any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof, from any and all claims, actions, suits, proceedings, or judgments against the City, or any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof to attack, set aside, void, or annul, an approval of the City, or any agency or instrumentality thereof, advisory agency, appeal board, or legislative body, including actions approved by the voters of the City, concerning the project and the approvals granted herein. Furthermore, developer/applicant shall indemnify, protect, defend, and hold harmless the City, or any agency or instrumentality thereof, against any and all claims, actions, suits, proceedings, or judgments against any governmental entity in which developer/applicant's project is subject to that other governmental entity's approval and a condition of such approval is that the City indemnify and defend (with counsel selected by the City) such governmental entity. City shall promptly notify the developer/applicant of any claim, action, suits, or proceeding. Developer/applicant shall be responsible to immediately prefund the litigation cost of the City including, but not limited to, City's attorney's fees and costs. If any claim, action, suits, or proceeding is filed challenging this approval, the developer/applicant shall be required to execute a separate and formal defense, indemnification, and deposit agreement that meets the approval of the City Attorney and to provide all required deposits to fully fund the City's defense immediately but in no event later than five (5) days from that date of a demand to do so from City. In addition, the developer/applicant shall be required to satisfy any monetary obligations imposed on City by any order or judgment.
- 8. The developer/applicant shall construct and operate the project in strict compliance with the approvals granted herein, City standards, laws, and ordinances, and in compliance with all State and Federal laws, regulations, and standards. In the event of a conflict between City laws and standards and a State or Federal law, regulation, or standard, the stricter or higher standard shall control.

9. Residential Planned Development #78 shall have the same development standards set forth for the R-1-5 Zoning District. Residential Planned Development #78 shall also comply with the design requirements set forth in Merced Municipal Code Section 20.46.020.

Findings and Considerations Planning Commission Resolution #4109

General Plan Amendment #22-05, Fahrens Creek Specific Plan Amendment #5, Zone Change #432, Establishment of Residential Planned Development (RP-D) #78

FINDINGS/CONSIDERATIONS:

General Plan Compliance and Policies Related to This Application

A) If the General Plan Amendment is approved, the proposed project would comply with the General Plan land use designation of Low Density Residential (LD) which allows 2 to 6 dwelling units per acre. The proposed 53 lot subdivision would provide a density of 4.93 units/acre. The project would also comply with the Zoning designation of Residential Planned Development (RP-D) #78 if the Zone Change and Establishment of RP-D #78 are approved.

The proposed project, with conditions of approval, will help achieve the following General Plan land use policies:

Policy L-1.5: Protect existing neighborhoods from incompatible

developments.

Policy L-1.6: Continue to pursue quality single-family residential

development.

Policy L-1.8: Create livable and identifiable residential neighborhoods.

Policy L-9: Ensure connectivity between existing and planned urban

areas.

<u>Urban Village Concept</u>

The Urban Village Concept goes back to 1990 with the *Merced 2030 – How Should We Grow?* process. This process was a study that analyzed the various growth and expansion options available to the City. As a result of this study, it was determined that Merced's growth pattern for new development areas should be based on mixed-use, pedestrian friendly, and transit-friendly design principles, known as the Urban Village Concept. As a follow-up to this planning process, the City commissioned an urban design study for an 8,000-acre portion of Northern Merced which resulted in the publication of the North Merced Conceptual Land Use Plan and Merced Villages Design Guidelines

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OF PLANNING COMMISSION RESOLUTION #4109
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in late 1991. This established the basic "Urban Design" policy direction used in preparation of the *Merced Vision 2015 General Plan* and *Merced Vision 2030 General Plan*.

Approval of this proposal would prevent the creation of the Urban Village Residential Neighborhood that was originally intended for this area when it was annexed into the City in 2003. Urban Villages are intended to create a high-density neighborhood (through multi-family, town houses, small single-family lots, etc.) that surround a regional commercial center (minimum of 10 acres). The subject site was reserved to be the neighborhood commercial center for this area. The residential zone surrounding the commercial is called an Inner Village that allows a density between 10-36 dwelling units per acre. Surrounding the Inner Village is the Outer Village which has a reduced density between 4-12 dwelling units per acre.

The commercial land is the central part of the Urban Village Residential concept which is intended to be sustained by the surrounding high density uses where residents can easily walk to either work, commercial amenities (retail/restaurants), and entertainment opportunities (similar to Downtown Merced). This land use concept is intended to promote active walkable neighborhoods with accessible amenities that would not be car-dependent, resulting in less pollution and more environmentally friendly development. The approval of this land use change would eliminate the commercial that is needed for the Urban Village Residential concept to function. With the loss of commercial land there would also be a loss in job creation and amenities to the community, but a gain in housing inventory.

The General Plan addresses the Urban Village Residential Concept in various sections of the General Plan. Shown below are some goals and policies that would be impacted by approving this proposal.

- Policy L-2.6 Provide Neighborhood Commercial Centers in Proportion to Residential Development in the City
- Policy L-2.7 Locate and Design New Commercial Developments to Provide Good Access from Adjacent Neighborhoods and Reduce Congestion on Major Streets

In addition, the below sections from Chapter 3 – Land Use, discuss encouraging Urban Villages in new growth areas.

Sections 3.6.1 – Mixed Uses, and 3.6.2 Merced Urban Villages – for promoting "pedestrian and transit-friendly areas (in) the

EXHIBIT B
OF PLANNING COMMISSION RESOLUTION #4109
Page 2

Urban Village, also known as Transit Ready Development. Urban Villages are compact, mixed-use districts that will accommodate projected growth, help maintain Merced's present quality of life, and help ensure its continued economic vitality."

 Promoting Section 6.4 Merced's Urban Villages (Transit Ready Development)

Mandatory Findings

- B) Chapter 20.80 (Zoning Ordinance Amendments) and 20.82 (General Plan Amendments) outlines procedures for considering Zone Changes and General Plan Amendments, but does not require any specific findings to be made for approval. In addition, to amend specific plans, such as the Fahrens Creek Specific Plan, there are no specific findings that need to be made. However, Planning practice would be to provide objective reasons for approval or denial, but these can take whatever form deemed appropriate by the Planning Commission and City Council. Based on State law and case law, the following findings are recommended:
 - 1. The proposed amendment is deemed to be in the public interest.

 The proposed amendment is deemed to be in the public interest because it will provide needed housing.
 - 2. The proposed amendment is consistent and compatible with the rest of the General Plan and any implementation programs that may be affected.
 - The proposed amendment is not consistent or compatible with the rest of the General Plan, but it does provided needed housing for the community.
 - 3. The potential impacts of the proposed amendment have been assessed and have been determined not to be detrimental to the public health, safety, or welfare.
 - The proposed project does not include any uses that would be detrimental to the public health, safety, and welfare of the City. Implementation of the conditions of approval and adherence to all applicable Building Codes, Fire Codes, and City Standards would prevent the project from having any detrimental effect on the health, safety, and welfare of the City.

4. The proposed amendment has been processed in accordance with the applicable provisions of the California Government Code and the California Environmental Quality Act (CEQA).

Planning staff has conducted an environmental review (#22-50) of the project in accordance with the requirements of the California Environmental Quality Act (CEQA), and a Negative Declaration (see Attachment K of Planning Commission Staff Report #23-289) has been recommended.

Neighborhood Impact (Loss of Urban Village Neighborhood)

C) As mentioned under Finding A, this area was originally reserved for an Urban Village Residential Neighborhood. Approval of this proposal would prevent the creation of the Urban Village Residential Neighborhood that was originally intended for this area when it was annexed into the City in 2003. Approval of the proposed General Plan Amendment, Specific Plan Amendment, Zone Change, and Establishment of Residential Planned Development (RP-D) #78 would change the character envisioned for this neighborhood by the General Plan and Fahrens Creek Specific Plan. Commercial uses would have to be located farther away from the neighborhood. However, the change would provide more needed housing and expand the existing residential uses in the area.

The property owner has indicated that there has been minimal interest from commercial developers to develop this land given the location of the subject site being on the edge of the City limits in a part of town that is mostly undeveloped with low traffic counts. Due to these challenges in attracting commercial development, the property owner is requesting a land use change to low density residential for a single-family home subdivision to fulfill a high housing demand in Merced with insufficient inventory and vacancy rates under 1%.

Public hearing notices were sent to all property owners within 300 feet of the project site. At the time that this report was prepared, the City had not received any comments regarding this project.

Affordability Requirements

D) In April 2022, the City Council approved Resolution 2022-15 regarding the requirement for 12.5% affordable housing for new single-family residential subdivisions and multifamily residential projects. This requirement is triggered by two qualifiers that need to be met; entitlement type and number

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OF PLANNING COMMISSION RESOLUTION #4109
Page 4

of units created. For single-family residential developments, the affordability requirement is triggered by a legislative action agreement (through annexations, general plan amendments, site utilization plan revisions, or zone changes) for projects with over 60 homes. Subdivisions with less than 60 homes are not required to provide affordable units. The proposed 53-unit subdivision is exempt from having to provide affordable units, as even though the proposal does require a legislative action agreement it contains less than the 60 units needed to trigger the affordability requirement.

Finding for Residential Planned Developments

- E) Per Merced Municipal Code Section 20.20.20 (J) Planned Development (P-D) Zoning Districts, approval of an application for Planned Development Establishment or Revision with accompanying Preliminary Site Utilization Plan only if the following findings can be made:
 - 1. The proposed development is consistent with the goals, policies, and actions of the General Plan and any applicable specific plan and community plan.
 - The proposed development requires a General Plan Amendment so it is not consistent with the General Plan. However, as shown under Finding A, the proposal provides much needed housing for the community and meets some of the goals and policies regarding promoting residential developments.
 - 2. The site for the proposed development is adequate in size and shape to accommodate proposed land uses.
 - The project site is approximately 10.76 acres, which exceeds the 1-acre minimum requirements for a Residential Planned Development as shown under Merced Municipal Code Section 20.20.020 (D.2) Planned Development (P-D) Zoning Districts.
 - 3. The site for the proposed development has adequate access considering the limitations of existing and planned streets and highways.
 - The subject site would improve the street network in the areas by extending both El Redondo Drive and Horizons Avenue north connecting with Cardella Road. This would allow the surrounding neighborhoods to the south to have a more direct access to northern roads in Merced.

- 4. Adequate public services exist or will be provided to serve the proposed development.
 - City utilities such as water and sewer main lines are directly available to the south at El Redondo Drive and Horizons Avenue.
- 5. The proposed development will not have a substantial adverse effect on surrounding property, will be compatible with the existing and planned land use character of the surrounding area, and will enhance the desirability of the area and have a beneficial effect.
 - The surrounding parcels to the south, east, and west have been entitled for residential developments. The property to the south is a residential subdivision for single-family homes (Sage Creek) that is currently under construction. To the north, across Cardella Road, is County Jurisdiction with a General Plan Designation of Office Commercial. Given the other surrounding residential entitlements, the proposed low-density residential subdivision would be compatible with the surrounding area.
- 6. The proposed development carries out the intent of the Planned Development zoning district by providing a more efficient use of the land and an excellence of site design greater than that which could be achieved through the application of established zoning standards.
 - The proposed development provides efficient use of land by proposing a "U-Shaped" street network that does not include the use of cul-de-sacs, that normally result in terminated streets.
- 7. Each individual unit of the proposed development, in each phase as well as the total development, can exist as an independent unit capable of creating a good environment in the locality and being in any stage as desirable and stable as the total development.
 - The proposed subdivision (Lotus) does not include multiple phases, and is intended to be constructed in one phase. All off-site public improvements would be required to be bonded for at the final map stage, and installed prior to home constructions.
- 8. Any deviation from the standard ordinance requirements is warranted by the design and additional amenities incorporated in the development plan, which offer certain unusual redeeming features to compensate for any deviations that may be permitted.

- The proposed subdivision does not include any deviations from the City's standard ordinance requirements as the proposal would be required to comply with the City's R-1-5 Standards.
- 9. The principles incorporated in the proposed development plan indicate certain unique or unusual features, which could not otherwise be achieved under the other zoning district.

The proposed development does not include any unique or unusual features, but it does provide much needed housing for the community and extends utilities north to an area with a lot of missing infrastructure (roads, sewer, water, etc.).

Environmental Clearance

F) Infill projects over 5 acres or projects that don't comply with Zoning/General Plan designations require an Initial Study, per the California Environmental Quality Act (CEQA). In this case, the project site is not consistent with Zoning or the General Plan and is over 5 acres (at 10.7 acres) – thus an Initial Study was required. An Initial Study includes a wide range of analysis required by the State covering an array of subjects including, but not limited to, impacts on vehicle miles traveled, air quality, biological resource, public services, cultural resources, and City utilities. Planning staff has conducted an environmental review of the project in accordance with the requirements of CEQA, and concluded that Environmental Review #22-50 results in a Negative Declaration as the proposal would not have a significant effect on the environment and does not require the preparation of an Environmental Impact Report. A copy of the Initial Study with a Negative Declaration can be found at Attachment K of Planning Commission Staff Report #23-289.

CITY OF MERCED Planning Commission

Resolution #4110

WHEREAS, the Merced City Planning Commission at its regular meeting of April 5, 2023, held a public hearing and considered Vesting Tentative Subdivision Map #1326, initiated by ISEA International, property owner. The proposed subdivisions would subdivide one parcel (approximately 10.76 acres) into 53 single-family lots, ranging in size between 5,000 square feet to 6,750 square feet. The approximate 10.76-acre subject site is generally located south of Cardella Road, between El Redondo Drive and Horizon Avenue. The subject site is more particularly described as Parcel 1 as shown on the map entitled "Parcel Map for YCH" recorded in Volume 102, Page 16, in Merced County Records; also known as a portion of Assessor's Parcel Number (APN) 206-030-017; and,

WHEREAS, the Merced City Planning Commission concurs with Findings/Considerations A through M of Staff Report #23-289 (Exhibit B of Planning Commission Resolution #4110); and,

WHEREAS, the Merced City Planning Commission concurs with the Findings for Tentative Subdivision Map Requirements in Merced Municipal Code Section 18.16.80, 18.16.90, and 18.16.100 as outlined in Exhibit B; and,

NOW THEREFORE, after reviewing the City's Initial Study and Draft Environmental Determination, and fully discussing all the issues, the Merced City Planning Commission does resolve to hereby adopt a Negative Declaration regarding Environmental Review #22-50, and approve Vesting Tentative Subdivision Map #1326, subject to the Conditions set forth in Exhibit A attached hereto and incorporated herein by this reference.

Upon mo Commission	tion by Commissioner	, and carried by the following vote:	by
AYES:	Commissioner(s)		
NOES:	Commissioner(s)		
	Commissioner(s) Commissioner(s)		

PLANNING COMMISSION RESOL Page 2 April 5, 2023	UTION #4110
Adopted this 5 th day of April 2023	
	Chairperson, Planning Commission of the City of Merced, California
ATTEST:	
Camptagg	_
Secretary	
Exhibits: Exhibit A – Conditions of Approval Exhibit B – Findings/Considerations	

Conditions of Approval Planning Commission Resolution # 4110 Vesting Tentative Subdivision Map #1326

- 1. The proposed project shall be constructed/designed as shown on Exhibit 1 (Proposed Vesting Tentative Map at Attachment E), and as modified by the conditions of approval within this resolution.
- 2. All conditions contained in *Resolution #1175-Amended ("Standard Tentative Subdivision Map Conditions")* shall apply.
- 3. The proposed project shall comply with all standard Municipal Code and Subdivision Map Act requirements as applied by the City Engineering Department.
- 4. The Project shall comply with all applicable conditions set forth in the resolutions for Annexation No. 190 (Fahrens Creek North Annexation) previously approved for this site as well as all applicable conditions of the Fahrens Creek Specific Plan.
- 5. All other applicable codes, ordinances, policies, etc., adopted by the City of Merced shall apply.
- 6. Community Facilities District (CFD) annexation is required for annual operating costs for police and fire services as well as storm drainage, public landscaping, street trees, street lights, parks and open space. CFD procedures shall be initiated before final map approval. Developer/Owner shall submit a request agreeing to such a procedure, waiving right to protest and post deposit as determined by the City Engineer to be sufficient to cover procedure costs and maintenance costs expected prior to first assessments being received.
- 7. The developer/applicant shall indemnify, protect, defend (with counsel selected by the City), and hold harmless the City, and any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof, from any and all claims, actions, suits, proceedings, or judgments against the City, or any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof to attack, set aside, void, or annul, an approval of the City, or any agency or instrumentality thereof, advisory agency, appeal board, or legislative body, including actions approved by the voters of the City, concerning the project and the approvals granted herein. Furthermore, developer/applicant shall indemnify, protect, defend, and hold

EXHIBIT A
OF PLANNING COMMISSION RESOLUTION #4110
Page 1

harmless the City, or any agency or instrumentality thereof, against any and all claims, actions, suits, proceedings, or judgments against any governmental entity in which developer/applicant's project is subject to that other governmental entity's approval and a condition of such approval is that the City indemnify and defend (with counsel selected by the City) such governmental entity. City shall promptly notify the developer/applicant of any claim, action, suits, or proceeding. Developer/applicant shall be responsible to immediately prefund the litigation cost of the City including, but not limited to, City's attorney's fees and costs. If any claim, action, suits, or proceeding is filed challenging this approval, the developer/applicant shall be required to execute a separate and formal defense, indemnification, and deposit agreement that meets the approval of the City Attorney and to provide all required deposits to fully fund the City's defense immediately but in no event later than five (5) days from that date of a demand to do so from City. In addition, the developer/applicant shall be required to satisfy any monetary obligations imposed on City by any order or judgment.

- 8. The developer/applicant shall construct and operate the project in strict compliance with the approvals granted herein, City standards, laws, and ordinances, and in compliance with all State and Federal laws, regulations, and standards. In the event of a conflict between City laws and standards and a State or Federal law, regulation, or standard, the stricter or higher standard shall control.
- 9. The project shall comply with all requirements of the California Building Code and all flood requirements of the Federal Emergency Management Agency (FEMA), as well as the requirements for the California Urban Level of Flood Protection (CA 200-year flood).
- 10. All public improvements shall be provided as required by the City Engineer along new Streets A, B, and C, and the widening of Cardella Road and Gaucho Drive, and the extensions of El Redondo Drive and Horizons Avenue within the proposed subdivision. All improvements shall meet City Standards.
- 11. All landscaping within the public right-of-way shall comply with state and local requirements for water conservation. All irrigation provided to street trees or other landscaping shall be provided with a drip irrigation or microspray system and shall comply with the City's Water Efficient Landscape Ordinance (MMC Section 20.36.030). Landscape plans for all public landscaping shall be provided with the Improvement Plans.

- 12. Prior to final inspection of any home, all front yards and side yards exposed to public view shall be provided with landscaping to include, ground cover, trees, shrubs, and irrigation in accordance with Merced Municipal Code Section 20.36.050. Irrigation for all on-site landscaping shall be provided by a drip system or micro-spray system in accordance with the State's Emergency Regulation for Statewide Urban Water Conservation or any other state or City mandated water regulations dealing with the current drought conditions. All landscaping shall comply with the City's Water Efficient Landscape Ordinance (MMC Section 20.36.030).
- 13. A 7-foot-tall concrete block wall shall be installed along Horizons Avenue, El Redondo Drive, and Cardella Road. The wall shall be treated to allow easy removal of graffiti or the developer shall plant fast-growing vines to cover the wall to deter graffiti. Developer shall submit landscape/irrigation/wall plans for approval by City Engineer. All walls shall be solid masonry. Fast-growing vines or other plants shall be planted on or near the wall to deter graffiti and/or a graffiti resistant coating applied to the wall. Details to be worked out with staff.
- 14. Landscaping shall be provided between the block wall and the sidewalk along Horizons Avenue, El Redondo Drive, and Cardella Road. This strip of land shall be dedicated to the City and maintained through the Community Facilities District during the Final Map stage, as required by the City Engineer.
- 15. Developer shall provide construction plans and calculations for all landscaping and public maintenance improvements. All such plans shall conform to City standards and meet approval of the City Engineer.
- 16. Traffic control signs, street markings, and striping shall be as directed by the City Engineer.
- 17. The applicant shall dedicate interior street rights-of-way and all necessary easements as needed for irrigation, utilities, drainage, landscaping, and open space during the Final Map stage as required by the City Engineer.
- 18. Fire hydrants shall be installed along the street frontage to provide fire protection to the area. The hydrants shall meet all City of Merced standards and shall comply with all requirements of the City of Merced Fire Department. Final location of the fire hydrants shall be determined by the Fire Department.
- 19. All undeveloped areas shall be maintained free of weeds and debris.
- 20. Street names shall be approved by the City Engineer.

EXHIBIT A
OF PLANNING COMMISSION RESOLUTION #4110
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- 21. Compliance with the "corner visual triangle" provisions of MMC 20.30.030 is required for corner lots, and may result in the applicant constructing smaller homes on these lots or increasing the front yard setbacks.
- 22. Valley Gutters may be installed in this subdivision per City standards.
- 23. Rolled curbing may be installed in this subdivision consistent with City Standard Design ST-1, if approved by the City Engineer.
- 24. At the building permit stage, the site plans for each lot shall include a minimum 3-foot by 6-foot concrete pad located in the side yard or backyard for the storage of 3 refuse containers. A paved access to the street from this pad shall be provided.
- 25. Full public improvements shall be installed/repaired if the permit value of the project exceeds \$100,000.00. Public improvements may include, but not be limited to, repairing/replacing the sidewalk, curb, gutter, and street corner ramp(s), so that they comply with ADA standards and other relevant City of Merced/State/Federal standards and regulations.
- 26. The project shall comply with all the Post Construction Standards required to comply with State requirements for the City's Phase II MS-4 Permit (Municipal Separate Storm Sewer System).
- 27. Sewer manholes shall be installed as determined necessary by the City Engineer.
- 28. To utilize a basin, the developer shall provide all required calculations to the Engineering Department.
- 29. The developer shall use proper dust control procedures during site development in accordance with San Joaquin Valley Air Pollution Control District rules.
- 30. The main water line for the subdivision shall include a loop system designed as required by the Public Works Department, unless otherwise approved by the City Engineer.
- 31. Minor modifications to the tentative subdivision map may be reviewed and approved through a Site Plan Review Permit, or be referred back to the Planning Commission if deemed necessary by the Director of Development Services.
- 32. This resolution for a Tentative Subdivision Map (TSM #1326) does not become effective until the General Plan Amendment, Specific Plan Amendment, Zone Change, and Establishment of Residential Planned

- Development #78 for this site (GPA #22-05, Fahrens Creek Specific Plan Amendment #5, ZC #432, and RP-D #78) are approved by the City Council.
- 33. The developer shall design the public right-of-way along Cardella Road so that it totals 158 feet of right-of-way (with 79 feet of right-of-way dedicated along property frontage), or as required by the City Engineer.
- 34. The developer shall install a 16 inch ductile iron pipe for water services along Cardella Road, or as required by the City Engineer.
- 35. The developer shall design public right-of-way along El Redondo Drive and Horizons Avenue so that it totals 94 feet of right-of-way, or as required by the City Engineer.
- 36. The street corner ramps along the northern side of Gaucho Drive, between El Redondo Drive and Horizons Avenue, shall be designed to match the street corner ramps along the southern side of El Redondo Drive recently designed by the developer of the subdivision to the south. Details to be worked out with the Engineering Department.
- 37. The developer shall reach-out to the Merced Irrigation District to determine if a storm drainage agreement is required for storm drainage discharge to MID facilities.
- 38. If there is a private irrigation line from the MID through the site, the applicant shall re-route or replace the line so that it may continue to serve nearby properties. The applicant shall work with MID to determine the need, size, and location of these lines.
- 39. The proposal is subject to the development standards for the City's Low Density Residential (R-1-5) Zone, and the Design Standards set forth under Merced Municipal Code Section 20.46.020.

Findings and Considerations Planning Commission Resolution #4110 Vesting Tentative Subdivision Map #1326

FINDINGS/CONSIDERATIONS:

General Plan Compliance and Policies Related to This Application

A) If the General Plan Amendment is approved, the proposed project would comply with the General Plan land use designation of Low Density Residential (LD) which allows 2 to 6 dwelling units per acre. The proposed 53 lot subdivision would provide a density of 4.93 units/acre. The project would also comply with the Zoning designation of Residential Planned Development (RP-D) #78 if the Zone Change and Establishment of RP-D #78 are approved.

The proposed Tentative Subdivision Map, with conditions of approval, will help achieve the following General Plan land use policies:

Policy L-1.5: Protect existing neighborhoods from incompatible

developments.

Policy L-1.6: Continue to pursue quality single-family residential

development.

Policy L-1.8: Create livable and identifiable residential neighborhoods.

Policy L-9: Ensure connectivity between existing and planned urban

areas.

Traffic/Circulation

B) It is anticipated that the proposal would generate approximately 507.21 Average Daily Trips (ADT) based on an average daily rate of 9.57 trips per dwelling unit. The subject site would be accessed via two collector streets, El Redondo Drive and Horizons Avenue (Attachments C and D of Planning Commission Staff Report #23-289). This would connect the subject site and surrounding properties to roads further north such as Cardella Road. This street connectivity would no longer require neighboring residents to drive 0.75 miles south to Yosemite Avenue to then drive back up north 1 mile to access Cardella Road or other northern roads. The traffic generated by this subdivision should not exceed the current and projected capacity for the surrounding street system as the subject site was designed to accommodate

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higher traffic counts for a 10-acre commercial/professional center with the existing General Plan designations of Neighborhood Commercial and Office Commercial.

Public improvements would need to be installed and frontage streets. As shown on Attachment D of Planning Commission Staff Report #23-289, this proposal includes the creation of Streets A, B, and C, the widening of Gaucho Drive and Cardella Road, and the extensions of El Redondo Drive and Horizons Avenue.

The right-of-way width of Cardella Road would be 158 feet. El Redondo and Horizons Avenue's right-of-way widths would be 94 feet. The new street's (Street "A" and Street "B") right-of-way widths would be 49 feet. The right-of-way includes streets, curb, gutter, sidewalk, and in some cases concrete masonry unit (CMU) block walls and park strips. All streets would need to be designed to City Engineering Design Standards (Conditions #33 and #35 of Planning Commission Staff Report #23-289). The applicant is proposing that Gaucho Drive, Street "A", Street "B", and Street "C" have rolled curbs and gutters (Condition #23 of Planning Commission Staff Report #23-289).

Site Design

C) The proposed subdivision with 53 residential lots is considered relatively smaller than those currently on the City's active Tentative Subdivision Map Activity List, which has 17 active maps with 9 maps over 100 units, three of those maps containing over 249 single family units. The proposed layout for the subdivision does not include any cul-de-sacs, it consists of three streets with two being approximately 200 feet long, and one being approximately 500 long. These new streets are connected to create a wide u-shape street network that loops back to Gaucho Drive. The subdivision does not include the construction of any parks or basins. The subject site was designed to be served by the existing storm basin at the southeast corner of Horizons Avenue and Monaco Drive (or other site approved by Engineering). The nearest park is Rudolph Joseph Merino Park located approximately ½ mile south. As mentioned under the Traffic/Circulation Finding, the proposed road extension would serve as a significant road connection that would link the existing subdivision and future subdivisions to the south, east, and west out to Cardella Road providing more direct access to northern parts of Merced and eventually a more direct path to UC Merced when Cardella Road connects to G Street.

Elevations

D) At this time, the applicant does not have any proposed elevations. This proposal will be within a Residential Planned Development, but the applicant does not have a particular design style or features proposed for this subdivision. During the building permit stage, staff would review the elevations to confirm that they meet the Zoning Ordinance's minimum design standards for single-family homes as shown under Merced Municipal Code 20.46 – Residential Design Standards (Attachment G of Planning Commission Staff Report #23-289). Staff would review plans to confirm compliance with Fire Department standards, and ensure that the architecture is of high quality that provides a variety of colors, textures, materials, and building forms.

Public Improvements/City Services

E) The developer would be required to install all streets, utilities, and other improvements within the subdivision. City water and sewer lines would be extended from the south (along El Redondo Drive and Horizons Avenue) to serve this subdivision. Each lot would be required to pay connection fees for sewer and water connections at the building permit stage. Each parcel would be required to meet the City's storm drainage and run-off requirements for the City's MS-IV permit.

In response to significant growth in Merced without a corresponding increase in the General Fund and other revenues, the City Council adopted public facilities impact fees in 1998, and also established a requirement for Community Facilities Districts (Condition #6 of Planning Commission Staff Report #23-289) to help fund roadway, police, fire, and park infrastructure to help fund operating costs for police and fire services. In addition, this district would cover cost related to streetlights, storm drain, and maintenance of landscaping.

Public Facilities Impact Fee Program

F) The developer is responsible for paying public facility impact fees for each home, and are typically paid at the time that the building permit is issued by the Building Department. These fees are used to pay for their fair share towards capital facilities and infrastructure generated by new development such as arterial streets, traffic signals, bridges, police/fire stations, bikeways, etc. The City Council adopted new impact fees in early 2022, and this included fee updates to commercial, industrial, and residential projects. The current

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impact fee per single family homes in this area is \$12,326.00. These fees are updated annually at the start of the calendar year, in accordance with the Engineering Construction Cost Index as published by Engineering News Record.

Schools

G) The Project site falls within the jurisdiction of the Merced City School District (elementary schools and middle schools) and the Merced Union High School District (MUHSD). Students from the subdivision would attend elementary schools, middle schools, and the high school surrounding the area. School fees per State law requirements are considered to be full mitigation for the impacts on schools from new development.

Landscaping

H) Each lot within the subdivision shall be provided with front yard landscaping in compliance with Zoning Ordinance Section 20.36 – Landscaping. Section 20.36.050 requires all exterior setback areas, excluding areas required for access to the property to be landscaped.

The landscape area along the street side of concrete masonry unit wall shall be maintained through the Communities Facilities District (CFD).

Parking

The applicant does not have any site plans showing the proposed parking for each single-family residential lot. However, the development would be required to comply with the standard parking requirements for single-family homes. Per Merced Municipal Code Section 20.38 – Parking and Loading, the parking requirements for a single-family home is 1 parking stall, indifferent of the number of bedrooms or bathrooms in the home. The applicant has noted that they expect to exceed the parking requirement with 2-car garages for each home. During the building permit stage, Planning staff would review each site plan to ensure that each residential lot contains at least 1 parking stall. Each lot would also need to provide a 20-foot-long driveway for vehicle backing space.

Neighborhood Impact

J) The subject site is surrounded by mostly undeveloped land and located on the edge of the City limits within the Northwest quadrant of the City, south of Cardella Road between El Redondo Drive and Horizons Avenue. Approval of this proposal would prevent the creations of the Urban Village Residential Neighborhood that was originally intended for this area when it was annexed into the City in 2003. Urban Villages are intended to create a high-density neighborhood (through multi-family, town houses, small single-family lots, etc.) that surround a regional commercial center (minimum of 10 acres). The subject site was reserved to be the regional commercial center for this area. The residential surrounding the commercial is called an Inner Village that allows a density between 10-36 dwelling units per acres. Surrounding the Inner Village is the Outer Village which has a reduced density between 4-12 dwelling units per acre. The commercial land is the central part of the Urban Village Residential concept which is intended to be sustained by the surrounding high density uses where residents can easily walk to either work, commercial amenities (retail/restaurants), and entertainment opportunities located (similar to Downtown Merced). This land use concept is intended to promote active walkable neighborhoods with accessible amenities that would not be car-dependent, resulting in less pollution and more environmentally friendly development. The approval of this land use change would eliminate the commercial that is needed for the Urban Village Residential concept to function. With the loss of commercial land there would also be a loss in job creation and amenities to the community, but additional housing would be generated.

Surrounding the project site are some recently approved developments, which have not been constructed yet. To the east is the Sage Creek Apartments (248 units on 13.5 acres), to the south is the Sage Creek subdivision (103 single-family homes on 16 acres), and to the west is the Royal Woods Estates Development (113 single-family lots on 16 acres with 3.60 acres reserved for future multifamily). Building permits have not been submitted for any of the surrounding projects. A final map has been recorded for the Sage Creek subdivision and grading/construction work is in progress. Approving this subdivision would connect the surrounding sites up to an arterial road at Cardella Road via the extension of two collector roads at El Redondo Drive and Horizons Avenue. This would further develop the street network in the area – along with extending utilities such as sewer and water main lines. Approving this proposal would not result in incompatible development, as it

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would be residential surrounded by a variety of residential zones, but it would eliminate this area from completing the Urban Village concept originally envisioned for this area when it was annexed into the City, and the neighborhood would not benefit from the walkability that was first planned for this area while losing job opportunities and amenities typically associated with commercial developments.

Public hearing notices were sent to all property owners within 300 feet of the project site. At the time that this report was prepared, the City had not received any comments regarding this project.

Tentative Subdivision Map Requirements

K) Per Merced Municipal Code (MMC) Section 18.16.080 – Information Required, a tentative subdivision map shall include all of the requirements shown at Attachment I of Planning Commission Staff Report #23-289. Said requirements include stating the location of the subject site, the name of the subdivision, and showing the layout of the proposed lots. MMC 18.16.090 – Required Statement, requires the applicant to provide a statement that explicitly states any deviations from tentative subdivision map requirements, standard drawings, or Zoning laws. In this case, the applicant is not requesting any deviations from City requirements. MMC 18.16.100 - Public Hearing – Generally, requires a public hearing to review and approve a tentative subdivision map in conformance with the Subdivision Map Act.

Per the California Environmental Quality Act, a public hearing notice was mailed to property owners within 300 feet of the subject site and published in a qualifying newspaper, Merced County Times, three weeks prior to this meeting. In addition, staff reached out to local utility companies, local school districts, and other relevant government agencies to solicit comments. At the time this staff report was prepared, staff did not receive any comments regarding this application.

Affordability Requirements

L) In April 2022, the City Council approved Resolution #2022-15 regarding the requirement for 12.5% affordable housing for new single-family residential subdivisions and multifamily residential projects under specific circumstances. This requirement is triggered by two qualifiers that need to be met; entitlement type and number of units created. For single-family residential developments, the affordability requirement is triggered by legislative action agreements that are required for Zone Changes (or site

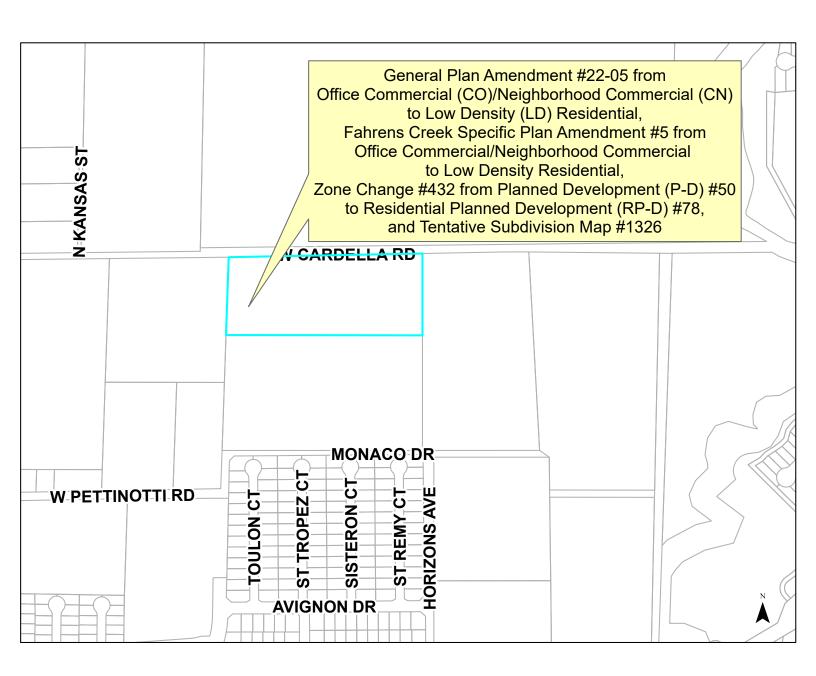
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utilization plan revisions, general plan amendments, or annexations) for projects over 60 single-family residential homes. Projects under 60 single-family residential homes are not required to provide affordable units, even with a legislative action agreement. The proposed 53-unit subdivision is exempt from having to provide affordable units, as even though the proposal requires a legislative action agreement (via Zone Change and General Plan Amendment) it contains less than the 60 units required to trigger the affordability requirement.

Environmental Clearance

M) Infill projects over 5 acres or projects that don't comply with Zoning/General Plan designations require an Initial Study, per the California Environmental Quality Act (CEQA). In this case, the project site is not consistent with Zoning or the General Plan and is over 5 acres (at 10.7 acres) – thus an Initial Study was required. An Initial Study includes a wide range of analysis required by the State covering an array of subjects including, but not limited to, impacts on vehicle miles traveled, air quality, biological resource, public services, cultural resources, and City utilities. Planning staff has conducted an environmental review of the project in accordance with the requirements of CEQA, and concluded that Environmental Review #22-50 results in a Negative Declaration as the proposal would not have a significant effect on the environment and does not require the preparation of an Environmental Impact Report. A copy of the Initial Study with a Negative Declaration can be found at Attachment K of Planning Commission Staff Report #23-289.





STATE OF CALIFORNIA CITY OF MERCED T10-050-902 :NAA CARDELLA ROAD ISEA INTERNATIONAL LLC. VESTING TENTATIVE SUBDIVISION MAP L SCENUX FER CITY STO, SOG-1 L VERTICAL CHES & CUTTER FER CITY STD, SCC-1 APN# 206-030-019 FUTURE SUBDIVISION 49 FT. RIGHT OF WAY ROADWAY W/ ROLLED CURB & GUTTER GALICHO DRIVE HOBISONS VAENUE LOT 3, AS SHOWN ON THE MAP BITTLED, MAP OF BARNELL'S MENCED TRACT, PLED NOVEMBER 14, 1913 BY THE OFFICE OF THE COUNTY RECORDER OF MERCED COUNTY, VOLUME 6 OF OFFICIAL PLATS, PAGE14. LEGAL DESCRIPTION 84 FT, RIGHT OF WAY ROADWAY W/ VERTICAL, CURB & GUTTER FORIZONS AVENUE & EL REDONDO DRIVE 5184 SQ.FT.± ALC. PARMENT FER CITY STANDARDS VERTOUL CURS & CUTTE PUR CITY STD. SCG-1 PROPOSED PUBLIC URLIN EXCHEND LINE 49 5184 SQ FI.± APN# 206-030-018 FUTURE SAGE CREEK SUBDIVISION - STORM DRUN LINE LUBEL
- SWEWER SENER LINE LUBEL
- WALDRINE LUBEL 5185 SO.FL± CITY LIMIT 32 5184 SQ.FI.± 12 5089 SQFT.± 31 5182 SQ.FI.± -- 1900 EUE 11 5089 SQ.FI.± SECONDA FOR STOLED CARS & CATTER SECONDA FOR STOLES CO. 14 SECONDA FOR STOLES CO. 14 STOLES CO. 15 S LEGEND: 49 FT, RICHT OF WAY ROADWAY W/ ROLLED CURB & GUTTER 10 5088 SQ.FT.± 43 5184 SQ.FI.± D) PRELIARMY THE STORY TO BE SOBRITHD WITH TROUBLE WAY.

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WP PREPARED BY: COLDEN WILLY BREATERN & SUMERNE,

WEREND, CA. 95340

(703) 722-3200 APW# 206-010-010, 206-010,011, & 206-010-012 3. STREET SECTIONS 1.) LOCATION MAP AS STORN HEREON.
2.) TRACT NAME, CATE, HORTH ARROW, SC.
HEREON.
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20.08.020 Land Use Regulations for Residential Zoning Districts

A. Permitted Land Uses. Table 20.08-1 identifies land uses permitted in residential zoning districts.

Table 20.08-1 Permitted Land Uses in the Residential Zoning Districts

Кеу	Zoning District [1]						
P Permitted Use							
M Minor Use Permit Required							
SP Site Plan Review Permit Required							
C Conditional Use Permit Required X Use Not Allowed		5.4					Additional
X Use Not Allowed RESIDENTIAL USES	R-R	R-1	R-2	R-3	R-4	R-MH	Regulations
Accessory Dwelling Units	Р	Р	Р	Р	Р	х	Chapter 20.42
Duplex Homes	Х	P	P	P	P	X	Chapter 20.42
Fraternities and Sororities	X	С	С	С	С	X	Sec. 20.44.060
			_				360. 20.44.060
Group/Transitional/Supportive Housing	P [3]	P [3]	P [3]	P [3]	P [3]	P [3]	
Mobile Home Parks	С	X	X	X	X	SP	
Multiple-Family Dwellings	X	X	C [4]	P	Р	X	
Residential Care Facilities, Small (1-6 persons)	Р	Р	Р	Р	Р	Р	
Residential Care Facilities, Large (More than 6)	С	С	С	С	С	Х	
Single-Family Dwellings	Р	Р	Р	Р	Р	M	Sec. 20.46.020
Single-Room Occupancy	Х	X	Х	SP	SP	Х	Sec. 20.44.120
COMMUNITY USES							
Colleges and Trade Schools	С	С	С	С	С	Х	
Community Assembly	С	С	С	С	С	С	
Community Gardens	С	С	С	С	С	С	Sec. 20.44.050
Cultural Institutions	Х	С	С	С	С	Х	
Day Care Centers	Х	Х	Х	М	М	М	
Day Care, Adult (1-12 persons)	Х	Х	C[5]	C[5]	C[5]	Х	
Day Care Home Facilities, Small (1-8 children)	Р	Р	Р	Р	Р	Р	
Day Care Home Facilities, Large (9-14 children)	Р	Р	Р	Р	Р	Р	
Foster Family Homes, Small (6 persons or fewer)	P	Р	Р	Р	Р	Р	
Foster Family Homes, Large (7+ persons)	С	Х	Х	С	С	Х	
Golf Courses	С	С	Х	Х	Х	Х	
Nursing and Convalescent Homes	С	Х	Х	С	С	Х	
Parks and Recreational Facilities	С	С	С	С	С	С	
Public Safety Facilities	С	С	С	С	С	С	
Schools, Public or Private	С	С	С	С	С	Х	

Key Zoning District [1]								
P Permitted Use M Minor Use Permit Required SP Site Plan Review Permit Required C Conditional Use Permit Required X Use Not Allowed	R-R	R-1	R-2	R-3	R-4	R-МН	Additional Regulations	
COMMERCIAL USES								
Bed and Breakfast	С	С	С	С	С	С	Sec. 20.44.030	
Commercial Recreation, Indoor	Х	Х	Х	Х	Х	M [6]		
Commercial Recreation, Outdoor	С	Х	Х	Х	Х	M [6]		
Home Occupation, Major	SP[9]	SP [9]	SP [9]	SP [9]	SP [9]	SP[9]	Chapter 20.48	
Home Occupation, Minor	P[9]	P[9]	P[9]	P[9]	P[9]	P[9]	Chapter 20.48	
Mobile Home Sales	Х	Х	Х	Х	Х	М		
Personal Services	х	Х	Х	SP[6]	SP[6]	SP[6]		
Retail, General (Limited)	M[7]	Х	Х	M [8]	M [8]	M [6]		
Temporary Subdivision Sales Offices (Max. 2 Years)	Р	Р	Р	Р	Р	Р		
AGRICULTURE AND NATURAL RESOURCES USES								
Animal Raising and Production	SP[10]	C [10]	C [10]	C [10]	х	х	Chapter 6.04	
Crop Cultivation	SP[10]	C [10]	C [10]	C [10]	C [10]	C [10]		
TRANSPORTATION, COMMUNICATIONS, AND UTILITIES USES								
Utilities, Major	С	С	С	С	С	Х		
Utilities, Minor	Р	Р	Р	Р	Р	х		
Wireless Communications Facilities		See	Chapte	er 20.5	8			

Notes:

- [1] A Site Plan Review Permit may be required per Chapter 20.32 (Interface Regulations) regardless of the uses shown in Table 20.08-1.
- [2] DELETED
- [3] Only permitted for rooming and boarding houses as an accessory use. The maximum persons allowed are: R-1, R-R, & R-MH (1 person); R-2 (2 persons); and R-3 and R-4 (no limit).
- [4] Permitted only on lots 15,000 sq. ft. or greater with five or more units and at least 3,000 sq. ft. per unit.
- [5] For day care home facilities for adults, a Conditional Use Permit would allow up to 12 adults in care.
- [6] Permitted only as an ancillary use to serve residents, not to exceed more than 2,500 sq. ft.
- [7] Permitted only for onsite retail for agricultural products.
- [8] Permitted only when ancillary to a multi-family use and intended to serve residents only. No exterior display or advertising is permitted. Retail use must be located within the same building as residences.
- [9] A Minor Use Permit is required for a cottage food industry home occupation.
- [10] Agricultural uses are temporary, transitional uses in the City and should not remain on a permanent basis. The appropriate length of time for the use will be defined in the Conditional Use Permit based on the types of crops, surrounding uses, etc. Hog-raising and onsite sale of products, including wholesale, are prohibited. See Chapter 6.04 (Animal Control) for additional regulations.

TABLE 20.08-2 DEVELOPMENT STANDARDS FOR SINGLE-FAMILY RESIDENTIAL ZONING DISTRICTS

	Figure	Zoning District						
	Label	R-R	R-1-20	R-1-10	R-1-6	R-1-5		
Lot and Density Standards (Min	imums)							
Lot Area		1 acre [4]	20,000 sq. ft.	10,000 sq. ft.	6,000 sq. ft.	5,000 sq. ft.		
Lot Width [2]								
Interior Lots		125 ft.	85 ft.	70 ft.	60 ft.	50 ft.		
Corner Lots		125 ft.	85 ft.	70 ft.	65 ft.	55 ft.		
Lot Depth [3]		None	125 ft.	100 ft.	100 ft.	80 ft.		
Lot Area per Dwelling Unit		1 acre [4]	20,000 sq. ft.	10,000 sq. ft.	6,000 sq. ft.	5,000 sq. ft.		
Primary Structure Standards								
Setbacks (min.)								
Exterior Yards, Front	Δ	30 ft.	30 ft.	20 ft.	20 ft.	15 ft. [1]		
Exterior Yards, Side (Corner	В	15 ft.	15 ft.	10 ft.	10 ft.	10 ft.		
Lots only) [5]		15 11.	15 11.	1011.	10 11.	10 11.		
Exterior Yards, Cul-De-Sacs		30 ft.	30 ft. [1]	15 ft. [1]	15 ft.[1]	15 ft.[1]		
One Interior Yard	00	15 ft.	15 ft.	10 ft.	10 ft.	10 ft.		
All Other Interior Yards	90	25 ft.	10 ft.	7 ft.	5 ft.	5 ft.		
Height (max.)	3							
Feet		35 ft.	35 ft.	35 ft.	35 ft.	35 ft.		
Other Standards								
Accessory Structure Standards		See Chapter 20.28						
Driveway Length (min.)[6]		20 ft.	20 ft.	20 ft.	20 ft.	20 ft.		
Lot Coverage (max.)		25%	30%	40%	45%	50%		
Off-Street Parking		See Chapter 20.38						
Projections Into Required Yards		See Chapter 20.26						
Separation Between Structures (min.)		As required by the California Building Code						

Notes:

- [1] 20-foot minimum for garages.
- [2] Lots located on curved streets, turnarounds, or cul-de-sac bulbs shall meet the minimum lot width requirement at the established front setback line.
- [3] Cul-de-sac lots located on the cul-de-sac bulbs shall meet the minimum lot depth requirement measured at the mean horizontal distance between the front and rear lot lines, but at no point shall be less than 80 feet in depth.
- [4] May be reduced to 1/3 acre if City sewer and water serves the property.
- [5] On corner lots, if the yard abuts the exterior front yard of an adjacent lot, then it shall be considered an exterior front yard. Otherwise, it shall be considered an exterior side yard.
- [6] Driveway length is measured from the garage/carport to the back of the sidewalk or front property line whichever is furthest from the street.

TABLE 20.08-3 DEVELOPMENT STANDARDS FOR MULTI-FAMILY RESIDENTIAL ZONING
DISTRICTS

	F:	Zoning District							
	Figure Label	R-2	R-3-2	R-3-1.5	R-4	R-MH			
Lot and Density Standards (Minimums)									
Lot Area		6,000 sq. ft.	6,000 sq. ft.	7,500 sq. ft.	7,500 sq. ft.	10 acres			
Lot Width									
Interior Lots		60 ft.	60 ft.	60 ft.	70 ft.	200 ft.			
Corner Lots		65 ft.	65 ft.	65 ft.	70 ft.	200 ft.			
Lot Depth		100 ft.	-	-	-	200 ft.			
Lot Area per Dwelling Unit		3,000 sq. ft.	2,000 sq. ft.	1,500 sq. ft.	1,000 sq. ft.	[1]			
Primary Building Standards									
Setbacks (min.)									
Exterior Yards, Front	A	15 ft.	15 ft.	15 ft.	15 ft.	25 ft.			
Exterior Yards, Side (Corner Lots Only)	0	10 ft.	10 ft.	10 ft.	10 ft.	10 ft.			
One Interior Yard	90	10 ft.	10 ft.	10 ft.	10 ft.	10 ft.			
All Other Interior Yards	GD	5 ft.	5 ft.	5 ft.	6 ft. [2]	10 ft.			
Height (max.)	•								
Feet		35 ft.	35 ft.	35 ft.	40 ft.	35 ft.			
Other Standards									
Accessory Structure Standards			See	c Chapter 20.	28				
Driveway Length (min.)		20 ft.	-	-	-	-			
Lot Coverage (max.)		50%	55%	55%	65%	65%			
Off-Street Parking			See	Chapter 20.	38				
Projections Into Required Yards		See Chapter 20.26							
Separation Between Structures (min.)		15 ft.	15 ft.	15 ft.	10 ft.	15 ft.			

Notes:

- [1] The maximum residential density in the R-MH zoning district is ten dwelling units per acre.
- [2] Rear yard minimum 10 feet for structures over 25 feet in height, an additional 1 foot per each additional 5 feet in height.

- **D. R-1-5 Subdivisions.** Homes for R-1-5 subdivisions shall comply with the following design standards, unless exceptions from individual standards are granted through a Minor Use Permit per Section 20.68.020:
 - A minimum of 25 percent of the front elevations along a street shall have a minimum 25-foot garage setback.
 - 2. No three-car garages shall be allowed on 5,000-square-foot lots, except on lots with alley access or lots exceeding 60 feet in width.
 - 3. All subdivisions shall provide a variety of dwelling elevations appropriate for the scale of the project. Elevations



- shall be approved by the Planning Division. At a minimum, the same elevations shall not be repeated for adjacent houses. Varied front setbacks and heights are encouraged as ways of achieving variety.
- 4. Windows, doors, and garage doors (except recessed garage doors) on the front elevation shall have raised trim in order to provide visual interest and relief.
- 5. Plans for two-story structures immediately adjacent to a developed R-1 area shall receive special attention by the Planning Division. Planning Division staff shall consider the relationship of second-story windows, doors, and balconies with the privacy of neighbors, and may require that these features be redesigned or omitted from second-story rear walls.
- **E. Exceptions on Required Front Setback.** In any residential zoning district, the required front setback may be modified with a Minor Use Permit if at least 50 percent of the homes are already constructed on the same block with front setbacks that are different from the front setback requirement in Table 20.08-2 (Setback and Height Standards for Residential Zoning Districts). In such cases, the modified setbacks shall comply with the following requirements:
 - 1. The front setback shall not exceed the average of existing front setbacks on the same block.
 - 2. The front setback shall not exceed the average of existing front setbacks of the two immediately adjoining lots.
 - 3. For corner lots, the front setback shall not exceed the front setback of the immediately adjoining lot.
 - 4. The front setback for all lots shall be a minimum of 10 feet and a maximum of 50 feet.

Chapter 20.46 - RESIDENTIAL DESIGN STANDARDS

Sections:	
20.46.010	Purpose
20.46.020	Design Standards for Single-Family Dwellings and Mobile Homes
20.46.030	General Design Standards for Multi-Family Dwellings
20.46.040	Specific Design Standards for Multi-Family Dwellings

20.46.010 Purpose

This chapter establishes design standards for residential uses, in addition to regulations set forth in Chapter 20.08 (Residential Zones), except that parking, location, and address requirements in Section 20.46.020 do not apply to accessory dwelling units.

20.46.020 Design Standards for Single-Family Dwellings and Mobile Homes

A. Applicability. The following standards shall apply to all single-family developments and mobile homes, unless exceptions from individual standards are granted through a Minor Use Permit per Section 20.68.020.

B. Siding. No shiny or reflective exterior siding materials, which are more reflective than semi-gloss paint, shall be permitted.

C. Exterior Walls.

- Materials shall extend to the ground where a unit is mounted at grade-level or the top of the solid concrete or masonry perimeter foundation where an above-grade foundation is used.
- 2. Materials shall be limited to stucco, wood, brick, stone, glass, or decorative concrete block. No tin or other metallic exterior wall material shall be used.
- 3. Materials shall be the same as or complementary to the wall materials and roofing materials of the dwelling unit.

D. Windows.

- 1. All windows, doors, and gable ends shall be architecturally treated with a trim.
- 2. No shiny or reflective materials shall be permitted for trim which are more reflective than semi-gloss paint.

E. Roof.

1. **Roof Pitch Slope.** The slope or inclination of a pitched roof shall be no less than a ratio of 4 inches vertical rise for each 12 inches horizontal run (4:12).



- 2. **Projection.** Overhanging eves shall be at least 12 inches from the exterior vertical walls.
- Materials.
- a. Roofs shall be composed of non-wood or fire-retardant-treated wood shingles or shake shingles, non-reflective and matte-finish metal, rock or concrete or adobe or composition tile, or other similar materials commonly used in the area.
- b. Fascia boards shall be used on all sides of the structure to screen exposed elements, like rafters and vents, and to give the roof a finished edge.
- c. Roofing materials for a garage or carport shall be the same as the wall materials and roofing materials of the dwelling unit.
- 4. **Mechanical and Utility Equipment.** All mechanical and utility equipment shall be screened from the public right-of-way.
- **F. Parking.** Each unit shall have at least 200 square feet of off-street parking outside of required setback areas.
- **G. Width.** Each unit shall have a width of at least 20 feet.
- **H. Location.** Each dwelling shall face or have frontage upon a street or permanent means of access to a street by way of a public or private easement other than an alley. Such easements shall not be less than 10 feet in width.
- Landscaping. All front yards, and all side yards exposed to public view on corner lots, shall be landscaped with drought-tolerant ground cover, trees, and shrubs, including but not limited to, City street trees. Underground irrigation of the required landscaping shall be required. All shall be installed prior to occupancy. (Refer to Chapter 20.36.)
- **J. Foundation.** All homes and mobile homes must be attached to a permanent foundation system that complies with all building codes of the City.
- **K.** Addresses. The street address number of the house shall be displayed on the front wall of the house clearly visible from the street and shall be a minimum height of 4 inches with a ½ inch stroke (or as otherwise required in the California Residential and Fire Codes.)

18.16.080 - Information required.

Every tentative map shall be clearly and legibly reproduced. The following information shall be shown on, or accompanying, the map:

- 1. A key or location map on which is shown the general area including adjacent property, subdivisions and roads;
- 2. The tract name, date, north point, scale and sufficient legal description to define location and boundaries of the proposed subdivision;
- 3. Name and address of recorded owner or owners:
- 4. Name and address of the subdivider;
- 5. Name and business address of the person who prepared the map;
- 6. Acreage of proposed subdivision to the nearest tenth of an acre;
- 7. Contours at six-inch intervals to determine the general slope of the land and the high and low point thereof;
- 8. The locations, names, widths, approximate radii of curves and grades of all existing and proposed roads, streets, highways, alleys and ways in and adjacent to the proposed subdivision or subdivision to be offered for dedication;
- 9. Proposed protective covenants;
- 10. Location and description of all easements;
- 11. Locations and size of all existing and proposed public utilities;
- 12. Proposed method of sewage and stormwater disposal;
- 13. Location and character of all existing and proposed public open space in and adjacent to the subdivision and a statement of intention with regard to park land dedication or payment of a fee in lieu thereof;
- 14. Lot layout, approximate dimensions and area in square feet of each irregular lot and lot numbers;
- 15. City limit lines occurring within the general vicinity of the subdivision;
- 16. Classification of lots as to intended land use, zone, and density;
- 17. Approximate bearings and distances to quarter-section bounds within the general vicinity of the subdivision;
- 18. Proposed public improvements;
- 19. Statement as to whether the subdivision is to be recorded in stages;
- 20. Existing use and ownership of land immediately adjacent to the subdivision;
- 21. Preliminary title report issued not more than sixty days prior to filing of the tentative map;
- 22. The outline of any existing buildings and indication of any to remain in place and their locations in relation to existing or proposed street and lot lines;

- 23. Location of all existing trees and indication of those proposed to remain in place, standing within the boundaries of the subdivision;
- 24. Location of all areas subject to inundation or storm water overflow, the location, width and direction of flow of all watercourses and indicate flood zone classification;
- 25. Elevations of sewers at proposed connection.

(Ord. 1533 § 1, 1984: Ord. 1358 § 3, 1980: Ord. 1342 § 2 (part), 1980: prior code § 25.32(c)).

18.16.090 - Required statement.

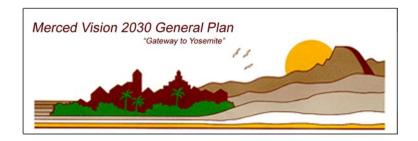
A statement shall be presented by the subdivider in written form accompanying the map and shall contain justification and reasons for any exceptions to provisions of this title, the standard drawings or for any amendments to or variation from the zoning law, which may be requested in conjunction with the subdivision proposed.

(Ord. 1533 § 2, 1984: Ord. 1342 § 2 (part), 1980: prior code § 25.33).

18.16.100 - Public hearing—Generally.

The planning commission shall review the tentative map at a public hearing to determine whether it is in conformity with the provisions of law and of this title and upon that basis, within the time allowed in the Subdivision Map Act.

(Ord. 1358 § 4, 1980: Ord. 1342 § 2 (part), 1980: prior code § 25.34(a)).



Chapter 6 Urban Design

6.1 INTRODUCTION

6.1.1 Background & Scope

Urban design is not merely a set of urban aesthetic guidelines but rather encompasses land use and design elements which enhance the livability of the community. Urban design is a grouping of concepts and guidelines which are used to describe the image or character of the City's environment.

Urban design concepts tend to fall into two distinct categories, relating to:

- The location of different land uses throughout the City and their relationship to one another. (For example, Policies UD-1.1 to UD-1.5 define relationships between commercial, residential, and public land uses and the planned circulation system which links them with one another.)
- The visual character and appearance of individual buildings, sites, and districts. (Policy UD-2.2 and the "Merced Urban Design Guidelines" pages throughout this chapter provide aesthetic guidelines for development.)

In attempting to influence the type, location, and character of both private and public

development, urban design policies provide the tools to help create a desirable relationship between new and existing development.

Within the *Merced Vision 2030 General Plan*, the urban design focus for new growth areas is primarily defined by the Urban Village concept (mixed use, pedestrian and transit-friendly neighborhoods). At a citywide scale, this urban design concept defines the relationship between various parts of the City, linked together by open space and transportation corridors.

At the neighborhood scale, the Urban Village concept results in development of commercial centers surrounded by residential areas, open space, and public facilities. At the project scale, this concept is intended to provide ideas which can be applied to solve a number of design problems and promote long-term, livable community development.

The goal is to build an environmentally and economically "sustainable" city. A "sustainable city" is a city designed, constructed, and operated to efficiently use land and other natural resources, minimize waste, and manage and conserve resources for the use of present and future generations.

A "sustainable" community is one where:

- 1) Housing, schools, shopping areas, and other things which meet most of the daily needs of residents are located within walking distance of one another;
- Higher population densities are located around transit stops to provide the critical mass of people and activities needed to make transit economically viable;
- 3) Housing provides places to live for a variety of people within a single neighborhood; and,
- 4) Mixed use and transit friendly commercial and employment centers are promoted.

Such a community makes efficient use of land and promotes alternative modes of transportation, thus helping to preserve both our air quality and our quality of life. These same characteristics can also be used to describe many of Merced's older neighborhoods.

6.1.2 Relationship to State Law

Urban design is of critical importance to the decisions that are made regarding general growth and development of a city. Although not a "required element" under state planning law, "good" urban design is the overall purpose of the planning process.

6.1.3 Relationship to Other General Plan Chapters

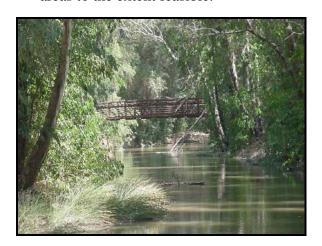
Within the *Merced Vision 2030 General Plan*, the Urban Design Chapter focuses on the Urban Village concept. Village development will be guided by the principles in this Urban Design Chapter. Other chapters of the General Plan, especially the Land Use Chapter, reflect the community

planning principles described in the Urban Design Chapter. Within all of the General Plan chapters, the idea of a "sustainable city" and the design principles for pedestrian- and transit-friendly development have been given specific application in the form of goals, policies and actions relating to the chapter subject area. Overall community appearance has also been addressed, primarily in Policy UD-2.2.

6.2 GUIDING PRINCIPLES

The *Urban Village* and other land use and design concepts have been implemented in the *Merced Vision 2030 General Plan* through the following guiding principles:

• Conserve natural resource areas that give form and character to the community. The policies contained in the Open Space, Conservation & Recreation Chapter, as well as others, provide for strengthening the visual and physical connection between the City and its natural elements. The Urban Expansion Chapter guides future City growth away from important resource areas to the extent feasible.



• Promote an urban form that integrates housing, shops, work places, schools, parks and civic facilities. The Urban Village development approach, as set forth in the Land Use Chapter and Land Use Diagram, is the primary means of implementing this principle. Within this land use pattern, development is to be guided by the principles contained in this Urban Design Chapter. Land use planning needs to address long-term as well as short-term needs for a variety of residential, commercial, and industrial land uses.



- Reinforce elements of the community which give Merced its unique identity. Through purposeful acts of community building at the City's inception, Merced developed into an attractive community. The Village development concept expands on these successful early planning efforts to future assure that growth development retains Merced's unique character.
- Expand the City's non-vehicular transportation network. Through provisions contained in the Transportation and Circulation Chapter

and supporting policies in other chapters of this Plan, the City's extensive system of bike and pedestrian paths will expand to serve new growth and development.



- Promote convenient pedestrian and vehicular access to transit, commercial, recreation and residential places. The success of the City's urban design approach relies on private development which provides convenient vehicular access but is also pedestrian-friendly. This Urban Design Chapter proposes various design approaches which will improve access and encourage walking and bicycling as viable transportation options.
- Reinforce the Downtown as a focus point in the City. Downtown Merced plays an important role in the social and economic well being of the community. As the seat of government for Merced County, Downtown supports a regional government center. Additionally, the Downtown area is the direct access point regional highway and railway Policies contained in the networks. various chapters of this plan strengthen the role and function of Merced's Downtown.

• Conserve the special qualities of existing neighborhoods and districts. The distinctive character of Merced's older residential neighborhoods is one of the most memorable features of the community. The Land Use Chapter of this plan provides policies for maintaining these qualities. The policies and design proposals of this Urban Design Chapter provide a basis for developing these qualities in new and expanding neighborhoods.

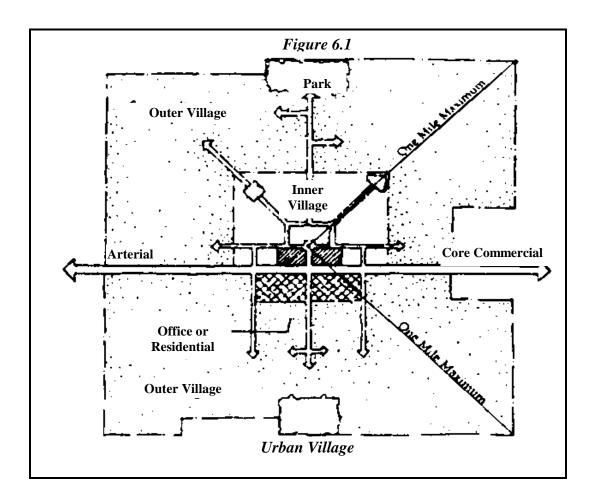


- Focus residential, commercial and employment center development to encourage public transit Successful urban centers of the future will be designed to accommodate local regional public transportation systems. This public transit focus is a central theme of the City's urban design concept. Urban design policies which facilitate transit friendly development as well as convenient vehicular access are contained in the Land Use. Urban Transportation, and Design Chapters of the Merced Vision 2030 General Plan.
- Maximize the use of City streets as public spaces. The streets of Merced comprise the major open spaces of the City and are among its liveliest public

- spaces. Design considerations should focus providing convenient access residential. automobile commercial, employment, and public areas while accommodating other forms of transportation as well. **Policies** contained in the Transportation and Circulation Chapter, along with the design concepts developed in the Urban Design Chapter, are aimed at balancing the need for auto movement and parking with the need for the street system to accommodate other vital community activities.
- Assure that development takes place in a balanced manner in order to promote the economic vitality of evolving areas. The development of Urban Villages will be a cooperative effort between the City, landowners, and the development community. Villages will likely be developed over a number of years and, thus, will need close coordination between these groups to assure that the desired mixture of land uses is achieved and development costs remain low. should be noted, however, that the majority of the Villages will be available for traditional single-family development but with a transit and pedestrian focus.

6.3 URBAN DESIGN GUIDELINES

The Urban Design Chapter, unlike other chapters of this Plan, also contains design guidelines that are not in the form of goals, policies or actions. These guidelines, contained in the "Urban Design Guidelines" sections of this Chapter, are provided as suggestions for architects and designers and are not mandatory requirements.



6.4 MERCED'S URBAN VILLAGES (TRANSIT READY DEVELOPMENT)

In 1990, *Merced 2030-How Should We Grow?* analyzed the various growth and expansion options available to the City. As a result of this study, it was determined that Merced's growth pattern for new growth areas should be based on mixed use, pedestrian- and transit-friendly design principles, simply known as the "Urban Village Concept."

As a follow-up to this planning process, the City commissioned a more refined urban design study for an 8,000-acre portion of the

"Northern City" which resulted in the publication of the North Merced Conceptual Land Use Plan and Merced Villages Design Guidelines in late 1991. This publication established the basic "urban design" policy direction that was used in the preparation of the Merced Vision 2015 General Plan in 1997. This Merced Vision 2030 General Plan continues to utilize the same Urban Village design principles.

Application of "Urban Village" design principles will be encouraged in all new growth areas of the City, including North Merced, Southwest Merced, and South Merced.

The fundamental building block for the Land Use Plan in new growth areas is the Urban Village, a compact, mixed-use district that encourage pedestrian and transit travel, which is also referred to "Transit Ready Development" instead of "Transit-Oriented Development." This is because Transit-Oriented Development generally refers to light rail or more extensive public transit systems while "Transit Ready Development" is more descriptive of a City such as Merced where the transit options haven't yet been as fully developed. By utilizing the Urban Village Concept, the City will be designed to accommodate these kinds of transit options in the future, however.

The following sections describe the basic components of a "village."

6.4.1 Inner Villages

The *Inner Village* is a mixed-use community within an average 1/4 mile walking distance of a transit stop and *Core Commercial* area. All Inner-Villages include a mixture of parks, shops, medium-density residences, and civic uses. Inner Villages combine these uses within a comfortable walking distance, making it convenient for residents and employees to travel by transit, bicycle or foot as well as by car.

A Merced example of an "Inner Village" would be the area surrounding the College Green Shopping Center at Olive and G. Higher-density apartments surround the commercial center and are directly connected to the center through a pedestrian walkway and College Green Drive.

6.4.2 Core Commercial Areas

Each village must have a mixed-use *Core Commercial* area located immediately adjacent to the medium-density

neighborhoods (*Village Core Residential areas*--see below). At a minimum, the Core area should provide convenience retail and civic sites. Larger cores may also include major supermarkets, professional offices, day care, restaurants, service commercial, entertainment uses, comparison retail and other retail stores. A transit stop and village green should be located in the Inner Village near the commercial and residential areas.



6.4.3 Village Core Residential Areas

"Village Core Residential" is the land use category applied to the residential areas that are within a convenient walking distance (about 1/4 mile) from the Core Commercial area and transit stop. (On the Land Use Diagram, this category is simply labeled "Village Residential.") These areas are built at densities high enough to support the commercial area and transit use. Together, the Core Commercial and Village Core Residential areas make up the Inner Village. An average minimum gross density of 10 dwelling units per acre (du/ac) will allow a mix of small lot single-family, townhouses and apartments in Village Core Residential areas.

All Village Core Residential areas should be pedestrian in scale, ranging from slightly under to slightly over one-quarter mile in radius and should provide direct and easy access to Core Commercial areas and transit stops. Village Core Residential areas may contain a variety of housing types and ownerships, ranging from small lot single-

family homes to apartment buildings, as long as the overall average gross density of the Inner Village is at least 10 du/ac. While housing diversity is desirable, this density requirement could be achieved using only a single-family product--small lots with ancillary units.

6.4.4 Outer Village Areas

Less compact areas surrounding the Inner Villages contain lower density housing, offices, schools, and open space. These areas are known as the *Outer Village*. The Outer Villages are tied to the Inner Villages by a local network of connector streets so that perimeter arterials and thoroughfares are not relied upon for local travel, thereby reducing demand on these roads and providing safe paths for pedestrians and bicyclists. This circulation system is a key component of Village developments.



The Outer Village Area is intended to provide lower-density uses that are not appropriate in the Inner Village because they are not sufficiently compact and are more reliant on the automobile. Outer Village areas are designated for single-family and office uses (only along arterials across from Core Commercial areas) that will help support the Core Commercial businesses and transit service. "Low Density Residential," which allows single-family

residences (see Chapter 3), is the land use category that will be applied to most of the Outer Village areas.

These Outer Village areas make up the majority of the land available in the Village areas. (Of each one- square-mile Village, approximately two-thirds of that area will be the Outer Village.) These areas will be traditional much like single-family neighborhoods, except they will have more of a pedestrianand transit-friendly atmosphere.

Public schools and parks that provide services to both the Outer Village and Inner Village should be located in the Outer Village near the boundary of the Inner Village.

6.4.5 Open Space, Parks & Plazas

The location of parks, plazas and trails should be coordinated to distribute a variety of recreation opportunities throughout the growth area. Growth areas should contain a network of open space including community parks, neighborhood parks, village parks, village greens, plazas and an inter-connected 'greenway' trail system. (Refer to Section 7.2.2 for more details.)



6.5 URBAN DESIGN GOALS, POLICIES, AND ACTIONS

Goal Area UD-1: Transit Ready Development or Urban Villages

GOALS

- An Integrated Urban Form
- **■** Transit-Ready Community Design
- Pedestrian- and Bicycle-Compatible Neighborhoods

POLICIES

- **UD-1.1** Apply Transit-Ready Development or Urban Village design principles to new development in the City's new growth areas.
- **UD-1.2** Distribute and design Urban Villages to promote convenient vehicular, pedestrian, and transit access.
- **UD-1.3** Promote and facilitate Core Commercial design principles in Village commercial areas.
- **UD-1.4** Promote and facilitate Urban Village residential area design principles.
- **UD-1.5** Design and develop public and quasi-public buildings and uses utilizing Transit-Ready Development or Urban Village principles.

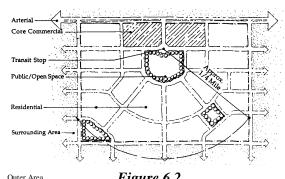
Policy UD-1.1

Apply Transit-Ready Development or Urban Village Design Principles to New Development in the City's New Growth Areas.

The fundamental building block of the Plan is the Village, a compact, mixed-use district that will accommodate projected growth, maintain Merced's present quality of life and help ensure its continued economic vitality. Villages achieve these goals by encouraging pedestrian and transit travel, and by minimizing single-use, low density developments that generate traffic congestion, air pollution, a scarcity of affordable housing, monotonous landscapes and poor utilization of environmental and land resources. The City of Merced has established the "Urban Village" model (also known as "Transit Ready Development") as the basic design concept governing urban form in new growth areas. Its principles should be applied as much as feasible in new growth areas throughout the Merced urban area.

Implementing Actions:

1.1.a The focus of new development will be the "Urban Village," which are mixed-use, pedestrian- and transit-friendly communities within a one-square mile area.



Villages should include a mixture of parks, shops, a variety of housing types, and civic uses. Villages combine these uses within a convenient distance, making it easier for residents and employees to travel by transit, bicycle or foot as well as by car. Village sites should be located on or near planned transit segments and provide a physical environment that encourages pedestrian and transit travel.

er Area Figure 6.2
"Inner Village"

1.1.b Each village shall have a mixed-use "Core Commercial" area located immediately adjacent to Village Core Residential neighborhoods.



At a minimum, plans for designated Core areas should provide convenience retail and civic sites. Larger cores may also include major supermarkets, professional offices, day care, restaurants, service commercial, comparison retail and other retail stores located adjacent to the transit stop. Optional upper floor office and residential uses in the Core

Commercial area increases the mixed-use, round-the-clock nature of the Core area. A transit stop and village green should be located between commercial uses and Village Core Residential areas.

Three kinds of Core Commercial areas may occur:

- a) Convenience Centers providing a convenience "mini-market" with some ancillary retail (typically 3-10 acres);
- b) Neighborhood Centers providing a supermarket with an additional anchor store, major ancillary retail and professional offices (typically 10-20 acres); or,
- c) Community Center providing a supermarket and drugstore, ancillary retail, professional offices and additional anchors such as junior department stores and health clubs (ranging from 20-60 acres).

1.1.c "Village Core Residential Areas" (part of the "Inner Villages") shall include residences that are within a convenient walking distance from Core Commercial areas and transit stops, and are built at densities high enough to help support them.

Village designs should incorporate an average minimum gross density of 10 dwelling units per acre (du/ac) which will allow a mix of small lot single-family, townhomes and apartments in Village Core Residential areas. All Village Core Residential areas should be pedestrian in scale, ranging from slightly under to slightly over one-quarter mile in radius and should provide direct and easy access to Core Commercial areas and transit stops.

Village Core Residential areas may contain a variety of housing types and ownership options, ranging from small lot single-family homes to apartment buildings, as long as the overall average gross density of the Village is at least 10 du/ac. (Gross densities calculations should include the area in lots as well as in streets and alleys immediately in front and behind the lots). While housing diversity is desirable, this density requirement could be achieved using only a single-family product — small lots with carriage (ancillary) units. Small village parks should be provided as an urban amenity within these denser Village Core Residential areas.

1.1.d Each Village will have an "Outer Village" adjacent to it which includes lands no further than one mile from the Core Commercial area.

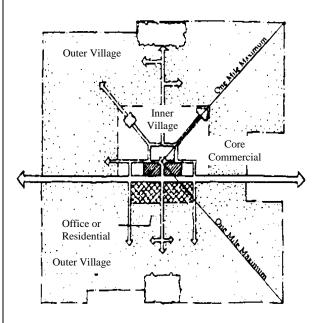


Figure 6.3 Urban Village

Site plans for the "Outer Village" street network must provide multiple direct street and bicycle connections to the center without use of an arterial street. Outer Villages may have lower density housing, public schools, community parks, limited areas of office uses, and park-and-ride lots.

The Outer Village is intended to provide uses that are not appropriate in the Inner Villages, because they are not sufficiently compact and are more reliant on the automobile. Public schools and parks that provide services to both the Inner and Outer Village should be located in Outer Villages near the boundary of the Inner Village.

Commercial uses that are very similar in nature and market appeal to those located in the Village's Core Commercial area are generally not allowed in Outer Villages because they diminish the viability of the Village's retail center, although professional office uses may be located on the opposite side of the arterial across from the Village Core Commercial Area.

1.1.e The location of parks, plazas, and trails should be coordinated to distribute a variety of recreation opportunities throughout the area.

The Urban Village area should contain a network of open space including community parks, neighborhood parks, village parks, village greens, plazas and an interconnected "greenway" trail system. Bicycle and pedestrian trails should be created along major creeks, high-voltage power lines, transitways, and along the abandoned Yosemite Valley Railroad (YVRR) railroad bed in North Merced to provide easy access to parks and schools that should be located along them.

1.1.f Uses which rely extensively upon autos or trucks are encouraged to locate in Business Park or other commercial areas along major transportation corridors.

An important concept of Urban Village development is to create areas which are less dependent upon auto and truck transportation than other areas of the City. Many uses typically allowed in commercial areas rely predominantly upon auto travel to generate business patrons. These uses, such as auto dealers and repair shops, mini-storage facilities, travel commercial complexes, and motels, should not be permitted in Villages in most cases. These uses should be accommodated in nearby areas where the street and highway system can support the traffic loads that they generate. For example, such uses are appropriate in business park areas adjacent to Highway 59 in North Merced.

Similarly, light industrial uses should not generally be permitted in Villages except that business park/research & development type uses may be appropriate in those Villages in the northeastern portion of the City near UC Merced. Industrial uses are appropriate, however, where existing industrial activities occur and along major transportation corridors.

1.1.g The City will work with individual property owners within the Village areas to assure that development occurs in a balanced manner to assure economic viability of individual projects.

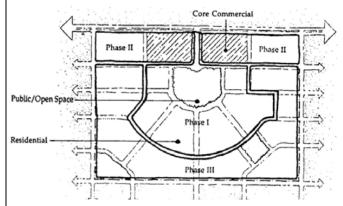


Figure 6.4
Conceptual Phasing of a Village

The growth area must be developed in a balanced phasing pattern. Schools and parks must be dedicated concurrent with commercial and residential uses. Furthermore, areas must be set aside for land uses that will be needed in later phases, but where market demand needs to mature, such as Core Commercial and higher density housing areas. For this reason, development of Villages is seen as a cooperative effort between the City, landowners and the development community.

Villages represent relatively large projects which may be executed over several years. The phasing of the project is critical to its success, both as a financial undertaking and as a mechanism to encourage transit use. In order to encourage the public service agencies to provide public facilities in a timely manner to serve the needs of residents, developers are asked to dedicate sites designated for public uses concurrent with development of commercial and residential uses. Developers should also work with the City to ensure that the recommended mixture of land uses is achieved in a timely manner and development costs remain low.

1.1.h Develop special "Urban Village" design principles to encourage more job-generating uses within the Urban Villages.

Special "Urban Village" designs should be developed to provide for increased opportunities for job-based land uses attracted by a university climate in some Urban Villages, especially in the northwestern area of the City, while still maintaining the basic concept of mixed-use, pedestrian and transit oriented communities. These "Urban Villages" may differ from others in the Community in the mixture of business park, research and development, office, public/cultural uses, and retail uses within the Village Core areas instead of the retail/office/public facilities focus of other Villages which are more residential in nature.

Policy UD-1.2

Distribute and Design Urban Villages to Promote Convenient Vehicular, Pedestrian, and Transit Access.

Villages should be distributed throughout the City's growth area in a pattern that allows the greatest number of residents access to a variety of shopping opportunities. Villages should be distributed to permit residents to walk to retail and public facilities without having to cross an arterial street. Villages should also be located to take advantage of main transit lines and existing retail market demand.

The Urban Village circulation system encourages all modes of travel, while providing adequate access for automobile traffic. This street pattern is achieved by providing multiple routes to destinations without relying on arterials. This pattern of multiple routes keeps traffic volumes lower on individual connector streets and allows pedestrians and bicyclists to avoid unfriendly arterials. This pattern also favors pedestrians by slowing traffic, reducing pavement, and improving the sense of shelter afforded by houses and trees. Within the Urban Village development concept, local and connector streets should be designed to discourage through traffic, while still providing an interconnected and a legible circulation network.

Implementing Actions:

1.2.a Villages should be located to maximize access to their Core Commercial areas from their adjacent neighborhoods without relying on arterials.

Villages with major retail centers should be spaced at least one mile apart and should be distributed to serve various growth sub-areas. Generally, there should be one Village for each full square mile bound by arterials, except in rural residential areas.

1.2.b The boundary of each village varies with the size of the Core Commercial area and does not extend across arterials.

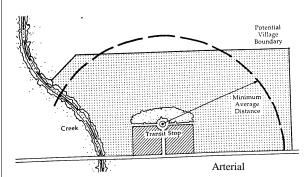


Figure 6.5
Village Boundaries

While the shape of the Village may vary, the size of the Inner Village should not be less than the area described by the quarter-mile walking distance radius (ranging from 1200 to 1600 feet) from the transit stop and core commercial area.

The minimum size of an Inner Village should vary according to the kind of Core Commercial area within the Village; larger Villages are associated with larger Core Commercial areas. The minimum distance requirement does not apply to areas with

major intervening features such as major creeks and high-voltage power lines, where the boundary should follow the major feature.

Inner Villages should typically be at least 100 acres when associated with a Community Center, 70 acres when associated with a Neighborhood Center, and 50 acres when associated with a Convenience Center.

1.2.c Building intensities and densities should meet the minimum requirements set forth for a Village to promote more active centers, support transit, and encourage pedestrian-oriented development that fronts onto the street.

Compared with other Village areas, the Inner Villages should have the highest commercial intensities (the amount of building relative to the size of the site) and the highest residential densities (the number of dwelling units in a given area). Core Commercial areas should be intensive enough to provide a "main street" shopping spine. Multi-storied buildings and structured parking are strongly encouraged near transit stops to better utilize the lands adjacent to the transit line and to provide additional transit ridership. A development pattern is encouraged where densities are highest at the center of the Village and become lower as the distance from the center increases. Thus higher density housing types such as apartments and townhouses are most appropriate adjacent to the Core, with lower density single family housing placed further out.

1.2.d The Village street system should provide multiple and parallel routes between the Core Commercial area and the rest of the Village. In no case shall trips which could be internal to a square mile bound by arterials be forced onto an arterial.

The collector street pattern should be simple and memorable. Winding roads, dead end streets and cul-de-sacs that cut off direct access to Village Centers should be discouraged in Village Core Residential Areas, but may be appropriate in some Outer Village areas. Streets should converge near common destinations that contribute to an area's unique identity, such as transit stops, Core Commercial areas, schools and parks

The street system should allow autos, bikes, and pedestrians to travel on small local streets to any location in the Village. At no time should an arterial street be the only preferable route to and from the Inner Village and its Outer Village.

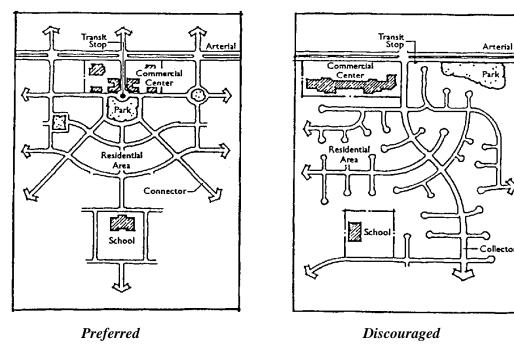


Figure 6.6 Village Street Systems

1.2.e Arterial streets should allow efficient conveyance of through traffic and must not pass through Villages.

The paved width of arterials should provide for safety, efficiency and long term needs. The regional traffic circulation system is dependent upon an efficient and smooth-flowing network of arterials. The required right-of-way for arterials varies with anticipated need. (Refer to Chapter 4, Circulation Map.)

1.2.f Collector and local streets should connect the Inner and Outer Village to Core Commercial areas, schools, and community parks without the use of arterials.

In general, Collectors should be designed to carry moderate levels of local traffic smoothly, in a way that is compatible with bicycle and foot traffic. A network of collectors should provide alternative paths to destinations within the Village for neighborhood residents. The collector network should not provide a speedy through-route alternative to arterials. "T" intersections and "dog leg" alignments could be used to reduce through traffic and reduce speeds. The precise alignment of collectors will be determined as individual projects are designed.

Collectors should contain bikeways. Driveway cuts should be minimized and alley access to rear garages is encouraged to minimize potential conflicts among autos and bicyclists, and for the convenience of residents along collectors. Collectors and some local streets should be aligned along the edge of parks and open space to enhance the aesthetic character of the streets and sidewalks.

1.2.g The pedestrian and bicycle system must provide clear and direct access to the Core Commercial area and the transit stop.

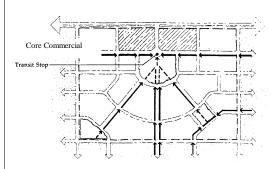


Figure 6.7
Pedestrian & Bicycle System

Although the street and sidewalk system will accommodate many destinations within Villages, the primary destination will be the Commercial Core and transit stop. Direct paths to the transit stop should be lined with activities and be shaded. The configuration of parking, shopping and pedestrian routes should reinforce access to transit. A feeling of safety for pedestrians and bicyclists can be provided through the use of park strips between the curb and the sidewalk or bike path which provide separation from auto traffic.

CITY OF MERCED PLANNING & PERMITTING DIVISION

TYPE OF PROPOSAL: General Plan Amendment #22-05, Fahrens Specific Plan Amendment #5,

Zone Change #432, Residential Planned Development Establishment #78,

and Tentative Subdivision Map #1326

INITIAL STUDY: #22-50

DATE RECEIVED: December 8, 2022 (date application determined to be complete)

LOCATION: 1250 Cardella Road

ASSESSOR'S PARCEL NUMBERS: 206-030-017

(SEE ATTACHED MAP AT ATTACHMENTS A)

Please forward any written comments by April 5, 2023 to:

Francisco Mendoza-Gonzalez, Associate Planner City of Merced Planning & Permitting Division

678 West 18th Street Merced, CA 95340 209-385-6929

mendozaf@cityofmerced.org

Applicant Contact Information:

Attn: ISEA International, LLC

42260 Vargard Road Fremont, CA 94593 (510) 378-3950

svpmarketing@yahoo.com

PROJECT DESCRIPTION

The Project site consists of an approximate 10.76-acre parcel (APN: 206-030-017located at 1250 Cardella Road (Attachment B), generally located on the south side of Cardella Road, between El Redondo Drive and Horizons Avenue. The subject site has a Zoning classification of Planned Development (P-D) #50 and General Plan designations of Office Commercial (CO) and Neighborhood Commercial (CN). The subject site is generally surrounded by undeveloped land.

The applicant would like to develop a single-family subdivision, for a total of 53 residential lots. The current zoning classification of Planned Development (P-D) #50 and General Plan designations of Office Commercial (CO) and Neighborhood Commercial (CN) are intended for commercial type uses which include, but are not limited to, professional services, personal services, retail, restaurants, etc. The existing land use designation also allows for multi-family residential at a density up to 36 dwelling units per acre. The proposed subdivision would be accessible from the new Gaucho Drive which connects with two collector roads, El Redondo Drive

and Horizons Avenue (both north/southbound lanes) out to the nearest arterial roads north to Cardella Road and south to Yosemite Avenue.

Project Location

The subject site is located within the northwestern quadrant of Merced. The subject site is surrounded by residential uses to the south, east, and west (either recently entitled or under construction). South of the subject site is a subdivision that has been approved for single-family homes, to the east is an undeveloped 15.5 acre parcel that was recently entitled for an apartment complex, to the southwest is undeveloped land that was entitled for single-family homes, and to the north across Cardella Road is agricultural land in Merced County jurisdiction (with a General Plan designation of Office Commercial). The table below identifies the surrounding uses:

Table 1 Surrounding Uses (Refer to Attachment A)					
Surrounding	Existing Use	Zoning	City General Plan		
Land	of Land	Designation	Land Use Designation		
	Undeveloped/Agriculture	Merced County	Office Commercial		
	(across from Cardella	Jurisdiction	(CO)		
North	Road)				
	Single-Family Homes	Planned	Village Residential		
	(across from Gaucho Drive)	Development	(VR)		
South		(P-D) #50			
	Undeveloped Land	Planned	Village Residential		
	(across from Horizons	Development	(VR)		
East	Avenue)	(P-D) #50	·		
	Undeveloped Land	Planned	Village Residential		
	(across from El Redondo	Development	(VR)		
West	Drive)	(P-D) #57	·		

1. INITIAL FINDINGS

- A. The proposal is a project as defined by CEQA Guidelines Section 15378.
- B. The Project is not a ministerial or emergency project as defined under CEQA Guidelines (Sections 15369 and 15369).
- C. The Project is therefore discretionary and subject to CEOA (Section 15357).
- D. The Project is not Categorically Exempt.
- E. The Project is not Statutorily Exempt.
- F. Therefore, an Environmental Checklist has been required and filed.

2. CHECKLIST FINDINGS

- A. An on-site inspection was made by this reviewer on February 27, 2023.
- B. This checklist was prepared on March 15, 2023.
- C. The *Merced Vision 2030 General Plan* and its associated Environmental Impact Report [EIR (SCH# 2008071069)] were certified in January 2012. The document

comprehensively examined the potential environmental impacts that may occur as a result of build-out of the 28,576-acre Merced (SUDP/SOI). For those significant environmental impacts (Loss of Agricultural Soils and Air Quality) for which no mitigation measures were available, the City adopted a Statement of Overriding Considerations (City Council Resolution #2011-63). This document herein incorporates by reference the *Merced Vision 2030 General Plan, the General Plan Program EIR* (SCH# 2008071069), and Resolution #2011-63.

As a subsequent development project within the SUDP/SOI, many potential environmental effects of the Project have been previously considered at the program level and addressed within the General Plan and associated EIR. (Copies of the General Plan and its EIR are available for review at the City of Merced Planning and Permitting Division, 678 West 18th Street, Merced, CA 95340.) As a second tier environmental document, Initial Study #22-50 plans to incorporate goals and policies to implement actions of the *Merced Vision 2030 General Plan*, along with mitigation measures from the General Plan EIR, as mitigation for potential impacts of the Project.

Project-level environmental impacts and mitigation measures (if applicable) have been identified through site-specific review by City staff. This study also utilizes existing technical information contained in prior documents and incorporates this information into this study.

3. ENVIRONMENTAL IMPACTS:

Will the proposed project result in significant impacts in any of the listed categories? Significant impacts are those that are substantial, or potentially substantial, changes that may adversely affect the physical conditions within the area affected by the Project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant. (Section 15372, State CEQA Guidelines. Appendix G of the Guidelines contains examples of possible significant effects.)

A narrative description of all "potentially significant," "negative declaration: potentially significant unless mitigation incorporated," and "less than significant impact" answers are provided within this Initial Study.

A. Aesthetics

SETTING AND DESCRIPTION

The project site is located in northwest Merced, approximately three miles northwest of Downtown and two and a half a mile northeast of Highway 99. The project site consists of an undeveloped totaling approximately 10.76 acres. The terrain is generally flat. The site is surrounded by residential uses to the south (single-family homes under construction) and undeveloped land designated Village Core Residential to the east and west.

The proposed project would include one single-family home on each newly created lot, for a total of 53 single-family homes. The site plans, floor plans, or elevations for this subdivision have not

been submitted. Even though the applicant is proposing a Residential Planned Development, the applicant is not proposing a unique set of development standards that would set standards for maximum building height, maximum lot coverage, minimum setback requirements, minimum parking requirements, etc. The applicant is proposing to utilize the existing development standards for the Low Density Residential (R-1-5) Zone already contained within the City's Zoning Ordinance. Similarly, for the building elevations, the applicant is not proposing any specific architectural standards for this subdivision. The exterior elevations shall be evaluated at a later time when building permit applications are submitted to ensure compliance with the City's general design requirements for single-family homes as shown under MMC 20.46.020 – Design Standards for Single-Family Dwellings and Mobile Homes.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A.	Aesthetics. Will the Project:				
1)	Have a substantial adverse effect on a scenic vista?				✓
2)	Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
3)	Substantially degrade the existing visual character or quality of the site and its surroundings?			√	
4)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			√	

1) No Impact

No designated scenic vistas exist on the project site or in the project area. Therefore, no impacts in this regard would occur with this development.

2) No Impact

There are no officially designated State Scenic Highways or Routes in the project vicinity. Therefore, the Project would have no impact on scenic resources, such as rock outcroppings, trees, or historic buildings within a scenic highway.

3) Less-Than-Significant Impact

The proposed Project would transform the site from a mostly undeveloped site to a fully developed site. Undeveloped lots tend lead to concerns regarding weed abatement, waste drop-off, and general dilapidation. The proposed homes, parking, and streets would fully develop the site. The units would add architectural interest with the use of siding, stucco, and stone veneers or as otherwise meeting the City's minimum single-family design standards. Based on these factors, this impact is considered to be less than significant.

4) Less Than Significant

Construction of the proposed project and off-site improvements include new lighting on the buildings and throughout the new streets for this subdivision. This new lighting could be a source of light or glare that would affect the views in the area. However, the City of Merced has adopted the California Green Building Standards Code as Section 17.07 of the Merced Municipal Code. As administered by the City, the Green Building Standards Code prohibits the spillage of light from one lot to another. This would prevent new glare effects on the existing buildings surrounding the project site.

B. Agriculture Resources

SETTING AND DESCRIPTION

Merced County is among the largest agriculture producing Counties in California (ranked fifth), with a gross income of more than \$4.4 billion. The County's leading agriculture commodities include milk, almonds, cattle and calves, chickens, sweet potatoes, and tomatoes.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
B.	Agriculture Resources. Will the Project:				
	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 non-agriculture?			√	
	2) Conflict with existing zoning for agricultural use or a Williamson Act contract?				✓
	3) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				✓
	4) Cause development of non-agricultural uses within 1,000 feet of agriculturally zoned property (Right-to-Farm)?				✓

1) Less Than Impact

The project site is located within the City Limits of Merced. The California Department of Conservation prepares Important Farmland Maps through its Farmlands Mapping and Monitoring Program (FMMP). The system of classifying areas is based on soil type and use. According to the latest Merced County Important Farmlands Map, the project site is classified as "Farmland of Local Importance". The conversion of this land from a mostly undeveloped lot (not being used for agricultural purposes), zoned for commercial development, to a developed urban parcel was analyzed as part of the Environmental Impact Report for the *Merced Vision 2030 General Plan*. The development of single-

family homes on "Farmland of Local Importance" that is not being used for agricultural purposes is considered to have less-than-significant impact. Therefore, CEQA requires no further review across an arterial roadway.

2) No Impact

There are no Williamson Act contract lands in this area and the land is not being used for agricultural uses. Therefore, there is no impact.

3) Less-Than-Significant Impact

Refer to Item #1 above.

4) No Impact

The nearest land being used for farming is located north of the subject site, across Cardella Road. The proposed development would not affect farming operations as the farm site is located on a separate parcel.

C. Air Quality

SETTING AND DESCRIPTION

For additional information, see Appendix A at Attachment C for combined studies on Air Quality, Green House Gas Emissions, and Vehicle Miles Traveled.

The project site is in the San Joaquin Valley Air Basin (SJVAB), which includes the southern half of the Central Valley and is approximately 250 miles long and an average of 35 miles wide. The Coast Ranges, which have an average height of 3,000 feet, serve as the western border of the SJVAB. The San Emigdio Mountains, part of the Coast Ranges, and the Tehachapi Mountains, part of the Sierra Nevada, are both south of the SJVAB. The Sierra Nevada extends in a northwesterly direction and forms the air basin's eastern boundary. The SJVAB is mostly flat with a downward gradient to the northwest.

The climate of the SJVAB is heavily influenced by the presence of these mountain ranges. The mountain ranges to the west and south induce winter storms from the Pacific Ocean to release precipitation on the western slopes, producing a partial rain shadow over the valley. A rain shadow is defined as the region on the leeward side of a mountain where noticeably less precipitation occurs because clouds and precipitation on the windward side remove moisture from the air. In addition, the mountain ranges block the free circulation of air to the east and entrap stable air in the Central Valley for extended periods during the cooler months.

Winters in the SJVAB are mild and fairly humid, and summers are hot, dry, and typically cloudless. During the summer, a high-pressure cell is centered over the northeastern Pacific, resulting in stable meteorological conditions and steady northwesterly winds.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
C. Air Quality. Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?			√	
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			✓	
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O ₃ precursors)?			√	
4) Expose sensitive receptors to substantial pollutant concentrations?			✓	
5) Create objectionable odors affecting a substantial number of people?			✓	

Impacts are evaluated below on the basis of both State CEQA Guidelines Appendix G criteria and SJVAPCD significance criteria.

SJVAPCD's thresholds for determining environmental significance separate a project's short-term emissions from long-term emissions. The short-term emissions are related mainly to the construction phase of a project. For this project, the long-term emissions are related primarily to household trips.

1) Less-than-Significant Impact

As part of the building permit review process, the applicant is required to consult with the San Joaquin Valley Air Pollution Control District (SJVAPCD) and is classified as nonattainment for ozone, PM10, and PM2.5. The SJVAPCD have applicable SIPs to address these nonattainment issues. The SJVAPCD has provided significance criteria (Table 2), which if a project's emissions are below these the significance criteria, the project is considered to not conflict with or obstruct implementation of the applicable air quality plan. As shown in Appendix A at Attachment C, the project's emissions do not exceed the SJVAPCD significance criteria.

2) Less-than-Significant Impact

Construction of the project would require demolition, site preparation, grading, building/infrastructure, paving and architectural coating. As shown in Table 3, construction criteria emission would not exceed the SJVAPCD significance criteria

TABLE 3
MAXIMUM ANNUAL CONSTRUCTION EMISSIONS

Pollutant/Precursor	Construction Emissions	Significant Criteria	Exceed Significant		
	Tons/Year				
co	1.66	100	No		
l x	1.53	10	No		
I OG	0.96	10	No		
sox	0.003	27	No		
Total PM10	0.27	15	Nc		
Total PM2.5	0.16	15	Nc		

Operation of the project would emit criteria pollution from area, energy, mobile, stationary, waste, and water sources. Table 4 on Appendix A at Attachment C shows the emissions from the operation of the project with 53 single-family homes. As shown in Table 4 project emissions would not exceed the SJVAPCD significance threshold. Therefore, operation of the project would not adversely impact regional air quality.

3) Less-than-Significant Impact

Although SJVAPCD does not have any quantitative cumulative significant criteria, air quality is cumulative in nature. CAAQS are predicated on past, present, and future emissions; therefore, if project-related emissions are found to have a less-than-significant impact in the near-term conditions, then cumulative impacts would also be less-than-significant. Project-related air quality impacts were found to be less-than-significant in the near-term conditions. The project would not adversely affect regional air quality in the future. Therefore, this impact would be less than significant.

4) Less-than-Significant Impact

The shortest distance between a project site and the nearest sensitive receptor (single family homes) is approximately 630 feet. Construction activities would be short term and intermittent. Although used during construction, heavy construction equipment would be the main source of pollutants during construction of the project. Given that heavy equipment would be used intermittently and during the day time hours, and given the short duration of construction activities in a given area and distance to the nearest sensitive receptor, exposure of sensitive receptors to substantial pollutant concentrations would not occur. Operation of the project would not result in substantial pollutant concentrations. This impact would be less than significant.

5) Less-than-Significant Impact

Given the use of heavy equipment during construction, the time of day heavy equipment would be operated, and the distance to the nearest sensitive receptor, the project would not emit objectionable odors that would be adversely affect a substantial number of people. Operation of the project would not emit odors. Therefore, construction and operation of the project would have a less-than-significant impact associated with odors. This impact would be less than significant.

D. Biological Resources

SETTING AND DESCRIPTION

The project site is located in northwest Merced, approximately three miles northwest of Downtown and a two and a half mile northeast of Highway 99. The development is surrounded by sites that are considered undeveloped (east, and west), with a single-family home subdivision (under construction) to the south, and agricultural uses to the north across Cardella Road outside City limits. The project site does not contain any creeks or other wetland areas.

The general project area is located in the Central California Valley eco-region (Omernik 1987). This eco-region is characterized by flat, intensively farmed plains with long, hot, dry summers and cool, wet winters (14-20 inches of precipitation per year). The Central California Valley eco-region includes the Sacramento Valley to the north, the San Joaquin Valley to the south, and ranges between the Sierra Nevada Foothills to the east and the Coastal Range foothills to the west. Nearly half of the eco-region is actively farmed, and about three-fourths of that farmed land is irrigated.

The biological resources evaluation, prepared as part of the *Merced Vision 2030 General Plan Program Environmental Impact Report* (EIR), does not identify the project area as containing any seasonal or non-seasonal wetland or vernal pool areas. Given the adjacent, built-up, urban land uses/agricultural uses and major roadways, no form of unique, rare or endangered species of plant and/or animal life could be sustained on the subject site.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
D.	<u>Biological Resources.</u> Would the Project:				
1)	Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				✓
2)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			√	
3)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
4)	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?				✓
5)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			√	
6)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

1) No Impact

The proposed project would not have any direct effects on animal life by changing the diversity of species, number of species, reducing the range of any rare or endangered species, introducing any new species, or leading to deterioration of existing fish or wildlife habitat. Although the *Merced Vision 2030 General Plan* identifies several species of plant and animal life that exist within the City's urban boundaries, the subject site does not contain any rare or endangered species of plant or animal life.

2) Less-than -Significant Impact

The proposed project would not have any direct effects on riparian habitat or any other sensitive natural community. The City General Plan identifies Bear, Black Rascal, Cottonwood, Miles, Fahrens, and Owens Creeks within the City's growth area. The subject site is approximately 2.15 miles from Bear Creek, and approximately 0.33 miles for Fahrens Creek which are Waters of the U.S. under the jurisdiction of the U.S. Army Corps of Engineers (ACOE), the California Department of Fish and Wildlife (CDFW), and the Regional Water Quality Control Board. Any proposed "fill" of that waterway would be subject to permits from ACOE, CDFW, and the Regional Water Quality Control Board. No such "fill" or disturbance of the waterway is proposed as part of this development. The City's General Plan requires the preservation of the creek in its natural state. No riparian habitat identified in CDFW or USFW plans are present on the project site. Therefore, the Project would have a less-than-significant impact on riparian habitat.

3) No Impact

The project site would not have any direct effect on wetlands as no wetlands have been identified in the project area.

4) No Impact

The Project would not have any adverse effects on any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridor, or impede the use of native wildlife nursery sites.

5) Less Than Significant Impact

The Project would not interfere with any local policies or ordinances protecting biological resources such as tree preservation policy or ordinance. The City requires the planting and maintenance of street trees along all streets and parking lot trees in parking lots but has no other tree preservation ordinances.

6) No Impact

The proposed project would not conflict with the provisions of a habitat conservation plan. There are no adopted Habitat Conservation Plans, Natural Conservation Community Plan, or other approved local, regional, or state Habitat Conservation Plan for the City of Merced or Merced County.

E. Cultural Resources

SETTING AND DESCRIPTION

The City of Merced area lies within the ethnographic territory of the Yokuts people. The Yokuts were members of the Penutian language family which held all of the Central Valley, San Francisco Bay Area, and the Pacific Coast from Marin County to near Point Sur.

Merced County was first explored by Gabriel Moraga in 1806, when he named the Merced River, "El Rio de Nuestra Senra de la Merced." Moraga's explorations were designed to locate appropriate sites for an inland chain of missions. Moraga explored the region again in 1808 and 1810.

Archaeology

Archaeological sites are defined as locations containing significant levels of resources that identify human activity. Very little archaeological survey work has been conducted within the City or its surrounding areas. Creeks, drainage, and sloughs exist in the northern expansion area of the City, and Bear Creek and Cottonwood Creek pass through the developed area. Archaeological sites in the Central Valley are commonly located adjacent to waterways and represent potential for significant archaeological resources.

Paleontological sites are those that show evidence of pre-human existence. They are small outcroppings visible on the earth's surface. While the surface outcroppings are important indications of paleontological resources, it is the geological formations that are the most important. There are no known sites within the project area known to contain paleontological resources of significance.

Historic Resources

In 1985, in response to community concerns over the loss of some of the City's historic resources, and the perceived threats to many remaining resources, a survey of historic buildings was undertaken in the City. The survey focused on pre-1941 districts, buildings, structures, and objects of historical, architectural, and cultural significance. The survey area included a roughly four square-mile area of the central portion of the City.

The National Register of Historic Places, the California Historical Landmarks List, and the California Inventory of Historic Resources identify several sites within the City of Merced. These sites are listed on the Merced Historical Site Survey and are maintained by the Merced Historical Society. There are no listed historical sites on the project site.

According to the environmental review conducted for the General Plan, there are no listed historical sites and no known locations within the project area that contain sites of paleontologic or archeological significance. The General Plan (Implementation Action SD-2.1.a) requires that the City utilize standard practices for preserving archeological materials that are unearthed during construction, as prescribed by the State Office of Historic Preservation.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
E.	<u>Cultural Resources.</u> Would the Project:				
1)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?			√	
2)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			✓	
3)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			✓	
4)	Disturb any human remains, including those interred outside of formal cemeteries?			✓	

1) Less-than-Significant Impact

The Project would not alter or destroy any known historic or archaeological site, building, structure, or object; nor would it alter or affect unique ethnic cultural values or restrict religious or sacred uses. According to the environmental review conducted for the General Plan, there are no listed historical sites and no known locations within the project area that contain sites of historical or archeological significance. The General Plan (Implementation Action SD-2.1.a) requires that the City utilize standard practices for preserving archeological materials that are unearthed during construction, as prescribed by the State Office of Historic Preservation.

2) Less-than-Significant Impact

The Project would not alter or destroy any known prehistoric or archaeological site, building, structure, or object; nor would it alter or affect unique ethnic cultural values or restrict religious or sacred uses. According to the environmental review conducted for the General Plan, there are no listed historical sites and no known locations within the project area that contain sites of historical or archeological significance. The General Plan (Implementation Action SD-2.1.a) requires that the City utilize standard practices for preserving archeological materials that are unearthed during construction, as prescribed by the State Office of Historic Preservation.

3) Less-than-Significant Impact

The Project would not alter or destroy any paleontological resource, site, or unique geological feature. According to the environmental review conducted for the General Plan, there are no listed historical sites and no known locations within the project area that contain sites of paleontological significance. The General Plan (Implementation Action SD-2.1.a) requires that the City utilize standard practices for preserving archeological materials that are unearthed during construction, as prescribed by the State Office of Historic Preservation.

4) Less-than-Significant Impact

The proposed project would not disturb any known human remains, including those interred outside of formal cemeteries; nor would it alter or affect unique ethnic cultural values or restrict religious or sacred uses. There are no known cemeteries in the project area. Excavation of the site would be needed to construct the proposed project, so it is possible that human remains would be discovered. However, Section 7050.5 of the California Health and Safety Code requires that if human remains are discovered during the construction phase of a development, all work must stop in the immediate vicinity of the find and the County Coroner must be notified. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission, which in turn will inform a most likely descendant. The descendant will then recommend to the landowner the appropriate method for the disposition of the remains and any associated grave goods. Additionally, the City's General Plan (Implementation Action SD-2.1.a) requires that the City utilize standard practices for preserving archeological materials that are unearthed during construction, as prescribed by the State Office of Historic By following the requirements of the Health and Safety Code and Preservation.

Compliance with the City's General Plan, this potential impact would be less than significant.

F. Geology and Soils

SETTING AND DESCRIPTION

The City of Merced is located approximately 150 miles southeast of San Francisco along the east side of the southern portion of the Great Valley Geomorphic Province, more commonly referred to as the San Joaquin Valley. The valley is a broad lowland bounded by the Sierra Nevada to the east and Coastal Ranges to the west. The San Joaquin Valley has been filled with a thick sequence of sedimentary deposits from Jurassic to recent age. A review of the geological map indicates that the area around Merced is primarily underlain by the Pleistocene Modesto and Riverbank Formations with Holocene alluvial deposits in the drainages. Miocene-Pliocene Mehrten and Pliocene Laguna Formation materials are present in outcrops on the east side of the SUDP/SOI. Modesto and Riverbank Formation deposits are characterized by sand and silt alluvium derived from weathering of rocks deposited east of the SUDP/SOI. The Laguna Formation is made up of consolidated gravel sand and silt alluvium, and the Mehrten Formation is generally a well consolidated andesitic mudflow breccia conglomerate.

Faults and Seismicity

A fault, or a fracture in the crust of the earth along which rocks on one side have moved relative to those on the other side, are an indication of past seismic activity. It is assumed that those that have been active recently are the most likely to be active in the future, although even inactive faults may not be "dead." "Potentially Active" faults are those that have been active during the past two million years or during the Quaternary Period. "Active" faults are those that have been active within the past 11,000 years. Earthquakes originate where movement or slippage occurs along an active fault. These movements generate shock waves that result in ground shaking.

Based on review of geologic maps and reports for the area, there are no known "active" or "potentially active" faults, or Alquist-Priolo Earthquake Fault Zones (formerly referred to as a Special Studies Zone) in the SUDP/SOI. In order to determine the distance of known active faults within 50 miles of the Site, the computer program EZ-FRISK was used in the General Plan update.

Soils

Soil properties can influence the development of building sites, including site selection, structural design, construction, performance after construction, and maintenance. Soil properties that affect the load-supporting capacity of an area include depth to groundwater, ponding, subsidence, shrink-swell potential, and compressibility.

F.	Geology and Soils. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1.	Geology and Sousi				
1	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
a	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?			√	
ŀ) Strong seismic ground shaking?			✓	
C) Seismic-related ground failure, including liquefaction?			√	
C) Landslides?			✓	
2	Result in substantial soil erosion or loss of topsoil?			√	
3	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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?			√	
4	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			✓	
5	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓

1) Less than Significant Impact

The project site is not located within a mapped fault hazard zone, and there is no record or evidence of faulting on the project site (City of Merced General Plan Figure 11.1). Because no faults underlie the project site, no people or structures would be exposed to substantial adverse effects related to earthquake rupture.

According to the City's *Merced Vision 2030 General Plan* EIR, the probability of soil liquefaction occurring within the City of Merced is considered to be a low to moderate hazard; however, a detailed geotechnical engineering investigation would be required for the project in compliance with the California Building Code (CBC).

There would be no exposure to any geological hazards in the project area.

Ground shaking of moderate severity may be expected to be experienced on the project site during a large seismic event. All building permits are reviewed to ensure compliance with the California Building Code (CBC). In addition, the City enforces the provisions of the Alquist Priolo Special Study Zones Act that limit development in areas identified as having special seismic hazards. All new structures shall be designed and built in accordance with the standards of the California Building Code.

APPLICABLE GENERAL PLAN GOALS AND POLICIES

The City's Merced Vision 2030 General Plan contains policies that address seismic safety.

Goal Are	Goal Area S-2: Seismic Safety:		
	Goal: Reasonable Safety for City Residents from the Hazards of Earthquake and		
Other G	Other Geologic Activity		
Policies			
S-2.1	Restrict urban development in all areas with potential ground failure		
	characteristics.		

The Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

Landslides generally occur on slopes of 15 percent or greater. The project site's topography is generally of slopes between 0 and 3 percent, which are considered insufficient to produce hazards other than minor sliding during seismic activity.

Therefore, no hazardous conditions related to seismic ground shaking would occur with the implementation of the Project. Additionally, the implementation of the project would not lead to offsite effects related to hazards related to seismic groundshaking, nor would any existing off-site hazards be exacerbated.

2) Less-Than-Significant Impact

Construction associated with the proposed project could result in temporary soil erosion and the loss of topsoil due to construction activities, including clearing, grading, site preparation activities, and installation of the proposed buildings and other improvements. The City of Merced enforces a Storm Water Management Program in compliance with the Federal Clean Water Act. All construction activities are required to comply with the City's Erosion and Sediment Control Ordinance (MMC §15.50.120.B), including the implementation of Best Management Practices (BMPs) to limit the discharge of sediment.

3) Less Than Significant Impact

The City of Merced is located in the Valley area of Merced County and is, therefore, less likely to experience landslides than other areas in the County. The probability of soil liquefaction actually taking place anywhere in the City of Merced is considered to be a low hazard. Soil types in the area are not conducive to liquefaction because they are either too

coarse or too high in clay content. According to the *Merced Vision 2030 General Plan* EIR, no significant free face failures were observed within this area and the potential for lurch cracking and lateral spreading is, therefore, very low within this area.

4) Less-Than-Significant

Expansive soils are those possessing clay particles that react to moisture changes by shrinking (when they dry) or swelling (when they become wet). Expansive soils can also consist of silty to sandy clay. The extent of shrinking and swelling is influenced by the environment, extent of wet or dry cycles, and by the amount of clay in the soil. This physical change in the soils can react unfavorably with building foundations, concrete walkways, swimming pools, roadways, and masonry walls.

Implementation of General Plan Policies, adherence to the Alquist-Priolo Act, and enforcement of the California Building Code (CBC) Standards would reduce the effect of this hazard on new buildings and infrastructure associated with the proposed development. This would reduce potential impacts to a less-than-significant level.

5) No Impact

The project site would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. However, the proposed project would be served by the City's sewer system. No new septic systems are allowed within the City Limits, and any existing systems will need to be removed upon demolition of the current home on the site.

G. Hazards and Hazardous Materials

SETTING AND DESCRIPTION

Hazardous Materials

A substance may be considered hazardous due to a number of criteria, including toxicity, ignitability, corrosivity, or reactivity. The term "hazardous material" is defined in law as any material that, because of quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.

Wildland and Urban Fire Hazards

Both urban and wildland fire hazard potential exists in the City of Merced and surrounding areas, creating the potential for injury, loss of life, and property damage. Urban fires primarily involve the uncontrolled burning of residential, commercial, or industrial structures due to human activities. Wildland fires affect grassland, brush or woodlands, and any structures on or near these fires. Such fires can result from either human-made or natural causes.

Urban fires comprise the majority of fires in the City of Merced. The site is adjacent to undeveloped agricultural land, which could be a source for a wildland fire. However, the City of Merced Fire Department has procedures in place to address the issue of wildland fires, so no additional mitigation would be necessary.

Airport Safety

The City of Merced is impacted by the presence of two airports-Merced Regional Airport, which is in the southwest corner of the City, and Castle Airport (the former Castle Air Force Base), located approximately eleven miles northwest of the subject site.

The continued operation of the Merced Regional Airport involves various hazards to both flight (physical obstructions in the airspace or land use characteristics which affect flight safety) and safety on the ground (damage due to an aircraft accident). Growth is restricted around the Regional Airport in the southwest corner of the City due to the noise and safety hazards associated with the flight path.

Castle Airport also impacts the City. Portions of the northwest part of the City's SUDP/SOI and the incorporated City are within Castle's safety zones. The primary impact is due to noise (Zones C and D), though small areas have density restrictions (Zone B2). The military discontinued operations at Castle in 1995. One important criterion for determining the various zones is the noise factor. Military aircraft are designed solely for performance, whereas civilian aircraft have extensive design features to control noise.

Potential hazards to flight include physical obstructions and other land use characteristics that can affect flight safety, which include: visual hazards such as distracting lights, glare, and sources of smoke; electronic interference with aircraft instruments or radio communications; and uses which may attract flocks of birds. In order to safeguard an airport's long-term usability, preventing encroachment of objects into the surrounding airspace is imperative.

According to the Merced County Airport Land Use Compatibility Plan, the project site is not located in any restricted safety zones for either airport, and no aircraft overflight, air safety, or noise concerns are identified.

Railroad

Hazardous materials are regularly shipped on the BNSF and SP/UP Railroad lines that pass through the City. While unlikely, an incident involving the derailment of a train could result in the spillage of cargo from the train in transporting. The spillage of hazardous materials could have devastating results. The City has little to no control over the types of materials shipped via the rail lines. There is also a safety concern for pedestrians along the tracks and vehicles utilizing at-grade crossings. The design and operation of at-grade crossings allows the City some control over rail-related hazards. Ensuring proper gate operation at the crossings is the most effective strategy to avoid collision and possible derailments. The Burlington Northern Santa Fe Railroad is approximately 2 miles from the site and Union Pacific Railroad is approximately 3 miles away.

Public Protection and Disaster Planning

Hospitals, ambulance companies, and fire districts provide medical emergency services. Considerable thought and planning have gone into efforts to improve responses to day-to-day emergencies and planning for a general disaster response capability.

The City's Emergency Plan and the County Hazardous Waste Management Plan both deal with detailed emergency response procedures under various conditions for hazardous material spills. The City also works with the State Department of Health Services to establish cleanup plans and to monitor the cleanup of known hazardous waste sites within the City.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
G.	Hazards and Hazardous Materials.				
	Would the Project:				
1)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			√	
2)	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?			✓	
3)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			√	
4)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			✓	
5)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			√	
6)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			✓	
7)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			√	
8)	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?			✓	

Construction activities associated with the proposed project would involve the use, storage, transport, and disposal of oil, gasoline, diesel fuel, paints, solvents, and other hazardous materials. The Project would be required to adhere to all applicable federal and state health

and safety standards. Construction activity must also be in compliance with the California Occupational Safety and Health Administration regulations (Occupational Safety and Health Act of 1970). Compliance with these requirements would reduce the risk of hazards to the public to a less-than-significant level.

2) Less-Than-Significant Impact

Construction on the project site would be reviewed for the use of hazardous materials at the building permit stage. Implementation of Fire Department and Building Code regulations for hazardous materials, as well as implementation of federal and state requirements, would reduce any risk caused by a future use on the site from hazardous materials to a less than significant level.

APPLICABLE GENERAL PLAN GOALS AND POLICIES

The City of Merced Vision 2030 General Plan contains policies that address hazardous materials.

Goal A	Goal Area S-7: Hazardous Materials				
Goal: I	Hazardous Materials Safety for City Residents				
Policies	5				
S-2.1	Prevent injuries and environmental contamination due to the uncontrolled release of hazardous materials.				
Implen	nenting Actions:				
7.1.a	Support Merced County in carrying out and enforcing the Merced County Hazardous Waste Management Plan.				
7.1.b	Continue to update and enforce local ordinances regulating the permitted use and storage of hazardous gases, liquids, and solids.				
7.1.d	Provide continuing training for hazardous materials enforcement and response personnel.				

3) Less-Than-Significant Impact

The nearest school is Rivera Elementary and Middle Schools, located on the northeast corner of Buena Vista and R Street. The subject site is within 1.2 miles of this school. There are no other existing or proposed schools within ¼ mile of the site. Given the California Building Code protective measures required during the construction process, this developments impacts would be less than significant. Post-construction, the site would be used for dwelling purposes only.

4) Less-Than-Significant Impact

No project actions or operations would result in the release of hazardous materials that could affect the public or the environment, and no significant hazard to the public or the environment would result with project implementation. This potential impact is less than significant.

The project site is located over four miles from the Merced Regional Airport. The approximate 10-acre site is surrounded by existing residential uses or reserved for residential purposes, except for north across Cardella Road which is in County jurisdiction with a General Plan designation of Office Commercial. Given the land use designation and surrounding land use, the potential impact is less than significant.

6) Less-Than-Significant Impact

The closest private airstrip to the site is approximately 15 miles away. There would be no hazard to people living or working on the project site.

7) Less-Than-Significant Impact

The proposed project will not adversely affect any adopted emergency response plan or emergency evacuation plan. No additional impacts would result from the development of the project area over and above those already evaluated by the EIR prepared for the *Merced Vision 2030 General Plan*.

APPLICABLE GENERAL PLAN GOALS AND POLICIES:

The Merced Vision 2030 General Plan contains policies that address disaster preparedness.

Goal Ar	Goal Area S-1: Disaster Preparedness				
Goal: C	General Disaster Preparedness				
Policies					
S-1.1	Develop and maintain emergency preparedness procedures for the City.				
Implem	nenting Actions:				
1.1.a	Keep up-to-date through annual review the City's existing Emergency Plan and coordinate with the countywide Emergency Plan.				
1.1.b	Prepare route capacity studies and determine evacuation procedures and routes for different types of disasters, including means for notifying residents of a need to evacuate because of a severe hazard as soon as possible.				
7.1.d	Provide continuing training for hazardous materials enforcement and response personnel.				

8) Less-Than-Significant Impact

According to the EIR prepared for the *Merced Vision 2030 General Plan*, the risk for wildland fire within the City of Merced is minimal. According to the Cal Fire website, the Merced County Fire Hazard Severity Zone Map shows the project site is designated as a "Local Responsibility Area" (LRA) with a Hazard Classification of "LRA Unzoned."

The City of Merced Fire Department is the responsible agency for responding to fires at the subject site. The project site is served by Station #53 located on 800 Loughborough Drive (approximately 1.75 miles from the project site).

The site is not near agricultural land that could be susceptible to wildland fires. The City of Merced Fire Department has procedures in place to address the issue of wildland fires, so no additional mitigation would be necessary. This potential impact is less than significant.

H. Hydrology and Water Quality

SETTING AND DESCRIPTION

Water Supplies and Facilities

The City's water supply system consists of 22 wells and 14 pumping stations equipped with variable speed pumps that attempt to maintain 45 to 50 psi (pounds per square inch) nominal water pressure. The City is required to meet State Health pressure requirements, which call for a minimum of 20 psi at every service connection under the annual peak hour condition and maintenance of the annual average day demand plus fire flow, whichever is stricter. The project site could be serviced by the extensions of water lines in El Redondo Drive, Horizons Avenue, and new lines installed in Gaucho Drive.

Storm Drainage/Flooding

In accordance with the adopted *City of Merced Standard Designs of Common Engineering Structures*, percolation/detention basins are designed to temporarily collect runoff so that it can be metered at acceptable rates into canals and streams that have limited capacity. The project would be required to adhere to the Post Construction Standards for compliance with the City's Phase II MS4 permit issued by the state of California.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Н.	Hydrology and Water Quality.				
	Would the Project:				
1)	Violate any water quality standards or waste discharge requirements?			✓	
2)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			√	
3)				✓	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite?			√	
5) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			√	
6) Otherwise substantially degrade water quality?			✓	
7) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			√	
8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			✓	
9) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?			√	
10) Inundation by seiche, tsunami, or mudflow?			✓	

The Project is not expected to violate any water quality standards or waste discharge requirements during construction or operation. In addition to compliance with standard construction provisions, the Project shall be required to comply with the Merced Storm Water Master Plan and the Storm Water Management Plan, and obtain all required permits for water discharge. During project operations, the City has developed requirements to minimize the impact to storm water quality caused by development and redevelopment. The increase in impervious areas caused by development can cause an increase in the type and quantity of pollutants in storm water runoff. Prior planning and design to minimize pollutants in runoff from these areas is an important component to storm water quality management. These standards are set forth in the City's Post-Construction Standards Plan and provide guidance for post-construction design measures to ensure that storm water quality is maintained. Compliance with these requirements and permits would reduce the impact to a less than significant level.

APPLICABLE GENERAL PLAN GOALS AND POLICIES:

The Merced Vision 2030 General Plan contains policies that address Water Quality and Storm Drainage.

Goal Are	Goal Area P-5: Storm Drainage and Flood Control			
Goal: A	Goal: An Adequate Storm Drainage Collection and Disposal System in Merced			
Policies	Policies			
P-5.1	Provide effective storm drainage facilities for future development.			
P-5.2	Integrate drainage facilities with bike paths, sidewalks, recreation facilities, agricultural activities, groundwater recharge, and landscaping.			

Implen	Implementing Actions:				
5.1.a	Continue to implement the City's Storm Water Master Plan and the Storm Water Management Plan and its control measures.				
5.1.c	Continue to require all development to comply with the Storm Water Master Plan and any subsequent updates.				

The City of Merced is primarily dependent on groundwater sources that draw from the San Joaquin aquifer. The City has 22 active well sites with one under construction, and 14 pumping stations, which provide service to meet peak hour urban level conditions and the average daily demand plus fire flows.

According to the City of Merced Water Master Plan, the estimated average peak water demand for the City is 23.1 mgd.

The proposed project is estimated to use approximately 3,000 gallons of water per day. This would represent 0.0080% of the estimated average daily water consumption. Although development of the site would restrict onsite recharge where new impervious surface areas are created, all alterations to groundwater flow would be captured and routed to the storm water percolation ponds or pervious surfaces with no substantial net loss in recharge potential anticipated. This reduces this impact to a less-than-significant level.

3) Less-Than-Significant Impact

The proposed project would result in modifications to the existing drainage pattern on the site. If required by the City's Engineering Department, the project will be designed to capture all surface water runoff onsite and then drain into the City's existing storm drainage system.

The project site is currently vacant and consists of pervious surfaces. The proposed project would create impervious surfaces over a large portion of the project site, thereby preventing precipitation from infiltrating and causing it to pond or runoff. However, stormwater flows would be contained onsite and piped or conveyed to the City's stormwater system, there would be no potential for increased erosion or sedimentation.

Developed storm drainage facilities in the area are adequate to handle this minor increase in flows. The Project would not result in a substantial alteration of drainage in the area, and no offsite uses would be affected by the proposed changes. All potential impacts are less than significant.

The proposed project would alter the existing drainage pattern of the site, but not in a manner that would result in flooding. The site is currently mostly vacant and any construction on the site would alter the drainage pattern and reduce the absorption capability of the site. There are no streams or rivers that would be affected. All storm runoff would be captured onsite and conveyed through pipes to the City's stormwater system. Any changes to the site would drain into the City's existing storm drain system which would prevent any onsite or offsite flooding. This potential impact is less than significant.

5) Less-Than-Significant Impact

Construction on the site will drain into the City's existing storm drain system. The developer would be required to provide documentation showing the capacity exists within the existing lines and basin to serve this project.

6) Less-Than-Significant Impact

The proposed project would not substantially degrade water quality. The proposed project would be served by the City's water system and all water runoff will be contained onsite then directed out to the City's storm drain system. The construction of the project would not affect the water quality and would not degrade water quality in the area. This potential impact is less than significant.

7) Less-Than-Significant Impact

The project would be required to comply with flood-related regulations, including submitting a flood elevation certificate to the City's Building Department during the building permit process. This potential impact is less than significant.

8) Less-Than-Significant Impact

The Flood Insurance Rate Map shows the project within a Zone "X," limited flood hazard area. As required with all new construction, the project would be required to comply with all requirements of the California Building Code (CBC) to ensure construction of the buildings meets the minimum requirements set forth by the CBC and the requirements of Flood Zone "X." Therefore, there are no significant impacts.

9) Less-Than-Significant Impact

The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. According to Figure 11.3 of the *Merced Vision 2030 General Plan*, the project site is inside the inundation area of the Yosemite Lake Dam, but not the Bear Reservoir Dam. In the case of dam failure, the General Plan Safety Element addresses local hazard response procedures. This potential impact is less than significant.

10) Less-Than-Significant Impact

The proposed project is located approximately 80 miles from the Pacific Ocean, distant from any large lakes, and not within the inundation zones for Lake Yosemite or Bear Reservoir at an elevation ranging from approximately 173 feet above MSL. According to

the City's General Plan Safety Element, the City of Merced is not subject to inundation by tsnami, seiche, or mudflow. This potential impact is less than significant.

I. Land Use and Planning

SETTING AND DESCRIPTION

The project site is located within the City Limits of Merced and within its Specific Urban Development Plan and Sphere of Influence (SUDP/SOI).

SURROUNDING USES

Refer to Page 2 of this Initial Study and the map at Attachment A for the surrounding land uses.

Current Use

The project site is approximately 10 acres of mostly undeveloped land located on the south side of Cardella Road, between El Redondo Drive and Horizon Avenue.

The project site is currently within a Planned Development with General Plan designations of Office Commercial (CO) and Neighborhood Commercial (CN), which would allow commercial uses such as, but not limited to, retail, grocery stores, restaurants, personal services, medical, and professional services. The proposed land use amendment would convert the site from commercial to residential with a residential density of approximately 4.95 units per acre, which is within the allowable range of 2 to 6 dwelling units per acre for the proposed General Plan designation of Low Density Residential (LDR), a change from commercial.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	Land Use and Planning.				
	Would the Project:				
) Physically divide an established community?			✓	
2	2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			√	
	Conflict with any applicable habitat conservation plan or natural community conservation plan?				√

1) Less-Than-Significant Impact

The project site is within the boundaries of the Merced City Limits. It would not physically divide the community as it is already part of the City. The extension of El Redondo Drive

and Horizons Avenue would improve connectivity north to Cardella Road with a direct access to the northern portion of Merced instead of having to backtrack south to Yosemite Avenue to then travel north to access Cardella Road. This potential impact is less than significant.

2) Less-Than-Significant Impact

The project would change the zoning from commercial to residential, for a site that is surrounded by residential zones and an existing residential subdivision to the south. The current designation of commercial was implemented in order to provide an "Urban Village" in this area. Without the commercial, the surrounding Village Residential is no longer necessary. However, the proposal would be compatible with surrounding residential zones, therefore, the impact is less than significant.

3) No Impact

No Habitat Conservation Plans or Natural Community Conservation Plans have been adopted by the City of Merced. Therefore, there would be no impact.

J. Mineral Resources

SETTING AND DESCRIPTION

The City of Merced does not contain any mineral resources that require managed production according to the State Mining and Geology Board. Based on observed site conditions and review of geological maps for the area, economic deposits of precious or base metals are not expected to underlie the City of Merced or the project site. According to the California Geological Survey, Aggregate Availability in California - Map Sheet 52, minor aggregate production occurs west and north of the City of Merced, but economic deposits of aggregate minerals are not mined within the immediate vicinity of the SUDP/SOI. Commercial deposits of oil and gas are not known to occur within the SUDP/SOI or immediate vicinity.

According to the Merced County General Plan Background Report (June 21, 2007), very few traditional hard rock mines exist in the County. The County's mineral resources are almost all sand and gravel mining operations. Approximately 38 square miles of Merced County, in 10 aggregate resource areas (ARA), have been classified by the California Division of Mines and Geology for aggregate. The 10 identified resource areas contain an estimated 1.18 billion tons of concrete resources with approximately 574 million tons in Western Merced County and approximately 605 million tons in Eastern Merced County. Based on available production data and population projections, the Division of Mines and Geology estimated that 144 million tons of aggregate would be needed to satisfy the projected demand for construction aggregate in the County through the year 2049. The available supply of aggregate in Merced County substantially exceeds the current and projected demand.

			Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
J.		Mineral Resources. Would the Project:				
	1)	Result in the loss of availability of a known				
		mineral resource that would be of value to				
		the region and the residents of the state?				✓
	2)	Result in the loss of availability of a locally-				
		important mineral resource recovery site				
		delineated on a local general plan, specific				
		plan, or other land use plan?				✓

1) No Impact

No mineral resources occur within City Limits, SUDP/SOI, or within the project site, so no impact.

2) Less-Than-Significant Impact

See #1 above.

K. Noise

SETTING AND DESCRIPTION

Potential noise impacts of the proposed project can be categorized as those resulting from construction and those from operational activities. Construction noise would have a short-term effect; operational noise would continue throughout the lifetime of the project. Construction associated with the development of the project would increase noise levels temporarily during construction. Operational noise associated with the development would occur intermittently with the continued operation of the proposed project.

Some land uses are considered more sensitive to noise levels than other uses. Sensitive land uses can include residences, schools, nursing homes, hospitals, and some public facilities, such as libraries. The noise level experienced at the receptor depends on the distance between the source and the receptor, the presence or absence of noise barriers and other shielding devices, and the amount of noise attenuation (lessening) provided by the intervening terrain. For line sources such as motor or vehicular traffic, noise decreases by about 3.0 to 4.5A –weighted decibels (dBA) for every doubling of the distance from the roadway.

Noise from Other Existing Sources

Vehicular noise from Cardella Road, El Redondo Drive, and Horizon Avenue would be the primary existing noise source at the project site. The nearest railroad corridor is approximately 2.25 miles from the project site. The site is surrounded by various residential properties that

generate operational noise on a daily basis. The are no industrial uses located within 1,000 feet of the project site.

According to the *Merced Vision 2030 General Plan*, noise exposure not exceeding 45 dB is considered to be a "normally acceptable" noise level for residential uses.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
K.	Noise. Would the Project result in:				
1)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			√	
2)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			✓	
3)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
4)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
5)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			✓	
6)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				
				✓	

1) Less Than Significant

Construction Noise

Construction of the Project would temporarily increase noise levels in the area during the construction period. Therefore, the noise from construction may be steady for a few months and then cease all together. Construction activities, including site preparation and grading, building construction, and sidewalk and street improvements would be considered an intermittent noise impact throughout the construction period. These activities could

result in various effects on sensitive receptors, depending on the presence of intervening barriers or other insulating materials. The effects will be short term and would result in a less than significant impact.

Operational Noise

Operational noise would be the main noise source expected from the proposed project. Traffic coming to and from the project site would generate the most noise. However, the site is surrounded by other residential uses, which are generally expected to generate similar amount of noise as the proposed development. Implementation of the Project would not lead to continued offsite effects related to noise generated by the Project. Given the noise from similar low impact zones near the subject site, this potential impact is less than significant.

2) Less-Than-Significant Impact

Implementation of the proposed project would not result in the generation of any ground borne vibration or noise. This is a less-than-significant impact.

3) Less-Than-Significant Impact

As noted above, limited operational noise would be expected from the proposed residential project. Any development on the site could be considered an increase in the ambient noise, given the fact that the site is currently vacant. However, as explained previously, the site is within a residential area and surrounded by residential properties. The potential impacts of this project in the vicinity are less than significant.

4) Less-Than-Significant Impact

The project construction will cause temporary and periodic increases in the ambient noise levels. However, because the construction noise will only be temporary and the increase in noise generated from the site would be minimal, the impacts are less than significant.

5) Less-Than-Significant Impact

The project site is located within 4 miles from active areas of the Merced Regional Airport and approximately 10 miles from the Castle Airport. The airport has a flight patterns that goes northwest/southeast, which most likely does not fly directly over the project site, however, given the distance between the project site and the airports, there should be less-than-significant impact. Therefore, no population working or living at the site would be exposed to excessive levels of aircraft noise. This potential impact is less than significant.

6) Less-Than-Significant Impact

See Section #5 above.

L. Population and Housing

SETTING AND DESCRIPTION

The Project includes the construction of 53 single-family residential units on 53 lots.

Expected Population and Employment Growth

According to the State Department of Finance population estimates for 2022, the City of Merced's population was estimated to be 89,058. Population projections estimate that the Merced SUDP area will have a significant population of 159,900 by the Year 2030.

According to the *Merced Vision 2030 General Plan*, the City of Merced is expected to experience significant population and employment growth by the Year 2030.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
L.	Population and Housing.				
	Would the Project:				
1)	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)?			✓	
2)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			√	
3)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			✓	

1) Less-Than-Significant Impact

The project site has a General Plan designation of Office Commercial and Neighborhood Commercial which allows a residential density up to 36 dwelling units per acre with a conditional use permit. The proposed land use change of Low Density Residential which would allow between 2 and 6 dwelling units per acre, 16% of the number units that can be constructed with the current land use designations. Based on the reduced density, this potential impact would be less than significant.

2) Less-Than-Significant Impact

The project site is currently undeveloped and would be considered in-fill development for 53 single-family homes, resulting in less-than-significant impact.

3) No Impact

The project site is undeveloped on this approximate 10-acre site. No housing would be displaced as a result of this project. Therefore, the impact is less than significant.

M. Public Services

SETTING AND DESCRIPTION

Fire Protection

The City of Merced Fire Department provides fire protection, rescue, and emergency medical services from five fire stations throughout the urban area. Fire Station #53 is located at 800 Loughborough Drive, approximately 1.5 miles from the site. This Station would serve the proposed project.

Police Protection

The City of Merced Police Department provides police protection for the entire City. The Police Department employs a mixture of sworn officers, non-sworn officer positions (clerical, etc.), and unpaid volunteers (VIP). The service standard used for planning future police facilities is approximately 1.37 sworn officers per 1,000 population, per the Public Facilities Financing Plan.

Schools

The public school system in Merced is served by three districts: 1) Merced City School District (elementary and middle schools); 2) Merced Union High School District (MUHSD); and, 3) Weaver Union School District (serving a small area in the southeastern part of the City with elementary schools). The districts include various elementary schools, middle (junior high) schools, and high schools.

As the City grows, new schools will need to be built to serve our growing population. According to the Development Fee Justification Study for the MUHSD, Merced City Schools students are generated by new development at the following rate:

Table 6 Student Generation Rates					
Commercial/Industrial Category	Elementary (K-8) (Students per 1,000 sq.ft.)	High School (9-12) (Students per 1,000 sq.ft.)			
Retail	0.13	0.038			
Restaurants	0.00	0.157			
Offices	0.28	0.048			
Services	0.06	0.022			
Wholesale/Warehouse	0.19	0.016			
Industrial	0.30	0.147			
Multi-Family	0.559 (per unit)	0.109 (per unit)			

Based on the table above, the 45 units would generate 30 K-8 students and 6 high school students.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
M.	<u>Public Services.</u> Would the Project:				
1)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
	a) Fire Protection?			✓	
b) Police Protection?				✓	
c) Schools?				✓	
	d) Parks?			✓	
	e) Other Public Facilities?			✓	

1) Less Than Significant

a) Fire Protection

The project site would be served by Fire Station #53, located at 800 Loughborough Drive (approximately 1.5 mile from the project site). The response from this station would meet the desired response time of 4 to 6 minutes, citywide, 90 percent of the time, within the financial constraints of the City. The proposed change in land use designation would not affect fire protection services, and no new or modified fire facilities would be needed. Any changes to the building or site would be required to meet all requirements of the California Fire Code and the Merced Municipal Code. Compliance with these requirements would reduce any future impacts to a less than significant level.

At the time a building permit is issued, the developer would be required to pay Public Facility Impact Fees (PFIF). A portion of this fee goes to cover the city's costs for fire protection such as fire stations, etc. In addition, the developer would be required to annex into the City's Community Facilities District for Services. This would result in an assessment paid with property taxes in which a portion of the tax would go to pay for fire protection services. Compliance with all Fire, Building, and Municipal Code requirements as well as payment of the Public Facility Impact Fees, and annexation into the City's CFD for services would reduce any potential impacts to a less than significant level.

b) Police Protection

The site would be served by the City Police Department. The development of the vacant project site could result in more calls to the site. Implementation of the proposed project would not require any new or modified police facilities.

The same requirements for paying Public Facility Impact Fees and annexation into the City's Community Facilities District for Services would apply with a portion of the fees and taxes collected going toward the costs for police protection. Therefore, this potential impact is reduced to a less-than-significant level.

c) Schools

The project site is located within the boundaries of the Merced City School District and Merced Union High School District. Based on the table and discussion provided in the "Settings and Description" section above, the proposed development would likely generate additional students to the school system. As appropriate, the developer would be required to pay all fees due under the Leroy F. Greene School Facilities Act of 1988. Once these fees are paid, the satisfaction of the developer of his statutory fee under California Government Code §65995 is deemed "full and complete mitigation" of school impacts. This potential impact is less than significant.

d) Parks

Rudolph Joseph Merino Park is located 0.50 miles south of the site. This housing development would slightly increase the use of neighborhood or regional parks.

Payment of the fees required under the Public Facilities Financing Program (PFIF) as described above would be required at time of building permit issuance to help fund future parks and maintenance of existing parks would be required at the building permit stage. The proposed amenities onsite and the payment of fees would reduce this potential impact to less than significant.

e) Other Public Facilities

The development of the Project could impact the maintenance of public facilities and could generate impacts to other governmental services. Payment of the fees required under the Public Facilities Financing Program (PFIF) as described above would mitigate these impacts to a less than significant level.

N. Recreation

SETTING AND DESCRIPTION

The City of Merced has a well-developed network of parks and recreation facilities. Several City parks and recreation facilities are located within a one-mile radius of the project site.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
N.	Recreation. Would the Project:				
1)	Increase the use of neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
2)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				√

1) Less the Significant Impact

Development of the Project may increase the use of neighborhood or regional parks. However, payment of the required development fees at the building permit stage along with the amenities on site would reduce the potential impacts to a less than significant level.

2) No Impact

The Project is not responsible for the construction or expansion of any recreational facilities.

O. Transportation/Traffic

SETTING AND DESCRIPTION

For additional information see Appendix A at Attachment C for combined studies on Air Quality, Green House Gas Emissions, and Vehicle Miles Traveled.

Roadway System

The project site is located in northwest Merced, approximately three miles north of Downtown and two miles north of Highway 99. The project site consists of an undeveloped lot totaling approximately 10.70 acres. The project site is bounded by collector roads (north-south bound), El Redondo Drive and Horizon Avenue, and the nearest east-west road in Cardella Road, being a Major Arterial Road designed to carry large volumes of traffic traversing through a large portion of the community. Yosemite Avenue connects with Highway 59 and R Street which link with Highway 99 that connects Merced with other regional communities throughout the State. Cardell Road will do so in the future.

Transit Service

The Transit Joint Powers Authority for Merced County has jurisdiction over public transit in Merced County and operates The Bus. The Bus provides transportation for residents traveling

within Merced and outside the City within neighboring communities such as Planada, Atwater, and Livingston.

Vehicle Miles Traveled

Senate Bill (SB) 743 directs the Governor's Office of Planning and Research (OPR) to develop new guidelines for assessing transportation-related impacts that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099[b][1]). These new guidelines will replace automobile delay, as described through level of service (LOS), with more appropriate criteria and metrics based on travel demand, such as "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated" (Public Resources Code Section 21099[b][1]). The State CEQA Guidelines have been amended to include guidance for measuring travel demand and to recommend that delays related to congestion no longer be considered a significant impact under CEQA (OPR 2016).

Vehicle Miles Traveled Analysis

Calculation of VMT shown in the CalEEMod output files in Appendix A, Section 4.0 Operational Detail – Mobile, 4.2 Trip Summary Information shows that the project's annual VMT is 1,906,497 miles. This is unmitigated VMT and does not show reduction for location of the project to transportation, schools, connectivity, employment centers, and shopping.

The project is located within 0.7 mile of the R Street and Pacific Drive bus stop (M2, Merced R Street Route). The project site is located within 0.9 miles from the University of California Merced and 1.2 miles from Rivera Intermediate and Elementary Schools. Merino Park is located approximately 0.55 miles from the project site. The project is located within three miles of the city center where the majority of employers are located. Shopping centers and markets are located within two miles of the project site and throughout Merced.

The CalEEMod trip generation (Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 10th Edition) provides for trip lengths of for home to work as 10.8-mile, home to shop as 7.3-miles, and home to other (schools, recreation) as 7.5-miles. As shown above the distance to from home to work, home to shopping, and home to schools is less than half these default distance provided by the ITE; therefore, given the location of the project, it is expected to reduce VMT by more 50 percent, resulting is a project VMT of 953,518 miles or a 50 percent reduction in the project's VMT.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
0.	Transportation/Traffic.				
Would	the project:				
1)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			1	
2)	Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)?			✓	
3)	Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?			√	
4)	Result in inadequate emergency access?			✓	

The CalEEMod trip generation (Institute of Transportation Engineers (ITE), *Trip Generation Manual*, *10th Edition*) provides for trip lengths of for home to work as 10.8-mile, home to shop as 7.3-miles, and home to other (schools, recreation) as 7.5-miles. As shown above the distance to from home to work, home to shopping, and home to schools is less than half these default distance provided by the ITE; therefore, given the location of the project, it is expected to reduce VMT by more 50 percent, resulting is a project VMT of 953,518 miles or a 50 percent reduction in the project's VMT. There are no specific planned transit, bicycle, or pedestrian facilities for this site – so the development would not be eliminating or impact any of the infrastructure required for those modes of transportation. This would result in a less than significant impact.

2) Less-than-Significant Impact

Per CEQA Guidelines Section 15064.3, alternative modes of transportation are being assessed. The Amtrak (passenger train service) is located within 3 miles south providing services to the greater California area and connections to travel across the county. The closest airport is Merced Regional Airport, located approximately 3 miles to the east. The project is located within 0.7 mile of the R Street and Pacific Drive bus stop (M2, Merced

R Street Route). The project site is located within 0.9 miles from the University of California Merced and 1.2 miles from Rivera Intermediate and Elementary Schools. Merino Park is located approximately 0.55 miles from the project site. The project is located within three miles of the city center where the majority of employers are located. Shopping centers and markets are located within two miles of the project site and throughout Merced.

The project would not result in a change in-air traffic patterns, including air traffic associated with any airports. The increase in density would result in slightly more vehicle miles traveled to surrounding uses.

3) Less-than-Significant Impact

The project site is surrounded by developed subdivisions that are missing road connections. The proposed subdivision would extend some of the existing roads in El Redondo Drive and Horizon Avenue installing missing infrastructure along these roads up to Cardella Road. The proposal does not require changes to the existing street network.

The project site is surrounded by a new single-family home subdivision to the south, and undeveloped but entitled parcels that are missing road connections. The proposed subdivision would extend some of the existing roads in El Redondo Drive and Horizon Avenue, and install missing infrastructure Cardella Road and the new Gaucho Drive. The proposal does not require significant changes to the existing street network. Therefore, less than significant impact would occur.

4) Less-than-Significant Impact

The subject site is an approximate 10.76-acre parcel on mostly undeveloped land in a neighborhood with a General Plan designation of Village Core Residential to the east and west of the subject site (minimum 10 dwelling units per acre) and to the south with the same designation with a housing subdivision currently under construction (Sage Creek). There is currently a gap missing infrastructure of roads and utilities between future developments to the east and west, and connectivity with various subdivisions immediately to the south up to Cardella Road where currently there is no direct vehicle access. This entire area has a General Plan designation of Office Commercial (CO)/Neighborhood Commercial (CN) which would allow multifamily with a conditional use permit at a density of 12 to 36 dwelling units pe acre. Approving this subdivision would connect the future east and west developments via road extensions and utility installation of Gaucho Drive, and connect the various subdivisions to the south up to Cardella Road where there is currently no access. These road connections would improve the street network within the neighborhood and improve emergency access to the site or surrounding uses. Therefore, project construction and operation would not pose a significant obstacle to emergency response vehicles. This impact on emergency access would be less than significant

P. PUBLIC UTILITIES AND FACILITIES

SETTING AND DESCRIPTION

Water

The City's water system is composed of 22 groundwater production wells located throughout the City, and approximately 350 miles of main lines. Well pump operators ensure reliability and adequate system pressure at all times to satisfy customer demand. Diesel powered generators help maintain uninterrupted operations during power outages. The City of Merced water system delivers more than 24 million gallons of drinking water per day to approximately 20,733 residential, commercial, and industrial customer locations. The City is required to meet State Health pressure requirements, which call for a minimum of 20 psi at every service connection under the annual peak hour condition and maintenance of the annual average daily demand plus fire flow, whichever is stricter. The City of Merced Water Division is operated by the Public Works Department.

The City of Merced's wells have an average depth of 414 feet and range in depth from 161 feet to 800 feet. The depth of these wells would suggest that the City of Merced is primarily drawing water from a deep aquifer associated with the Mehrten geological formation. Increasing urban demand and associated population growth, along with an increased shift by agricultural users from surface water to groundwater and prolonged drought have resulted in declining groundwater levels due to overdraft. This condition was recognized by the City of Merced and the Merced Irrigation District (MID) in 1993, at which time the two entities began a two-year planning process to ensure a safe and reliable water supply for Eastern Merced County through the year 2030. Integrated Regional Water Planning continues today through various efforts.

Wastewater

Wastewater (sanitary sewer) collection and treatment in the Merced urban area is provided by the City of Merced. The wastewater collection system handles wastewater generated by residential, commercial, and industrial uses in the City.

The City Wastewater Treatment Plant (WWTP), located in the southwest part of the City about two miles south of the airport, has been periodically expanded and upgraded to meet the needs of the City's growing population and new industry. The City's wastewater treatment facility has a capacity of 11.5 million gallons per day (mgd); with an average flow of 8.5 mgd. The City has recently completed an expansion project to increase capacity to 12 mgd and upgrade to tertiary treatment with the addition of filtration and ultraviolet disinfection. Future improvements would add another 8 mgd in capacity (in increments of 4 mgd), for a total of 20 mgd. This design capacity can support a population of approximately 174,000. The collection system will also need to be expanded as development occurs.

Treated effluent is disposed of in several ways depending on the time of year. Most of the treated effluent (75% average) is discharged to Hartley Slough throughout the year. The remaining treated effluent is delivered to a land application area and the on-site City-owned wetland area south of the treatment plant.

Storm Drainage

The *Draft City of Merced Storm Drainage Master Plan* addresses the collection and disposal of surface water runoff in the City's SUDP. The study addresses both the collection and disposal of

storm water. Systems of storm drain pipes and catch basins are laid out, sized, and costed in the plan to serve present and projected urban land uses.

It is the responsibility of the developer to ensure that utilities, including storm water and drainage facilities, are installed in compliance with City regulations and other applicable regulations. Necessary arrangements with the utility companies or other agencies will be made for such installation, according to the specifications of the governing agency and the City [(Ord. 1342 § 2 (part), 1980: prior code § 25.21(f)).] The disposal system is mainly composed of MID facilities, including water distribution canals and laterals, drains, and natural channels that traverse the area.

The City of Merced has been involved in developing a Storm Water Management Plan (SWMP) to fulfill requirements of storm water discharges from Small Municipal Separate Storm Sewer System (MS4) operators in accordance with Section 402(p) of the Federal Clean Water Act (CWA). The SWMP was developed to also comply with General Permit Number CAS000004, Water Quality Order No. 2003-0005-DWQ.

Solid Waste

The City of Merced is served by the Highway 59 Landfill and the Highway 59 Compost Facility, located at 6040 North Highway 59. The County of Merced is the contracting agency for landfill operations and maintenance, as the facilities are owned by the Merced County Association of Governments. The City of Merced provides services for all refuse pick-up within the City limits and franchise hauling companies collect in the unincorporated areas. In addition to these two landfill sites, there is one private disposal facility, the Flintkote County Disposal Site, at SR 59 and the Merced River. This site is restricted to concrete and earth material.

			Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
P.		Utilities and Service Systems.				
		Would the Project:				
	1)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			√	
	2)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
	3)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			√	

4)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?		√	
5)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?		✓	
6)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?		√	
7)	Comply with federal, state, and local statutes and regulations related to solid waste?		✓	

The project site would be served by City sewer system. There is sufficient capacity for serving this project within the City of Merced. This potential impact is less than significant.

2) Less-Than-Significant Impact

The City's current water and wastewater system is capable of handling this project within the City of Merced. There are existing sewer and water lines along El Redondo Drive and Horizons Avenue, which would be extended to go through the project site. No significant environmental impacts would result from connecting to the line. This potential impact is less than significant.

3) Less-Than-Significant Impact

No new facilities or expansions of existing facilities are needed. This potential impact is less than significant.

4) Less-Than-Significant Impact

As explained above, no new water facilities are needed for this project. The existing water system is sufficient to serve the development. Potential impacts are less than significant.

5) Less-Than-Significant Impact

Refer to item 2 above.

6) Less-Than-Significant Impact

The City of Merced uses the Highway 59 Landfill. Sufficient capacity is available to serve the future project. According to the *Merced Vision 2030 General Plan DEIR*, the landfill has capacity to serve the City through 2030. Potential impacts are less than significant.

All construction on the site would be required to comply with all local, state, and federal regulations regarding solid waste, including recycling. Potential impacts are less than significant.

Q. Mandatory Findings of Significance

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Q.	Mandatory Findings of Significance.				
	Would the Project:				
1)	Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			√	
2)	Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects?)			√	
3)	Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			√	

1) Less-Than-Significant Impact

As previously discussed in this document, the Project does not have the potential to adversely affect biological resources or cultural resources, because such resources are lacking on the project site, and any potential impacts would be avoided with implementation of the mitigation measures and other applicable codes identified in this report. Also, the Project would not significantly change the existing urban setting of the project area. Thus, this impact would be less than significant.

The Program Environmental Impact Report conducted for the *Merced Vision 2030 General Plan, the General Plan Program EIR* (SCH# 2008071069), has recognized that future development and build-out of the SUDP/SOI will result in cumulative and unavoidable impacts in the areas of Air Quality and Loss of Agricultural Soils. In conjunction with this conclusion, the City has adopted a Statement of Overriding Considerations for these impacts (Resolution #2011-63) which is herein incorporated by reference.

The certified General Plan EIR addressed and analyzed cumulative impacts resulting from changing agricultural use to urban uses. No new or unaddressed cumulative impacts will result from the project that have not previously been considered by the certified General Plan EIR or by the Statement of Overriding Considerations, or mitigated by this Expanded Initial Study. This Initial Study does not disclose any new and/or feasible mitigation measures which would lessen the unavoidable and significant cumulative impacts.

The analysis of impacts associated with the development would contribute to the cumulative air quality and agricultural impacts identified in the General Plan EIR. In the case of air quality, emissions from the proposed project would be less than significant. The nature and extent of these impacts, however, falls within the parameters of impacts previously analyzed in the General Plan EIR. No individual or cumulative impacts will be created by the Project that have not previously been considered at the program level by the General Plan EIR or mitigated by this Initial Study.

3) Less-Than-Significant Impact

Development anticipated by the *Merced Vision 2030 General Plan* will have significant adverse effects on human beings. These include the incremental degradation of air quality in the San Joaquin Basin, the loss of unique farmland, the incremental increase in traffic, and the increased demand on natural resources, public services, and facilities. However, consistent with the provisions of CEQA previously identified, the analysis of the proposed project is limited to those impacts which are peculiar to the project site or which were not previously identified as significant effects in the prior EIR. The previously-certified General Plan EIR and the Statement of Overriding Considerations addressed those cumulative impacts; hence, there is no requirement to address them again as part of this project.

This previous EIR concluded that these significant adverse impacts are accounted for in the mitigation measures incorporated into the General Plan EIR. In addition, a Statement of Overriding Considerations was adopted by City Council Resolution #2011-63 that indicates that the significant impacts associated with development are offset by the benefits that will be realized in providing necessary jobs for residents of the City. The analysis and mitigation of impacts have been detailed in the Environmental Impact Report prepared for the *Merced Vision 2030 General Plan*, which is incorporated into this document by reference.

While this issue was addressed and resolved with the General Plan EIR in an abundance of caution, in order to fulfill CEQA's mandate to fully disclose potential environmental consequences of projects, this analysis is considered herein. However, as a full disclosure

document, this issue is repeated in abbreviated form for purposes of disclosure, even though it was resolved as a part of the General Plan.

Potential impacts associated with the Project's development have been described in this Initial Study. All impacts were determined to be less than significant.

R. Greenhouse Gas Emissions

For additional information see Appendix A at Attachment C for combined studies on Air Quality, Green House Gas Emissions, and Vehicle Miles Traveled.

SETTING AND DESCRIPTION

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. A portion of the solar radiation that enters the atmosphere is absorbed by the earth's surface, and a smaller portion of this radiation is reflected back toward space. Infrared radiation is absorbed by GHGs; as a result, infrared radiation released from the earth that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on Earth.

GHGs are present in the atmosphere naturally, are released by natural sources and anthropogenic sources, and are formed from secondary reactions taking place in the atmosphere. The following GHGs are widely accepted as the principal contributors to human-induced global climate change and are relevant to the project: carbon dioxide (CO₂), methane, and nitrous oxide.

Emissions of CO₂ are byproducts of fossil fuel combustion. Methane is the main component of natural gas and is associated with agricultural practices and landfills. Nitrous oxide is a colorless GHG that results from industrial processes, vehicle emissions, and agricultural practices.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO₂. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas in absorbing infrared radiation and the length of time the gas remains in the atmosphere (i.e., its atmospheric lifetime). The reference gas for GWP is CO₂; therefore, CO₂ has a GWP of 1. The other main GHGs that have been attributed to human activity include methane, which has a GWP of 28, and nitrous oxide, which has a GWP of 265 (IPCC 2013). For example, 1 ton of methane has the same contribution to the greenhouse effect as approximately 28 tons of CO₂. GHGs with lower emissions rates than CO₂ may still contribute to climate change, because they are more effective than CO₂ at absorbing outgoing infrared radiation (i.e., they have high GWPs). The concept of CO₂-equivalents (CO₂e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation.

Climate Change

Global climate change is a change in the average weather of the Earth, which can be measured by wind patterns, storms, precipitation, and temperature. It is exacerbated by GHGs, which trap heat in the atmosphere (called the "greenhouse" effect). GHGs include carbon dioxide, methane, and nitrous oxide, and are emitted by natural processes and human activities. Potential adverse effects of global climate change include a reduction in

the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels, and changes to ecosystems and the natural environment.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

Regulatory Context

The City of Merced has developed and approved a Climate Action Plan (October 1, 2012). The City of Merced Climate Action Plan provides strategies for reduction of GHG emissions. The SJVAPC Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA (December 17, 2009) provides guidance for addressing GHG analysis and implements a 29 percent reduction in project GHG emissions.

Significance Criteria

The Climate Action Plan provides strategies and actions for new developments in Part 4: Climate Action Plan Strategies and Actions. Consistence with the Climate action Plan strategies and action would show the project would not significantly increase GHG emissions in the future. The SJVAPCD criteria is to reduce GHG emission by 29 percent over business-as-usual.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
R.	Greenhouse Gas Emissions. Would the project:				
1	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			√	
2	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			<i></i>	

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is responsible for protecting public health and welfare through the administration of federal and state air quality laws and policies. In December 2009, SJVAPCD adopted the *Final Staff Report Addressing Greenhouse Gas Emissions Impacts under the California Environmental Quality Act* (SJVAPCD 2009). SJVAPCD also developed guidance for land-use agencies to address GHG emission impacts for new development projects. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would have a less-than-significant individual and cumulative impact related to GHG emissions. Projects implementing best performance standards and reducing project-specific GHG emissions by at least 29 percent compared to the business-as-usual condition would have a less-than-significant individual and cumulative impact on global climate change under this guidance. However, models used to estimate GHG emissions now include some of the statewide measures that previously would have been used to evaluate this 29 percent reduction performance standard, so this particular method of comparison is out of date.

To establish the context in which to consider the project's GHG emissions, this analysis used guidance from the adjacent Sacramento Metropolitan Air Quality Management District (SMAQMD) to determine significance. In 2014, SMAQMD adopted a significance threshold for GHG emissions consistent with the goals of Assembly Bill (AB) 32: 1,100 metric tons (MT) CO₂e per year for construction-related and operational emissions (SMAQMD 2014). This significance threshold was developed to assess the consistency of a project's emissions with the statewide framework for reducing GHG emissions.

The impacts associated with GHG emissions generated by the project are related to the emissions from short-term construction and operations. Off-road equipment, materials transport, and worker commutes during construction of the project would generate GHG emissions. Emissions generated by the project during operations are related to indirect GHG emissions associated with residential uses.

Project's GHG Emissions

The proposed project would result in the emission of GHGs during the construction and operational phases.

Construction GHG Emissions

Construction of the project would emit GHGs during the operation of heavy equipment. **Table 5** provides an estimate of project related GHG emissions per construction year.

Table 5

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Construction	Palatad	(+)	Hmiccione
Construction	i ixtiaittu	OHIO	EHHISSIOHS

Construction Year	CO ₂ e Emissions
	MT/year
2023	263.27
2024	110.15
Maximum Year Emissions	263.27

Operational GHG Emissions

Operation of the project would emit GHGs from area, energy, mobile, stationary, waste, and water sources. **Table 5** provides an estimate of project related GHG emissions per construction year. Detailed calculations are provided in Appendix A.

Table 5Estimation of Project Related GHG Emissions

Operation	CO ₂ e Emissions		
	MT/year		
Total GHG Emissions	998.21		

GHG emissions associated with construction of the project are short-term and will cease following completion of construction activity. Therefore, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. For additional information see Appendix A at Attachment C. This impact would be less than significant.

2) Less-than-Significant Impact

In 2006, California enacted AB 32, the California Global Warming Solutions Act of 2006 (California Health and Safety Code Section 38500 et seq.). AB 32 establishes regulatory, reporting, and market mechanisms to achieve reductions in GHG emissions and establishes

a cap on statewide GHG emissions. It requires that statewide GHG emissions be reduced to 1990 levels by 2020.

In 2008 and 2014, the California Air Resources Board (ARB) approved the Climate Change Scoping Plan (Scoping Plan) and the first update to the Climate Change Scoping Plan: Building on the Framework, respectively (ARB 2008; ARB 2014). In 2016, the state legislature passed Senate Bill SB 32, which established a 2030 GHG emissions reduction target of 40 percent below 1990 levels. In response to SB 32 and the companion legislation of AB 197, ARB approved the Final Proposed 2017 Scoping Plan Update: The Strategy for Achieving California's 2030 GHG Target in November 2017 (ARB 2017). The 2017 Scoping Plan draws from the previous plans to present strategies to reaching California's 2030 GHG reduction target. The project would comply with any mandate or standards set forth by an adopted Scoping Plan Update effecting construction activities and operations.

In 2012, the City of Merced adopted the *Merced Climate Action Plan* to address the reduction of major sources of GHG emissions. The climate action plan established an emissions target of 1990 levels by 2020, commensurate with the State of California's target (City of Merced 2012). To meet this goal, the City adopted values, goals, and strategies to reduce emissions. Goals of the plan include:

- enhanced mobility of all transportation modes;
- sustainable community design;
- water conservation and technology;
- protection of air resources;
- waste reduction:
- increased use of renewable energy sources;
- building energy conservation; and
- public outreach and involvement.

The project would be consistent with the goals of the Merced Climate Action Plan.

The greatest source of GHG emissions emitted from the project is from mobile sources (refer to Appendix A). It is important that the project be consistent with reduced VMT and strategy provided in the Climate Action Plan.

Due to the location of the project to schools, shopping, employment, and transportation, it is reasonable to assume that implementation of the project would reduce VMT and therefore, reduce GHG emissions (refer to Vehicle Miles Traveled Section below). It is anticipated that the location of the project would reduce residential VMT by greater than 50 percent; however, to be conservative a 50 percent reduction in VMTs was used in the CalEEMod (refer to Appendix A). A reduction is VMT of 50 percent will not result in a 50 percent reduction in GHG emissions because the overall project GHG emissions includes, not only mobile emission, but area, energy, waste, and water GHG emission sources. Table 6 shows GHG emissions based on the reduction of VMT estimated in Vehicle Miles Traveled Section, as shown emissions are reduced by 44 percent, CalEEMod output files are provided in Appendix A

Table 6

Reduced VMT Related GHG Emissions

Operation	CO ₂ e Emissions
1	MT/year
Total	
GHG Emissions	555.60

The project is also consistent with the City's Climate Action Plan, Strategy EM 1.5 Mobility Development Review Polices due to the project's connectivity with the adjacent neighborhoods, nearby transit stops (Route M5 – Merced South-East), and schools which reduce mobile GHG emissions. The project would not create any significant new sources of GHG emissions and would comply with the City's Climate Action Plan and SJVAPCD emissions reduction requirements; therefore, the project would not contribute to adverse impacts associated with cumulative GHG emissions.

As mentioned above, the project would not exceed emissions thresholds adopted by SMAQMD and would be consistent with the applicable requirements of the *Merced Climate Action Plan*. Therefore, the project would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. For additional information see Appendix A at Attachment C. This impact would be less than significant.

4. Environmental Determination

On the basis of this initial environmental evaluation:

X

I find that the project could have a significant effect on the environment, and that a NEGATIVE DECLARATION HAS BEEN PREPARED for public review.

March 1, 2023

Francisco Mendoza-Gonzalez, Associate Planner

Kim Espinosa, Planning Manager

Kim Espinosa, Planning Manager Environmental Coordinator City of Merced

5. Preparers of the Initial Study

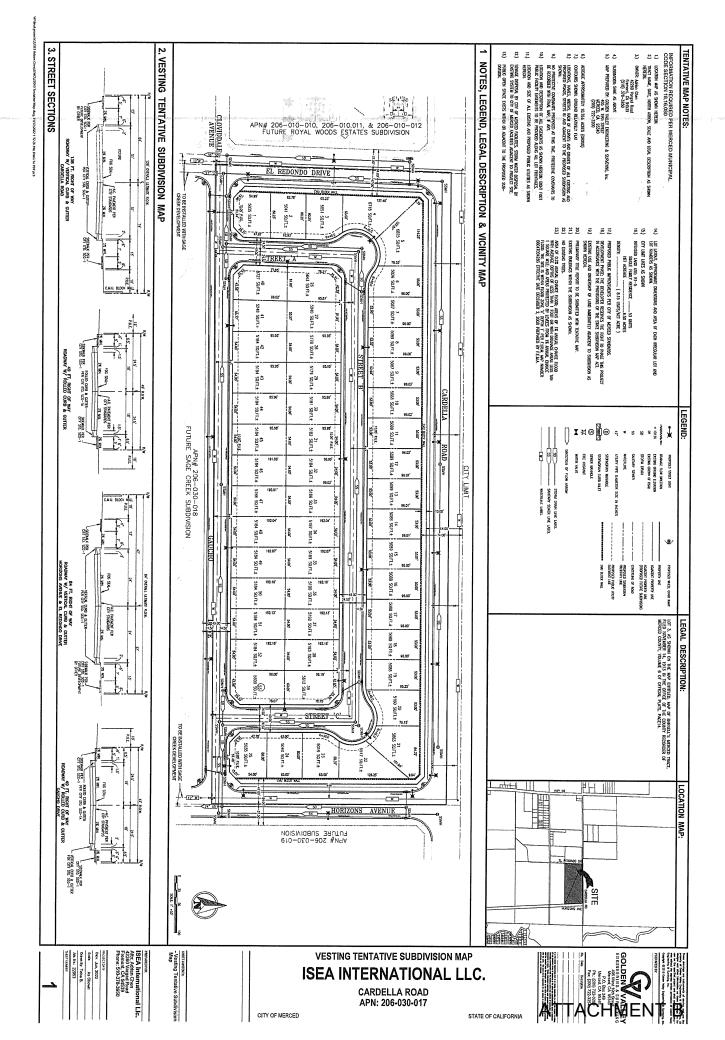
LEAD AGENCY

City of Merced Planning & Permitting Division 678 West 18th Street Merced, CA 95340 (209) 385-6929 Francisco Mendoza-Gonzalez, Associate Planner

ATTACHMENTS:

- A) Location Map
- B) Site Plan
- C) Appendix A Combined Studies for Air Quality, Green House Gas Emissions, and Vehicle Miles Traveled





SCS ENGINEERS

Environmental Consultants & Contractors

November 14, 2022 File No. 01222274.00

Adrian Chen 42260 Vargad Road Fremont, CA 94539 510-378-3950

Subject:

Air Quality (AQ), Greenhouse Gas (GHG), and Vehicle Miles Traveled (VMT) Analyses for the Cardella Road Land Use Project Located in the City of Merced, Merced County, California

Dear Mr. Chen:

Mr. Chen has requested **SCS Engineers** (**SCS**) to provide an AQ and GHG analyses for submittal to the City of Merced, California. It is our understanding that the Cardella Road Project (project) is required by the City of Merced (City) to analyze the project's impact on AQ, GHG, and VMT; therefore, SCS provides Cardella Road with the following letter.

PROJECT BACKGROUND

SCS understand Cardella Road is a 6.5-acre subdivision project located adjacent to Cardella Road to the north, Redondo Drive to the west, and Horizons Avenue to the east in the City of Merced, CA. The subdivision is approximately 53 lots, ranging between 5,035 to 6,825 square feet.

The proposed project will consist of a constructing a single-family residential subdivision. The City is requesting that AQ, GHG, and VMT analyses be performed.

AIR QUALITY

REGULATORY CONTEXT

Ambient Air Quality Standards

The California Clean Air Act (CAA) establishes maximum ambient concentrations for the criteria air pollutants (CAPs), known as the California Ambient Air Quality Standards (CAAQS). The CAPs are ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO), lead (Pb), particulate matter 10 and 2.5 microns in size (PM₁₀ and PM_{2.5}), hydrogen sulfide, sulfates, visibility reducing particles, and vinyl chloride. Concentrations above these time-averaged limits are anticipated to cause adverse health effects to sensitive receptors. **Table 1** shows the standards for the various averaging times for criteria pollutants under the CAAQS. The San Juaquin Valley Air Basin (SJVAB) is in nonattainment for the following CAAQS criteria pollutants: ozone, PM₁₀, PM_{2.5}.

Mr. Adrien Chen November 14, 2022 Page 2

TABLE 1
STATE AND FEDERAL AMBIENT AIR QUALITY STANDARDS

		Standard
Pollutant	Averaging Time	parts per million or microgram per cubic meter
		CAAQS
Ozone	1 hour	0.09
Ozone	8 hour	0.070
СО	8 hour	9
	1 hour	20
NO ₂	Annual Mean	0.03
1102	1 hour	0.18
	24 hour	0.04
SO ₂	3 hour	N/A
	1 hour	0.25
PM ₁₀	Annual Mean	(20)
FIVI10	24 hour	(50)
PM _{2.5}	Annual arithmetic mean	(12)
	24 hour	N/A
Pb	Rolling 3-Moth Average	N/A
	30 Days	(1.5)
Hydrogen Sulfide	1 hour	0.03
Vinyl Chloride	24 hour	0.01
Sulfate	24 hour	(25)
Visibility Reducing Particles	8 hour	extinction of 0.23 per km

California State Implementation Plan (SIP)

California's SIP is comprised of the State's overall air quality attainment plans to meet the CAAQS as well as the individual air quality attainment plans of each Air Quality Management District (AQMD) and Air Pollution Control District (APCD). The items included in the California SIP are listed in 40 CFR Chapter I, Part 52, Subpart F §52.220. The California SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), AQMD and APCD rules, State regulations, and federal controls for each air basin and California's overall air quality. Many of the items within the California SIP rely on the same control strategies, such as emissions standards for cars and heavy trucks, fuel regulations, and limitations on emissions from consumer products. AQMDs and APCDs, as well as other agencies such as the Bureau of Automotive Repair, prepare draft California SIP elements and submit them to California Air Resource Board (CARB) for review and approval. The California CAA identifies CARB as the lead agency for compiling items for incorporation into the California SIP, and submitting the items to CARB and the United States Environmental Protection Agency (U.S. EPA) for

approval. San Juaquin Valley Air Basin (SJVAB) is in nonattainment for ozone, PM₁₀, PM_{2.5} and have approved SIPs.

San Joaquin Valley Air Pollution Control District (SJVAPCD)

The SJVAPCD is a regional agency which regulates stationary sources of air pollution within the SJVAB whose boundaries are contiguous with the County's boundaries. Its primary purpose is to enforce local, state, and federal air quality regulations in order to satisfy ambient air quality standards and protect the public from harm due to poor air quality. The SJVAPCD regulates air quality through its permit authority over most types of stationary emission sources and through its planning and review activities. Additionally, the SJVAPCD regulates open and agricultural burning and is responsible for air quality monitoring, preparing clean air plans, and responding to citizen complaints regarding air quality.

All projects in Merced County and in the community of Merced are subject to applicable SJVAPCD rules and regulations in effect at the time of construction and operation. The SJVAPCD has adopted air quality thresholds for determination of impact significance for projects subject to California Environmental Quality Act (CEQA) review. Air quality significance criteria is provided in Table 2.

TABLE 2
AIR QUALITY THREHOLDS OF SIGNIFICANCE – CRITERIA POLLUTANTS

		Operational Emissions						
Pollutant/Precursor	Construction Emissions	Permitted Equipment and Activities	Permitted Equipment and Activities					
	Tons/Year							
CO	100	100	100					
NOx	10	10	10					
ROG	10	10	10					
SOx	27	27	27					
PM10	15	15	15					
PM2.5	15	15	15					

SJVAPCD, AQ Thresholds of Significance – Criteria Pollutants (March 19, 2015)

Sensitive Receptors

Schools, hospitals, and convalescent homes 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. Residential areas are considered sensitive to poor air quality, because people usually stay home for extended periods of time, increasing the potential exposure to ambient air quality. Recreational uses are also considered sensitive due to the greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system.

The land surrounding the project sites is primarily open space, there is a residential subdivision located approximately 630 feet to the south and agricultural land uses located approximately 1,375 feet to the north. Merced College is the nearest school to the project site at 0.82 miles and Rudolph Rivera Intermediate and Elementary School are approximately 1.30 miles from the project site. The nearest recreation facility, Merino Park is located 0.52 miles from the project site and the nearest hospital, Mercy Hospital is located 1.27 mile from the project site.

Methodology

The Proposed Project's short-term construction-related criteria pollutant emissions were estimated using California Emissions Estimator Model (CalEEMod) Version 2020.4.0. The CalEEMod used default values for construction and operational emissions estimate. Because the City does not provide criteria pollutant emission thresholds, estimated project-related criteria pollutant emissions were compared to the SJVAPCD CEQA construction and operational criteria pollutant significant criteria shown in Table 2.

Air Quality Analyses

The City of Merced is located in the SJVAB, which is under the jurisdiction of the SJVAPCD and is classified as nonattainment for ozone, PM₁₀, PM_{2.5}. The SJVAPCD have applicable SIPs to address these nonattainment issues. The SJVAPCD has provided significance criteria (Table 2), which if a project's emissions are below these the significance criteria the project is considered to not conflict with or obstruct implementation of the applicable air quality plan. As shown below the project's emissions do not exceed the SJVAPCD significance criteria. **No Impact.**

Construction

Construction of the project would require demolition, site preparation, grading, building/infrastructure, paving and architectural coating. As shown in Table 3, construction criteria emission would not exceed the SJVAPCD significance criteria. **Less than Significant.**

TABLE 3
MAXIMUM ANNUAL CONSTRUCTION EMISSIONS

Pollutant/Precursor	Construction Emissions	Significant Criteria	Exceed Significant						
	Tons/Year								
CO	1.66	100	No						
NOx	1.53	10	No						
ROG	0.96	10	No						
SOx	0.003	27	No						
Total PM10	0.27	15	No						
Total PM2.5	0.16	15	No						

Operation

Operation of the project would emit criteria pollution from area, energy, mobile, stationary, waste, and water sources. Table 4, shows the emissions from the operation of the project with 53 single family homes. As shown in Table 4 project emission would not exceed the SJVAPCD significance threshold. Therefore, operation of the project would not adversely impact regional air quality. **Less than Significant.**

TABLE 4
MAXIMUM ANNUAL OPERATIONAL EMISSIONS

Pollutant/Precursor	Construction Emissions	Significant Criteria	Exceed Significant						
	Tons/Year								
CO	3.51	100	No						
NOx	0.83	10	No						
ROG	0.78	10	No						
S0x	0.01	27	No						
Total PM10	0.73	15	No						
Total PM2.5	0.21	15	No						

Cumulative Impacts

Although SJVAPCD does not have any quantitative cumulative significant criteria, air quality is cumulative in nature. CAAQS are predicated on past, present, and future emissions; therefore, if project-related emission are found to have a less-than-significant impact in the near-term conditions, then cumulative impacts would also be less-than-significant. Project-related air quality impacts were found to be less-than-significant in the near-term conditions; therefore, the project would not adversely affect regional air quality in the future. Less than Significant.

The shortest distance between a project site and the nearest sensitive receptor is approximately 630 feet. Construction activities would be short term and intermittent. Although used during construction, heavy construction equipment would be the main source of pollutants during construction of the project. Given that heavy equipment would be used intermittently and during the day time hours, and given the short duration of construction activities in a given area and distance to the nearest sensitive receptor, exposure of sensitive receptors to substantial pollutant concentrations would not occur. Operation of the project would not result in substantial pollutant concentrations. **Less than Significant.**

Given the use of heavy equipment during construction, the time of day heavy equipment would be operated, and the distance to the nearest sensitive receptor, the project would not emit objectionable odors that would be adversely affect a substantial number of people. Operation of the project would not emit odors. Therefore, construction and operation of the project would have a less-than-significant impact associated with odors. Less than Significant.

GREENHOUSE GAS EMISSIONS

CLIMATE CHANGE

Global climate change is a change in the average weather of the Earth, which can be measured by wind patterns, storms, precipitation, and temperature. It is exacerbated by GHGs, which trap heat in the atmosphere (called the "greenhouse" effect). GHGs include carbon dioxide, methane, and nitrous oxide, and are emitted by natural processes and human activities. Potential adverse effects of global climate change include a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels, and changes to ecosystems and the natural environment.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

REGULATORY CONTEXT

The City of Merced has developed and approved a Climate Action Plan (October 1, 2012). The City of Merced Climate Action Plan provides strategies for reduction of GHG emissions. The SJVAPCD Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA (December 17, 2009) provides guidance for addressing GHG analysis and implements a 29 percent reduction in project GHG emissions.

METHODOLOGY

The Proposed Project's short-term construction-related GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2020.4.0. The CalEEMod used default values for construction and operational emissions estimate.

SIGNIFICANCE CRITERIA

The Climate Action Plan provides strategies and actions for new developments in Part 4: Climate Action Plan Strategies and Actions. Consistence with the Climate action Plan strategies and action would show the project would not significantly increase GHG emissions in the future. The SJVAPCD criteria is to reduce GHG emission by 29 percent over business-as-usual.

Project's GHG Emissions

The proposed project would result in the emission of GHGs during the construction and operational phases.

Construction GHG Emissions

Construction of the project would emit GHGs during the operation of heavy equipment. **Table 5** provides an estimate of project related GHG emissions per construction year. Detailed calculations are provided in **Appendix A**.

TABLE 5
CONSTRUCTION RELATED GHG EMISSIONS

	CO ₂ e Emissions
Construction Year	MT/year
2023	263.27
2024	110.15
Maximum Year Emissions	263.27

Operational GHG Emissions

Operation of the project would emit GHGs from area, energy, mobile, stationary, waste, and water sources. **Table 5** provides an estimate of project related GHG emissions per construction year. Detailed calculations are provided in **Appendix A**.

TABLE 5
ESTIMATION OF PROJECT RELATED GHG EMISSIONS

Operation	CO ₂ e Emissions
Operation	MT/year
Total GHG Emissions	998.21

Project's Consistency with City's Climate Action Plan

The greatest source of GHG emissions emitted from the project is from mobile sources (refer to Appendix A). It is important that the project be consistent with reduced VMT and strategy provided in the Climate Action Plan.

Due to the location of the project to schools, shopping, employment, and transportation, it is reasonable to assume that implementation of the project would reduce VMT and therefore, reduce GHG emissions (refer to Vehicle Miles Traveled Section below). It is anticipated that the location of the project would reduce residential VMT by greater than 50 percent; however, to be conservative a 50 percent reduction in VMTs was used in the CalEEMod (refer to Appendix A). A reduction is VMT of 50 percent will not result in a 50 percent reduction in GHG emissions because the overall project GHG emissions includes, not only mobile emission, but area, energy, waste, and water GHG emission sources. Table 6 shows GHG emissions based on the reduction of VMT estimated in Vehicle Miles Traveled Section, as shown emissions are reduced by 44 percent, CalEEMod output files are provided in Appendix A.

TABLE 6
REDUCED VMT RELATED GHG EMISSIONS

0	CO₂e Emissions
Operation	MT/year
Total GHG Emissions	555.60

The project is also consistent with the City's Climate Action Plan, Strategy EM 1.5 Mobility Development Review Polices due to the project's nearby transit stops on R Street (Route M2), and schools, shopping, employment centers, which would reduce mobile GHG emissions. The project would not create any significant new sources of GHG emissions and would comply with the City's Climate Action Plan and SJVAPCD emissions reduction requirements; therefore, the project would not contribute to adverse impacts associated with cumulative GHG emissions. Less than Significant.

VEHICLE MILES TRAVELED

Regulatory Context

Pursuant to Senate Bill 743 (passed in 2013), the metric for analyzing transportation impacts under the CEQA officially changed over on July 1, 2020 from level of service to VMT. The 2030 City of Merced General Plan identifies the improvement project and strategies that have and will assist the City of Merced in reducing it vehicles miles traveled.

Vehicle Miles Traveled Analysis

Calculation of VMT shown in the CalEEMod output files in Appendix A, Section 4.0 Operational Detail – Mobile, 4.2 Trip Summary Information shows that the project's annual VMT is 1,906,497 miles. This is unmitigated VMT and does not show reduction for proximity of the project to transportation, schools, employment centers, and shopping.

The project is located within 0.7 mile of the R Street and Pacific Drive bus stop (M2, Merced R Street Route). The project site is located within 0.9 miles from University of California at site and 1.2 miles from Rivera Intermediate and Elementary schools. Merino Park is located approximately 0.55 miles from the project site. The project is located within three miles of the city center where the majority of employers are located. Shopping centers and markets are located within two miles of the project site and throughout Merced.

The CalEEMod trip generation (Institute of Transportation Engineers (ITE), *Trip Generation Manual, 10th Edition*) provides for trip lengths of for home to work as 10.8-mile, home to shop as 7.3-miles, and home to other (schools, recreation) as 7.5-miles. As shown above the distance to from home to work, home to shopping, and home to schools is less than half these default distance provided by the ITE; therefore, given the location of the project, it is expected to reduce VMT by more 50 percent, resulting is a project VMT of 953,518 miles or a 50 percent reduction in the project's VMT. **Less than Significant.**

CONCLUSION

Implementation of the project would not result in result in a significant regional AQ impacts, a significant increase in GHG emissions, and would comply with VMT criteria within the City.

Sincerely,

Erin Quinn Project Director SCS Engineers

Attachments

Patrick Sullivan Senior Vice President SCS Engineers ATTACHMENTS

CalEEMod Output Files

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Cardella Road - Merced County, Annual

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

Cardella Road

Merced County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	53.00	Dwelling Unit	6.50	95,400.00	152

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	49
Climate Zone	3			Operational Year	2024
Utility Company	Merced Irrigation District				
CO2 Intensity (lb/MWhr)	290.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per plans

Construction Phase -

Demolition -

Area Mitigation -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LotAcreage	17.21	6.50
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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Cardella Road - Merced County, Annual

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

tblWoodstoves	NumberCatalytic	6.50	10.76
tblWoodstoves	NumberNoncatalytic	6.50	10.76

2.0 Emissions Summary

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Cardella Road - Merced County, Annual

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

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							Mī	Туг		
2023	0.1694	1.5312	1.6630	3.0000e- 003	0.1945	0.0721	0.2666	0.0916	0.0675	0.1591	0.0000	261.2257	261.2257	0.0599	1.8600e- 003	263.2763
2024	0.9587	0.5552	0.7239	1.2600e- 003	0.0112	0.0253	0.0365	3.0000e- 003	0.0238	0.0268	0.0000	109.3112	109.3112	0.0247	7.3000e- 004	110.1454
Maximum	0.9587	1.5312	1.6630	3.0000e- 003	0.1945	0.0721	0.2666	0.0916	0.0675	0.1591	0.0000	261.2257	261.2257	0.0599	1.8600e- 003	263.2763

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr.									MT	⁻ /yr					
2023	0.1694	1.5312	1.6630	3.0000e- 003	0.1945	0.0721	0.2666	0.0916	0.0675	0.1591	0.0000	261.2254	261.2254	0.0599	1.8600e- 003	263.2760
2024	0.9587	0.5552	0.7239	1.2600e- 003	0.0112	0.0253	0.0365	3.0000e- 003	0.0238	0.0268	0.0000	109.3111	109.3111	0.0247	7.3000e- 004	110.1453
Maximum	0.9587	1.5312	1.6630	3.0000e- 003	0.1945	0.0721	0.2666	0.0916	0.0675	0.1591	0.0000	261.2254	261.2254	0.0599	1.8600e- 003	263.2760

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	Sta	ert Date	End	Date	Maximu	ım Unmitiga	ted ROG +	NOX (tons/c	uarter)	Maxi	mum Mitigate	ed ROG + N	OX (tons/qu	arter)		
1	4-	1-2023	6-30	-2023			0.6361					0.6361				
2	7-	1-2023	9-30	-2023	0.6361 0.6361											
3	10-	-1-2023	12-31	1-2023			0.5387					0.5387				
4	1-	1-2024	3-31	-2024			0.4951	and the second				0.4951				
5	4-	1-2024	6-30-2024 1.0085									1.0085				
Marrie Michigan (America)		2000 - W. W.	Hig	hest			1,0085			***************************************		1.0085				

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tor	ıs/yr							MT	/yr		467
Area	0.6956	0.0568	2.3932	6.6400e- 003		0.3287	0.3287	i !	0.3287	0.3287	43.4997	23.6028	67.1025	0.2044	4.2000e- 004	72.3382
Energy	6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003		4.7500e- 003	4.7500e- 003	0.0000	123.7650	123.7650	7.6300e- 003	2.0100e- 003	124.5557
Mobile	0.2975	0.7712	3,0953	8.0800e- 003	0.7177	8.4200e- 003	0.7261	0.1925	7.9400e- 003	0.2004	0.0000	750.2519	750.2519	0.0337	0.0487	765.6010
Waste	21 21 21		1 ! !	1 1 1 1		0.0000	0.0000	 	0.0000	0.0000	11.1077	0.0000	11.1077	0.6564	0.0000	27.5188
Water	#; #; #;		1 1 1	1		0.0000	0.0000		0.0000	0.0000	1.0955	3,4718	4.5674	0.1129	2.7000e- 003	8.1962
Total	1.0000	0.8867	5.5135	0.0151	0.7177	0.3418	1.0595	0.1925	0.3413	0.5338	55.7029	901.0915	956.7944	1.0151	0.0538	998.2099

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2,5	Exhaust PM2,5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	0.4740	4.5300e- 003	0.3934	2.0000e- 005		2.1800e- 003	2.1800e- 003		2.1800e- 003	2.1800e- 003	0.0000	0.6428	0.6428	6.2000e- 004	0.0000	0.6583
Energy	6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003	, : : : :	4.7500e- 003	4.7500e- 003	0.0000	123.7650	123.7650	7.6300e- 003	2.0100e- 003	124.5557
Mobile	0.2975	0.7712	3.0953	8.0800e- 003	0.7177	8.4200e- 003	0.7261	0.1925	7.9400e- 003	0.2004	0.0000	750.2519	750.2519	0.0337	0.0487	765.6010
Waste	61 	:		;		0.0000	0.0000	; ; ; ;	0.0000	0.0000	11.1077	0.0000	11.1077	0.6564	0.0000	27.5188
Water	6)	: :		: : : : : : : : : : : : : : : : : : :		0.0000	0.0000		0.0000	0.0000	1.0955	3.4718	4.5674	0.1129	2.7000e- 003	8.1962
Total	0.7783	0.8344	3.5137	8.4700e- 003	0.7177	0.0154	0.7330	0.1925	0.0149	0.2074	12.2032	878.1315	890.3347	0.8113	0.0534	926.5299

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	22.16	5.90	36.27	43.87	0.00	95.51	30.81	0.00	95.64	61.16	78.09	2.55	6.95	20.08	0.78	7.18

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2023	4/14/2023	5	10	
2	Grading	Grading	4/15/2023	5/12/2023	5	20	
3	Building Construction	Building Construction	5/13/2023	3/29/2024	5	230	

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4	Paving	Paving	3/30/2024	4/26/2024	5 20)
	Architectural Coating	Architectural Coating	4/27/2024	5/24/2024	5 20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 20

Acres of Paving: 0

Residential Indoor: 193,185; Residential Outdoor: 64,395; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT .
Building Construction	9	19.00	6.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							M	Г/уг		
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e- 004		6.3300e- 003	6.3300e- 003	; : : : :	5.8200e- 003	5.8200e- 003	0.0000	16.7254	16.7254	5.4100e- 003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e- 004	0.0983	6.3300e- 003	0.1046	0.0505	5.8200e- 003	0.0563	0.0000	16.7254	16.7254	5.4100e- 003	0.0000	16.8606

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

3.2 Site Preparation - 2023 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e- 004	3.3000e- 004	3.8400e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	1.0000e- 005	3.0000e- 004	0.0000	0.9156	0.9156	3.0000e- 005	3.0000e- 005	0.9243
Total	4.3000e- 004	3.3000e- 004	3.8400e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	1.0000e- 005	3.0000e- 004	0.0000	0.9156	0.9156	3.0000e- 005	3.0000e- 005	0.9243

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr						410	МТ	[*] lyr	445	
Fugitive Dust			! !	I I I	0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e- 004		6.3300e- 003	6.3300e- 003		5.8200e- 003	5.8200e- 003	0.0000	16.7253	16.7253	5.4100e- 003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e- 004	0.0983	6.3300e- 003	0.1046	0.0505	5.8200e- 003	0.0563	0.0000	16.7253	16.7253	5.4100e- 003	0.0000	16.8606

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3.2 Site Preparation - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e- 004	3.3000e- 004	3.8400e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	1.0000e- 005	3.0000e- 004	0.0000	0.9156	0.9156	3.0000e- 005	3.0000e- 005	0.9243
Total	4.3000e- 004	3.3000e- 004	3.8400e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	1.0000e- 005	3.0000e- 004	0.0000	0.9156	0.9156	3.0000e- 005	3.0000e- 005	0.9243

3.3 Grading - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ıs/yr							МТ	Γ/yr		
Fugitive Dust	; ; ;		 	1 1	0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1794	0.1475	3.0000e- 004		7.7500e- 003	7.7500e- 003		7.1300e- 003	7.1300e- 003	0.0000	26.0606	26.0606	8.4300e- 003	0.0000	26.2713
Total	0.0171	0.1794	0.1475	3.0000e- 004	0.0708	7.7500e- 003	0.0786	0.0343	7.1300e- 003	0.0414	0.0000	26.0606	26.0606	8.4300e- 003	0.0000	26.2713

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3.3 Grading - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0,0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e- 004	5.6000e- 004	6,4000e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1,0000e- 005	5.0000e- 004	0.0000	1.5260	1.5260	4.0000e- 005	5.0000e- 005	1.5406
Total	7.2000e- 004	5.6000e- 004	6.4000e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.5260	1.5260	4.0000e- 005	5.0000e- 005	1.5406

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Category					ton	s/yr							МТ	Г/уг		
Fugitive Dust				 	0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1794	0.1475	3.0000e- 004		7.7500e- 003	7.7500e- 003		7.1300e- 003	7.1300e- 003	0.0000	26.0606	26.0606	8.4300e- 003	0.0000	26.2713
Total	0.0171	0.1794	0.1475	3.0000e- 004	0.0708	7.7500e- 003	0.0786	0.0343	7.1300e- 003	0.0414	0.0000	26.0606	26.0606	8.4300e- 003	0.0000	26.2713

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3.3 Grading - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e- 004	5.6000e- 004	6.4000e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.5260	1.5260	4.0000e- 005	5.0000e- 005	1.5406
Total	7.2000e- 004	5.6000e- 004	6.4000e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.5260	1.5260	4.0000e- 005	5.0000e- 005	1.5406

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	co	SO2	Fugitive Exhaust PM10 PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons/yr							MT	T/yr		
Off-Road	0.1298	1.1868	1.3401	2.2200e- 003	0.0577	0.0577	1 1 1	0.0543	0.0543	0.0000	191.2389	191.2389	0.0455	0.0000	192.3762
Total	0.1298	1.1868	1.3401	2.2200e- 003	0.0577	0.0577		0.0543	0.0543	0.0000	191.2389	191.2389	0.0455	0.0000	192.3762

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3.4 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e- 004	0.0208	7.0000e- 003	9.0000e- 005	2.9600e- 003	1.3000e- 004	3.1000e- 003	8.6000e- 004	1.3000e- 004	9.8000e- 004	0.0000	8.8131	8.8131	3.0000e- 005	1.3100e- 003	9.2045
Worker	7.5200e- 003	5.8300e- 003	0.0669	1.7000e- 004	0.0194	1.1000e- 004	0.0196	5.1700e- 003	1.0000e- 004	5.2700e- 003	0.0000	15.9462	15.9462	4.7000e- 004	4.7000e- 004	16.0988
Total	8.0800e- 003	0.0266	0.0739	2.6000e- 004	0.0224	2,4000e- 004	0.0227	6.0300e- 003	2.3000e- 004	6.2500e- 003	0.0000	24.7593	24.7593	5.0000e- 004	1.7800e- 003	25.3033

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	/yr							МТ	/yr		
Off-Road	0.1298	1.1868	1.3401	2.2200e- 003	1	0.0577	0.0577		0.0543	0.0543	0.0000	191.2387	191.2387	0.0455	0.0000	192.3760
Total	0.1298	1.1868	1.3401	2.2200e- 003		0.0577	0.0577		0.0543	0.0543	0.0000	191.2387	191.2387	0.0455	0.0000	192.3760

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3.4 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Calegory					ton	s/yr				L			M1	T/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e- 004	0.0208	7.0000e- 003	9.0000e- 005	2.9600e- 003	1.3000e- 004	3.1000e- 003	8.6000e- 004	1.3000e- 004	9.8000e- 004	0.0000	8.8131	8.8131	3.0000e- 005	1.3100e- 003	9.2045
Worker	7.5200e- 003	5.8300e- 003	0.0669	1.7000e- 004	0.0194	1.1000e- 004	0.0196	5.1700e- 003	1.0000e- 004	5.2700e- 003	0.0000	15.9462	15.9462	4.7000e- 004	4.7000e- 004	16.0988
Total	8.0800e- 003	0.0266	0.0739	2.6000e- 004	0.0224	2.4000e- 004	0.0227	6.0300e- 003	2.3000e- 004	6.2500e- 003	0.0000	24.7593	24.7593	5.0000e- 004	1.7800e- 003	25.3033

3.4 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

0.0478

Total

0.4369

0.5254

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category			1997		ton	s/yr							МТ	T/yr		
Off-Road	0.0478	0.4369	0.5254	8.8000e- 004		0.0199	0.0199		0.0188	0.0188	0.0000	75.3510	75.3510	0.0178	0.0000	75.7964

0.0199

0.0199

0.0000

75.3510 75.3510

0.0178

0.0000

75.7964

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3.4 Building Construction - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e- 004	8.1800e- 003	2.6700e- 003	4.0000e- 005	1.1700e- 003	5.0000e- 005	1.2200e- 003	3.4000e- 004	5.0000e- 005	3.9000e- 004	0.0000	3.4173	3.4173	1.0000e- 005	5.1000e- 004	3.5689
Worker	2.7200e- 003	2.0000e- 003	0.0240	7.0000e- 005	7.6600e- 003	4.0000e- 005	7.7000e- 003	2.0400e- 003	4.0000e- 005	2.0700e- 003	0.0000	6.0895	6.0895	1.6000e- 004	1.7000e- 004	6.1442
Total	2.9300e- 003	0.0102	0.0267	1.1000e- 004	8.8300e- 003	9.0000e- 005	8.9200e- 003	2.3800e- 003	9.0000e- 005	2.4600e- 003	0.0000	9.5068	9.5068	1.7000e- 004	6.8000e- 004	9.7131

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							M1	Tyr		
Off-Road	0.0478	0.4369	0,5254	8.8000e- 004		0.0199	0.0199	1 1 1 1	0.0188	0.0188	0.0000	75.3509	75.3509	0.0178	0.0000	75.7963
Total	0.0478	0.4369	0.5254	8.8000e- 004		0.0199	0.0199		0.0188	0.0188	0.0000	75.3509	75.3509	0.0178	0.0000	75.7963

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3.4 Building Construction - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e- 004	8.1800e- 003	2.6700e- 003	4.0000e- 005	1.1700e- 003	5.0000e- 005	1.2200e- 003	3.4000e- 004	5.0000e- 005	3.9000e- 004	0.0000	3.4173	3.4173	1.0000e- 005	5.1000e- 004	3.5689
Worker	2.7200e- 003	2.0000e- 003	0.0240	7.0000e- 005	7.6600e- 003	4.0000e- 005	7.7000e- 003	2.0400e- 003	4.0000e- 005	2.0700e- 003	0.0000	6.0895	6.0895	1.6000e- 004	1.7000e- 004	6.1442
Total	2.9300e- 003	0.0102	0.0267	1.1000e- 004	8.8300e- 003	9.0000e- 005	8.9200e- 003	2.3800e- 003	9.0000e- 005	2.4600e- 003	0.0000	9.5068	9.5068	1.7000e- 004	6.8000e- 004	9.7131

3.5 Paving - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							Mī	Г/yr		
Off-Road	9.8800e- 003	0.0953	0.1463	2.3000e- 004	i i	4.6900e- 003	4.6900e- 003		4.3100e- 003	4.3100e- 003	0.0000	20.0265	20.0265	6.4800e- 003	0.0000	20.1885
Paving	0.0000	1				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8800e- 003	0.0953	0.1463	2.3000e- 004		4.6900e- 003	4.6900e- 003		4.3100e- 003	4.3100e- 003	0.0000	20.0265	20.0265	6.4800e- 003	0.0000	20.1885

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3.5 Paving - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2,5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Calegory					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e- 004	4.9000e- 004	5.8300e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.4792	1.4792	4.0000e- 005	4.0000e- 005	1.4925
Total	6.6000e- 004	4.9000e- 004	5.8300e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.4792	1.4792	4.0000e- 005	4.0000e- 005	1.4925

Mitigated Construction On-Site

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

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3.5 Paving - 2024 Mitigated Construction Off-Site

	ROG	NOx	co	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e- 004	4.9000e- 004	5.8300e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.4792	1.4792	4.0000e- 005	4.0000e- 005	1.4925
Total	6.6000e- 004	4.9000e- 004	5.8300e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.4792	1.4792	4.0000e- 005	4.0000e- 005	1.4925

3.6 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MI	Tyr .		
Archit. Coating	0.8954		! !			0.0000	0.0000	! ! !	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01171000	1.8100e- 003	0.0122	0.0181	3.0000e- 005	W. Colonia	6.1000e- 004	6.1000e- 004		6.1000e- 004	6.1000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5569
Total	0.8972	0.0122	0.0181	3.0000e- 005	· · · · · · · · · · · · · · · · · · ·	6.1000e- 004	6.1000e- 004		6.1000e- 004	6.1000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5569

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3.6 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	⁻ lyr	- 1	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e- 004	1.3000e- 004	1.5600e- 003	0.0000	5.0000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3945	0.3945	1.0000e- 005	1.0000e- 005	0.3980
Total	1.8000e- 004	1.3000e- 004	1.5600e- 003	0.0000	5.0000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3945	0.3945	1.0000e- 005	1.0000e- 005	0.3980

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	/yr							MT	Γ/yr		
Archit. Coating	0.8954					0.0000	0.0000	1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0,0000	0.0000	0.0000
Off-Road	1.8100e- 003	0.0122	0.0181	3.0000e- 005		6.1000e- 004	6.1000e- 004		6.1000e- 004	6.1000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5568
Total	0.8972	0.0122	0.0181	3.0000e- 005		6.1000e- 004	6.1000e- 004		6.1000e- 004	6.1000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5568

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3.6 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e- 004	1.3000e- 004	1.5600e- 003	0.0000	5.0000e- 004	0.0000	5,0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3945	0.3945	1.0000e- 005	1.0000e- 005	0.3980
Total	1.8000e- 004	1.3000e- 004	1.5600e- 003	0.0000	5.0000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3945	0.3945	1.0000e- 005	1.0000e- 005	0.3980

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr		- 11					MT	/yr		
Mitigated	0.2975	0.7712	3.0953	8.0800e- 003	0.7177	8.4200e- 003	0.7261	0.1925	7.9400e- 003	0.2004	0.0000	750.2519	750.2519	0.0337	0.0487	765.6010
Unmitigated	0.2975	0.7712	3.0953	8.0800e- 003	0.7177	8.4200e- 003	0.7261	0.1925	7.9400e- 003	0.2004	0.0000	750.2519	750.2519	0.0337	0.0487	765.6010

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	500.32	505.62	453.15	1,906,497	1,906,497
Total	500.32	505.62	453.15	1,906,497	1,906,497

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	46.90	17.40	35.70	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.515533	0.047958	0.156749	0.151796	0.029800	0.007258	0.013970	0.049021	0.000803	0.000458	0.021477	0.002201	0.002977

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr	<u> </u>						MT	/yr		
Electricity Mitigated	#: #: #:		i ! !	; ; ;		0.0000	0.0000		0.0000	0.0000	0.0000	55.7800	55.7800	6.3300e- 003	7.7000e- 004	56.1667
Electricity Unmitigated			i ! !			0.0000	0.0000		0.0000	0.0000	0.0000	55.7800	55.7800	6.3300e- 003	7.7000e- 004	56.1667
NaturalGas Mitigated	6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003		4.7500e- 003	4.7500e- 003	0.0000	67.9850	67.9850	1.3000e- 003	1.2500e- 003	68.3890
NaturalGas Unmitigated	6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003		4.7500e- 003	4.7500e- 003	0.0000	67.9850	67.9850	1.3000e- 003	1.2500e- 003	68.3890

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5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	7yr		
Single Family	1.27399e	6.87000-	0.0587	0.0250	3,7000e-		4.7500-	17500		4.7500	4.7500			07.0050	4.0000	4.0500	00.0000
Housing	+006	003	0.0307	0.0230 i	004		4.7500e- 003	4.7500e- 003		4.7500e- 003	4.7500e- 003	0.0000	67.9850	67.9850	1.3000e- 003	1.2500e- 003	68.3890

<u>Mitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							M	Γ/yr		
Single Family Housing	1.27399e +006	6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003		4.7500e- 003	4.7500e- 003	0.0000	67.9850	67.9850	1.3000e- 003	1.2500e- 003	68.3890
Total		6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003		4.7500e- 003	4.7500e- 003	0.0000	67.9850	67.9850	1.3000e- 003	1.2500e- 003	68.3890

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

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

alan ayar da	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M	Г/уг	
Single Family Housing	422620	55.7800	6.3300e- 003	7.7000e- 004	56.1667
Total		55.7800	6.3300e- 003	7.7000e- 004	56.1667

<u>Mitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	T/yr	
Single Family Housing	422620	55.7800	6.3300e- 003	7.7000e- 004	56.1667
Total		55.7800	6.3300e- 003	7.7000e- 004	56.1667

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

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Use Low VOC Paint - Residential Exterior
Use Low VOC Paint - Non-Residential Interior
Use Low VOC Paint - Non-Residential Exterior
Use only Natural Gas Hearths
No Hearths Installed

	ROG	NOx	co	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							M	Γ/yr		
Mitigated	0.4740	4.5300e- 003	0.3934	2.0000e- 005		2.1800e- 003	2.1800e- 003		2.1800e- 003	2.1800e- 003	0.0000	0.6428	0.6428	6.2000e- 004	0.0000	0.6583
Unmitigated	0.6956	0.0568	2.3932	6.6400e- 003		0.3287	0.3287		0.3287	0.3287	43.4997	23.6028	67.1025	0.2044	4.2000e- 004	72.3382

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6.2 Area by SubCategory <u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2,5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	/yr		
Architectural Coating	0.0895	 				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3726					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2216	0.0523	1.9999	6.6200e- 003	 	0.3265	0.3265	1	0.3265	0.3265	43.4997	22.9600	66.4597	0.2038	4.2000e- 004	71.6799
Landscaping	0.0118	4.5300e- 003	0.3934	2.0000e- 005		2.1800e- 003	2.1800e- 003		2.1800e- 003	2.1800e- 003	0.0000	0.6428	0.6428	6.2000e- 004	0.0000	0.6583
Total	0.6956	0.0568	2.3932	6.6400e- 003		0.3287	0.3287		0.3287	0.3287	43.4997	23.6028	67.1025	0.2044	4.2000e- 004	72.3382

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6.2 Area by SubCategory Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		<u> </u>	<u> </u>	<u> </u>	ton	s/yr							MT	- Tyr		
Architectural Coating	0.0895	1 1 1 1				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3726		j			0.0000	0.0000	i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	[: : :	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0118	4.5300e- 003	0.3934	2.0000e- 005		2.1800e- 003	2.1800e- 003	,	2.1800e- 003	2.1800e- 003	0.0000	0.6428	0.6428	6.2000e- 004	0.0000	0,6583
Total	0.4740	4.5300e- 003	0.3934	2.0000e- 005		2.1800e- 003	2.1800e- 003		2.1800e- 003	2.1800e- 003	0.0000	0.6428	0.6428	6.2000e- 004	0.0000	0.6583

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category		Mî	ī/yr	
imigated	4.5674	0.1129	2.7000e- 003	8.1962
- Criminguiou	4.5674	0.1129	2.7000e- 003	8.1962

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		M	Γ/yr	
Single Family Housing	3.45316 / 2.17699	4.5674	0.1129	2.7000e- 003	8.1962
Total		4.5674	0.1129	2.7000e- 003	8.1962

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	T/yr	
Single Family Housing	3.45316 / 2.17699	4.5674	0.1129	2.7000e- 003	8.1962
Total		4.5674	0.1129	2.7000e- 003	8.1962

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	/yr	
Mitigated	11.1077	0.6564	0.0000	27.5188
	11.1077	0.6564	0.0000	27.5188

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8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MΊ	ſ/yr	
Single Family Housing	54.72	11.1077	0.6564	0.0000	27.5188
Total		11.1077	0.6564	0.0000	27.5188

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		Mī	7/yr	
Single Family Housing	54.72	11.1077	0.6564	0.0000	27.5188
Total		11.1077	0.6564	0.0000	27.5188

9.0 Operational Offroad

p-10-20-10-10-10-20-20-20-20-20-20-20-20-20-20-20-20-20	VICTOR DE LA CONTRACTOR DE	VICTORIA CARROLLA CONTRACTORIA				
Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	

User Defined Equipment

Equipment Type Number

11.0 Vegetation

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

Cardella Road

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	53.00	Dwelling Unit	6.50	95,400.00	152

1.2 Other Project Characteristics

Urbanization

Rural

Wind Speed (m/s)

2.2

Precipitation Freq (Days)

49

Climate Zone

3

a opoca (....o)

Operational Year

2024

Utility Company

Merced Irrigation District

CO2 Intensity (lb/MWhr)

290.98

CH4 Intensity (lb/MWhr)

0.033

N2O Intensity (lb/MWhr)

0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per plans

Construction Phase -

Demolition -

Vehicle Trips - 50% Reduction due to location of schools, shopping, connetivity, and transportation.

Woodstoves -

Area Mitigation -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LotAcreage	17.21	6.50

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tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TL	7.90	3.95
tblVehicleTrips	HS_TL	7.10	3.55
tblVehicleTrips	HW_TL	16.80	8.40
tblWoodstoves	NumberCatalytic	6.50	0.00
tblWoodstoves	NumberNoncatalytic	6.50	0.00

2.0 Emissions Summary

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

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	T/yr		<u> </u>
2023	0.1694	1.5312	1.6630	3.0000e- 003	0.1945	0.0721	0.2666	0.0916	0.0675	0.1591	0.0000	261.2257	261.2257	0.0599	1.8600e- 003	263.2763
2024	0.9587	0.5552	0.7239	1.2600e- 003	0.0112	0.0253	0.0365	3.0000e- 003	0.0238	0,0268	0.0000	109.3112	109.3112	0.0247	7.3000e- 004	110.1454
Maximum	0.9587	1.5312	1.6630	3.0000e- 003	0.1945	0.0721	0.2666	0.0916	0.0675	0.1591	0.0000	261.2257	261.2257	0.0599	1.8600e- 003	263.2763

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МП	/yr		
2023	0.1694	1.5312	1.6630	3.0000e- 003	0.1945	0.0721	0.2666	0.0916	0.0675	0.1591	0.0000	261.2254	261.2254	0.0599	1.8600e- 003	263.2760
2024	0.9587	0.5552	0.7239	1.2600e- 003	0.0112	0.0253	0.0365	3.0000e- 003	0.0238	0.0268	0.0000	109.3111	109.3111	0.0247	7.3000e- 004	110.1453
Maximum	0.9587	1.5312	1.6630	3.0000e- 003	0.1945	0.0721	0.2666	0.0916	0.0675	0.1591	0.0000	261.2254	261.2254	0.0599	1.8600e- 003	263.2760

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	ROG	NOx	co	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	Sta	art Date	End	Date	Maximu	m Unmitiga	ted ROG +	NOX (tons/c	juarter)	Maxir	num Mitigate	ed ROG + N	OX (tons/qua	arter)		
1	4-	1-2023	6-30	-2023			0.6361					0.6361				
2	7-	1-2023	9-30	-2023			0.5380				- 10 to 10 t	0.5380				
3	10	-1-2023	12-31	1-2023		***************************************	0.5387					0.5387				
4	1-	1-2024	3-31	-2024			0.4951					0.4951				
5	4-	1-2024	6-30	-2024			1.0085					1.0085				
			Hig	hest			1.0085	tie to the second of the				1.0085				

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	co	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		art las			tor	ns/yr				1911			M	T/yr		
Area	0.4763	0.0244	0.4018	1.5000e- 004	1	3.7800e- 003	3.7800e- 003	 	3.7800e- 003	3.7800e- 003	0.0000	23.6028	23.6028	1.0600e- 003	4.2000e- 004	23.7547
Energy	6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003	j	4.7500e- 003	4.7500e- 003	0.0000	123.7650	123.7650	7.6300e- 003	2.0100e- 003	124.5557
Mobile	0.2216	0.4543	1.8230	4.1600e- 003	0.3589	4.4000e- 003	0.3633	0.0963	4.1400e- 003	0.1004	0.0000	385.8944	385.8944	0.0224	0.0276	394.6768
Waste	#1 #1		; ; ; ;	1	 	0.0000	0.0000		0.0000	0.0000	11.1077	0.0000	11.1077	0.6564	0.0000	27.5188
Water			i i i	; ;	, : :	0.0000	0.0000		0.0000	0.0000	1.0955	3.4718	4.5674	0.1129	2.7000e- 003	8.1962
Total	0.7048	0.5373	2.2497	4.6800e- 003	0.3589	0.0129	0.3719	0.0963	0.0127	0.1090	12.2032	536.7341	548.9373	0.8004	0.0327	578.7021

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2.2 Overall Operational Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2,5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ıs/yr							MT	/yr		
Area	0.4740	4.5300e- 003	0.3934	2.0000e- 005		2.1800e- 003	2.1800e- 003		2.1800e- 003	2.1800e- 003	0.0000	0.6428	0.6428	6.2000e- 004	0.0000	0.6583
Energy	6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003		4.7500e- 003	4.7500e- 003	0.0000	123.7650	123.7650	7.6300e- 003	2.0100e- 003	124.5557
Mobile	0.2216	0.4543	1.8230	4.1600e- 003	0.3589	4.4000e- 003	0.3633	0.0963	4.1400e- 003	0.1004	0.0000	385.8944	385.8944	0.0224	0.0276	394.6768
Waste	#: #: #:		i : :	! !		0.0000	0.0000		0.0000	0.0000	11.1077	0.0000	11.1077	0.6564	0.0000	27.5188
Water	 B1 B1 B1		! ! ! !			0.0000	0.0000		0.0000	0.0000	1.0955	3.4718	4.5674	0.1129	2.7000e- 003	8.1962
Total	0.7024	0.5175	2.2413	4.5500e- 003	0.3589	0.0113	0.3703	0.0963	0.0111	0.1074	12.2032	513.7741	525.9773	0.8000	0.0323	555.6057

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.33	3.69	0.37	2.78	0.00	12.37	0.43	0.00	12.63	1.47	0.00	4.28	4.18	0.05	1.28	3.99

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2023	4/14/2023	5	10	
2	Grading	Grading	4/15/2023	5/12/2023	5	20	
3	Building Construction	Building Construction	5/13/2023	3/29/2024	5	230	

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4	Paving	Paving	3/30/2024	4/26/2024	5	20	1
5	Architectural Coating	Architectural Coating		5/24/2024	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 20

Acres of Paving: 0

Residential Indoor: 193,185; Residential Outdoor: 64,395; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0,42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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HHDT

HDT_Mix

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16.80

6.60

20.00 LD_Mix

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	19.00	6.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

0.00

3.1 Mitigation Measures Construction

4.00

0.00

3.2 Site Preparation - 2023

Architectural Coating

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁷ /yr	and the	
Fugitive Dust		 	; ; ;	 	0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e- 004		6.3300e- 003	6.3300e- 003		5.8200e- 003	5.8200e- 003	0.0000	16.7254	16.7254	5.4100e- 003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e- 004	0.0983	6.3300e- 003	0.1046	0.0505	5.8200e- 003	0.0563	0.0000	16.7254	16.7254	5.4100e- 003	0.0000	16.8606

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

3.2 Site Preparation - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e- 004	3.3000e- 004	3.8400e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	1.0000e- 005	3.0000e- 004	0.0000	0.9156	0.9156	3.0000e- 005	3.0000e- 005	0.9243
Total	4.3000e- 004	3.3000e- 004	3.8400e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	1.0000e- 005	3.0000e- 004	0.0000	0.9156	0.9156	3.0000e- 005	3.0000e- 005	0.9243

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МП	/yr		
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e- 004		6.3300e- 003	6.3300e- 003		5.8200e- 003	5.8200e- 003	0.0000	16.7253	16.7253	5.4100e- 003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e- 004	0.0983	6.3300e- 003	0.1046	0.0505	5.8200e- 003	0.0563	0.0000	16.7253	16.7253	5.4100e- 003	0.0000	16.8606

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

3.2 Site Preparation - 2023 <u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	Tyr .	100	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e- 004	3.3000e- 004	3.8400e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	1.0000e- 005	3.0000e- 004	0.0000	0.9156	0.9156	3.0000e- 005	3.0000e- 005	0.9243
Total	4.3000e- 004	3.3000e- 004	3.8400e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	1.0000e- 005	3.0000e- 004	0.0000	0.9156	0.9156	3.0000e- 005	3.0000e- 005	0.9243

3.3 Grading - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tor	is/yr				·			МТ	Г/уг		
Fugitive Dust		1 1 1	! ! !	i i i	0.0708	0.0000	0.0708	0,0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1794	0.1475	3.0000e- 004		7.7500e- 003	7.7500e- 003	 	7.1300e- 003	7.1300e- 003	0.0000	26.0606	26.0606	8.4300e- 003	0.0000	26.2713
Total	0.0171	0.1794	0.1475	3.0000e- 004	0.0708	7.7500e- 003	0.0786	0.0343	7.1300e- 003	0.0414	0.0000	26.0606	26.0606	8.4300e- 003	0.0000	26.2713

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3.3 Grading - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	lyr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e- 004	5.6000e- 004	6.4000e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.5260	1.5260	4.0000e- 005	5.0000e- 005	1.5406
Total	7.2000e- 004	5.6000e- 004	6.4000e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.5260	1.5260	4.0000e- 005	5.0000e- 005	1.5406

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2,5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							M1	T/yr		
Fugitive Dust			! ! !	i i	0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1794	0.1475	3.0000e- 004		7.7500e- 003	7.7500e- 003		7.1300e- 003	7.1300e- 003	0.0000	26.0606	26.0606	8.4300e- 003	0.0000	26.2713
Total	0.0171	0.1794	0.1475	3.0000e- 004	0.0708	7.7500e- 003	0.0786	0.0343	7.1300e- 003	0.0414	0.0000	26.0606	26.0606	8.4300e- 003	0.0000	26.2713

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3.3 Grading - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Category					ton	s/yr							MT	Г/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000,0	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e- 004	5.6000e- 004	6.4000e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.5260	1.5260	4.0000e- 005	5.0000e- 005	1.5406
Total	7.2000e- 004	5.6000e- 004	6.4000e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.5260	1.5260	4.0000e- 005	5.0000e- 005	1.5406

3.4 Building Construction - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2		Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons/y	ır							MT	/yr		
Off-Road	0.1298	1.1868	1.3401	2.2200e- 003		0.0577	0.0577		0.0543	0.0543	0.0000	191.2389	191.2389	0.0455	0.0000	192.3762
Total	0.1298	1.1868	1.3401	2.2200e-		0.0577	0.0577		0.0543	0.0543	0.0000	191.2389	191.2389	0.0455	0.0000	192.3762

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

3.4 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Calegory					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e- 004	0.0208	7.0000e- 003	9.0000e- 005	2.9600e- 003	1.3000e- 004	3.1000e- 003	8.6000e- 004	1.3000e- 004	9.8000e- 004	0.0000	8.8131	8.8131	3.0000e- 005	1.3100e- 003	9.2045
Worker	7.5200e- 003	5.8300e- 003	0.0669	1.7000e- 004	0.0194	1.1000e- 004	0.0196	5.1700e- 003	1.0000e- 004	5.2700e- 003	0.0000	15.9462	15.9462	4.7000e- 004	4.7000e- 004	16.0988
Total	8.0800e- 003	0.0266	0.0739	2.6000e- 004	0.0224	2.4000e- 004	0.0227	6.0300e- 003	2.3000e- 004	6.2500e- 003	0.0000	24.7593	24.7593	5.0000e- 004	1.7800e- 003	25.3033

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МП	'/yr		
Off-Road	0.1298	1.1868	1.3401	2.2200e- 003	i i	0.0577	0.0577		0.0543	0.0543	0.0000	191.2387	191.2387	0.0455	0.0000	192.3760
Total	0.1298	1.1868	1.3401	2.2200e- 003		0.0577	0.0577		0.0543	0.0543	0.0000	191.2387	191.2387	0.0455	0.0000	192.3760

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3.4 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr						8 - 12 - 12 - 12 - 12 - 12 - 12 - 12 - 1	MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e- 004	0.0208	7.0000e- 003	9.0000e- 005	2.9600e- 003	1.3000e- 004	3.1000e- 003	8.6000e- 004	1.3000e- 004	9.8000e- 004	0.0000	8.8131	8.8131	3.0000e- 005	1.3100e- 003	9.2045
Worker	7.5200e- 003	5.8300e- 003	0.0669	1.7000e- 004	0.0194	1.1000e- 004	0.0196	5.1700e- 003	1.0000e- 004	5.2700e- 003	0.0000	15.9462	15.9462	4.7000e- 004	4.7000e- 004	16.0988
Total	8.0800e- 003	0.0266	0.0739	2.6000e- 004	0.0224	2.4000e- 004	0.0227	6.0300e- 003	2.3000e- 004	6.2500e- 003	0.0000	24.7593	24.7593	5.0000e- 004	1.7800e- 003	25,3033

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	Tyr		
Off-Road	0.0478	0.4369	0.5254	8.8000e- 004	1 1 1 1	0.0199	0.0199		0.0188	0.0188	0.0000	75.3510	75.3510	0.0178	0.0000	75.7964
Total	0.0478	0.4369	0.5254	8.8000e- 004		0.0199	0.0199		0.0188	0.0188	0.0000	75.3510	75.3510	0.0178	0.0000	75.7964

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3.4 Building Construction - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category				## C	ton	ıs/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e- 004	8.1800e- 003	2.6700e- 003	4.0000e- 005	1.1700e- 003	5.0000e- 005	1.2200e- 003	3.4000e- 004	5.0000e- 005	3.9000e- 004	0.0000	3.4173	3.4173	1.0000e- 005	5.1000e- 004	3.5689
Worker	2.7200e- 003	2.0000e- 003	0.0240	7.0000e- 005	7.6600e- 003	4.0000e- 005	7.7000e- 003	2.0400e- 003	4.0000e- 005	2.0700e- 003	0.0000	6.0895	6.0895	1.6000e- 004	1.7000e- 004	6.1442
Total	2.9300e- 003	0.0102	0.0267	1.1000e- 004	8.8300e- 003	9.0000e- 005	8.9200e- 003	2.3800e- 003	9.0000e- 005	2.4600e- 003	0.0000	9.5068	9.5068	1.7000e- 004	6.8000e- 004	9.7131

Mitigated Construction On-Site

	ROG	NOx	co	SO2		xhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons/yr								MT	/yr		
Off-Road	0.0478	0.4369	0.5254	8.8000e- 004	0	0.0199	0.0199		0.0188	0.0188	0.0000	75.3509	75.3509	0.0178	0.0000	75.7963
Total	0.0478	0.4369	0.5254	8.8000e-	0	0.0199	0.0199		0.0188	0.0188	0.0000	75.3509	75.3509	0.0178	0.0000	75.7963

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3.4 Building Construction - 2024 <u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tor	ıs/yr							МТ	/yr	30	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e- 004	8.1800e- 003	2.6700e- 003	4.0000e- 005	1.1700e- 003	5.0000e- 005	1.2200e- 003	3.4000e- 004	5.0000e- 005	3.9000e- 004	0.0000	3.4173	3.4173	1.0000e- 005	5.1000e- 004	3.5689
Worker	2.7200e- 003	2.0000e- 003	0.0240	7.0000e- 005	7.6600e- 003	4.0000e- 005	7.7000e- 003	2.0400e- 003	4.0000e- 005	2.0700e- 003	0.0000	6.0895	6.0895	1.6000e- 004	1.7000e- 004	6.1442
Total	2.9300e- 003	0.0102	0.0267	1.1000e- 004	8.8300e- 003	9.0000e- 005	8.9200e- 003	2.3800e- 003	9.0000e- 005	2.4600e- 003	0.0000	9.5068	9.5068	1.7000e- 004	6.8000e- 004	9.7131

3.5 Paving - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	co	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							M	Г/уг		
Off-Road	9.8800e- 003	0.0953	0.1463	2.3000e- 004		4.6900e- 003	4.6900e- 003		4.3100e- 003	4.3100e- 003	0.0000	20.0265	20.0265	6.4800e- 003	0.0000	20.1885
Paving	0.0000		! !			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8800e- 003	0.0953	0.1463	2.3000e- 004		4.6900e- 003	4.6900e- 003		4.3100e- 003	4.3100e- 003	0.0000	20.0265	20.0265	6.4800e- 003	0.0000	20.1885

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3.5 Paving - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2,5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e- 004	4.9000e- 004	5.8300e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.4792	1.4792	4.0000e- 005	4.0000e- 005	1.4925
Total	6.6000e- 004	4.9000e- 004	5.8300e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.4792	1.4792	4.0000e- 005	4.0000e- 005	1.4925

Mitigated Construction On-Site

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

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3.5 Paving - 2024 <u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr			17				MT	⁻ /yr	<u> </u>	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e- 004	4.9000e- 004	5.8300e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.4792	1.4792	4.0000e- 005	4.0000e- 005	1.4925
Total	6.6000e- 004	4.9000e- 004	5.8300e- 003	2.0000e- 005	1.8600e- 003	1.0000e- 005	1.8700e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.4792	1.4792	4.0000e- 005	4.0000e- 005	1.4925

3.6 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2,5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MI	T/yr		
Archit. Coating	0.8954		 - -	; ; ;		0.0000	0.0000	t t t	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e- 003	0.0122	0.0181	3,0000e- 005		6.1000e- 004	6.1000e- 004	 	6.1000e- 004	6.1000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5569
Total	0.8972	0.0122	0.0181	3.0000e- 005		6.1000e- 004	6.1000e- 004		6.1000e- 004	6.1000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5569

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3.6 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e- 004	1.3000e- 004	1.5600e- 003	0.0000	5.0000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3945	0.3945	1.0000e- 005	1.0000e- 005	0.3980
Total	1.8000e- 004	1.3000e- 004	1.5600e- 003	0.0000	5.0000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3945	0.3945	1.0000e- 005	1.0000e- 005	0.3980

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	Г/уг		
Archit. Coating	0.8954					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e- 003	0.0122	0.0181	3.0000e- 005		6.1000e- 004	6.1000e- 004		6.1000e- 004	6.1000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5568
Total	0.8972	0.0122	0.0181	3.0000e- 005		6.1000e- 004	6.1000e- 004		6.1000e- 004	6.1000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5568

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3.6 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		•			ton	s/yr		-	L				Mī	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e- 004	1.3000e- 004	1.5600e- 003	0.0000	5.0000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3945	0.3945	1.0000e- 005	1.0000e- 005	0.3980
Total	1.8000e- 004	1.3000e- 004	1.5600e- 003	0.0000	5.0000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3945	0.3945	1.0000e- 005	1.0000e- 005	0.3980

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	slyr							МТ	7yr		
Mitigated	0.2216	0.4543	1.8230	4.1600e- 003	0.3589	4.4000e- 003	0.3633	0.0963	4.1400e- 003	0.1004	0.0000	385.8944	385.8944	0.0224	0.0276	394.6768
Unmitigated	0.2216	0.4543	1.8230	4.1600e- 003	0.3589	4.4000e- 003	0.3633	0.0963	4.1400e- 003	0.1004	0.0000	385.8944	385.8944	0.0224	0.0276	394.6768

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	500.32	505.62	453.15	953,518	953,518
Total	500.32	505.62	453.15	953,518	953,518

4.3 Trip Type Information

		Miles			Trip %		6	Trip Purpos	se %
Land Use	H-W or C-W	20020000000000000000000000000000000000	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	8.40	3.55	3.95	46.90	17.40	35.70	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Single Family Housing	0.515533	0.047958	0.156749	0.151796	0.029800	0.007258	0.013970	0.049021	0.000803	0.000458	0.021477	0.002201	0.002977
												لـــــــــــــــــــــــــــــــــــــ	

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	lyr		
Electricity Mitigated	: ; : :					0.0000	0.0000	; ; ; ;	0.0000	0.0000	0.0000	55.7800	55.7800	6.3300e- 003	7.7000e- 004	56.1667
Electricity Unmitigated	i i					0.0000	0.0000	1—————— ; ; ; ;	0.0000	0.0000	0.0000	55.7800	55.7800	6.3300e- 003	7.7000e- 004	56.1667
NaturalGas Mitigated	6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003		4.7500e- 003	4.7500e- 003	0.0000	67.9850	67.9850	1.3000e- 003	1.2500e- 003	68.3890
NaturalGas Unmitigated	6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003		4,7500e- 003	4.7500e- 003	0.0000	67.9850	67.9850	1.3000e- 003	1.2500e- 003	68.3890

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5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2,5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	'/yr		
Single Family Housing	1.27399e +006	6.8700e- 003	0.0587	0.0250	3.7000e- 004	t 1 1	4.7500e- 003	4.7500e- 003	! ! !	4.7500e- 003	4.7500e- 003	0.0000	67.9850	67.9850	1.3000e- 003	1.2500e- 003	68.3890
Total		6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003		4.7500e- 003	4.7500e- 003	0.0000	67.9850	67.9850	1.3000e- 003	1.2500e- 003	68.3890

<u>Mitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2,5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Single Family Housing	1.27399e +006	6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003		4.7500e- 003	4.7500e- 003	0.0000	67.9850	67.9850	1.3000e- 003	1.2500e- 003	68.3890
Total		6.8700e- 003	0.0587	0.0250	3.7000e- 004		4.7500e- 003	4.7500e- 003		4.7500e- 003	4.7500e- 003	0.0000	67.9850	67.9850	1.3000e- 003	1.2500e- 003	68.3890

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5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	Г/уг	
Single Family Housing	422620	55.7800	6.3300e- 003	7.7000e- 004	56.1667
Total		55.7800	6.3300e- 003	7.7000e- 004	56.1667

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Single Family Housing	422620	55.7800	6.3300e- 003	7.7000e- 004	56.1667
Total		55.7800	6.3300e- 003	7.7000e- 004	56.1667

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

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Use Low VOC Paint - Residential Exterior
Use Low VOC Paint - Non-Residential Interior
Use Low VOC Paint - Non-Residential Exterior
Use only Natural Gas Hearths
No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive Exhaust PM10 PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons/yr			100				MT	/yr		
Mitigated	0.4740	4.5300e- 003	0.3934	2.0000e- 005	2.1800e- 003	2.1800e- 003	1	2.1800e- 003	2.1800e- 003	0.0000	0.6428	0.6428	6.2000e- 004	0.0000	0.6583
l	<u>.</u>	<u>i</u>	<u>i</u>		i	;	;	000	000		•	:	004	:	

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6.2 Area by SubCategory <u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory					tor	is/yr							MT	/yr		
Architectural Coating	0.0895		: :			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Products	0.3726		i	: :		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.3200e- 003	0.0198	8.4400e- 003	1.3000e- 004		1.6000e- 003	1.6000e- 003	i	1.6000e- 003	1.6000e- 003	0.0000	22.9600	22.9600	4.4000e- 004	4.2000e- 004	23.0964
Landscaping	0.0118	4.5300e- 003	0.3934	2.0000e- 005		2.1800e- 003	2.1800e- 003	i ! !	2.1800e- 003	2.1800e- 003	0.0000	0.6428	0.6428	6.2000e- 004	0.0000	0.6583
Total	0.4763	0.0244	0.4018	1.5000e- 004		3.7800e- 003	3.7800e- 003		3.7800e- 003	3.7800e- 003	0.0000	23.6028	23.6028	1.0600e- 003	4.2000e- 004	23.7547

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6.2 Area by SubCategory Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	ıs/yr	1						MT	Γ/yr		
Architectural Coating	0.0895	i i		: :		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3726		 	;		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0118	4.5300e- 003	0.3934	2.0000e- 005		2.1800e- 003	2.1800e- 003	 	2.1800e- 003	2.1800e- 003	0.0000	0.6428	0.6428	6.2000e- 004	0.0000	0.6583
Total	0.4740	4.5300e- 003	0.3934	2.0000e- 005		2.1800e- 003	2.1800e- 003		2.1800e- 003	2.1800e- 003	0.0000	0.6428	0.6428	6.2000e- 004	0.0000	0.6583

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category		M	Г/уг	
Mitigated		0.1129	2.7000e- 003	8.1962
Unmitigated	4.5674	0.1129	2.7000e- 003	8.1962

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	Г/уг	
Single Family Housing	3.45316 / 2.17699	4.5674	0.1129	2.7000e- 003	8.1962
Total		4.5674	0.1129	2.7000e- 003	8.1962

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7.2 Water by Land Use

<u>Mitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Single Family Housing	3.45316 / 2.17699	4.5674	0.1129	2.7000e- 003	8,1962
Total		4.5674	0.1129	2.7000e- 003	8.1962

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		M ⁻	Г/уг	
Mitigated	11.1077	0.6564	0.0000	27.5188
Unmitigated	11.1077	0.6564	0.0000	27.5188

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8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		Mi	T/yr	
Single Family Housing	54.72	11.1077	0.6564	0.0000	27.5188
Total		11.1077	0.6564	0.0000	27.5188

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		M	Г/уг	
Single Family Housing	54.72	11.1077	0.6564	0.0000	27.5188
Total		11.1077	0.6564	0.0000	27.5188

9.0 Operational Offroad

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

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Fuel Type

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied 10.0 Stationary Equipment

Fire Pumps and Emergency Generators Equipment Type Number Hours/Day Hours/Year Horse Power Load Factor Fuel Type **Boilers** Equipment Type Number Heat Input/Day Heat Input/Year Boiler Rating

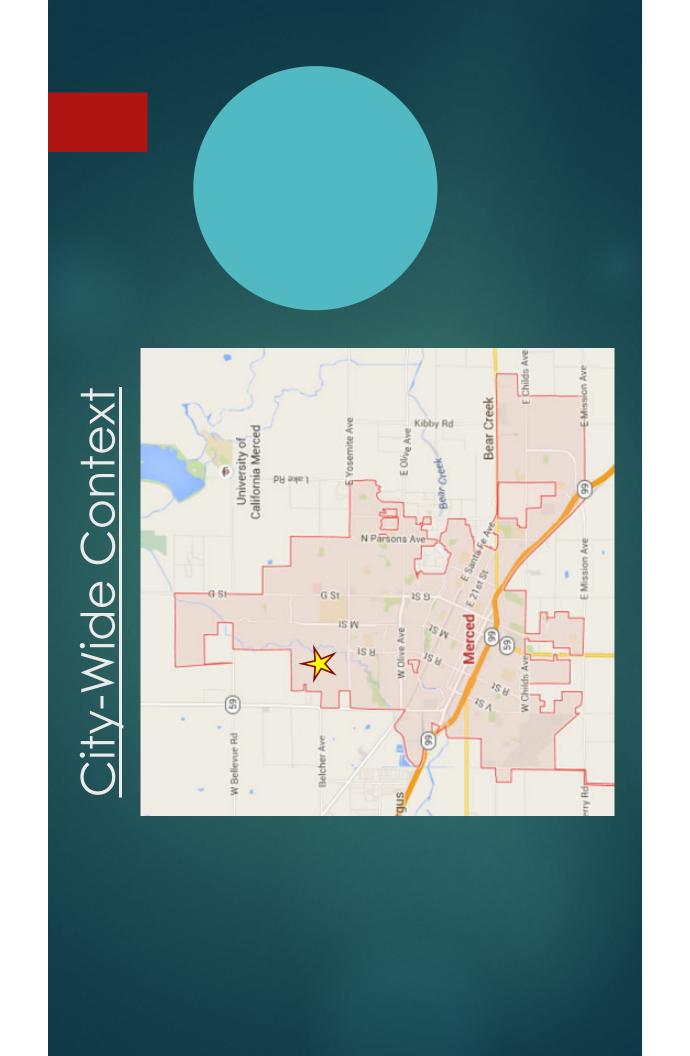
User Defined Equipment

Equipment Type Number

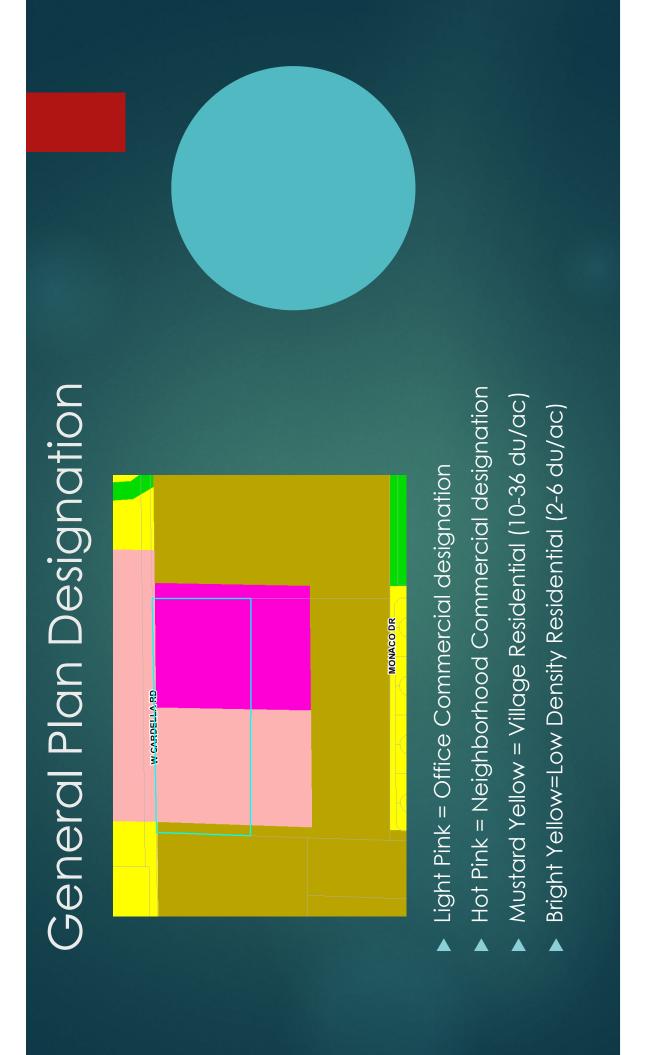
11.0 Vegetation

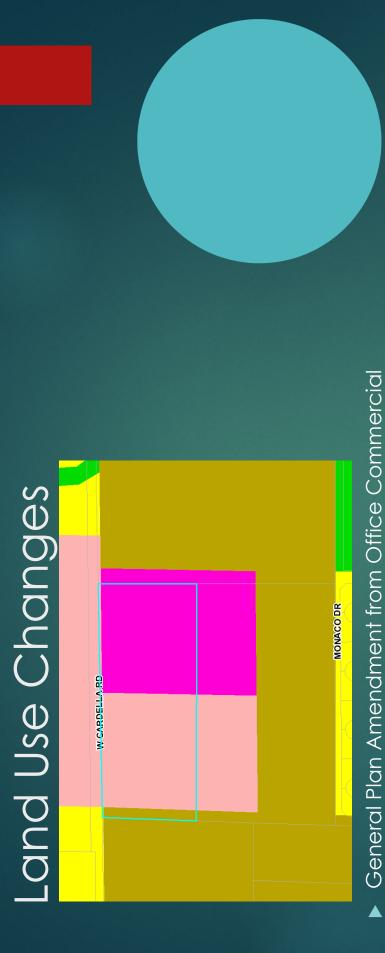
Single-Family Homes New Subdivision ISEA INTERNATIONAL _otus

GPA #22-05/FAHRENS CREEK SPECIFIC PLAN AMENDMENT #5/ZC#432/ESTABLISHMENT OF RP-D #78/TSM #1326





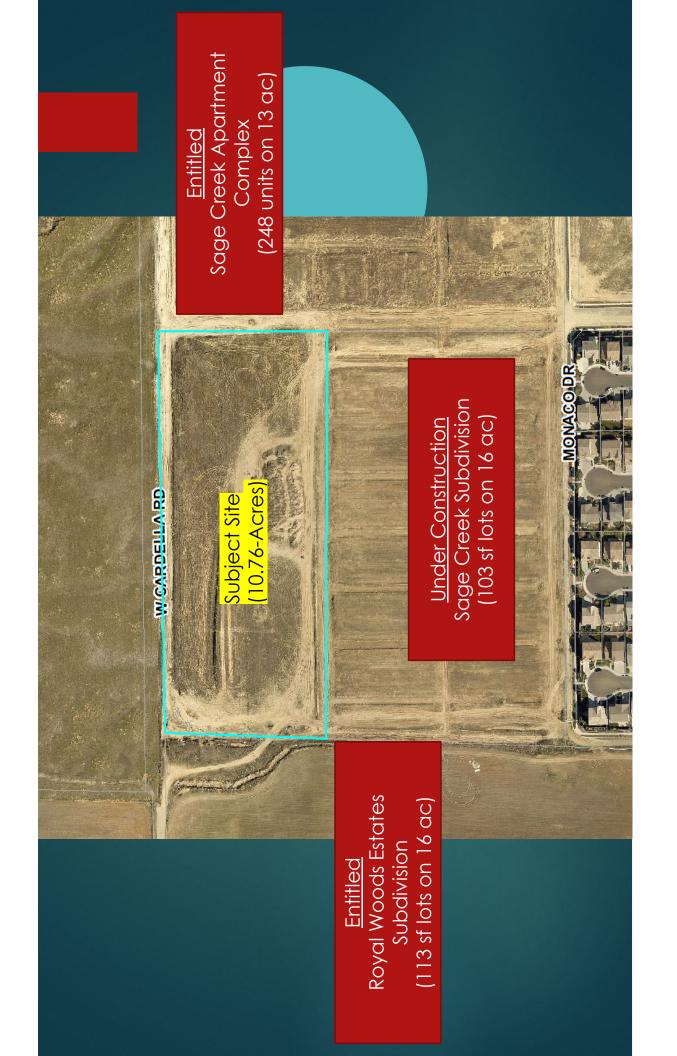




(CO)/Neighborhood Commercial (CN) to Low-Density Residential (LD)

Commercial/Neighborhood Commercial to Low-Density Residential Fahrens Creek Specific Plan Amendment from Office

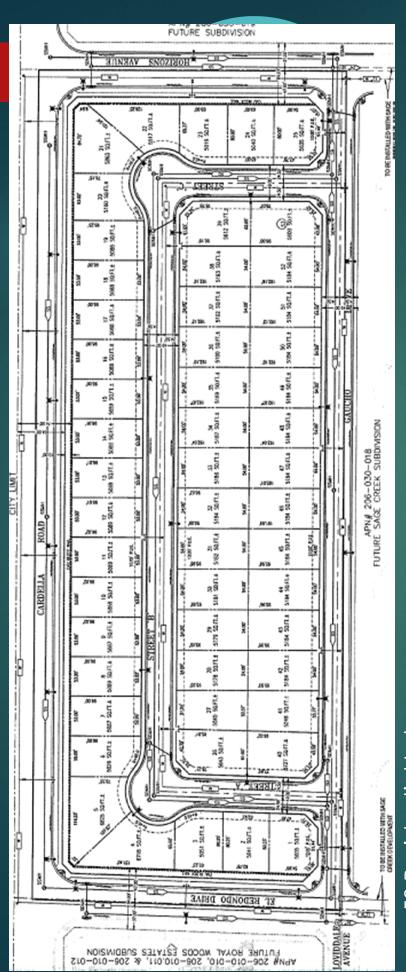
Zone Change from Planned Development #50 to Residential Planned Development (RP-D) #78 Tentative Subdivision Map #1326 for 53 single-family homes on 10.76 ac



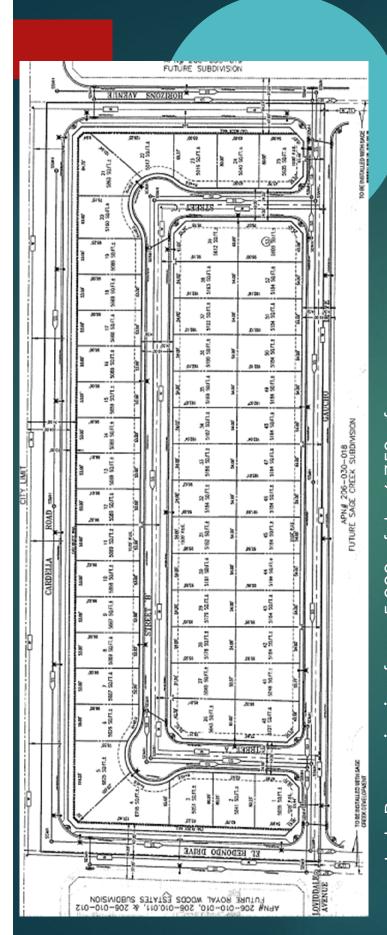
Street View (Existing Off-Site Condition)



curb/gutter/sidewalk, street trees, streetlights required, and block walls Missing improvements and overhead power lines. Full-Road,



- ▶ 53 Residential Lots.
- Extension of El Redondo Drive and Horizons Avenue up to Cardella Road
- Improvements to be made along Gaucho Drive and Cardella Road frontages
 - Creation of Streets A, B, and C (U-Shaped street network)



► Lots Range in size from 5,000 s.f. to 6,750 s.f.

Lots minimum 50 feet wide, 80 feet deep, with at least 5,000-s.f.

Improvements w/ 6-foot-tall CMU (Block Wall) along El Redondo Drive, Horizons Avenue, and Cardella Road

10-foot Public Utility Easement along frontage of parcels

Main line utility connections from south (El Redondo Drive, Horizons Ave., Gaucho Drive)

Development Standards

► Regular R-1-5 Development Standards to apply (as not a Planned Development):

Lot Coverage (45%), Setbacks (20',10',5'), Maximum Building Height (35'), parking requirements (1 stall)

etc.

				Zoning District		
	rigure	R-R	R-1-20	R-1-10	R-1-6	R-1-5
Lot and Density Standards (Minimums)	imums)					
Lot Area	Ι	1 acre [4]	20,000 sq. ft.	20,000 sq. ft. 10,000 sq. ft.	6,000 sq. ft.	5,000 sq. ft.
Lot Width [2]						
Interior Lots		125 ft.	85 ft.	70 ft.	60 ft.	50 ft.
Corner Lots		125 ft.	85 ft.	70 ft.	65 ft.	55 ft.
Lot Depth [3]		None	125 ft.	100 ft.	100 ft.	80 ft.
Lot Area per Dwelling Unit		1 acre [4]	20,000 sq. ft.	20,000 sq. ft. 10,000 sq. ft.	6,000 sq. ft.	5,000 sq. ft.
Primary Structure Standards						
Setbacks (min.)						
Exterior Yards, Front	3	30 ft.	30 ft.	20 ft.	20 ft.	15 ft. [1]
Exterior Yards, Side (Corner	0	411	411	104	401	401
Lots only) [5]		15 17.	15 ff.	10 11.	10 H.	10 11
Exterior Yards, Cul-De-Sacs		30 ft.	30 ft. [1]	15 ft. [1]	15 ft.[1]	15 ft.[1]
One Interior Yard	0	15 ft.	15 ft.	10 ft.	10 ft.	10 ft.
All Other Interior Yards	0	25 ft.	10 ft.	7 ft.	5 ft.	5 ft.
Height (max.)	0					
Feet		35 ft.	35 ft.	35 ft.	35 ft.	35 ft.
Other Standards						
Accessory Structure Standards			Š	See Chapter 20.28	83	
Driveway Length (min.)		20 ft.	20 ft.	20 ft.	20 ft.	20 ft.
Lot Coverage (max.)		72%	30%	40%	45%	20%
Off-Street Parking			Š	See Chapter 20.38	88	
Projections Into Required Yards			Š	See Chapter 20.26	56	
Separation Between Structures			As required b	As required by the California Building Code	Building Code	

Elevations

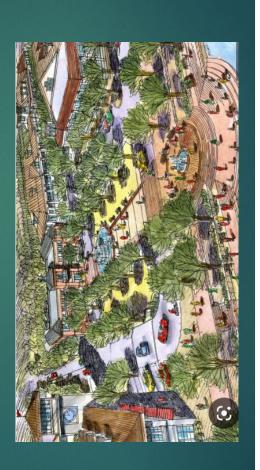
- Applicant did not include floor plans or elevations
- Elevations shall comply with Minimum Design Standards for Single-Family Homes (MMC 20.46,020). Would be reviewed during building permit stage.

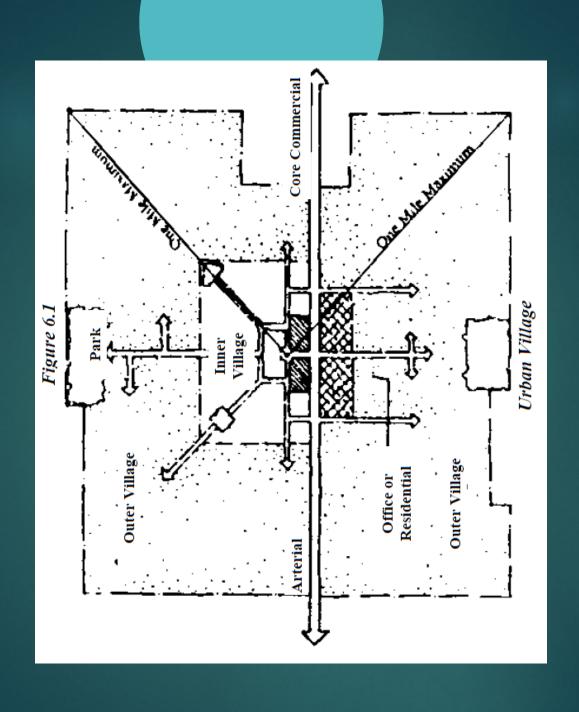
Urban Village Concept

walkable neighborhoods where residents can walk to commercial, Urban Village Neighborhoods are intended to create vibrant entertainment, or work.

density 10-36 dwelling units per acre), then by an Outer Village (4-12 developments which are surrounded by an Inner Village (high 10-Acre commercial centers are at the center of these dwelling units per acre)

This results in transit-oriented development similar to Downtown





Subject Site Background

The subject site (approximately 10.7 acres) was annexed into the City in 2003, as part of the Fahrens Creek North Annexation which incorporated approximately 152.19 acres into the City limits. This annexation followed the annexation of the Fahrens Creek II annexation, approved earlier in 2003. Both annexations were approved with a land use policy that would support the Urban Village concept with 10-acres of commercial

Goals and Policy's

► The proposed project, with conditions of approval, will help achieve the following General Plan land use policies:

➤ Policy L-1.5: Protect existing neighborhoods from incompatible developments. ➤ Policy L-1.6: Continue to pursue quality single-family residential development. > Policy L-1.8: Create livable and identifiable residential neighborhoods.

➤ Policy L-9: Ensure connectivity between existing and planned urban

Land Use Change

fulfilling the Urban Village Neighborhood originally intended for this area, however it would result in more housing for the ➤ The approval of this proposal would eliminate the site from community.

difficult to attract commercial development given the site's location on the edge of the City limits in an area with low The developer has indicated that it has been extremely traffic counts, missing infrastructure, and surrounding undeveloped parcels.

Housing Affordability Requirements

- ▶ In 2022, City Council approved Resolution #2022-15 regarding 12.5% affordability housing for new single-family residential projects if they require a legislative action agreement (due to Annexation, GPA, SUP Revision, Zone Change, etc.) and if the housing the project exceeds over 60 units.
- though it requires a legislative action agreement it is under 60 units This project will not be required to provide affordable units, even (at 53 units).

Public Comments

foot radius) and published in the Merced County Times 3 weeks prior to today's meeting. As of the date this presentation was prepared, Public Hearing Notices war mailed to surrounding properties (300 no comments have been received from the public.

Conditions (TSM)

- Condition #6: Community Facility District annexation required.
- Condition #32: The TSM does not become affective until City Council approves the General Plan Amendment, Specific Plan Amendment, Zone Change, and Establishment of Residential Planned Development.
- side of Gaucho Drive, shall match the design on the southern side currently being installed for the Sage Creek Subdivision. Condition #36: The street corner ramps along the northern
- development standards, and Design Standards for single-Condition #39: The proposal is subject to R-1-5 Zone family homes under MMC Section 20.46.020.

Recommend to City Council

Approve/Disapprove/Modify:

► Environmental Review #22-50 (Negative Declaration)

▶ General Plan Amendment #22-05

► Fahren's Creek Specific Plan Amendment

► Zone Change #432 (Subject to the Conditions in the Staff Report)

Direct Action

Approval/Disapprove/Modify:

- ► Environmental Review #22-50 (Negative Declaration)
- ► Tentative Subdivision Map #1326
- approval of GPA, FCSPA, Establishment of RP-(approvals would be contingent upon CC D#78, and ZC)



CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

ADMINISTRATIVE REPORT

File #: 23-283 Meeting Date: 4/5/2023

Planning Commission Staff Report

Report Prepared by: Julie Nelson, Senior Planner, Development Services Department

SUBJECT: General Plan Amendment #22-03 (Amended), initiated by Eric Pluim on behalf of Gateway Park Development Partners, LLC, property owners. This application involves a request to change the General Plan roadway classification from Divided Arterial to Collector for a portion of Mission Avenue from Coffee Street east to the end of the City Limits at Tower Road (extended) **PUBLIC HEARING**

ACTION: PLANNING COMMISSION:

Recommendation to City Council

- 1) Environmental Review #22-25 (Addendum to General Plan EIR)
- 2) General Plan Amendment #22-03

CITY COUNCIL:

Approve/Disapprove/Modify

- 1) Environmental Review #22-25 (Addendum to General Plan EIR)
- 2) General Plan Amendment #22-03

SUMMARY

This is an amended request to amend the General Plan Circulation Element by changing the roadway classification from Divided Arterial to Collector for a portion of Mission Avenue from Coffee Street east to the end of the City Limits at Tower Road (extended). This change is requested to improve the circulation for future development in the area. Staff is recommending approval.

RECOMMENDATION

Planning staff recommends that the Planning Commission recommend approval to the City Council of Environmental Review #22-25 (*Addendum to the General Plan EIR*) and General Plan Amendment #22-03 (including the adoption of the Draft Resolution at Attachment A) subject to the conditions in Exhibit A and the findings/considerations in Exhibit B of the Draft Resolution.

DISCUSSION

Gateway Park Development Partners is requesting the road classification for a portion of Mission Avenue be changed from Divided Arterial to Collector. The Planning Commission previously took action on this request, but subsequently, the applicant amended the request. The new request is to change Mission Avenue from Coffee Street east to the City Limits at Tower Road (extended) from a

File #: 23-283 Meeting Date: 4/5/2023

Divided Arterial to a Collector Street (refer to the map at Attachment B). This section is adjacent to the Merced Gateway Marketplace southern boundary and extends east to the City Limit line at Tower Road (extended).

Project Description

Section 4.3.2 of *Merced Vision 2030 General Plan* provides guidance on road classifications and design standards. This section identifies different street types and classifies them by categories that reflect their importance and function.

The proposed change to the roadway classification for this portion of Mission Avenue would reduce the need for right-of-way and the improvements installed. Freeways are the highest level of roadway, with fully controlled access, high operating speeds and volumes, and highest design standards. Local streets and alleys are the lowest functional classification, with low speeds and volumes and direct access to adjacent property. Table 4.2 of the Circulation Element provides the different road classifications, amount of right-of-way needed, number of lanes provided, street intersection spaces, and parking. Below is an excerpt from this table showing the classification, the right-of-way, and the number of lanes. The full table is provided at Attachment C)

Road Classification	Right-of-Way	No. of Lanes
Expressway	150 ft.	4-6
Major Arterial	128 ft.	4-6
Arterial	128 ft.	4-6
Divided Arterial	118 ft.	4-6
Minor Arterial	94 ft.	2-4
Major Collector	68-74 ft.	2-4
Collector	68 ft.	2
Local	51-62 ft.	2
Transitway	Varies	2-6

Mission Avenue is currently designated as a Divided Arterial which would have a 118-foot-right-of-way with 4-6 lanes. The proposal to change the classification to a Collector would reduce the right-of-way to 74 feet which would provide two travel lanes (one in each direction), a bicycle lane, on-street parking, a park strip, and sidewalk on both sides of the street.

The need for this segment of Mission Avenue to be a Divided Arterial was diminished with the construction of Campus Parkway and the extension of Pluim Drive from Gerard Avenue south to Mission Avenue. The construction of the Mission Avenue Interchange as part of the Campus Parkway project eliminated direct access to Hwy 99 from Mission Avenue. The portion of Mission Avenue between Coffee Street and Hwy 99 became a dead-end with the construction of the interchange. That segment of Mission Avenue was vacated by the City in 2019.

The Merced Gateway Marketplace Shopping Center Master Plan shows two driveways on Mission Avenue. There is currently one constructed with the Tractor Supply project, east of the building

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(Attachment D). The exact location of the second driveway has not been determined but would be located between the first driveway and Pluim Drive (extended). The Merced Marketplace Shopping Center is required to construct Mission Drive along its project frontage [Coffee Street east to Pluim Drive (extended)]. Each property owner to the east would also be required to construct Mission Avenue along their frontage at time of development. By changing the road classification, the amount of right-of-way needed is reduced. Thus, the number of improvements required is also reduced. The width of the paved area of the road would be reduced from 36 feet to 24 feet. This reduction in paving translates to cost savings for the Merced Marketplace project.

The land to the east of the Merced Gateway Marketplace is zoned Business Park (B-P) and Heavy Industrial (I-H) (refer to Location Map at Attachment B).

A traffic analysis has been provided to support the change in classification (Attachment F). This analysis included the entire section of Mission Avenue proposed to be changed. Therefore, staff is recommending approval.

Surrounding uses as noted in Attachment B.

		300 do Hotod III / titaon	mont B.
Surrounding Land	Existing Use of Land	City Zoning Designation	City General Plan Land Use Designation
North	Vacant	P-D #74	Regional / Community Commercial (RC)
South	Vacant	County	Commercial Reserve (COM-R)
East	Vacant/Commercial	P-D #35	Thoroughfare Commercial (CT)
West	Vacant	BP	Business Park (BP)

<u>Background</u>

The project site was annexed into the City as part of the Weaver Annexation No. 1 in 1998, with proposed uses that included multi-family and retail commercial. Historical records indicate the property was used for row crops from 1946 until around 2005-2006.

In 2017, the City approved the Merced Gateway Marketplace Master Development Plan. This plan included over 600,000 square feet of commercial space, 178 multi-family dwelling units, and a site for a future fire station.

In 2018, the first commercial use was approved for the shopping center. This was for the development of the Arco AM/PM at the southeast corner of Campus Parkway and Coffee Street.

In 2019, a parcel map was recorded that created 7 individual parcels on the south side of Campus Parkway.

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Since the approval of the Arco, the City has approved McDonald's, Tractor Supply, and Starbucks, all located on the south side of Campus Parkway, east of Coffee. The McDonald's, Tractor Supply, and Starbucks are currently open.

In 2020, the Site Plan Review Committee approved an increase in the number of multi-family units. This approval allowed an increase from 178 to 200 units. The multi-family portion of the project is located at the southeast corner of Gerard Avenue and Coffee Street. A parcel map was recorded to create a separate parcel for the multi-family development. The area dedicated to multi-family has since been sold to a different developer who will construct the multi-family housing.

The Planning Commission took action on General Plan Amendment #22-03 on January 18, 2023. However, subsequently, the applicant requested to extend the portion of Mission Avenue to be changed to include the portion of Mission that extends across the property owned by Merced Gateway, LLC (refer to property ownership shown on the Location Map Attachment B). After reviewing the request, the City determined it would be best to include all of Mission Avenue from Coffee Street to the City Limits at Tower Road (extended).

Findings/Considerations

Please refer to Exhibit B of the Draft Planning Commission Resolution at Attachment A.

ATTACHMENTS

- Draft Resolution #4097 A)
- B) **Location Map**
- C) General Plan Table 4.1
- Merced Gateway Marketplace Site Plan (portion) D)
- E) Traffic Analysis
- F) City Standard ST-2 (Collector Street)
- **Environmental Review** G)
- H) **Draft Presentation**

CITY OF MERCED Planning Commission

Resolution #4111

WHEREAS, the Merced City Planning Commission at its regular meeting of April 5, 2023, held a public hearing and considered **General Plan Amendment #22-03**, initiated by Eric Pluim on behalf of Gateway Park Development Partners, LLC, property owners. This application involves a request to change the General Plan roadway classification from Divided Arterial to Collector for a portion of Mission Avenue from Coffee Street east to the City Limit line at Tower Road (extended); and,

WHEREAS, the Merced City Planning Commission concurs with Findings/Considerations A through G of Staff Report #23-283 (Exhibit B); and,

NOW THEREFORE, after reviewing the City's Draft Environmental Determination and discussing all the issues, the Merced City Planning Commission does resolve to hereby recommend to City Council approval of the Addendum to the *Merced Vision 2030 General Plan* Environmental Impact Report (Environmental Review #22-25) and General Plan Amendment #22-03, subject to the Conditions set forth in Exhibit A and the Findings set forth in Exhibit B, attached hereto and incorporated herein by this reference.

Upon mo Commission	tion by Commissioner	, and carried by the following vote:	by
AYES:	Commissioner(s)		
NOES:	Commissioner(s)		
ABSENT:	Commissioner(s)		
ABSTAIN:	Commissioner(s)		

PLANNING COMMISSION RESOLUTION #4111 Page 2 April 5, 2023 Adopted this 5th day of April 2023 Chairperson, Planning Commission of the City of Merced, California ATTEST: Secretary Exhibits: Exhibit A – Conditions of Approval Exhibit B – Findings/Considerations

Conditions of Approval Planning Commission Resolution #4111 General Plan Amendment #22-03

- 1. The General Plan roadway classification for the portion of Mission Avenue between Coffee Street and the east side of Pluim Drive (extended) shall be changed from "Divided Arterial" to "Collector" as shown on the map at Attachment B of Planning Commission Staff Report #23-283.
- 2. The Circulation Plan of the *Merced Vision 2030 General Plan* (Figure 4.1) shall be updated to reflect this change.
- 3. All other applicable codes, ordinances, policies, etc., adopted by the City of Merced shall apply.
- The developer/applicant shall indemnify, protect, defend (with counsel 4. selected by the City), and hold harmless the City, and any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof, from any and all claims, actions, suits, proceedings, or judgments against the City, or any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof to attack, set aside, void, or annul, an approval of the City, or any agency or instrumentality thereof, advisory agency, appeal board, or legislative body, including actions approved by the voters of the City, concerning the project and the approvals granted herein. Furthermore, developer/applicant shall indemnify, protect, defend, and hold harmless the City, or any agency or instrumentality thereof, against any and all claims, actions, suits, proceedings, or judgments against any governmental entity in which developer/applicant's project is subject to that other governmental entity's approval and a condition of such approval is that the City indemnify and defend (with counsel selected by the City) such governmental entity. City shall promptly notify the developer/applicant of any claim, action, suits, or proceeding. Developer/applicant shall be responsible to immediately prefund the litigation cost of the City including, but not limited to, City's attorney's fees and costs. If any claim, action, suits, or proceeding is filed challenging this approval, the developer/applicant shall be required to execute a separate and formal defense, indemnification, and deposit agreement that meets the approval of the City Attorney and to provide all required deposits to fully fund the City's defense immediately but in no event later than five (5) days from that date of a demand to do so from City. In addition, the developer/applicant shall be required to satisfy any monetary obligations imposed on City by any order or judgment.

EXHIBIT A
OF PLANNING COMMISSION RESOLUTION #4111
Page 1

- 5. The developer of the Merced Gateway Marketplace Shopping Center and all future development along this section of Merced Avenue shall construct the development's portion of Mission Avenue, which is equal to one-half of a collector equivalent, north of the center line on Mission Avenue, unless otherwise determined by the City Engineer. Construction shall include, but is not limited to, pavement, sidewalk, curb, gutter, street trees, streetlights, and landscaping in the park strip.
- 6. The developer of the Merced Gateway Marketplace Shopping Center shall initiate vacation proceedings to request the City vacate the excess right-of-way on Mission Avenue along the entire frontage of the Merced Gateway Marketplace property and the Lyon's property. This request shall be initiated at the developer's expense and shall be made prior to a Notice of Completion being issued for the work on Mission Avenue. Each property owner shall work with the Engineering Department to determine the location and width of public utilities easements. Existing easements may need to be adjusted as determined by the City Engineer.
- 7. The area along the Merced Gateway Marketplace frontage that is vacated as required by Condition #6 shall be fully landscaped to match the rest of the shopping center. The vacation area along the Lyon's property frontage shall be incorporated into their future development.

Findings and Considerations Planning Commission Resolution #4111 General Plan Amendment #22-03

FINDINGS/CONSIDERATIONS:

General Plan Compliance and Policies Related to This Application

A) The proposed change to the road classification would comply with the General Plan if the proposed amendment is approved by the City Council.

Zoning Code Compliance

B) The Zoning Ordinance does not address changes to the General Plan Circulation Element and Circulation Plan.

Traffic/Circulation

C) The proposal to change the segment of Mission Avenue from Coffee Street east to the City Limits at Tower Road (extended) was supported by a traffic analysis prepared by KD Anderson & Associates, Inc. (Attachment F of Planning Commission Staff Report #23-283). The analysis provided long-term daily traffic volumes and resulting traffic conditions under the current General Plan circulation plan. A transportation model obtained from the Merced County Association of Governments (MCAG) was utilized to determine the estimated traffic volume in the area. The applicable roadway classification for this segment of Mission Avenue was then determined based on the daily traffic volume and the General Plan's applicable Level of Service (LOS) thresholds.

A new 24-hour count collected on May 27, 2021, revealed that Mission Avenue from Coffee Street to Arboleda Drive (beyond the City Limits) currently operates at LOS C. The section of Mission Avenue from Coffee Street to Tower Road had 375 average daily trips (ADT's), of which 28 (7%) were trucks. Mission Avenue from Tower Road to Arboleda had 109 ADT's with 14 trucks (13%).

The results of the analysis show that if the segment of Mission Avenue from Coffee Street to the City Limits at Tower Road (extended) is reduced to a 2-lane Collector, the section from Coffee Street to approximately 1,300 feet east of Pluim Drive (extended) would operate at LOS D. From this point to Tower Road (extended) would operate at LOS C. The *Merced Vision 2030 General Plan* identifies LOS D as an acceptable level of service. Therefore, even if

EXHIBIT B
OF PLANNING COMMISSION RESOLUTION #4111
Page 1

the classification for this segment is changed, it would still operate at a better level than is acceptable per the General Plan.

The Merced Gateway Marketplace Shopping Center is expected to have two driveway entrances from this segment of Mission Avenue. Local traffic from the immediate area could continue to use Mission Avenue, but with the extension of Pluim Drive, would also have access to Campus Parkway and Gerard Avenue without using this segment of Mission Avenue. A traffic signal would be installed at the intersection of Campus Parkway and Pluim Drive with a future phase of development within the shopping center. This will allow any traffic traveling north on Pluim Drive from Mission Avenue to have full turning movements. Currently, a four-way stop exists at the intersection of Coffee Street and Campus Parkway that allows left and right-hand turns. Campus Parkway runs parallel to this segment of Mission Avenue, therefore, the majority of traffic in this area would use Campus Parkway rather than Mission Avenue.

Public Improvements/City Services

- D) If the requested change is approved, Mission Avenue would be constructed as a Collector with a 74-foot right-of-way (Attachment F). This would include the following:
 - Two 12-foot-wide travel lanes (one in each direction)
 - A 7-foot-wide parking area
 - A 5-foot-wide bicycle lane
 - A 7.5-foot-wide park strip
 - A 5-foot-wide sidewalk
 - A 6-inch gap between the sidewalk and the property line

The parking area, bicycle lane, park strip, and sidewalk would ultimately be required on both the north and south side of Mission Avenue. The Merced Gateway Marketplace project is required to install all improvements on the north side of the center line in Mission Avenue along their property frontage (Condition #5). As the other properties development, they would be required to install the improvements along their property frontage. The improvements south of the center line of Mission Avenue would be installed when the properties to the south develop.

Vacation of Right-of-Way

E) Currently, the City has acquired enough Mission Avenue right-of-way from the Merced Gateway Marketplace property and the Lyon's property to the east

EXHIBIT B
OF PLANNING COMMISSION RESOLUTION #4111
Page 2

to accommodate the width of a Divided Arterial (118-foot-wide). If the classification is reduced to a collector, the City will have excess right-of-way. Therefore, Condition #6 requires that the developer of the Merced Gateway Marketplace initiate a vacation application to request that the City vacate the excess right-of-way and return it to the Merced Gateway Marketplace property. The request should also include the vacation of the excess right-of-way in along the Lyon's property frontage. Condition #7 requires that the property vacated along the Merced Gateway Marketplace frontage be landscaped to match the rest of the shopping center landscaping. When the Lyon's property is developed, the vacated right-of-way would be incorporated into their development plans.

As part of the vacation process, the existing Public Utilities Easements may need to be adjusted to avoid having a large easement or a gap between two easements. These details would be worked out with the Engineering Department through the vacation process (Condition #6)

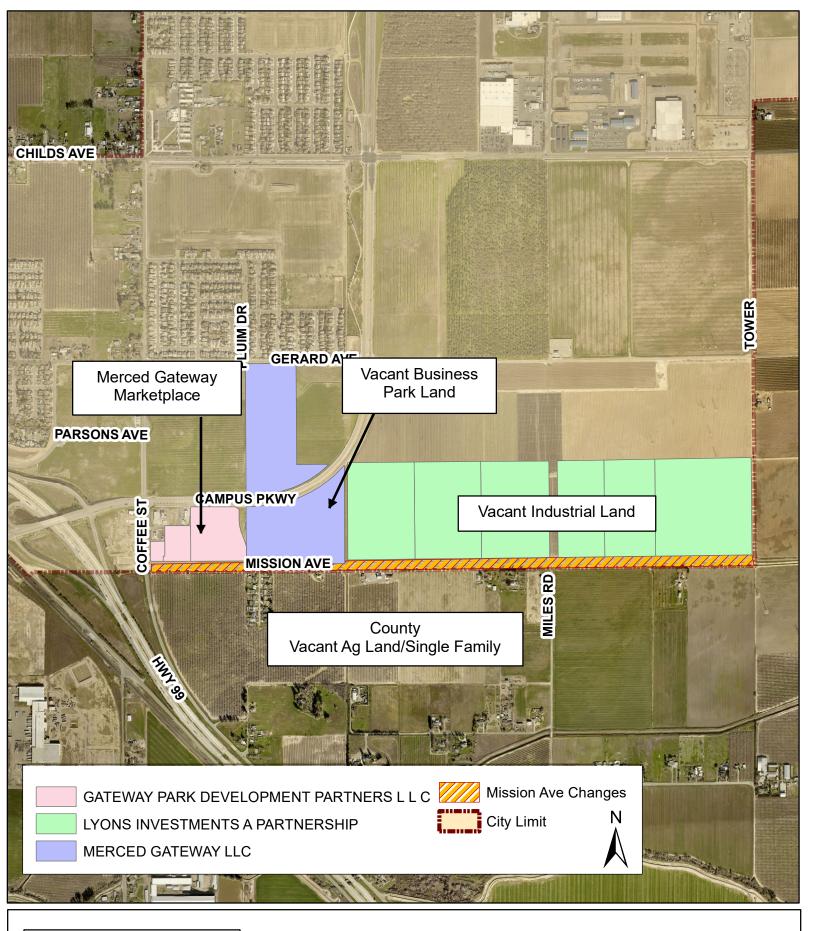
Neighborhood Impact/Interface

F) As shown on the location map at Attachment B of Planning Commission Staff Report #23-283, on the south side of the segment of Mission Avenue under consideration is primarily vacant farmland, a few single-family homes on Mission Avenue, and a subdivision on Lawndale Avenue. To the north is the Merced Gateway Marketplace Shopping Center. Once Pluim Drive is constructed, traffic on Mission Avenue would have access to Campus Parkway via Pluim Drive or Coffee Street. Eventually, Kibby Road and Tower Road would be extended providing additional access to the north, including access to SR Hwy 140.

A traffic signal would be installed at the intersection of Pluim Drive and Campus Parkway providing full turning movements at the intersection. Given the amount of traffic expected on this segment of Mission Avenue, it is not expected that the reduction of Mission from a Divided Arterial to a Collector would impact the immediate area.

Environmental Clearance

G) Pursuant to the California Environmental Quality Act (CEQA), the project was reviewed and an Addendum to the Environmental Impact Report for the *Merced Vision 2030 General Plan* SCH#2008071069 (Attachment G of Planning Commission Staff Report #23-283) was prepared.



Disclaimer: This document was prepared for general inquiries only. The City of Merced is not liable for errors or ommissions that might occur. Official information concerning specific parcels should be obtained from recorded or adopted City documents.

GENERAL PLAN AMENDMENT #22-03 MISSION AVENUE





The accompanying table (*Table 4.2*) and representative cross-sections which follow summarize the characteristics of roadway categories. (*More detailed design standards and additional cross-sections are described*

in Section 4.8.1.) Specific design requirements are found in the City of Merced's Standard Designs of Common Engineering Structures, which are amended on a regular basis.

Table 4.2
City of Merced
Summary of Street and Highway Standards

Road Classification	Right-of- Way	# of Lanes	Driveway Access Restrictions	Street Intersection Spacing	Parking
Expressway (Atwater-Merced & Campus Parkway)	150	4-6	Full	1/2 – 1 mile	No
Major Arterial	128 feet	4-6	Full	1/4 - 1/2 mile	No
Arterial	128 feet	4-6	¹ Partial	1/4 - 1/2 mile	No
Divided Arterial	118 feet	4-6	¹ Partial	1/4 - 1/2 mile	No
Minor Arterial	94 feet	2-4	¹ Partial	1/8 - 1/4 mile	Generally Not Permitted
Major Collector	^{2.} 68-74 ft	2-4	³ Partial	As needed	³ Permitted in Selected Areas
Collector	68 ft	2	⁴ Partial	As needed	⁴ Permitted in Selected Areas
Local	⁵ 51-62 ft	2	No	As needed	Permitted
Transitway	⁶ Varies	2-6	⁶ Varies	⁶ Varies	⁶ Varies

¹ Generally no direct access to adjacent property. Right-turn-in/right-turn-out local streets or combined access driveways may be permitted at the City's discretion at 1/8 mile points.

NOTE: These are general standards appropriate for most situations. Higher standards may be required or less standards may be permitted based on detailed design studies. Expanded ROW's may be required at intersections to accommodate turn lanes. Onstreet parking may be deleted if adequate, convenient off-street parking is provided in a subdivision design. A subdivision design deleting on-street bicycle lanes may be permitted if an adequate, convenient Class I bicycle path(s) is available (subject to possible reimbursement and/or maintenance costs for existing system).

Currently adopted standards are contained in the City of Merced Standard Designs of Common Engineering Structures.

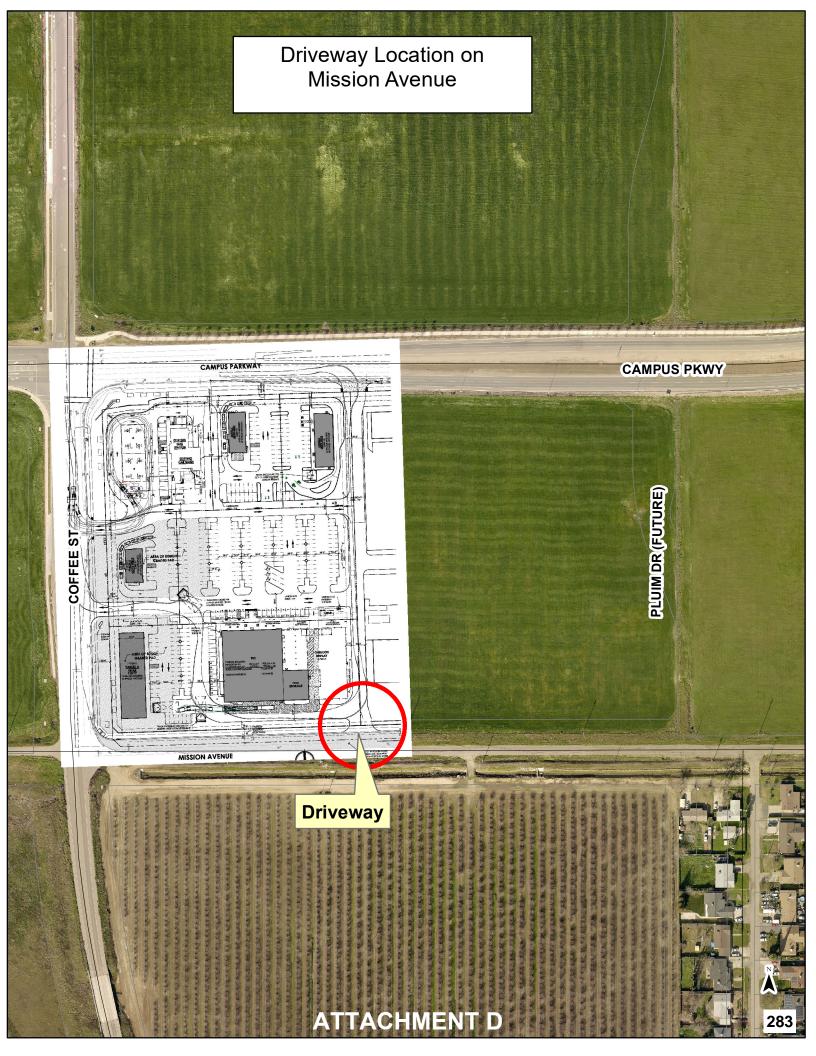
²Less (68 feet) right-of-way (ROW) may be permitted where supported by a traffic analysis to assure that the narrower street would not be overloaded. Analysis would include trip generation and distribution based on existing and future land use and circulation system. Additional width may be necessary at intersections where analysis shows need for turn lane(s).

³ Generally no direct access (fronting lots and residential driveways) allowed.

⁴ Fronting lots would be permitted on Collectors where a traffic analysis shows daily traffic volumes will not exceed 1,500 vehicles under ultimate conditions. Driveways or other direct access and parking are to be avoided if feasible within 300 feet of existing signalized intersection or an intersection with realistic prospects for future signalization

⁵ 36 foot minimum distance required from curb to curb

⁶There are different kinds of transitways, depending on their function. Some segments will allow buses only (refer to Bellevue Ranch Master Development Plan) while others will function as normal arterials except they will offer exclusive "High-Occupancy Vehicle" lanes.





Transportation Engineers

July 28, 2022

Received 8/1/22 Planning Dept.

Mr. Eric R. Pluim **GATEWAY PARK DEVELOPMENT PARTNERS**133 Old Wards Ferry Road, Suite G

Sonora, CA 95370

RE: MISSION AVENUE DESIGN ASSESSMENT, MERCED, CA

Dear Mr. Pluim:

Thank you for contacting KD Anderson & Associates (KDA) regarding the traffic analysis needed by the City of Merced to address the ultimate design requirements of Mission Avenue east of State Route 99 (SR 99).

Background

Purpose of Analysis. As we understand, Dickenson Ferry Road-Mission Avenue extends east-west across southern Merced from Gurr Road on the west across SR 99 to Arboleda Drive on the east, as indicated in Figure 1. The City of Merced General Plan Circulation Element notes that the route will be improved to a multi-lane arterial in the area from Thornton Road on the west to Tower Road on the east. However, with the implementation of Campus Parkway, the segment east of SR 99 (i.e., E. Mission Avenue) no longer has direct access to the freeway, and recent improvements to the SR 99 / Arboleda Drive / Le Grand Road interchange provide another truck route to SR 99 as well. You have suggested to the City of Merced that a four-lane arterial street, as designed in the General Plan is no longer needed east of SR 99. City of Merced staff has indicated that analysis of long-term traffic conditions that represent full buildout of land uses in the area that will be tributary to E. Mission Avenue is needed to address this issue. By comparing "build out" traffic volumes with the roadway capacity threshold included in the General Plan, the analysis herein provides the evidence needed to support or deny the change you request.

Approach. The analysis summarized herein presents long term daily traffic volumes and resulting traffic conditions under the current General Plan circulation plan. This work has involved identifying long term land use assumptions for the southeastern Merced area, including the Industrial areas east of Campus Parkway. The travel demand forecasting model created for the *Merced Gateway EIR* was modified for this purpose, including incorporating relevant future roadways (i.e., Coffee Street and Pluim Drive extensions to Marino Way). The applicable roadway section for Mission Avenue was then determined based on daily traffic volume and the General Plan's applicable LOS thresholds (i.e., Table 1).

Mr. Eric Pluim Gateway Park Development Partners July 28, 2022 Page 2

TABLE 1 LEVEL OF SERVICE THRESHOLDS FOR ROADWAY SEGMENTS							
	Daily Roadway Segment Level of Service Thresholds						
Roadway Type	LOS A	LOS B	LOS C	LOS D	LOS E		
6 lane Freeway	25,900	42,600	57,800	68,400	76,000		
4 lane Freeway	40,000	65,800	89,200	105,600	117,400		
4 lane Expressway		3,000	27,800	36,000	37,800		
6 lane Expressway		5,900	38,900	48,900	51,300		
2 lane Arterial	-	-	11,600	16,000	16,800		
4 lane Arterial	-	4,100	26,800	33,700	35,400		
6 lane Arterial	-	6,600	41,800	50,700	53,200		
2 lane Collector	-	-	4,800	10,300	13,200		
4 lane Collector	-	-	11,300	22,200	26,400		
2 lane County Road	-	-	7,700	15,000	16,100		
Source: Merced Vision 203	0 General Plan, 2010)					

Current Traffic Volumes / Levels of Service. New 24-hr counts were collected for study area roads on May 27, 2021 to provide perspective on current traffic conditions on relevant segments. These volumes and Levels of Service are shown in Figure 2 and summarized in Table 2.

Chroot	Landin	Class	Lanes	Daily Volume			LOS
Street	Location	Class		Total	Trucks	Truck %	LOS
Campus Pkwy	Coffee St to Gerard Ave		4	4,432	426	10%	A
	Gerard Ave to Childs Ave	Expressway	4	3,398	499	15%	A
	Childs Ave to Yosemite Ave (SR 140)		4	1,039	64	6%	A
Yosemite Ave (SR 140)	Campus Pkwy to Tower Rd	Divided Arterial	2	7,178	625	9%	В
Childs Avenue	Campus Pkwy to Tower Rd	Minor Arterial	2	5,044	506	10%	C
Gerard Avenue	Campus Pkwy to Tower Rd	Collector	2	487	35	7%	С
Mission Avenue	Coffee St to Tower Rd	Divided Arterial	2	375	28	7%	С
	Tower Rd to Arboleda Dr	Divided Arterial	2	109	14	13%	C
Coffee Street	Campus Pkwy to Mission Ave	Collector	2	1,548	134	9%	C
	Mission Ave to Marino Way	Collector	2	1,211	121	10%	C
Marino Way	Coffee St to Le Grand Rd	Merced County ¹	2	375	41	11%	C
Kibby Road	SR 140 to Childs Ave	Collector	2	1,336	217	16%	C
Tower Road	SR 140 to Gerard Ave	Collector	2	335	51	15%	С
Arboleda Drive	SR 140 to Mission Ave	Merced County ¹	2	2,224	275	12%	С
	Mission Ave to Le Grand Rd	Merced County ¹	2	934	222	24%	С



Mr. Eric Pluim Gateway Park Development Partners July 28, 2022 Page 4

Development Characteristics. This analysis makes use of land use assumptions for the cumulative analysis presented in the Merced Gateway EIR (MGEIR) traffic study but modifies those assumptions to create a "worst case" assessment of the area's traffic volumes. The MGEIR originally assumed cumulative development that was consistent with the Merced County Association of Governments (MCAG) regional travel demand forecasting model for the Year 2035. The MGEIR analysis added build out of the Merced Gateway project.

The analysis contained herein assumes that the non-residential land uses in the southeast Merced area are built out. Figure 3 notes these areas, and the land use assumptions for each area are listed in Table 3. As indicated, this "Build Out" analysis assumes that the southeast Merced area could eventually contain more than 17,000 employees. Because development of the reserves was not assumed in the City of Merced GPEIR and will not proceed without a General Plan amendment, this analysis does not address future conditions with reserve area development.

	TABLE 3 SOUTHEAST MERCED DEVELOPMENT ASSUMPTIONS						
	MGEIR Cumulative		Assumed				
Area	Land Use	Development Level	Employees	Development Level	Employees		
1	Industrial	Partial	3,176	Build Out	15,544		
2	BP	Partial	440	Build Out	963		
3	Merced Gateway	Build Out	720	Build Out	720		
	Total		4,336		17,227		

Retail Commercial density 27.4 employees per acre Office Commercial density 21.4 employees per acre Industrial density 17.6 employees per acre

Circulations System Assumptions. The volume of traffic in the future on study area roads could vary based on assumptions for improvements to area roadways. This analysis assumes that improvements identified in the City of Merced General Plan will be made, as noted in Table 4.

TABLE 4 CIRCULATION IMPROVEMENTS ASSUMPTIONS						
Roadway	Location	Existing	Improvements			
SR 99	Through Merced	4-6 lanes	Widen to 6 lanes			
AME	Greensands Ave to Bellevue Rd	-	Construct to 4 lanes			
Campus Parkway	SR 99 to Childs Ave	4 lanes	Widen to 6 lanes			
	Childs Ave to SR 140	4 lanes	No change			
	SR 140 to Yosemite Ave	-	Construct 4 lane			
	Yosemite Ave to UCM	-	Construct 4 lanes			
Coffee Street	Campus Pkwy to Mission Ave	2 lanes	Widen to 4 lanes			
Pluim Drive	Campus Pkwy to Mission Ave	-	Construct 4 lanes			
Tower Road	Gerard Ave to Mission Ave	-	Construct 2 lanes			
Parsons Avenue	SR 140 to N. Bear Creek Rd	0-4 lanes	Complete to 4 lanes			
	N. Bear Creek Rd to Yosemite Ave	2-4 lanes	Complete to 4 lanes			
	Yosemite Ave to Bellevue Ave	0-2 lanes	Complete to 4 lanes			
Mission Avenue	Coffee St to Pluim Drive	2 lanes	Collector			

Results

Traffic Volume Forecasts. The MCAG traffic model was run to produce roadway segment daily traffic volumes, as noted in Figure 4. Level of Service was identified based on GPEIR thresholds in Table 5. For comparison, the daily traffic volumes and Level of Service reported in the GPEIR have also been presented.

Conditions on Mission Avenue. The unconstrained daily traffic volume on Mission Avenue east of Coffee Street falls below the minimum LOS D threshold for a two-lane Collector street. Thus, Merced General Plan standards will be satisfied with the proposed two-lane facility.

Street	Location		Future	Daily Volume				
		Class		E-1-41	Future		GPEIR	
			Lanes	Existing	Volume	LOS	Volume	LOS
Campus Pkwy	SR 99 to Coffee St		6	n.a.	37,950	C		
	Coffee St to Pluim Dr		6	4,432	27,450	C	46 200	D
	Pluim Drive to Gerard Ave	Expressway	6	4,432	19,950	С	46,200	ע
	Gerard Ave to Childs Ave	Expressway	6	3,398	22,050	С		
	Childs Ave to Yosemite Ave (SR 140)		4	1,039	18,900	С	35,110	D
Yosemite Blvd (SR 140)	Campus Pkwy to Tower Rd	Divided Arterial	2	7,178	27,000	F	n.a.	
Childs Avenue	Campus Pkwy to Tower Rd	Minor Arterial	2	5,044	6,750	С	19,300	F
Gerard Avenue	Campus Pkwy to Tower Rd	Collector	2	487	10,650	С	7,640	D
Mission Avenue	Coffee St to Pluim Dr	Collector	2	375	5,000	D		
	Pluim Dr to new BP	Collector	2	375	5,000	D	1,890	C
	New BP to Tower Road	Divided Arterial	2	375	2,850	С		
	Tower Rd to Arboleda Dr	Divided Arterial	2	109	200	С	n.a.	
Coffee Street	Campus Pkwy to Mission Ave	Collector	2	1,548	6,050	D	n.a.	
	Mission Ave to Marino Way	Collector	2	1,211	1,250	С	n.a.	
Pluim Drive	Campus Pkwy to Mission Ave	Collector	2	n.a.	6,150	D	n.a.	
Marino Way	Coffee St to Le Grand Rd	Merced County ¹	2	375	450	С	n.a.	
Kibby Road	SR 140 to Childs Ave	Collector	2	1,336	7,350	D	n.a.	
Tower Road	SR 140 to Gerard Ave	Collector	2	335	2,300	С	n.a.	
Arboleda Drive	SR 140 to Mission Ave	Merced County ¹	2	2,224	2,250	С	n.a.	
	Mission Ave to Le Grand Rd	Merced County ¹	2	934	1,050	С	n.a.	



Mr. Eric Pluim Gateway Park Development Partners July 28, 2022 Page 7

Thank you for reviewing this information. Please feel free to call me if you have any questions.

Sincerely yours,

KD Anderson & Associates, Inc.

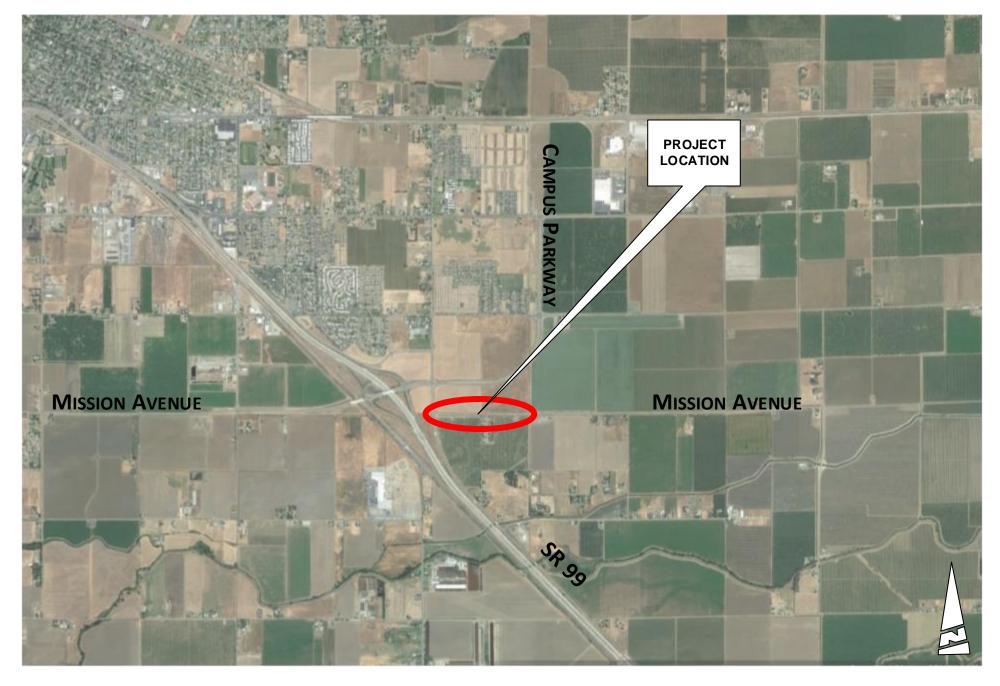
Kenneth D. Anderson, P.E.

President

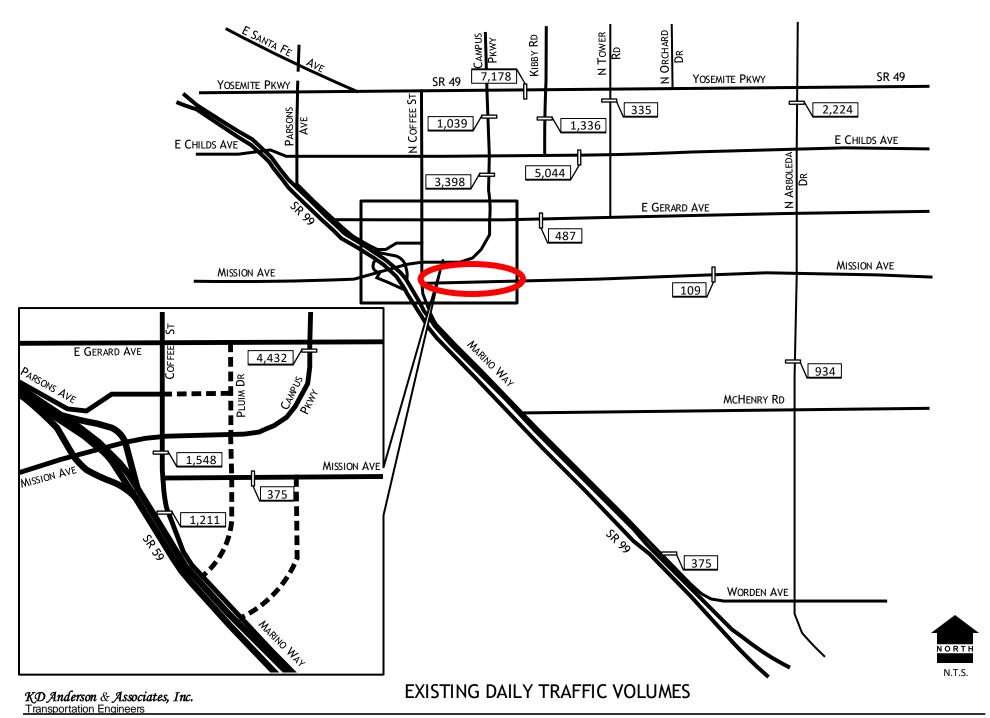
Attachment: figures, traffic counts

NOTE: Traffic counts available upon request.

Mission Avenue Design Analysis 7 28 22.ltr



KD Anderson & Associates, Inc. Transportation Engineers VICINITY MAP



3435-A-02 RA 8/12/2021

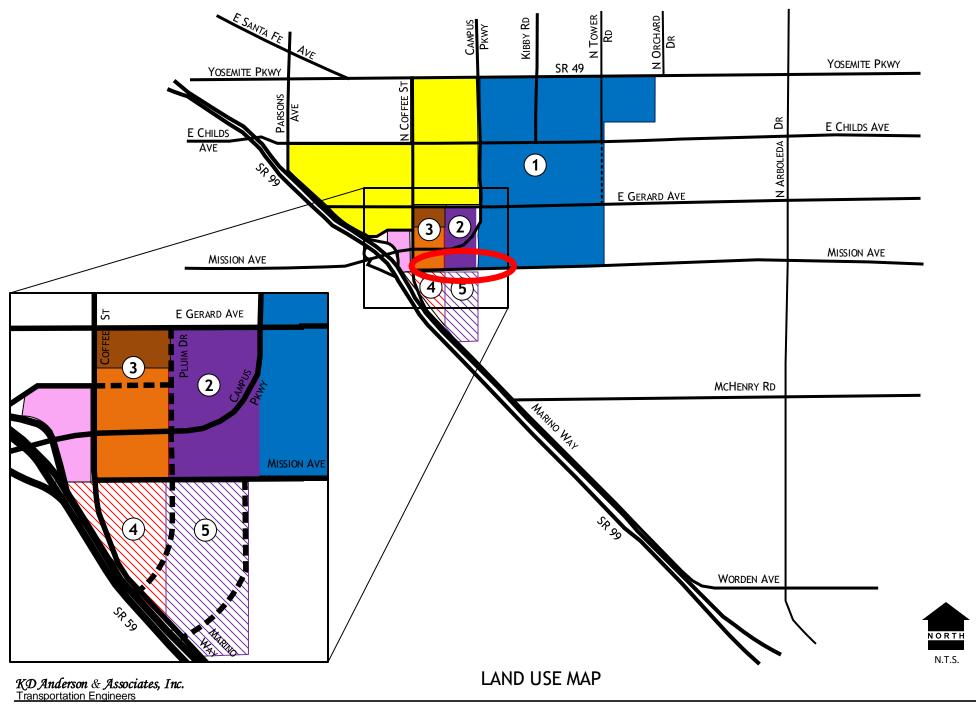
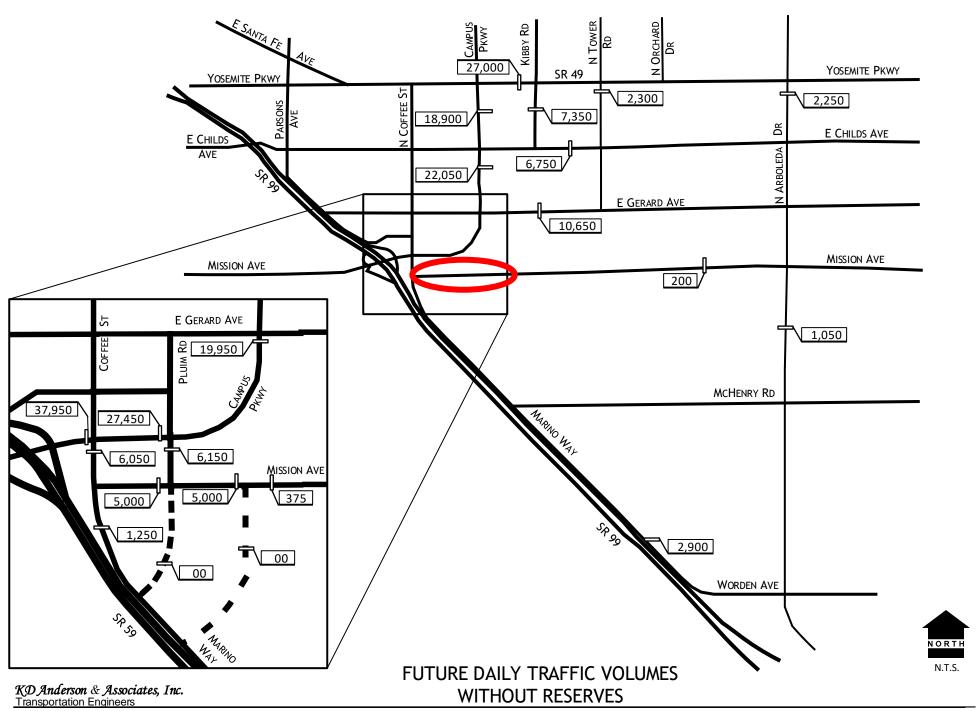
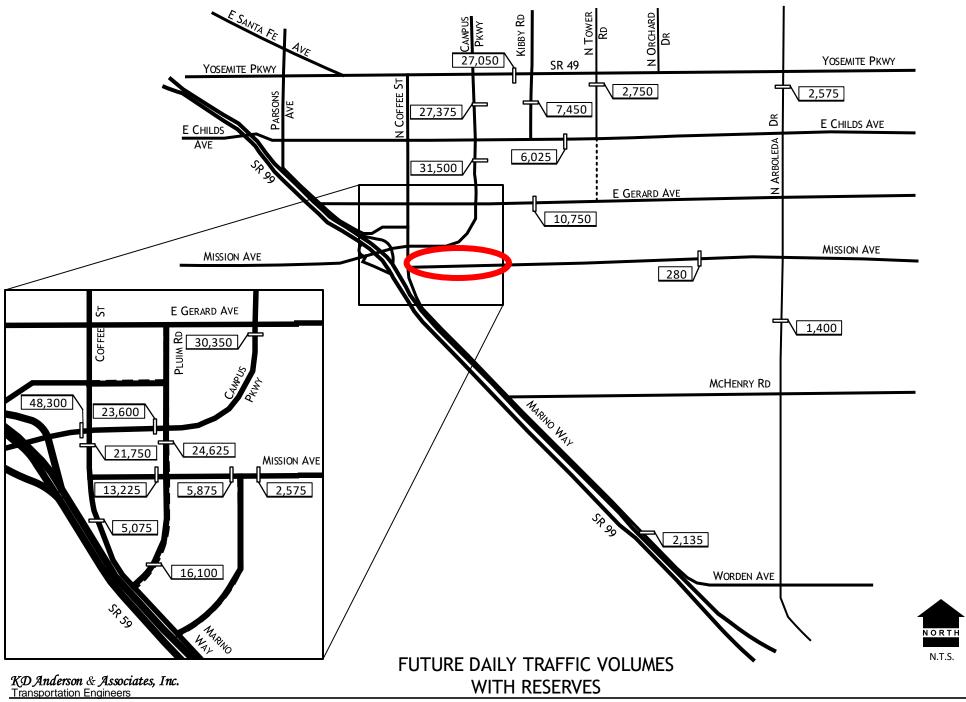


figure 3







Transportation Engineers

July 28, 2022

Received 8/1/22 Planning Dept.

Mr. Eric R. Pluim **GATEWAY PARK DEVELOPMENT PARTNERS**133 Old Wards Ferry Road, Suite G

Sonora, CA 95370

RE: MISSION AVENUE DESIGN ASSESSMENT, MERCED, CA

Dear Mr. Pluim:

Thank you for contacting KD Anderson & Associates (KDA) regarding the traffic analysis needed by the City of Merced to address the ultimate design requirements of Mission Avenue east of State Route 99 (SR 99).

Background

Purpose of Analysis. As we understand, Dickenson Ferry Road-Mission Avenue extends east-west across southern Merced from Gurr Road on the west across SR 99 to Arboleda Drive on the east, as indicated in Figure 1. The City of Merced General Plan Circulation Element notes that the route will be improved to a multi-lane arterial in the area from Thornton Road on the west to Tower Road on the east. However, with the implementation of Campus Parkway, the segment east of SR 99 (i.e., E. Mission Avenue) no longer has direct access to the freeway, and recent improvements to the SR 99 / Arboleda Drive / Le Grand Road interchange provide another truck route to SR 99 as well. You have suggested to the City of Merced that a four-lane arterial street, as designed in the General Plan is no longer needed east of SR 99. City of Merced staff has indicated that analysis of long-term traffic conditions that represent full buildout of land uses in the area that will be tributary to E. Mission Avenue is needed to address this issue. By comparing "build out" traffic volumes with the roadway capacity threshold included in the General Plan, the analysis herein provides the evidence needed to support or deny the change you request.

Approach. The analysis summarized herein presents long term daily traffic volumes and resulting traffic conditions under the current General Plan circulation plan. This work has involved identifying long term land use assumptions for the southeastern Merced area, including the Industrial areas east of Campus Parkway. The travel demand forecasting model created for the *Merced Gateway EIR* was modified for this purpose, including incorporating relevant future roadways (i.e., Coffee Street and Pluim Drive extensions to Marino Way). The applicable roadway section for Mission Avenue was then determined based on daily traffic volume and the General Plan's applicable LOS thresholds (i.e., Table 1).

	Daily Roadway Segment Level of Service Thresholds						
Roadway Type	LOS A	LOS B	LOS C	LOS D	LOS E		
6 lane Freeway	25,900	42,600	57,800	68,400	76,000		
4 lane Freeway	40,000	65,800	89,200	105,600	117,400		
4 lane Expressway		3,000	27,800	36,000	37,800		
6 lane Expressway		5,900	38,900	48,900	51,300		
2 lane Arterial	-	-	11,600	16,000	16,800		
4 lane Arterial	-	4,100	26,800	33,700	35,400		
6 lane Arterial	-	6,600	41,800	50,700	53,200		
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TOS ⋖ ₹ C C C C C C C C C C ⋖ \mathbf{m} \mathcal{O} Truck % 10%15% 10% 13% 10% 11% 16% 15% 12% 24% %9 2% %6 7% %6 Daily Volume Trucks 426 499 625 506 275 49 35 134 121 217 222 28 14 4 51 4,432 3,398 1,039 7,178 1,548 1,336 Total 5,044 1,211 2,224 375 487 109 375 335 934 CURRENT DAILY TRAFFIC VOLUMES / LEVEL OF SERVICE Lanes 4 4 4 2 α 2 (1 Divided Arterial Divided Arterial Merced County¹ Divided Arterial Merced County1 Merced County1 Minor Arterial Expressway Collector Collector Collector Collector Collector Class TABLE 2 Childs Ave to Yosemite Ave (SR 140) Campus Pkwy to Mission Ave Mission Ave to Le Grand Rd Mission Ave to Marino Way Campus Pkwy to Tower Rd Campus Pkwy to Tower Rd Campus Pkwy to Tower Rd Gerard Ave to Childs Ave Tower Rd to Arboleda Dr Coffee St to Le Grand Rd Coffee St to Gerard Ave SR 140 to Mission Ave Coffee St to Tower Rd SR 140 to Childs Ave SR 140 to Gerard Ave Location Yosemite Ave (SR 140) Mission Avenue Arboleda Drive Gerard Avenue Childs Avenue Campus Pkwy Coffee Street Marino Way Tower Road Kibby Road Street

Gateway Park Development Partners July 28, 2022 Page 3

Mr. Eric Pluim

¹ LOS based on 2 lane County Road threshold

Mr. Eric Pluim Gateway Park Development Partners July 28, 2022 Page 4

Development Characteristics. This analysis makes use of land use assumptions for the cumulative analysis presented in the Merced Gateway EIR (MGEIR) traffic study but modifies those assumptions to create a "worst case" assessment of the area's traffic volumes. The MGEIR originally assumed cumulative development that was consistent with the Merced County Association of Governments (MCAG) regional travel demand forecasting model for the Year 2035. The MGEIR analysis added build out of the Merced Gateway project.

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	SR 140 to Yosemite Ave	-	Construct 4 lane		
	Yosemite Ave to UCM	-	Construct 4 lanes		
Coffee Street	Campus Pkwy to Mission Ave	2 lanes	Widen to 4 lanes		
Pluim Drive	Campus Pkwy to Mission Ave	-	Construct 4 lanes		
Tower Road	Gerard Ave to Mission Ave	-	Construct 2 lanes		
Parsons Avenue	SR 140 to N. Bear Creek Rd	0-4 lanes	Complete to 4 lanes		
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Results

Traffic Volume Forecasts. The MCAG traffic model was run to produce roadway segment daily traffic volumes, as noted in Figure 4. Level of Service was identified based on GPEIR thresholds in Table 5. For comparison, the daily traffic volumes and Level of Service reported in the GPEIR have also been presented.

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KSK

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Gateway Park Development Partners

July 28, 2022

Mr. Eric Pluim

Mr. Eric Pluim Gateway Park Development Partners July 28, 2022 Page 7

Thank you for reviewing this information. Please feel free to call me if you have any questions.

Sincerely yours,

KD Anderson & Associates, Inc.

Kenneth D. Anderson, P.E.

President

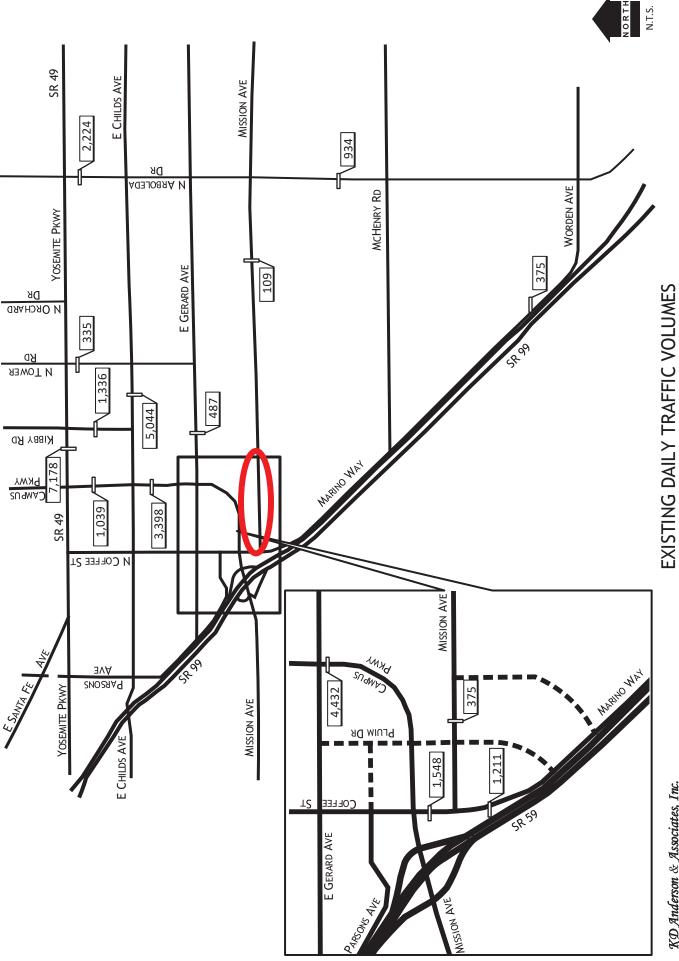
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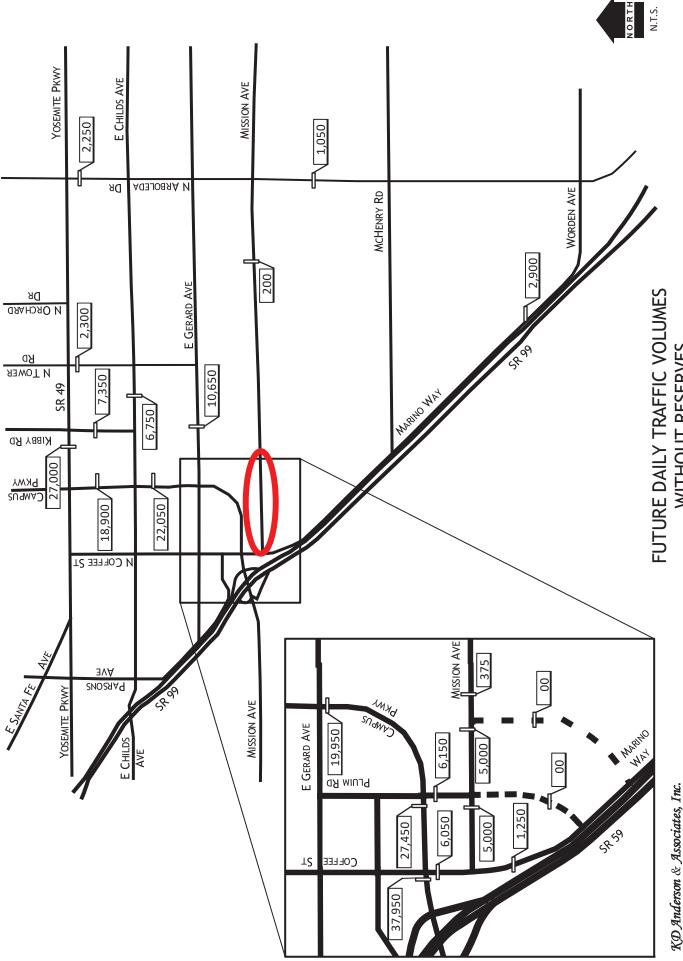
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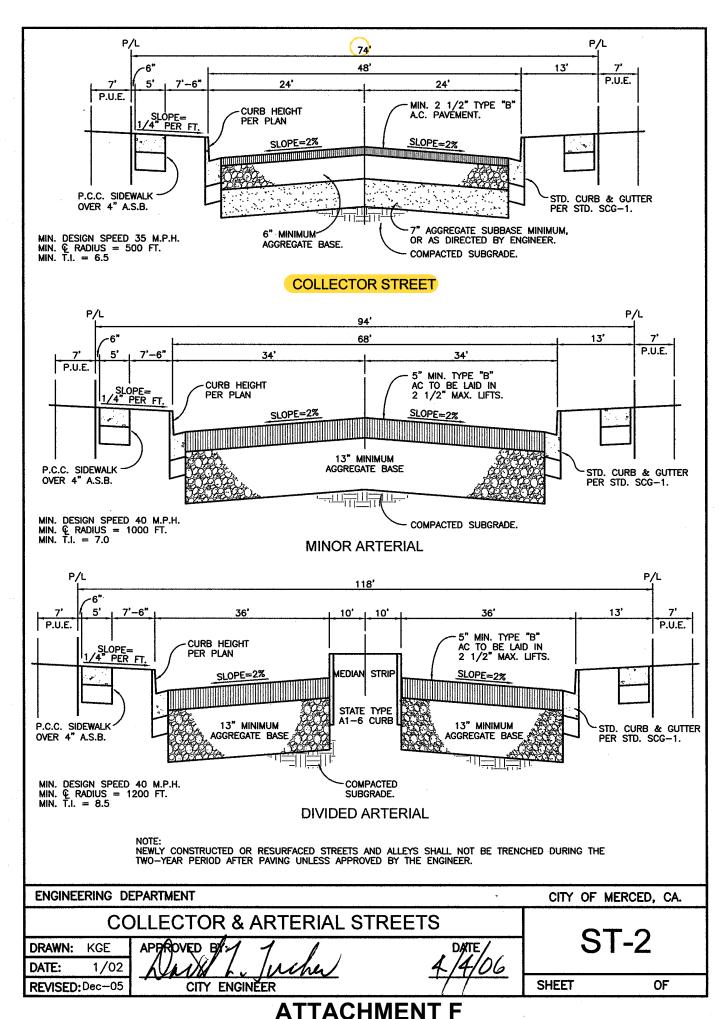
Mission Avenue Design Analysis 7 28 22.ltr

VICINITY MAP

KD Anderson & Associates, Inc.
Transportation Engineers
3435-A-02 RA 8/12/2021







ADDENDUM TO THE MERCED VISION 2030 GENERAL PLAN FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT

General Plan Amendment #22-03 Environmental Review #22-25

LEAD AGENCY:

City of Merced 678 W. 18th Street Merced, CA 95340

Contact: Julie Nelson, Senior Planner (209) 385 - 6967

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SECTION 1: INTRODUCTION AND PURPOSE

The California Environmental Quality Act ("CEQA") recognizes that between the date an environmental document is completed and the date that the project is fully implemented, CEQA Section 15164 provides that "the lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some change or additions are necessary but none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred.

On January 3, 2012, the Merced City Council approved the *Merced Vision 2030 General Plan* Program Environmental Impact Report ("FEIR"). The FEIR analyzes the implementation and buildout of the General Plan though the 2030 planning period and includes a circulation plan that addresses the City's major road system, local street patterns, air facilities, bus and rail transit, and bicycle and pedestrian facilities. As a Program level EIR, the FEIR did not review specific proposals, but rather analyzed the development potential of approximately 33,462 acres of land within the Specific Urban Development Planning Area (SUDP) and the Sphere of Influence (SOI). The Transportation/Traffic section of the FEIR identified transportation impacts associated with implementation of General Plan. A traffic analysis was prepared (Fehr and Peers, May 9, 2009) to investigate anticipated traffic conditions with implementation of the proposed General Plan.

The proposed General Plan Amendment would redesignate the section of Mission Avenue from Coffee Street east to Tower Raod (extended) from a Divided Arterial to a Collector road, thus reducing the right-of-way from 118 feet to 74 feet (not including landscape areas). This reduction is requested as part of the Merced Gateway Marketplace Shopping Center that was approved in 2017. An Environmental Impact Report (EIR) (SCH #2015101048) was approved by the Merced City Council on August 9, 2017, for the Merced Marketplace. This EIR did not consider the reduction in the roadway classification for Mission Avenue.

1.1 - CEQA Authority for an Addendum

The California Environmental Quality Act ("CEQA") Guidelines Section 15162 through 15164 specify the type of documentation required when changes are proposed to a project that has been previously approved pursuant to a certified EIR. State CEQA Guidelines Section 15162 states:

"a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record one or more of the following:

- Substantial changes are proposed in the project, which will require major revisions of the previous EIR or negative declaration due to the involvement of new environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or,
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time of the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
 - A. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.
- b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise, the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.
- c) Once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency, which grants the next discretionary approval for the project, if any. In this situation, no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent ne3gative declaration adopted.
- d) A subsequent EIR or subsequent negative declaration shall be given the same notice and public review as required under Section 15087 and 15072. A

subsequent EIR or negative declaration shall state where the previous document is available and can be reviewed."

Section 15163 addresses when a supplemental EIR is required:

- "a) The Lead or Responsible Agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:
 - (1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and
 - (2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.
- b) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.
- c) A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.
- d) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.
- e) When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised."

Section 15164 of the State CEQA Guidelines allows for an addendum when a subsequent or supplemental EIR is not required. State CEQA Guidelines Section 15164 states:

- "a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some change or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.
- b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.
- c) An addendum need not be circulated for public review, but can be included in or attached to the final EIR, or adopted negative declaration.
- d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.
- e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence."

1.2 – Previous CEQA Environmental Documents

Merced Vision 2030 General Plan EIR

The City's General Plan includes forecasts of long-term conditions, outlines development goals and policies, and includes exhibits and diagrams. It guides growth and development within the City by designating land uses on the proposed land use map and through implementation of the goals and policies of the City's General Plan. It also provides a long-term vision for the City, and through its implementation goals and policies, indicates how that vision may be achieved over time.

The *Merced Vision 2030 General Plan EIR* (SCH #2008071069) was certified on January 4, 2012, and addresses the environmental effects associated with the implementation of the City's General Plan.

1.3 - Findings

For purposes of the Addendum, the project includes amending the Circulation Element by changing the roadway classification for a portion of Mission Avenue [from Coffee Street east Tower Road (extended)] from "Divided Arterial" to "Collector." The proposed change does not require preparation of a new subsequent or supplemental EIR, due to neither the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Therefore, the completion of an Addendum is appropriate CEQA compliance for the project.

1.4 - CEQA Approach

Pursuant to State CEQ Guidelines, this Addendum has been prepared to determine whether changing the roadway classification for a portion of Mission Avenue [from Coffee Street east to Tower Road (extended)] would result in new impacts or new information of substantial importance requiring the preparation of a subsequent or supplemental EIR. As documented within this Addendum, none of the criteria outlined in State CEQA Guidelines Sections 15162 or 15163 have been identified. Thus, this Addendum is sufficient to approve the minor revisions to the Circulation Element of the City's General Plan.

SECTION 2: PROJECT DESCRIPTION

Project Name:

General Plan Amendment #22-03

Project Location:

Mission Avenue, from Coffee Street, east to Tower Road (Figure 1)

Project Applicant:

Eric Pluim, on behalf of Gateway Park Development Partners, LLC 133 Old Wards Ferry Road, Ste. G Sonora, CA 95370-7822

Figure 1 – Location Map



Setting:

The Circulation Element of the *Merced Vision 2030 General Plan* is Chapter 4 of the General Plan. This element addresses the City's major road system, local street patterns, air facilities, bus and rail transit, and bicycle and pedestrian facilities. The goal is to identify the most effective ways to plan for circulation while enhancing the community and protecting the environment.

City and regional streets and highways are classified by categories that reflect their importance and function. Freeways are the highest level of roadway, with fully controlled access, high operating speeds and volumes, and highest design standards. Local streets and alleys are the lowest function classification, with low speeds and volumes and direct access to adjacent property. Other roadway classifications include:

Road Classification	Right-of-Way	# of Lanes	
Major Arterial	128 Ft.	4-6	
Arterial	128 Ft.	4-6	
Divided Arterial	118 Ft.	4-6	
Minor Arterial	94 Ft.	2-4	
Major Collector	68-74 Ft.	2-4	
Collector	68 Ft.	2	
Local	51-62 Ft.	2	

Figure 4.1 of the *Merced Vision 2030 General Plan* provides the Circulation Plan for the City (refer to Figure 2 of this document). This map shows the major roadways and their classifications according to the Circulation Plan.

Mission Avenue is an east/west road that extends from SR Hwy 59 to Arboleda Road. West of SR Hwy 59, Mission Avenue becomes Dickenson Ferry Road and extends west to Quinley Road. The sections of Mission Avenue between SR Hwy 59 and Tyler Road and Hwy 99 and Tower Road are within the City Limits (Figure 2.1). The rest of Mission Avenue/Dickenson Ferry Road is in the unincorporated areas of the County.

According to the Circulation Map at Figure 2, Mission Avenue is classified as a Major Arterial (128-foot right-of-way) from the west side of Hwy 99 to SR Hwy 59. On the east side of Hwy 99, Mission Avenue is classified as a Divided Arterial (118-foot right-of-way). The proposed change would reduce the classification for Mission Avenue from Coffee Street east to the end of the City Limits at Tower Road (extended) from a Divided Arterial to a Collector Road (74-foot right-of-way). The section of Mission Avenue between Coffee Street and Hwy 99 was abandoned in 2018 as the road came to a dead-end and this section was no longer needed.

In 2008, the Mission Avenue/Hwy 99 interchange was constructed. This interchange connects to Campus Parkway, which in turn connects north to Yosemite Avenue and will eventually connect to the UC Merced Campus.

In July 2022, the Campus Parkway (a four-lane expressway) opened the second segment of the expressway. This expressway provides cross-town access from Hwy 99 to Yosemite Avenue in North Merced. This expressway has easy access to North and South Hwy 99 as well as connections to East SR Hwy 140. Connections to SR Hwy 59 North and South as well as West SR Hwy 140 can be made via Hwy 99.

Figure 2 Circulation Map

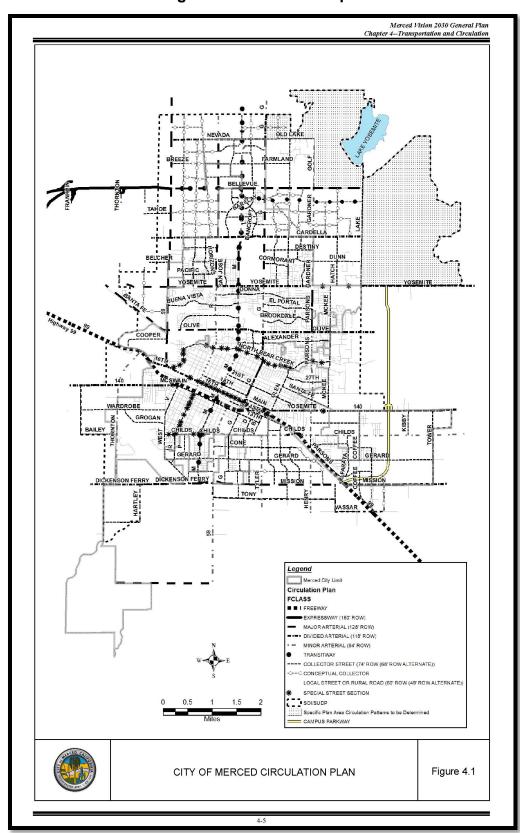
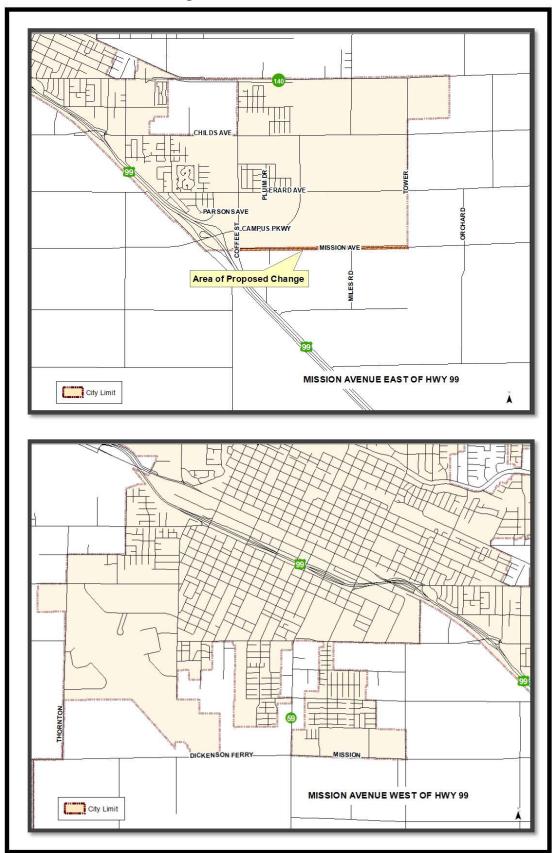


Figure 2.1 - Mission Avenue



With the opening of Campus Parkway, the need for Mission Avenue to be a Divided Arterial on the north side of Hwy 99 was diminished. Mission Avenue no longer provides access to Hwy 99. Campus Parkway now provides access as previously described.

Campus Parkway would provide access to the future Pluim Drive (Collector) which would connect to Mission Avenue. Mission Avenue is proposed to be changed from a Divided Arterial to a Collector from Pluim Drive to Tower Road (extended). East of Tower Road (extended) would remain a Divided Arterial. It should be noted that the area east of Tower Road is outside of the City Limits and the City's SUDP and SOI.

Mission Avenue is the southern boundary for the Merced Gateway Marketplace shopping center. This shopping center extends north to Gerard Avenue and is bisected by Campus Parkway. As this shopping center developed, the developers realized that Mission Avenue would no longer need to be a Divided Arterial along their project frontage due to the access provided by Campus Parkway and Pluim Drive (extended). The Merced Gateway Marketplace Shopping Center site consists of 77.5 acres. The shopping center will include over 600,000 square feet of commercial uses and approximately 200 multifamily apartments. Construction of the first phase of the shopping center has begun between Campus Parkway and Mission Avenue. Currently, this phase includes an Arco AM/PM Mini-Mart/Gas Station, Starbuck's, McDonald's, and Tractor Supply.

The developer immediately to the east of the Merced Gateway Marketplace determined that Mission Avenue would no longer need to be a Divided Arterial to serve their development as well. As the City looked at the roadway classification for the segment of Mission Avenue from Coffee Street to the City Limits at Tower Road (extended), it was determined that a Collector Street would serve this area sufficiently. A Design Assessment prepared by KD Anderson & Associates, Inc. indicated that Mission Avenue would continue to operate at a Level of Service (LOS) D or better from Coffee Street east to Tower Road (extended) if it was changed to a Collector Street.

SECTION 3: Environmental Impact Analysis

3.1 – Summary

The *Merced Vision 2030 General Plan* analyzed potential impacts related to the following sections: Aesthetics, Agriculture and Forest Resource, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Recreation, Public Services, Transportation, Utilities and Services, Public Services, Transportation, Utilities and Services, and Greenhouse Gas Emissions.

The proposed project only seeks to amend the information found in the Circulation Element of the General Plan. The City's preliminary review of the project determined that Traffic and Transportation is the only environmental issue potentially affected by the proposed change to the classification of a segment of Mission Avenue. Therefore, this analysis only addresses potential impacts related to the Transportation section of the EIR.

3.2 - Merced Vision 2030 General Plan EIR: Transportation and Traffic

Section 3.15 of the City's General Plan EIR evaluates the potential transportation and traffic impacts resulting from the implementation of the City's General Plan. Implementation of the proposed *Merced Vision 2030 General Plan* will generate increased

traffic that will affect circulation conditions on the local and regional roadway network. The General Plan Circulation Element includes a broad range of policies for managing and optimizing the function of the transportation system to accommodate this additional traffic, and the proposed Circulation Plan included in the Circulation Element identifies the location of the physical circulation system planned throughout the City.

As part of the EIR, a traffic analysis was prepared. The traffic analysis investigated anticipated traffic conditions with implementation of the proposed General Plan. The analysis focused on the projected roadway and intersection operations at buildout of the *Merced Vision 2030 General Plan* and investigated the adequacy of the proposed Circulation Plan, primarily as it pertains to vehicle traffic on the planned roadways and intersections.

As a result of the traffic analysis, traffic volumes and the Level of Service (LOS) on key roadway segments were included in the EIR and subsequently in the Transportation Section of the General Plan. Table 3.15-4 of the EIR provided the traffic volumes and LOS results. It should be noted that the LOS results presented in Table 3.15-4 represent a worst-case scenario, as the roadway segment analysis was based on buildout of the Merced Vision 2030 General Plan, which most likely will not occur in its entirety by the year 2030, and the analysis does not consider the additional capacity that is provided at intersections for additional turn pockets (i.e. dual left-turn pockets), nor the benefits of signal timing coordination and advanced traffic signal technology that will be phased in over the life of the General Plan.

According to the Transportation Element of the *Merced Vision 2030 General Plan*, Level of Service (LOS) standards are a method for expressing how well traffic is moving on a road or through an intersection in relation to the capacity of that road or intersection. LOS ranks the quality of traffic movement on a scale of A through F, with A being the best.

The traffic analysis prepared for the General Plan included the section of Mission Avenue proposed to be changed [from Coffee Street east to Tower Road (extended)]. The analysis considered this section of Mission Avenue as a Divided Arterial, but it currently only has two lanes. The analysis showed that Mission Avenue from Coffee Street to Tower Road currently operates at a Level of Service (LOS) C+. At build-out of the General Plan, this section of Mission Avenue was considered to be a four-lane Divided Arterial and continued to operate at LOS C+. The average daily trips expected at build-out was 1,890.

3.2 - Updated Analysis of Proposed Change

An updated traffic analysis to consider the proposed change to the segment of Mission Avenue from Coffee Street east to Tower Road (extended) was prepared by Ken Anderson & Associates (Attachment 1). This analysis considered the long-term traffic conditions that represent full buildout of land uses in the area that will be tributary to E. Mission Avenue.

Approach

The analysis presented long-term daily traffic volumes and resulting traffic conditions under the current General Plan circulation plan. This work has involved identifying long term land use assumptions for the southeastern Merced area, including the Industrial areas east of Campus Parkway. The travel demand forecasting model created for the

Merced Gateway EIR (SCH #2015101048) was modified for this purpose, including incorporating relevant future roadways (i.e., Coffee Street and Pluim Drive extensions to Marino Way). The applicable roadway section for Mission Avenue was then determined based on daily traffic volume and the General Plan's applicable LOS thresholds (refer to the excerpt from Table 1 of the analysis Prepared by Ken Anderson & Associates, Inc. – Attachment 1).

Table 1 (excerpt)

Level of Service Thresholds for Roadway Segments							
Roadway Type	Dai	Daily Roadway Segment Level of Service Thresholds					
	LOS A	LOS A LOS B LOS C LOS D LOS E					
2 lane Arterial	-	-	11,600	16,000	16.800		
4 lane Arterial	-	4,100	26,800	33,700	35,400		
6 lane Arterial	-	6,600	41,800	50,700	53,200		
2 lane Collector	-	-	4,800	10,300	13,200		
4 lane Collector	-	-	11,300	22,200	26,400		

A new 24-hour count collected on May 28, 2021, revealed that Mission Avenue from Coffee Street to Arboleda Drive currently operates at LOS C. The section of Mission Avenue from Coffee Street to Tower Road had 375 average daily trips (ADT's), of which 28 (7%) were trucks. Mission Avenue from Tower Road to Arboleda had 109 ADT's with 14 trucks (13%).

Development Characteristics

Because a lot of the land in the area of Mission Avenue and Coffee Street is vacant, the traffic analysis assumed certain land uses. These assumptions were based on the previous EIR prepared for the Merced Gateway Shopping Center (SCH #2015101048), but were modified to create a "worst case" assessment of the areas traffic volumes. The land uses assumed included the Merced Gateway Shopping Center, Business Park, and Industrial. Table 3 of Attachment 1 provides more details on the assumptions made in the analysis.

Circulation System Assumptions

The traffic analysis at Attachment 1 assumed certain roadways were either existing or would be constructed at buildout of the General Plan (refer to Table 4 of Attachment 1). Consistent with the proposed change, Mission Avenue was assumed to be a Collector rather than a Divided Arterial in these assumptions.

Results

The analysis used the Merced County Association of Government's (MCAG) traffic model. When the model was run, assuming Mission Avenue from Coffee Street, east to Tower Road (extended) is a 2-lane Collector road instead of a Divided Arterial, this section continued to operate at LOS D or better.

Because this segment would maintain the same level of service as a two-lane Collector as it was expected to as a Divided Arterial in the General Plan EIR, there are no impacts associated with the proposed change in the classification of this segment of Mission Avenue.

SECTION 4: Conclusion

As described in Section 3 above, the proposed change to the classification of Mission Avenue from Coffee Street to Tower Road (extended) would not decrease the level of service for this segment or create other traffic-related impacts. Therefore, the Circulation Element of the General Plan would remain consistent with the assumptions in the General Plan Circulation Traffic Study. Additionally, there are no new impacts associated with air quality, noise, or greenhouse gas emissions. All applicable mitigation from the City's General Plan EIR will continue to be applied.

Based on the information provided above, the proposed General Plan Amendment to change the classification of a segment of Mission Avenue from Divided Arterial to Collector does not require revisions to the City's General Plan EIR.

Attachments:

1) Traffic Analysis



Transportation Engineers

March 3, 2023

Mr. Eric R. Pluim **GATEWAY PARK DEVELOPMENT PARTNERS, LLC**133 Old Wards Ferry Road, Suite G

Sonora, CA 95370

RE: MISSION AVENUE DESIGN ASSESSMENT, MERCED, CA

Dear Mr. Pluim:

Thank you for contacting KD Anderson & Associates (KDA) regarding the traffic analysis needed by the City of Merced to address the ultimate design requirements of Mission Avenue east of State Route 99 (SR 99).

Background

Purpose of Analysis. As we understand, Dickenson Ferry Road-Mission Avenue extends east-west across southern Merced from Gurr Road on the west across SR 99 to Arboleda Drive on the east, as indicated in Figure 1. The City of Merced General Plan Circulation Element notes that the route will be improved to a multi-lane arterial in the area from Thornton Road on the west to Tower Road on the east. However, with the implementation of Campus Parkway, the segment east of SR 99 (i.e., E. Mission Avenue) no longer has direct access to the freeway, and recent improvements to the SR 99 / Arboleda Drive / Le Grand Road interchange provide another truck route to SR 99 as well. You have suggested to the City of Merced that a four-lane arterial street, as designed in the General Plan is no longer needed east of SR 99. City of Merced staff has indicated that analysis of long-term traffic conditions that represent full buildout of land uses in the area that will be tributary to E. Mission Avenue is needed to address this issue. By comparing "build out" traffic volumes with the roadway capacity threshold included in the General Plan, the analysis herein provides the evidence needed to support or deny the change you request.

Approach. The analysis summarized herein presents long term daily traffic volumes and resulting traffic conditions under the current General Plan circulation plan. This work has involved identifying long term land use assumptions for the southeastern Merced area, including the Industrial areas east of Campus Parkway. The travel demand forecasting model created for the *Merced Gateway EIR* was modified for this purpose, including incorporating relevant future roadways (i.e., Coffee Street and Pluim Drive extensions to Marino Way). The applicable roadway section for Mission Avenue was then determined based on daily traffic volume and the General Plan's applicable LOS thresholds (i.e., Table 1).

Mr. Eric Pluim Gateway Park Development Partners, LLC March 3, 2023 Page 2

TABLE 1 LEVEL OF SERVICE THRESHOLDS FOR ROADWAY SEGMENTS							
	Daily Roadway Segment Level of Service Thresholds						
Roadway Type	LOS A	LOS B	LOS C	LOS D	LOS E		
6 lane Freeway	25,900	42,600	57,800	68,400	76,000		
4 lane Freeway	40,000	65,800	89,200	105,600	117,400		
4 lane Expressway		3,000	27,800	36,000	37,800		
6 lane Expressway		5,900	38,900	48,900	51,300		
2 lane Arterial	-	-	11,600	16,000	16,800		
4 lane Arterial	-	4,100	26,800	33,700	35,400		
6 lane Arterial	-	6,600	41,800	50,700	53,200		
2 lane Collector	-	-	4,800	10,300	13,200		
4 lane Collector	-	-	11,300	22,200	26,400		
2 lane County Road	-	-	7,700	15,000	16,100		
Source: Merced Vision 2030	0 General Plan, 2010)			•		

Current Traffic Volumes / Levels of Service. New 24-hour counts were collected for study area roads on May 27, 2021 to provide perspective on current traffic conditions on relevant segments. These volumes and Levels of Service are shown in Figure 2 and summarized in Table 2.

G	Location	Class	Lanes	RVICE Daily Volume			1.00
Street				Total	Trucks	Truck %	LOS
Campus Pkwy	Coffee St to Gerard Ave		4	4,432	426	10%	A
	Gerard Ave to Childs Ave	Expressway	4	3,398	499	15%	A
	Childs Ave to Yosemite Ave (SR 140)		4	1,039	64	6%	A
Yosemite Ave (SR 140)	Campus Pkwy to Tower Rd	Divided Arterial	2	7,178	625	9%	В
Childs Avenue	Campus Pkwy to Tower Rd	Minor Arterial	2	5,044	506	10%	С
Gerard Avenue	Campus Pkwy to Tower Rd	Collector	2	487	35	7%	С
Mission Avenue	Coffee St to Tower Rd	Divided Arterial	2	375	28	7%	С
	Tower Rd to Arboleda Dr	Divided Arterial	2	109	14	13%	С
Coffee Street	Campus Pkwy to Mission Ave	Collector	2	1,548	134	9%	С
	Mission Ave to Marino Way	Collector	2	1,211	121	10%	С
Marino Way	Coffee St to Le Grand Rd	Merced County ¹	2	375	41	11%	С
Kibby Road	SR 140 to Childs Ave	Collector	2	1,336	217	16%	С
Tower Road	SR 140 to Gerard Ave	Collector	2	335	51	15%	С
Arboleda Drive	SR 140 to Mission Ave	Merced County ¹	2	2,224	275	12%	С
	Mission Ave to Le Grand Rd	Merced County ¹	2	934	222	24%	С



Mr. Eric Pluim Gateway Park Development Partners, LLC March 3, 2023 Page 4

Development Characteristics. This analysis makes use of land use assumptions for the cumulative analysis presented in the Merced Gateway EIR (MGEIR) traffic study but modifies those assumptions to create a "worst case" assessment of the area's traffic volumes. The MGEIR originally assumed cumulative development that was consistent with the Merced County Association of Governments (MCAG) regional travel demand forecasting model for the Year 2035. The MGEIR analysis added build out of the Merced Gateway project.

The analysis contained herein assumes that the non-residential land uses in the southeast Merced area are built out. Figure 3 notes these areas, and the land use assumptions for each area are listed in Table 3. As indicated, this "Build Out" analysis assumes that the southeast Merced area could eventually contain more than 17,000 employees. Because development of the reserves was not assumed in the City of Merced GPEIR and will not proceed without a General Plan amendment, this analysis does not address future conditions with reserve area development.

TABLE 3 SOUTHEAST MERCED DEVELOPMENT ASSUMPTIONS						
		MGEIR Cumulative		Assumed		
Area	Land Use	Development Level	Employees	Development Level	Employees	
1	Industrial	Partial	3,176	Build Out	15,544	
2	Business Park East of Pluim Drive	Partial	440	Build Out	1,605	
3	Merced Gateway	Build Out	720	Build Out	720	
Total			4,336		17,869	

Retail Commercial density 27.4 employees per acre Office Commercial density 21.4 employees per acre Industrial density 17.6 employees per acre

Circulations System Assumptions. The volume of traffic in the future on study area roads could vary based on assumptions for improvements to area roadways. This analysis assumes that improvements identified in the City of Merced General Plan will be made, as noted in Table 4.

TABLE 4 CIRCULATION IMPROVEMENTS ASSUMPTIONS			
Roadway	Location	Existing	Improvements
SR 99	Through Merced	4-6 lanes	Widen to 6 lanes
AME	Greensands Ave to Bellevue Rd	-	Construct to 4 lanes
Campus Parkway	SR 99 to Childs Ave	4 lanes	Widen to 6 lanes
	Childs Ave to SR 140	4 lanes	No change
	SR 140 to Yosemite Ave	-	Construct 4 lane
	Yosemite Ave to UCM	-	Construct 4 lanes
Coffee Street	Campus Pkwy to Mission Ave	2 lanes	Widen to 4 lanes
Pluim Drive	Campus Pkwy to Mission Ave	-	Construct 2 lanes
Tower Road	Gerard Ave to Mission Ave	-	Construct 2 lanes
Parsons Avenue	SR 140 to N. Bear Creek Rd	0-4 lanes	Complete to 4 lanes
	N. Bear Creek Rd to Yosemite Ave	2-4 lanes	Complete to 4 lanes
	Yosemite Ave to Bellevue Ave	0-2 lanes	Complete to 4 lanes
Mission Avenue	Coffee St to Tower Road	2 lanes	Collector

Results

Traffic Volume Forecasts. The MCAG traffic model was run to produce roadway segment daily traffic volumes, as noted in Figure 4. Level of Service was identified based on GPEIR thresholds in Table 5. For comparison, the daily traffic volumes and Level of Service reported in the GPEIR have also been presented.

Conditions on Mission Avenue. The unconstrained daily traffic volume on Mission Avenue east of Coffee Street falls below the minimum LOS D threshold for a two-lane Collector street. Thus, Merced General Plan standards will be satisfied with the proposed two-lane facility.

TABLE 5 FUTURE DAILY TRAFFIC VOLUMES / LEVEL OF SERVICE **Daily Volume Future** Street Location Class Future **GPEIR** Lanes **Existing** LOS Volume Volume LOS Campus Pkwy C SR 99 to Coffee St 6 37,950 n.a. Coffee St to Pluim Dr 6 4,432 27,450 C D 46,200 C Pluim Drive to Gerard Ave 6 4,432 19,950 Expressway C Gerard Ave to Childs Ave 6 3,398 22,050 Childs Ave to 4 1.039 18,900 \mathbf{C} 35,110 D Yosemite Ave (SR 140) 2 Yosemite Blvd (SR 140) Campus Pkwy to Tower Rd Divided Arterial 7,178 27,000 F n.a. Campus Pkwy to Tower Rd Minor Arterial 2 C Childs Avenue 5.044 6,750 19,300 F Campus Pkwy to Tower Rd 2 C Gerard Avenue Collector 487 10,650 7,640 D Mission Avenue Coffee St to Pluim Dr Collector 2 375 5,000 D Pluim Dr to New Roadway East of Collector 2 375 5,000 D C 1,890 New Roadway East of BP to C Collector 2 375 2,850 Tower Road Tower Rd to Arboleda Dr Divided Arterial 2 109 200 C n.a. Coffee Street Campus Pkwy to Mission Ave Collector 2 1,548 6,050 D n.a. C 2 Mission Ave to Marino Way Collector 1,211 1,250 n.a. 2 Pluim Drive Campus Pkwy to Mission Ave Collector D n.a. 6,150 n.a. Merced County¹ 2 375 450 C Marino Way Coffee St to Le Grand Rd n.a. 2 D Kibby Road SR 140 to Childs Ave Collector 1,336 7,350 n.a. Tower Road SR 140 to Gerard Ave Collector 2 335 C 2,300 n.a. Merced County¹ 2 2,250 C Arboleda Drive SR 140 to Mission Ave 2,224 n.a. Merced County¹ Mission Ave to Le Grand Rd 2 934 1,050 C n.a.



Mr. Eric Pluim Gateway Park Development Partners, LLC March 3, 2023 Page 7

Thank you for reviewing this information. Please feel free to call Wayne Shijo at (916) 205-7032 if you have any questions.

Sincerely yours,

KD Anderson & Associates, Inc.

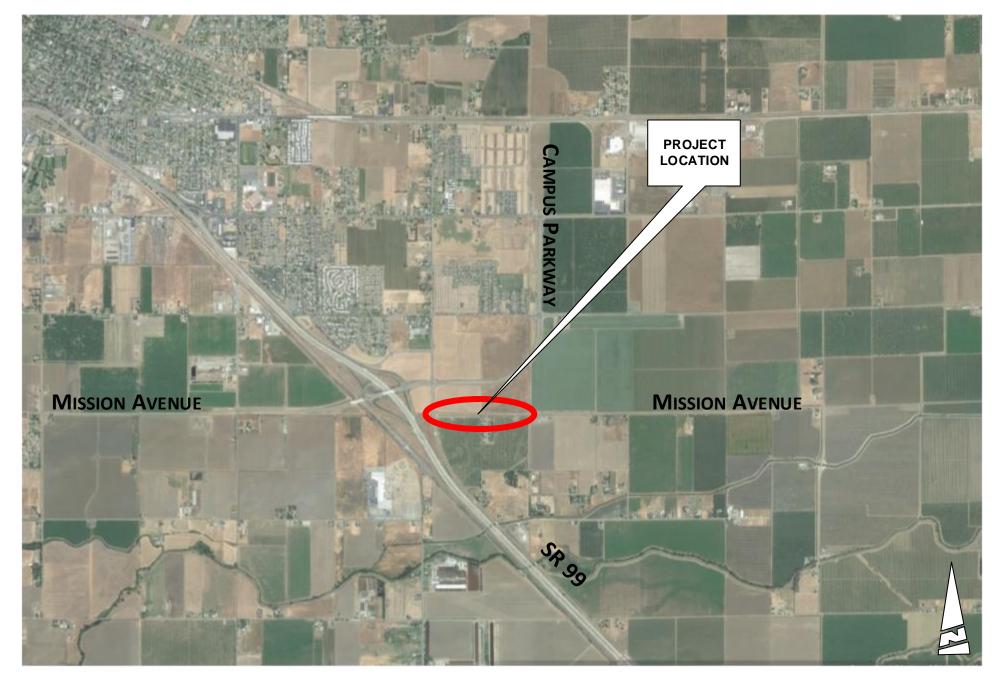
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Jonathan Flecker, P.E.

President

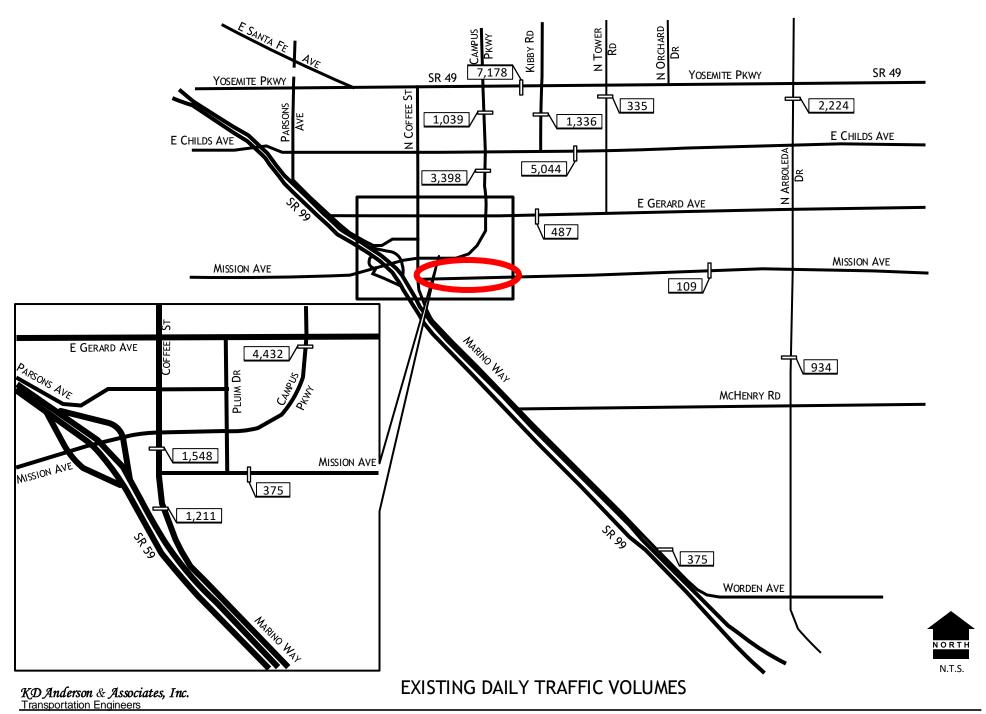
Attachment: figures, traffic counts

Mission Ave Design Analysis 3-3-23.doc

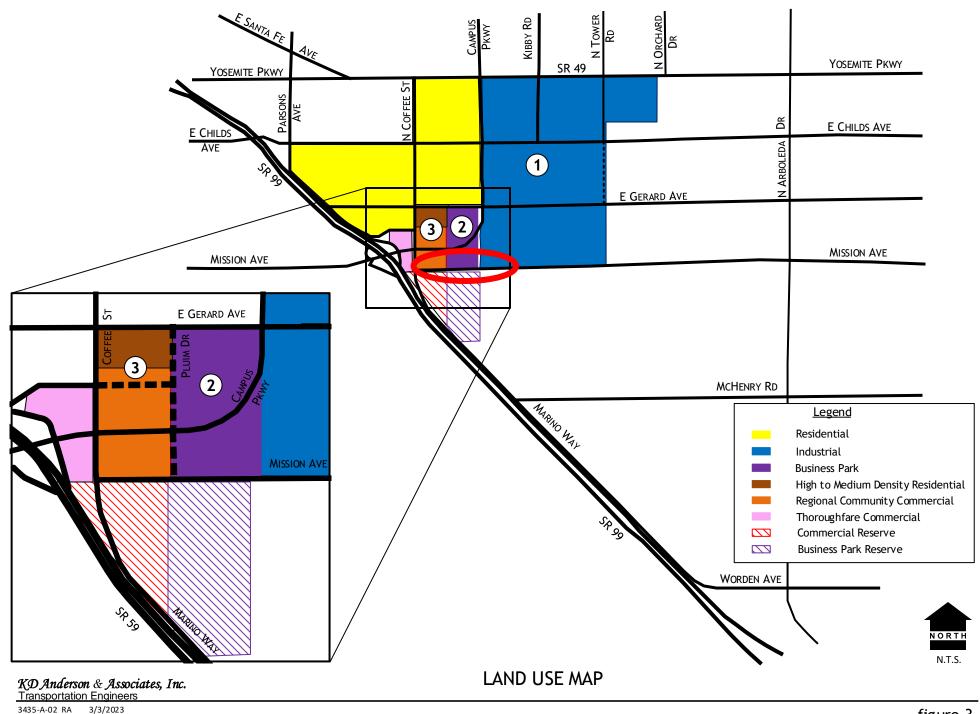


KD Anderson & Associates, Inc.
Transportation Engineers

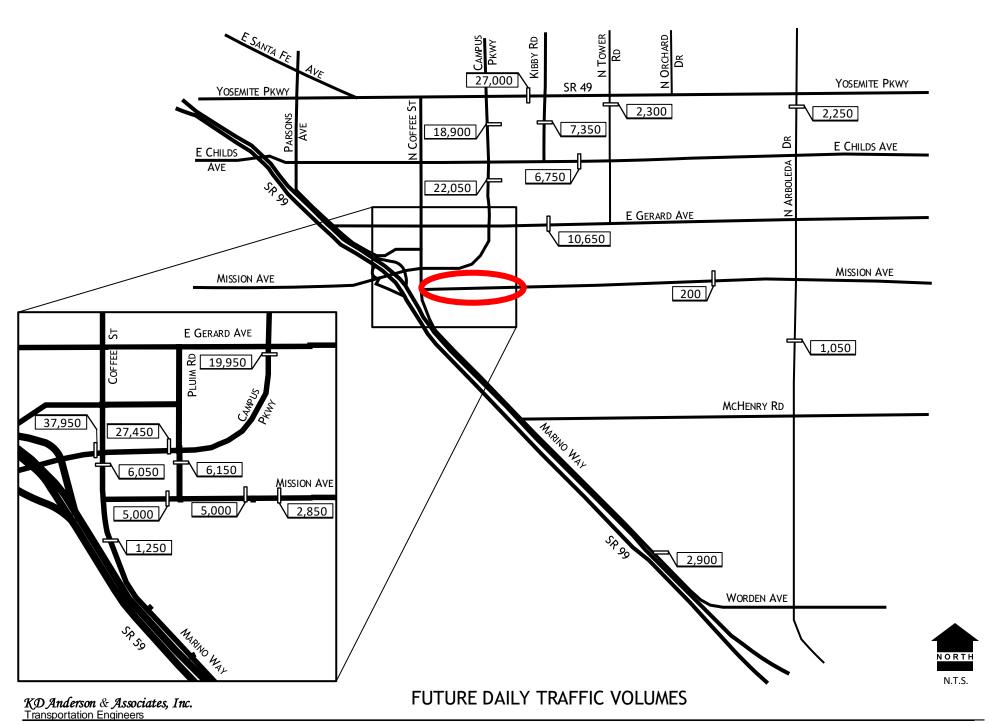
VICINITY MAP

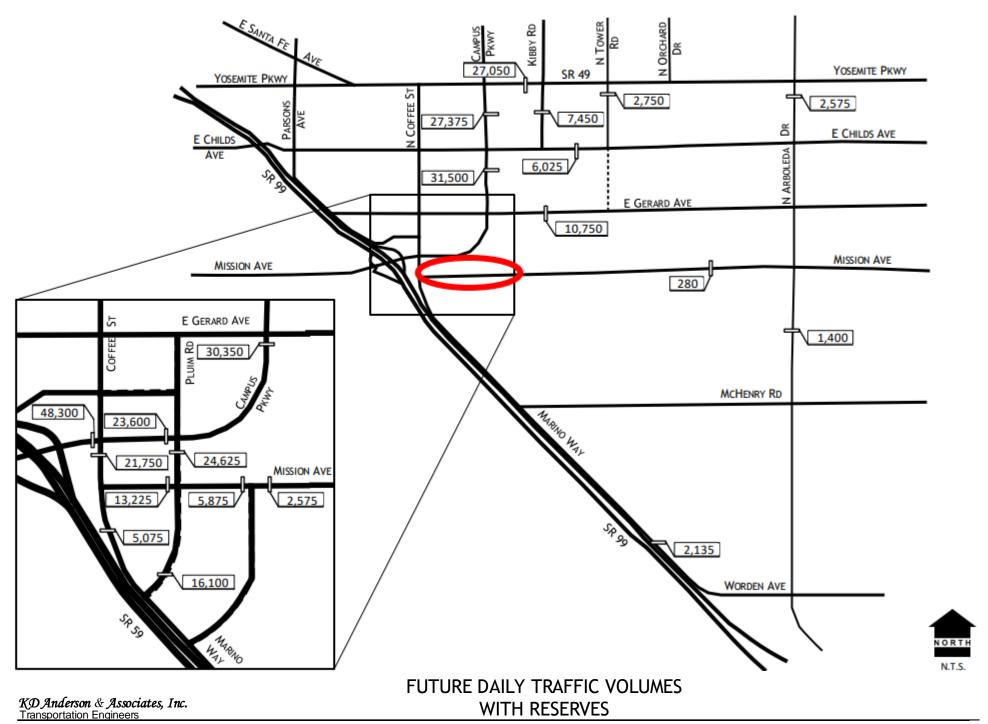


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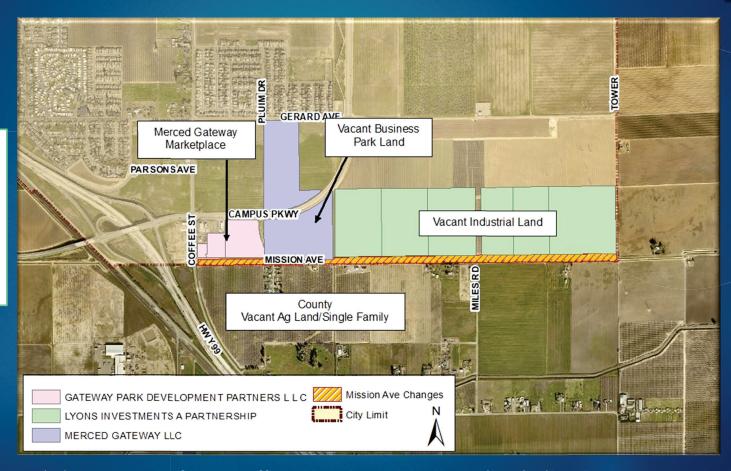
General Plan Amendment #22-03

MISSION AVENUE

Planning Commission Meeting 4/5/2023

Project Site – Mission Avenue

The project was amended since the Planning Commission reviewed in January.



Mission Avenue from Coffee Street east to the City Limits at Tower Road.

Roadway Classifications

Road Classification	Right-of-Way	No. of Lanes
Expressway	150 ft.	4-6
Major Arterial	128 ft.	4-6
Arterial	128 ft.	4-6
Divided Arterial	118 FT.	4-6
Minor Arterial	94 ft.	2-4
Major Collector	68-74 ft.	2-4
Collector	68 ft.	2
Local	51-62 ft.	2
Transitway	Varies	2-3

Proposed R-O-W is 74 ft. (Major Collector)

Mission Avenue



- Mission Avenue is a deadend west of Coffee St.
- Pluim Drive would be extended south to connect to Mission Ave. with the Merced Gateway Marketplace project.
- Miles Rd./Kibby Rd. would be extended to connect Mission Avenue and Gerard Ave. in the future.

Design Assessment

- ▶ KD Anderson & Associates performed a Design Assessment for this segment of Mission Avenue.
- The assessment determined that if this section of Mission Avenue was reduced to a two-lane collector, it would continue to operate at LOS C.
- Level of Service (LOS) D is considered an acceptable level of service per the Merced Vision 2030 General Plan.

Mission Avenue Street Section

- 12-foot-wide travel lane (one in each direction)
- A 7-foot-wide parking area
- ► A 5-foot-wide bicycle lane
- A 7 1/2 foot-wide park strip
- A 5-foot-wide sidewalk
- 6 inches between sidewalk and property line

PARSONSAVE

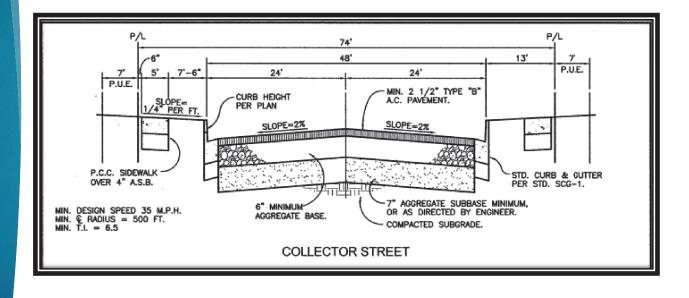
CARROS REVENT

OF THE PROPERTY OF

74-foot Collector (37-foot half-width)

This development is required to install the northern half of Mission Avenue (Condition #5).

Collector Street Standard



Vacation of Right-of-Way

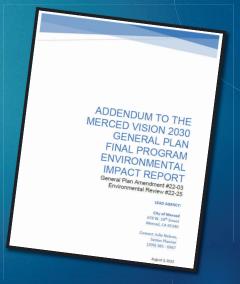
- Sufficient Right-of-Way was dedicated with a Parcel Map for the Merced Gateway Shopping Center to construction a Divided Arterial.
- Right-of-Way was also dedicated by the Lyon's property for a Divided Arterial.
- If the proposed General Plan Amendment is approved, a vacation of the excess right-of-way shall be initiated (Condition #6).
- The area vacated would be returned to the property owners who dedicated the land.
- ▶ The area vacated by Merced Gateway Marketplace and would be required to be landscaped to match the rest of the shopping center landscaping (Condition #7).

Neighborhood Impact

- Traffic in the area would continue to have access to Mission Avenue.
- Local traffic could continue to use Mission Avenue to Coffee Street or use Pluim Drive once constructed.
- The amount of traffic on this segment of Mission Avenue would remain low enough that it is not expected to cause any impacts to the surrounding area.
- Staff received a few phone calls from property owners in the area inquiring about the project, but no one has voice opposition.

Environmental Review

▶ An Addendum to the Environmental Impact Report prepared for the Merced Vision 2030 General Plan was prepared and administratively approved in accordance with the requirements of CEQA.



Previous Planning Commission Actions

- ▶ The Planning Commission reviewed this project on January 18, 2023.
- The Commission voted to recommend approval to the City Council.
- ► The project was amended to extend the change in the roadway classification of Mission Avenue from Coffee Street to the eastern City Limits at Tower Road (extended).

Planning Commission Action

- ▶ The Planning Commission is making a **recommendation** to the City Council.
- Approve/Disapprove/Modify
 - ► Environmental Review #22-25 (Addendum to EIR)
 - ► General Plan Amendment #22-03

Questions?



CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

ADMINISTRATIVE REPORT

File #: 23-309 Meeting Date: 4/5/2023

Report Prepared by: Scott McBride, Director of Development Services

SUBJECT: Cancellation of April 19, 2023, and May 3, 2023, Planning Commission Meetings due to lack of items

ACTION:

Cancel the Planning Commission Meetings of April 19, 2023, and May 3, 2023



CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

ADMINISTRATIVE REPORT

Meeting Date: 4/5/2023 File #: 23-310

Planning Commission Staff Report

SUBJECT: Report by Director of Development Services of Upcoming Agenda Items

ACTION

Information only.



CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

ADMINISTRATIVE REPORT

File #: 23-311 Meeting Date: 4/5/2023

Planning Commission Staff Report

SUBJECT: Calendar of Meetings/Events

April	3	City Council, 6:00 p.m.
	5	Planning Commission, 7:00 p.m.
	17	City Council, 6:00 p.m.
	19	Planning Commission, 7:00 p.m. (To be cancelled)
	25	Bicycle and Pedestrian Advisory Commission, 4:00 p.m.
May	1	City Council, 6:00 p.m.
	3	Planning Commission, 7:00 p.m. (To be cancelled)
	15	City Council, 6:00 p.m.
	17	Planning Commission, 7:00 p.m.