

CITY OF MERCED
PLANNING & PERMITTING DIVISION

TYPE OF PROPOSAL: **General Plan Amendment #19-03, Site Utilization Plan (SUP)
Revision #3 to Planned Development #72, and Environmental Review
#19-28**

INITIAL STUDY: #19-28

DATE RECEIVED: September 26, 2019

LOCATION: Northeast corner of East Yosemite Avenue and G Street

ASSESSOR'S PARCEL NUMBERS: **231-040-004 AND 231-040-005**

Please forward any written comments by December 4, 2019 to:

Michael Hren, Principal Planner
City of Merced Planning & Permitting Division
678 West 18th Street
Merced, CA 95340
hrenm@cityofmerced.org

Applicant Contact Information:

Yosemite and G, LLC
1155 W. Shaw Ave., Ste. 104
Fresno, CA 93711-3748

General Plan and Zoning Designations

Current General Plan Designation: Commercial Office (CO) and High to Medium Density Residential (HMD) – refer to the General Plan and Zoning Map at Figure 3.

Current Zoning Designation: Planned Development (#72) – refer to the General Plan and Zoning Map at Figure 3.

Project Site

The proposed project is located at the northeast corner of Yosemite Avenue and G Street (Figures 1 and 2). The site is comprised of two parcels (APN's: 231-040-004 and 231-040-005) totaling approximately 21.5 acres (Figure 2). The surrounding land uses are shown on the map at Figure 2 and listed in the table below.

Surrounding Land	Existing Use of Land	Zoning Designation	City General Plan Land Use Designation
North	Mercy Medical Center and Vacant Lot	C-O	Commercial Office (CO)
South	Retail, Restaurants, Grocery (across Yosemite Avenue)	P-D #26	Neighborhood Commercial (CN)
East	Single-Family Residential	R-1-6, P-D #72	Low Density Residential (LD), High to Medium Density Residential (HMD), and Neighborhood Commercial (CN)
West	Merced College (across G Street)	R-1-6	School

Figure 1
Proximity Map

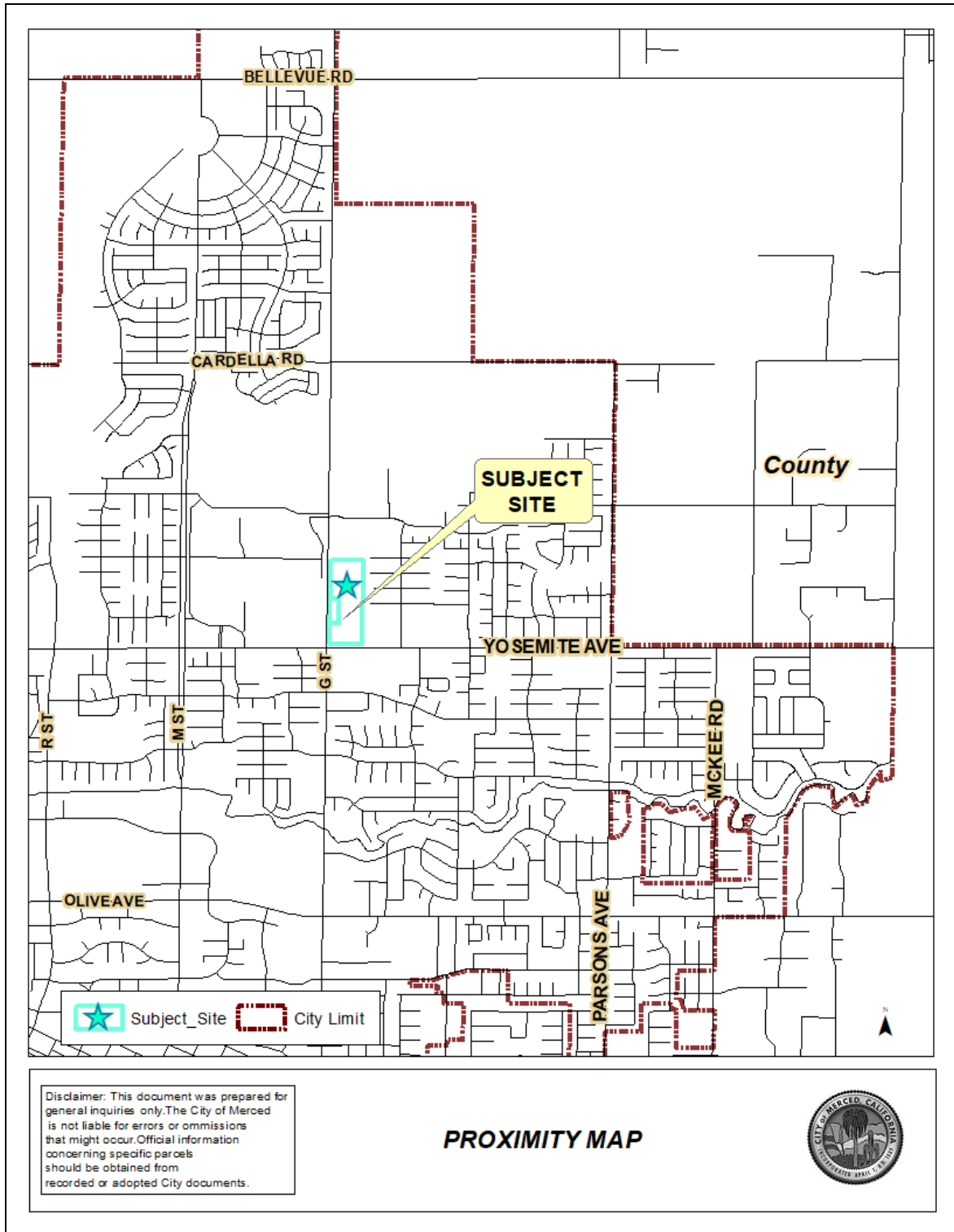
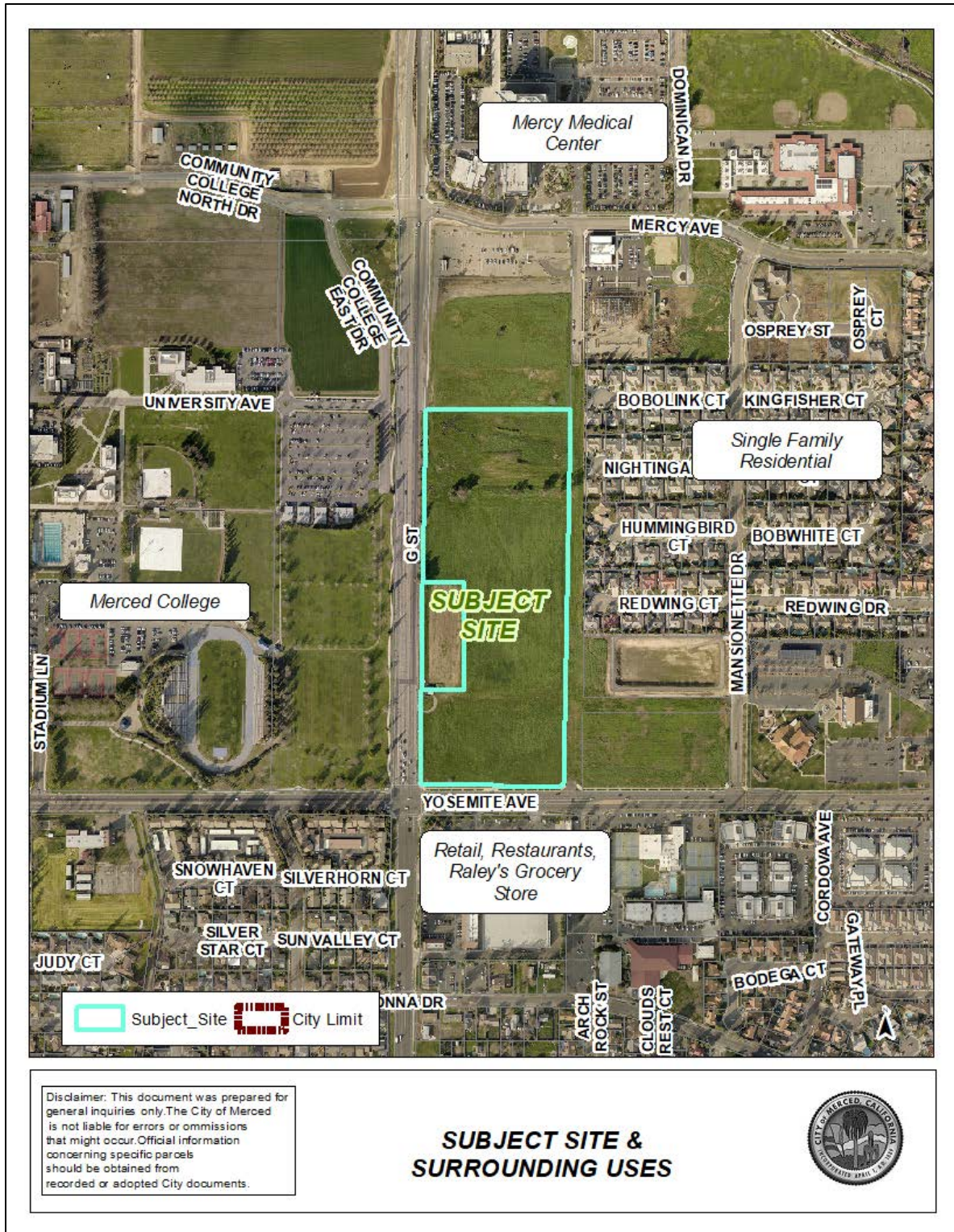


Figure 2
Subject Site & Surrounding Uses



Project Description

The proposed project includes a General Plan Amendment and Site Utilization Plan (SUP) Revision for 21.5 acres of land on the Subject Site (refer to the map at Figure 3). As shown on the Proposed Land Use Changes Map at Figure 3, the site has two General Plan designations of Commercial Office (CO) and High to Medium Density Residential (HMD); it also has a Zoning designation of Planned Development (P-D) #72. The proposed General Plan Amendment would change the General Plan designation to Neighborhood Commercial (CN).

The Site Utilization Plan (SUP) Revision includes changes to a number of aspects of Planned Development #72, including a four-story hotel of approximately 80,104 square feet and 128 rooms, and two medical office buildings totaling approximately 66,465 square feet. It also includes 44 Units of Multi-Family Residential Housing totaling approximately 29,887 square feet, fast food uses with drive-through windows totaling approximately 5,494 square feet, and a mixed-use development with approximately 59,616 square feet of other retail and office uses, shown on the Site Plan at Figure 4.

The Zoning Ordinance describes uses that are allowed within a specific zone “by right” and those allowed with a discretionary review, such as a Conditional Use Permit. Under ordinary circumstances, drive-through sales, alcoholic beverage sales in restaurants for on-site consumption, multi-family dwellings, and gas and service stations are allowed within a C-N zone with approval of a Conditional Use Permit. Day care centers require a Minor Use Permit and hotels are listed as “use not allowed” in an ordinary C-N zone.

Additionally, Section 20.32 of the Zoning Ordinance sets out the requirements for interface regulations to help integrate potentially incompatible zones. This section requires Site Plan Review be obtained prior to construction on a parcel with a Neighborhood Commercial (C-N) zone when it is adjacent to or across the street from an R-1-6 zone. In this case, several properties to the east are zoned R-1-6. The uses in this area include single-family dwellings located on approximately 0.2-acre lots. This project is designed in such a way that may at a future time be desirable to separate the parcels, as noted by the “proposed parcel line” notations on the Site Plan, shown at Figure 4; however, no parcel modifications have been submitted at this time.

Instead of the typical requirements for additional Conditional Use Permits and Site Plan Review for interface, this Site Utilization Plan process will address interface regulations, additional review, and permissibility of specific uses in Planned Development #72. These modifications apply in the portions of Planned Development #72 covered by the subject site parcels (Assessor’s Parcel Number 231-040-004 and 231-040-005) in the following manner, taking into consideration that the adjacency of parcels may change in the event of parcel modifications in the future:

- Multi-family housing will require a Site Plan Review Permit rather than a Conditional Use Permit, and if on a parcel abutting or across from (per the definitions in Section 20.32.020 of the Zoning Ordinance) a property with R-1 zoning, will require a publicly noticed public hearing at the Site Plan Review meeting per Section 20.32 of the Zoning Ordinance.
- The hotel, rather than being a “use not allowed,” shall require a Site Plan Review Permit rather than a Conditional Use Permit, and if on a parcel abutting or across from (per the definitions in Section 20.32.020 of the Zoning Ordinance) a property with R-1 zoning, will require a publicly noticed public hearing at a Site Plan Review meeting per Section 20.32 of the Zoning Ordinance, but will not require an additional Conditional Use Permit.

- Restaurants selling alcohol for consumption on-site will require only a Site Plan Review Permit use without further requirement for a Conditional Use Permit or public hearing for interface considerations.
- Gas and service stations will require only a Site Plan Review Permit without further requirement for a Conditional Use Permit unless the gas and service station wishes to sell alcohol, in which case a Conditional Use Permit is required, and a letter of Public Convenience and Necessity may be required, but an additional public hearing for interface consideration is not required.
- Day care centers require only a Site Plan Review Permit without further requirement for a Minor Use Permit or public hearing for interface considerations.
- Drive-through and drive-up sales require only a Site Plan Review Permit without further requirement for a Conditional Use Permit or public hearing for interface considerations.
- General retail uses, professional offices, restaurants, and banks require only a Site Plan Review Permit without further requirement for a public hearing for interface considerations.

Figure 3 - Proposed Land Use Changes

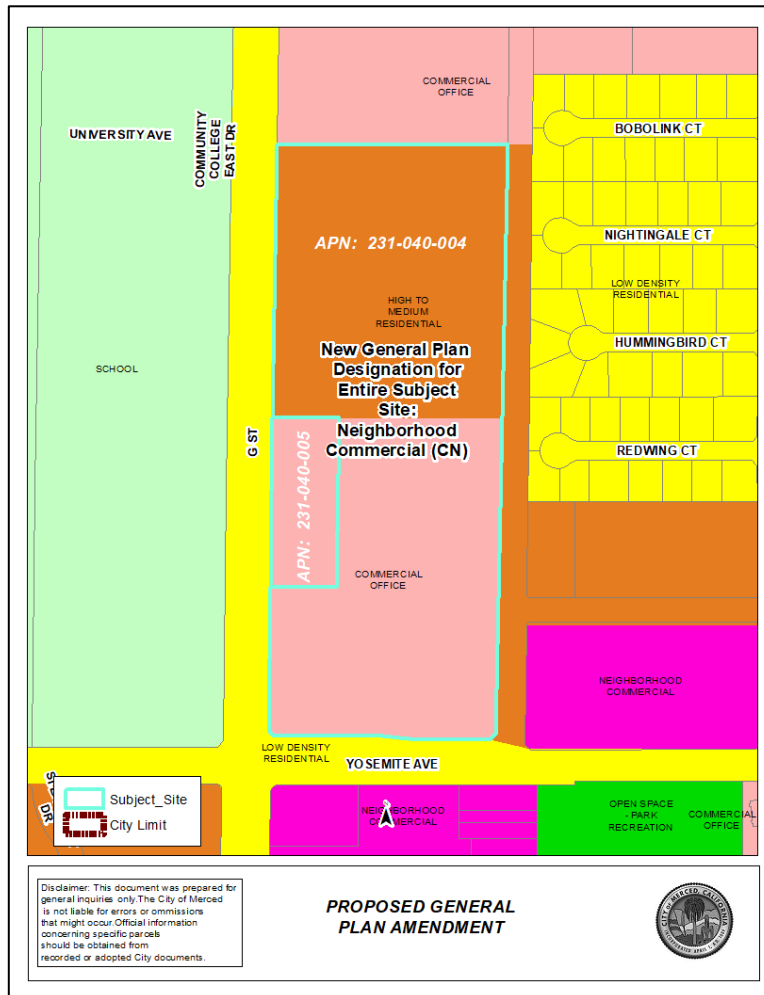
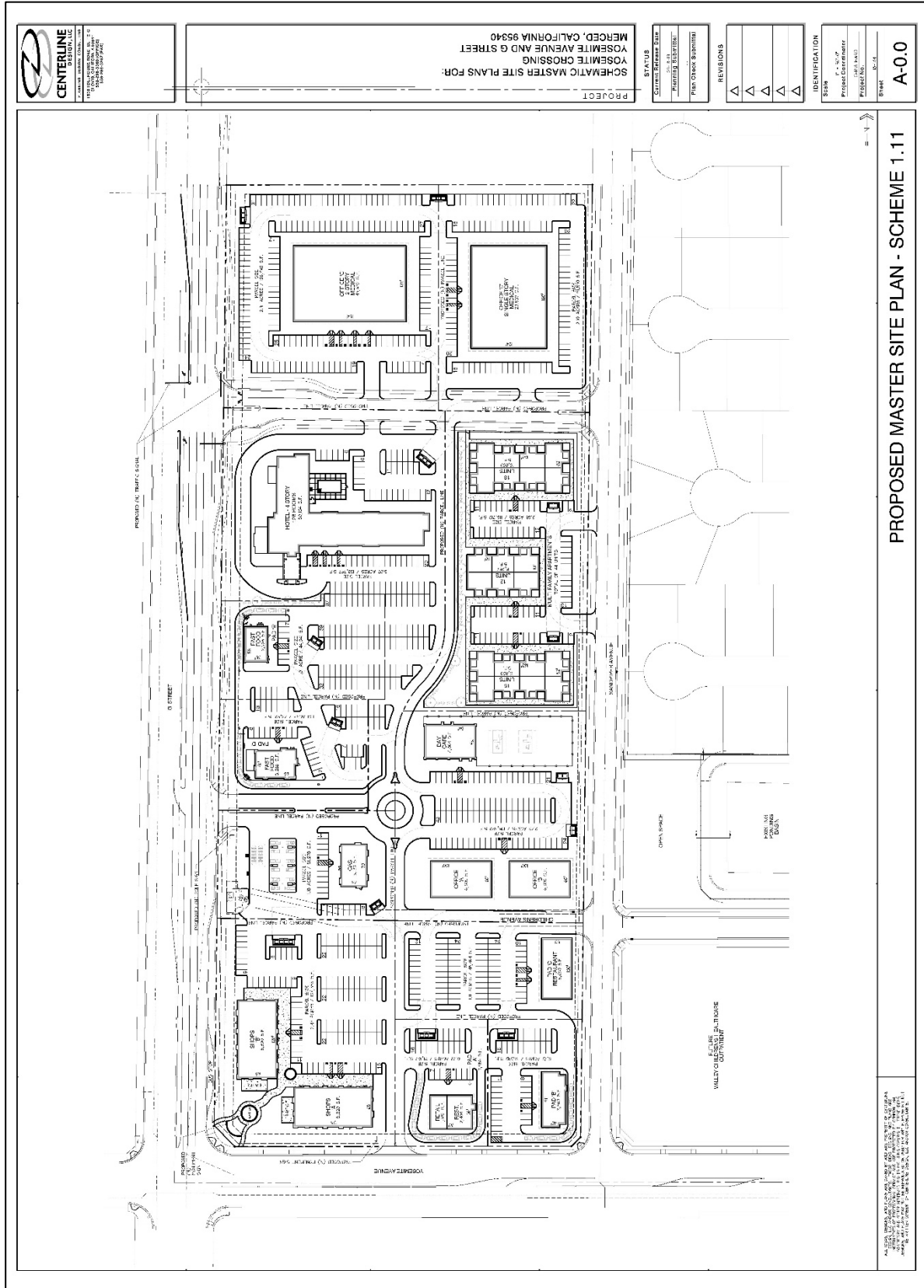


Figure 4 - Site Plan



CENTERLINE
 CONSULTING ENGINEERS
 10000 CENTERLINE DRIVE, SUITE 200
 SAN JOSE, CALIFORNIA 95131
 (408) 253-1234
 WWW.CECONLINE.COM

PROJECT
 SCHEMATIC MASTER SITE PLANS FOR
 YOSEMITE CROSSING
 YOSEMITE AVENUE AND G STREET
 MENLO PARK, CALIFORNIA 94025

DATE: 08/14/19
PROJECT: YOSEMITE CROSSING
SCALE: AS SHOWN

NO.	DATE	DESCRIPTION

DESIGNED BY: [Name]
CHECKED BY: [Name]
DATE: 08/14/19

A-0.0

PROPOSED MASTER SITE PLAN - SCHEME 1.11

THIS PLAN IS THE PROPERTY OF CENTERLINE CONSULTING ENGINEERS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF CENTERLINE CONSULTING ENGINEERS.

Figure 5 – Rendering of Retail Buildings at corner of Yosemite and G

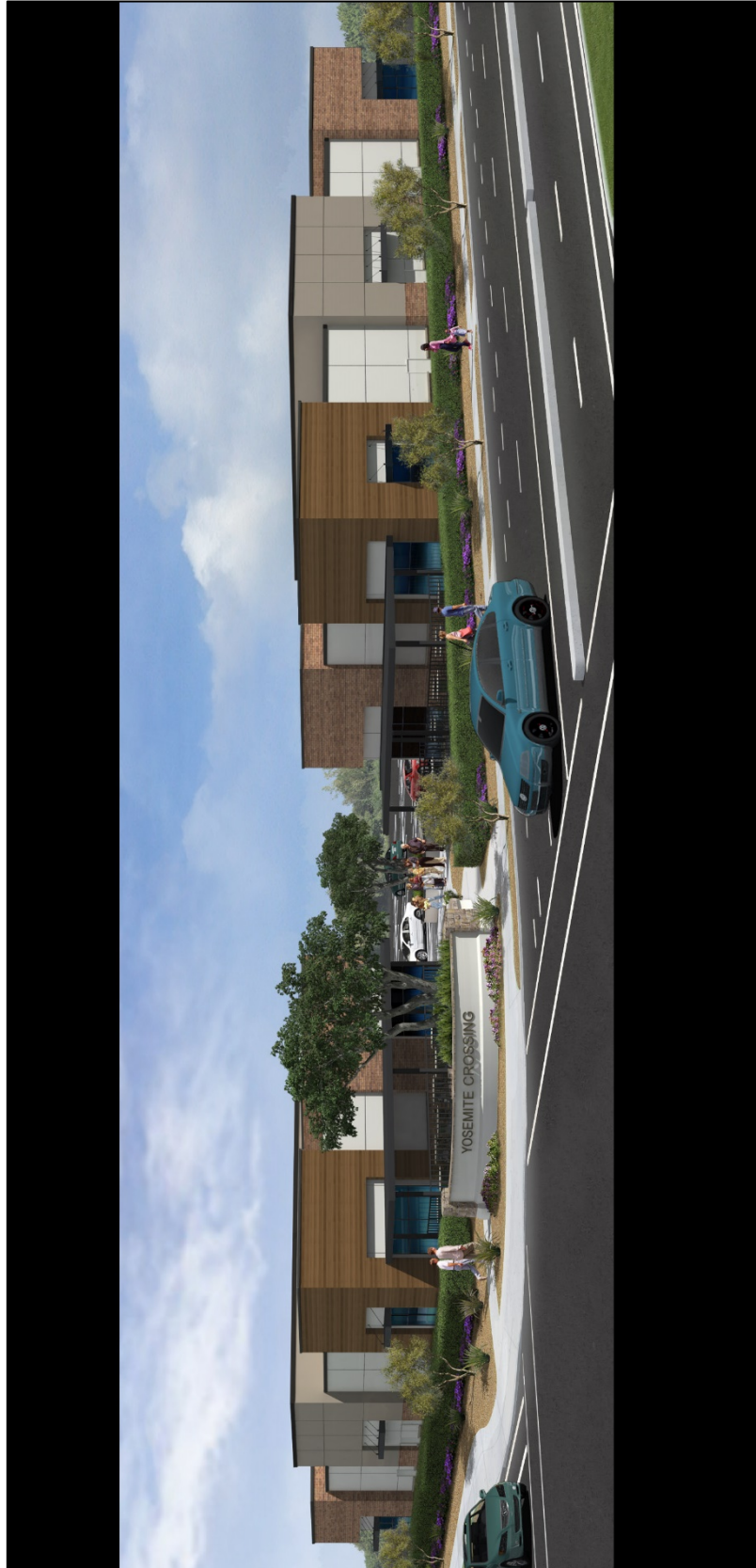
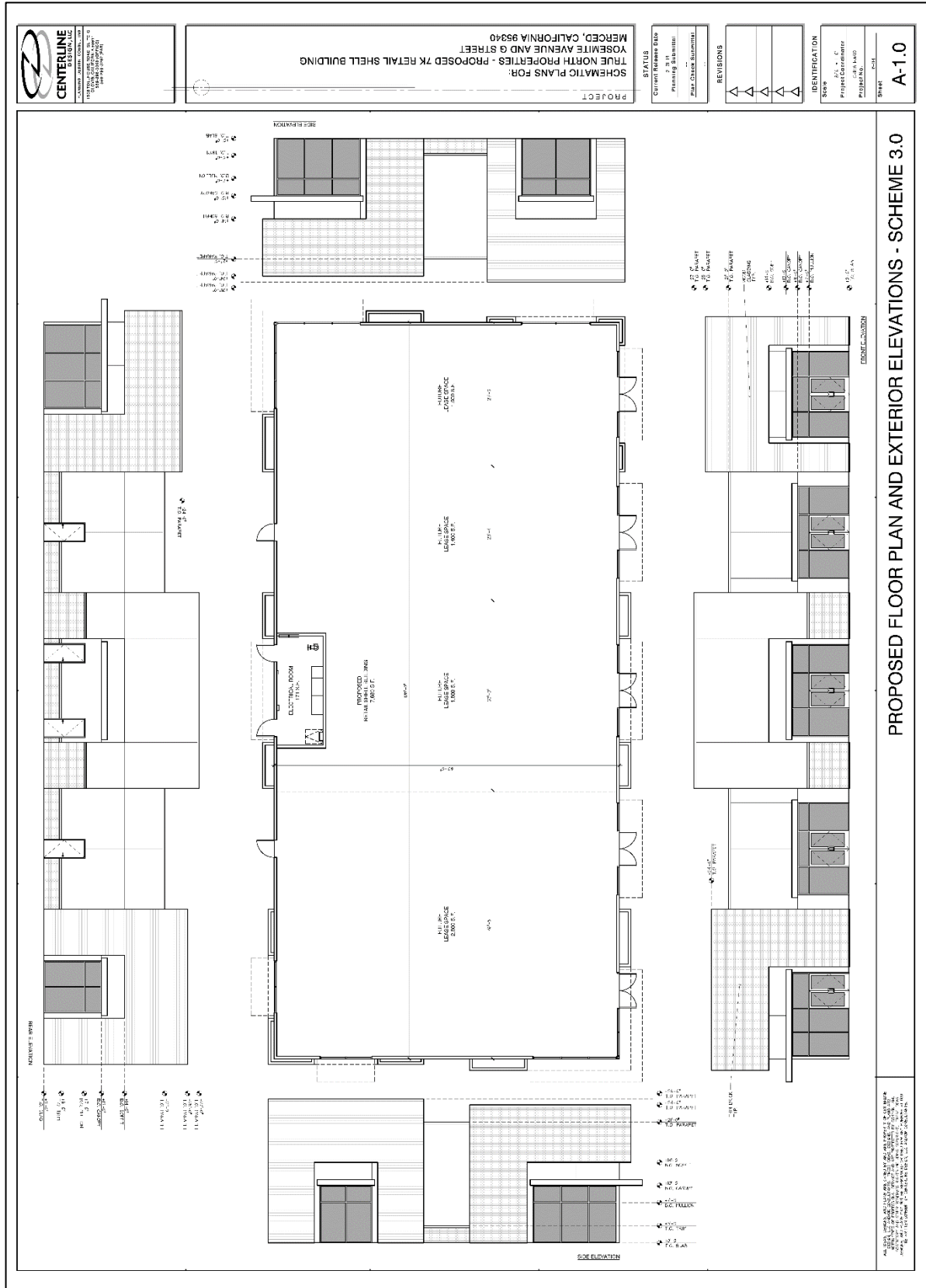


Figure 6- Typical Elevations and Floor Plans



Background

This site was previously entitled through General Plan Amendment #10-02, Revision #3 to the Northeast Yosemite Specific Plan, Zone Change #410, and Establishment of Planned Development (P-D) #72 in 2010. These items changed the General Plan designation of the 11.5-acre parcel at the northeast corner of Yosemite Avenue and G Street from High-Medium Density (HMD) Residential to Commercial Office (CO) and allowed for a curb-cut on G Street approximately 520 feet north of the intersection at G Street and Yosemite Avenue. The Planned Development was established and the zoning changed for an area including the 11.5-acre parcel at the northeast corner of Yosemite Avenue and G Street, the adjacent parcel to the north [designated High-Medium Density (HMD) Residential], and the adjacent parcel to the east (also HMD Residential).

The first phase of the Planned Development was to be the development of a commercial office center at the northeast corner of G Street and Yosemite Avenue. The second and third phases were for the adjacent residential parcels to the north and east.

The plans at the time were to develop the 11.5-acre parcel with the following uses:

Building	Use	Size
Office Building "A"	General and/or Medical Office	7,400 s.f.
Office Building "B"	General and/or Medical Office	2,540 s.f.
Office Building "B"	Fast-Food Restaurant (no drive-thru allowed)	2,500 s.f.
Office Building "C"	General and/or Medical Office	4,800 s.f.
Office Building "D"	General and/or Medical Office	4,800 s.f.
Bank	Bank	4,536 s.f.
Restaurant	Family-style Restaurant (approximately 150 seats).	7,930 s.f.
Hotel	2 or 3 story – 84 units	24,000 s.f.
Total		75,346 s.f.

The southern half of the parcel to the east (northeast corner of Yosemite Avenue and the future Sandpiper Drive) was sold to the City. The remaining northern half of the parcel and the parcel north of the proposed commercial development were planned for high-medium density residential uses.

With this change, an additional environmental review (Initial Study #14-32) was prepared and also resulted in a Mitigated Negative Declaration (MND). The Mitigation Monitoring Program for Initial Study #10-06 applied to this project.

The project site was also part of General Plan Amendment #11-05, and Site Utilization Plan (SUP) Revision #1 to Planned Development (P-D) #72 in 2011. The General Plan Amendment was to allow an exception to the General Plan Policies addressing the spacing of driveways along arterial roadways (Policies T-1.3.j and T-1.3.k) and the Site Utilization Plan Revision allowed the relocation of the drainage basin previously approved for the northeast side of the parcel located at the corner of G Street and Yosemite Avenue to the newly created parcel between the future Sandpiper Avenue and Mansionette Drive, and the construction of five additional office buildings on the parcel at Yosemite Avenue and G Street.

A. 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 CEQA (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.

B. CHECKLIST FINDINGS

- A. An on-site inspection was made by this reviewer on November 7, 2019.
- B. The checklist was prepared on November 8, 2019.
- C. 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.

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 #19-28 plans to incorporate goals, policies, and implementing 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. This site was included in General Plan Amendment #10-02, Revision #3 to the Northeast Yosemite Specific Plan, Zone Change #410, and Establishment of Planned Development (P-D) #72, as well as General Plan Amendment #11-05, and Site Utilization Plan (SUP) Revision #1 to Planned Development (P-D) #72.

Project-level environmental impacts 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.

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C. ENVIRONMENTAL IMPACTS:

Will the proposed project result in significant impacts in any of the listed categories? Significant impacts are those which 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.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Less than Significant" or "Less than Significant with Mitigation Incorporated," as indicated by the checklist on the following pages.

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

DETERMINATION

On the basis of this initial evaluation:

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

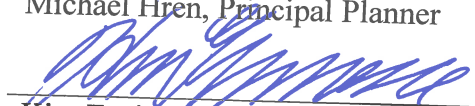
Prepared by:



Michael Hren, Principal Planner

11/14/19
Date

Approved by:



Kim Espinosa, Planning Manager
Environmental Coordinator, City of Merced

11/14/19
Date

The project site is comprised of two parcels totaling approximately 21.5 acres located at the northeast corner of East Yosemite Avenue and G Street. The site is currently vacant. The site is surrounded by urban development consisting of single-family homes to the east, Merced College to the west across G Street, Mercy Medical Center to the north, and commercial businesses to the south across Yosemite Avenue.

The site is not located within a designated scenic corridor and there are no scenic vistas visible from the site. The topography of the site is level and there are no outstanding features noted.

The proposed project would include the construction of twelve single-story buildings, four two-story buildings, and a single four-story hotel. The buildings would be dispersed throughout the site with parking surrounding the buildings (refer to the site plan at Figure 4, and proposed renderings and elevations at Figures 5 and 6, on pages 7 through 9).

The site would be enhanced with landscaping along the perimeter and between the buildings as well as parking lot trees.

Parking lot lighting and exterior building lighting would be added to the site.

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

Impact Analysis

Would the project:

- a) *Have a substantial adverse effect on a scenic vista?*

The site is not designated as a scenic vista and is not located near any designated scenic vistas. Therefore, the project would not have any adverse impacts on a scenic vista and there would be **no impact**.

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

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.

- c) *If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project site is located within an urbanized area with development surrounding the site. The current general plan designation for the site is split between Commercial Office (CO) and High to Medium Density Residential (HMD). The proposed General Plan Amendment would change the site to Neighborhood Commercial (C-N). With the exception of the four-story hotel, the proposed buildings would not exceed the maximum height allowed within a C-N zone when directly across from or adjacent to a residential zone (35 feet) Per Table 20.10-2 of the Zoning Ordinance. The City's zoning ordinance does not regulate scenic quality other than building height and general aesthetics. Because the site is currently vacant and has been for many years, the development of the site would improve the aesthetic value of the site. Additionally, existing buildings in the vicinity within a quarter of a mile are between three and seven stories tall, including the Mercy Medical Center buildings and the Merced College Stadium. Based upon these buildings' existing heights, the addition of a single four-story (approximately 50 ft.) structure would have negligible impact on the visual character of the site, and would be a **less than significant impact**.

- d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The General Plan Amendment and Site Utilization Plan Revision would not create any additional source of light or glare that would affect views in the area. The construction of the mixed-use development on the site would add artificial lighting to the area. The parking areas and buildings would add artificial lighting to the site and area. However, given the fact that the site is surrounded by urban development and is currently zoned, in part, for commercial development, the impacts would be less than significant. The proposed project may result in low level, off-site light and glare from street lights, security lights, parking lot lighting and reflective material. Off-site effects depend upon the type of lighting fixtures installed and building materials used to construct the buildings. All lighting would be required to meet the California Energy Code and would be required to be shielded so it does not spillover onto adjacent properties as required by the Energy Code. The addition of lighting would be a **less than significant impact**.

2. 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 \$3.4 billion in 2017. The County’s leading agriculture commodities include milk, chickens, almonds, cattle and calves, tomatoes, and sweet potatoes.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2. <u>Agriculture and Forestry Resources.</u>				
Will the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and monitoring Program of the California Resources Agency, to non - agriculture?				✓
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forest land [as defined in Public Resources Code Section 12220(g)], timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production [as defined by Government Code Section 51104(g)]?				✓
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				✓

Impact Analysis

Would the project:

- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and monitoring Program of the California Resources Agency, to non -agriculture?*

The project site is located within the City Limits of Merced and was annexed in 1992. 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 2018 Merced County Important Farmlands Map, the site is classified as “Farmland of Local Importance” (Figure 7A). Therefore, the proposed General Plan Amendment, Zone Change, and Conditional Use Permit would not have any effect on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The proposed project would not affect protected farmland and there would be **no impact**.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

There are no Williamson Act contract lands in this area. Therefore, there is **no impact**.

- c) *Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

There is no forest land or timberland on the site. The project would not conflict with any zoning or plan for forest land or timberland. Therefore, **there is no impact**.

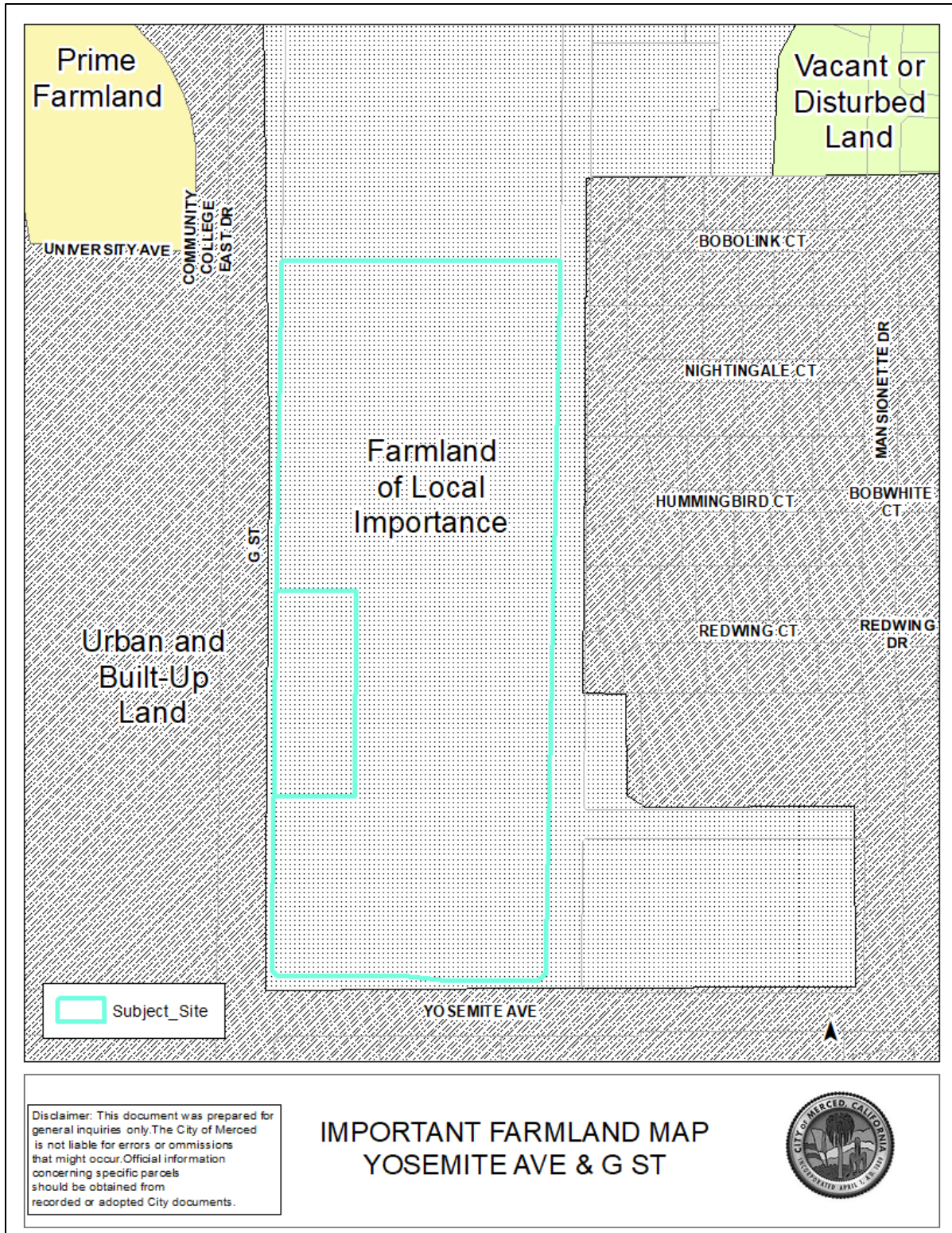
- d) *Result in the loss of forest land or conversion of forest land to non-forest use?*

There is no forest land on the site. **No impact**.

- e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

The nearest land being used for farming is to the west, being used by Merced College for agricultural education purposes. The proposed development would not cause the use of this land to change. Therefore, there is **no impact**.

Figure 7A - Important Farmland Map



3. Air Quality

SETTING AND DESCRIPTION

The San Joaquin Valley Air Pollution Control District (SJVAPCD) will review the project to assess the impact to air quality and to establish acceptable mitigation measures. Hence, the City recognizes that additional mitigation measures may be applied to subsequent phases of the development of this area. While the action of the SJVAPCD is independent of City reviews and actions, their process allows the City to review proposed mitigation measures that could affect project design and operation. Any proposed changes are subject to approval by the City.

The project is located in the San Joaquin Valley Air Basin (SJVAB), which occupies the southern half of the Central Valley and is approximately 250 miles in length and, on average, 35 miles in width. The Coast Range, which has an average elevation of 3,000 feet, serves as the western border of the SJVAB. The San Emigdio Mountains, part of the Coast Range, and the Tehachapi Mountains, part of the Sierra Nevada, are both located to the south of the SJVAB. The Sierra Nevada extends in a northwesterly direction and forms the eastern boundary of the SJVAB. The SJVAB is basically flat with a downward gradient to the northwest.

The climate of the SJVAB is strongly influenced by the presence of these mountain ranges. The mountain ranges to the west and south induce winter storms from the Pacific 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 the mountain where precipitation is noticeably less because moisture in the air is removed in the form of clouds and precipitation on the windward side. In addition, the mountain ranges block the free circulation of air to the east, resulting in the entrapment of stable air in the valley for extended periods during the cooler months.

Winter in the SJVAB is characterized as mild and fairly humid, and the summer is hot, dry, and cloudless. During the summer, a Pacific high-pressure cell is centered over the northeastern Pacific Ocean, resulting in stable meteorological conditions and a steady northwesterly wind.

For additional information, please refer to the Air Quality Analysis prepared by LSA found at Appendix A.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. <u>Air Quality.</u> Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			✓	
c) Expose sensitive receptors to substantial pollutant concentrations?		✓		
d) Create objectionable odors affecting a substantial number of people?			✓	

Impact Analysis

Would the project:

- a) *Conflict with or obstruct implementation of the applicable air quality plan?*

Per the Air Quality Analysis found at Appendix A, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. Therefore, there would be **no impact**.

- b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

Per the Air Quality Analysis found at Appendix A, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant. Therefore, this impact is considered **less than significant**.

- c) *Expose sensitive receptors to substantial pollutant concentrations?*

Construction of the proposed project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). As shown in Table 10 of the Air Quality Analysis found at Appendix A, construction emissions associated with the project would not exceed the SJVAPCD's thresholds for ROG, NO_x, CO, SO_x, PM_{2.5}, or PM₁₀ emissions. In addition to the construction period thresholds of significance, the SJVAPCD has implemented Regulation VIII measure for dust control during construction. These control measures are intended to reduce the amount of PM₁₀ emissions during the construction period. Implementation of mitigation measure AIR-1 would ensure that the proposed project complies with Regulation VIII and further reduces the short-term construction period air quality impacts.

Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. Exposure from diesel exhaust associated with construction activity contributes to both cancer and chronic non-cancer health risks. According to the SJVAPCD, a project would result in a significant impact if it would expose sensitive receptors to TACs resulting in an increased cancer risk greater than 20.0 in one million or an increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute).

As shown in Table 12 of the Air Quality Analysis found at Appendix A, the risk of unmitigated inhalation health risks from project construction to off-site receptors for carcinogenic inhalation health risk would be 45.3 in one million, which would exceed the SJVAPCD cancer risk threshold of 10 in one million. The highest chronic hazard index would be 0.041, which would not exceed the threshold of 1.0. Implementation of Mitigation Measure AIR-2 would be required to reduce substantial pollutant concentrations during project construction and would reduce this impact of the project to a less-than-significant level. As shown in Table 13, the risk with implementation of Mitigation Measure AIR-2 would be 8.8 in one million, which would not exceed the SJVAPCD cancer

risk of 10 in one million threshold. Therefore, with implementation of Mitigation Measure AIR-2, construction of the project would not exceed SJVAPCD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations.

In addition, once the proposed project is constructed, the project would not be a significant source of long-term operational emissions. All gasoline dispensing operations associated with the project would be subject to SJVAPCD Rule 4622 which would limit emissions of gasoline vapors from the transfer of gasoline into motor vehicle fuel tanks. Therefore, with implementation of Mitigation Measure AIR-2, the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Compliance with these mitigation measures would reduce this impact to **less than significant with mitigation**.

Mitigation Measures:

AIR-1) Consistent with SJVAPCD Regulation VIII (Fugitive PM10 Prohibitions), the following controls are required to be included as specifications for the proposed project and implemented at the construction site:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of out-door storage piles, said piles shall be effectively stabilized of fugitive dust emission utilizing sufficient water or chemical stabilizer/suppressant.

AIR-2) The project contractor shall ensure all off-road diesel-powered construction equipment of 50 horsepower or more used for the project meet the California Air Resources Board (CARB) Tier 2 with a Level 3 Diesel Particulate Filter emissions standards or equivalent.

d) *Create objectionable odors affecting a substantial number of people?*

During construction, the various diesel powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the project site. The potential for diesel odor impacts is therefore considered less than significant. In addition, the proposed residential and commercial uses are not expected to produce any offensive odors that would result in frequent odor complaints. All gasoline dispensing operations associated with the project would be subject to SJVAPCD Rule 4622 which would limit emissions of gasoline odors from the transfer of gasoline into motor vehicle fuel tanks. Additionally, the siting of the proposed gas station at the west side of the property makes the possibility of odors reaching the residential properties to the east unlikely. With G Street between the subject site and Merced College to the west, the potential impact of odors on the College is similarly unlikely. The proposed project would not create objectionable odors affecting a substantial number of people during project construction or operation, and this impact is considered **less than significant**.

4. Biological Resources

SETTING AND DESCRIPTION

The plan area is located in the Central California Valley eco-region. 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 and the San Joaquin Valley to the south and it ranges between the Sierra Nevada Foothills to the east to 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 site as containing any seasonal or non-seasonal wetland or vernal pool areas. Given the adjacent, built-up, urban land 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
4. <u>Biological Resources.</u> Would the project:				
a) 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?		✓		
b) 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?			✓	
c) Conflict with any local policies or ordinance protecting biological resources, such as a tree preservation policy or ordinance?				✓
d) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓
e) Conflict with any local policies or ordinance protecting biological resources, such as a tree preservation policy or ordinance?				✓
f) <i>Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</i>				✓

Impact Analysis

Would the project:

- a) *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?*

The proposed project would not have any direct effects on animal life by changing the diversity of species, number of species, reduce any rare or endangered species, introduce any new species, or deteriorate 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, which is surrounded by developed urban uses, does not contain any rare or endangered species of plant or animal life.

A biological resources inventory was prepared as part of the environmental review for the annexation of this area. Cross-referencing the list of wildlife present on the entirety of the site at that time with the Special Animals List from the California Natural Diversity Database (CNDD), August 2019 version, the only animals to be on both lists were the White-tailed Kite and Black-tailed Jack Rabbit. However, the CNDD list specifies the San Diego black-tailed Jack Rabbit, which according to the San Diego Management & Monitoring Program ranges from the Los Padres National Forest southward and west of the peninsular range into northwestern Baja California, Mexico. Based on this range, it is unlikely that the San Diego Black-tailed Jack Rabbit is present in the subject site. Additionally, the potential presence of the White-tailed Kite on the site in the modern environment is unlikely. The environmental report indicated that "these raptors perch (and some may nest) in the trees on the project site." At the time of the report, the site contained several rows of trees that are no longer present, making perching and nesting activities significantly reduced from the time of the original report. There are very few remaining trees on the site.

The report provided two mitigation measures that are applicable to this site. Based on this information, with continued practice of the mitigation measures, the project will not have a substantial adverse effect, either directly or through habitat modification on any species identified as a candidate, sensitive, or special status species. This impact would be **less than significant with mitigation**.

Mitigation Measures:

BIO-1) Impacts of the proposed project upon vegetation and wildlife habitat can be mitigated by preserving as many of the existing trees as possible (if any still exist) and incorporating them into the proposed project. The Cottonwood trees have the greatest wildlife habitat value, although they are generally less visually attractive and in poorer condition than either the Olive trees or the Eucalyptus trees. However, in spite of appearances, a Cottonwood, even in poor condition, provides good wildlife habitat.

Impacts to wildlife habitat can also be reduced by using native plant materials in landscaping to the greatest extent possible. Native plant species provide the best wildlife habitat since native vegetation has co-evolved with the wildlife and affords food sources for which wildlife is best adapted. Native species cannot always be used to produce the desired form and floral characteristics, but some native species can usually be incorporated.

<i>Goal Area OS-1: Open Space for the Preservation of Natural Resources</i>	
Policies:	
OS-1.1	Identify and mitigate impacts to wildlife habitats which support rare, endangered, or threatened species.

- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

The proposed project would not have any direct effects on riparian habitat or 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 not located adjacent to any of these areas or any water way. Additionally, mitigation measures were adopted in the environmental review for annexation of this area, for project sites that abut Cottonwood Creek and the Sells Lateral Irrigation Channel. Because this project site abuts neither the creek nor the irrigation channel, these mitigation measures are not applicable to this project. Therefore, the project would have a **less than significant impact** on riparian habitat.

- c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The project site would not have any direct effect on wetlands as no wetlands have been identified in this area. The area surrounding the subject site has been modified from its original state and is developed with urban uses. There is **no impact**.

- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

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. There is **no impact**.

- e) *Conflict with any local policies or ordinance protecting biological resources, such as a tree preservation policy or ordinance?*

The proposed project would not conflict with local policies and/or ordinances protecting biological resources. There are few remaining trees present on the site. The City's General Plan does not identify this site as being a biological resource. Therefore, there is **no impact**.

- f) *Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The proposed project would not have any effects on 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. There is **no impact**.

5. 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. Quite frequently, they are small outcroppings visible on the earth’s surface. While the surface outcroppings are important indications of paleontological resources, the geologic formations are the most important. There are no known sectors within the project area known to contain sites of paleontological 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 maintained by the Merced Historical Society. There are no listed historical sites on the Project site.

According to the environmental review conducted for the annexation of this area, there are no listed historical sites and no known sectors within the project area known to contain sites of paleontological or archeological significance. However, mitigation measures were adopted to ensure proper steps are taken in the event evidence of archeological artifacts area discovered during construction.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. <u>Cultural Resources.</u> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		✓		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		✓		
c) Disturb any human remains, including those interred outside of formal cemeteries?		✓		

Impact Analysis

Would the project:

- a) *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

The project would not alter or destroy any historic archaeological site, building, structure, or object, nor would it alter or affect unique ethnic cultural values or restrict religious or sacred uses.

As a part of the annexation to the City of Merced that these parcels were a part of, Marcus Arguelles of the Merced College Archaeology Department was contracted to conduct limited subsurface testing on the area of the Northeast Specific Plan. A series of ten auger test units was laid out and ascertained that no cultural materials were observed in the course of conducting the auger testing. Additionally, the texture and color of the soil from each unit did not exhibit any of the properties of an anthrosoil. The test concluded that the possibility of buried archaeological deposits in the area are minimal.

An earlier study related to the same project noted that ground contours and the presence of hydrologic features suggested that three loci may yield significant prehistoric material. Locus 1 and Locus 2 were both in the vicinity of the Cottonwood Creek, which is outside the subject site for this project. Locus 3 was noted to be, “located in the southerly portion of the site. It is highly possible that deeply buried subsurface deposits could yield significant artifactual material in this area.” While the locus is never fully shown on a map or described with greater locational detail, the subject site is in the southerly portion of the Northeast Specific Plan. While it is unclear where the potential locus precisely resides, an additional thirty years of inattention and laying vacant have reduced the likelihood that valuable cultural materials will be found even further. Adhering to Mitigation Measure CUL-1 reduces the danger to cultural resources to less than significant.

Additionally, a cultural resources records search was conducted by the Central California Information Center (CCIC) at California State University, Stanislaus as part of the City’s General Plan update. No historic resources were found at or near the project site. The impact of this project would be less than significant. However, as part of the Environmental

Impact Report prepared for this site as part of the annexation process, mitigation measures were applied to ensure no cultural resources would be disturbed. Since the creation of that Environmental Impact Report, the standard for these mitigation measures has changed, as reflected in Mitigation Measure CUL-1, CUL-2, and CUL-3. This project would be required to comply with those mitigation measures. Compliance with these mitigation measures would reduce this impact to **less than significant with mitigation**.

Mitigation Measures:

- CUL-1)** If unknown pre-contact or historic-period archaeological materials are encountered during project activities, all work in the immediate vicinity of the find shall halt until a qualified archaeologist can evaluate the find and make recommendations.

Cultural resources materials may include pre-contact resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock, as well as historic resources such as glass, metal, wood, brick, or structural remnants. If the qualified archaeologist determines that the discovery represents a potentially significant cultural resource, additional investigations shall be required to mitigate adverse impacts from project implementation. These additional studies may include, but are not limited to, recordation, archaeological excavation, or other forms of significance evaluations.

The applicant shall inform its contractor(s) of the sensitivity of the project site for archaeological deposits, and include the following directive in the appropriate contract documents:

“The subsurface of the construction site is sensitive for archaeological deposits. If archaeological deposits are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified archaeologist shall assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any archaeological materials. Archaeological deposits can include, but are not limited to, shellfish remains; bones, including human remains; and tools made from, obsidian, chert, and basalt; mortars and pestles; historical trash deposits containing glass, ceramics, and metal artifacts; and structural remains, including foundations and wells.”

The City shall verify that the language has been included in the grading plans prior to issuance of a grading permit or other permitted project action that includes ground-disturbing activities on the project site.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The project would not alter or destroy any prehistoric archaeological site, building, structure, or object, nor would it alter or affect unique ethnic cultural values or restrict religious or sacred uses.

A cultural resources records search was conducted by the Central California Information Center (CCIC) at California State University, Stanislaus as part of the City's General Plan update. No archeological resources were found at or near the project site. Therefore, this impact would be **less than significant with mitigation**.

Mitigation Measure:

CUL-2) Implementation of Mitigation Measure CUL-1.

c) *Disturb any human remains, including those interred outside of formal cemeteries?*

Disturbance of human remains interred outside of formal cemeteries would result in a significant impact. If human remains are identified during project construction, Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code shall apply, appropriate. Therefore, implementation of Mitigation Measure CUL-3 reduce potential impacts to human remains to **less than significant with mitigation**.

Mitigation Measure:

CUL-3) If human remains are identified during construction and cannot be preserved in place, the applicant shall fund: 1) the removal and documentation of the human remains from the project corridor by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology; 2) the scientific analysis of the remains by a qualified archaeologist, should such analysis be permitted by the Native American Most Likely Descendant; and, 3) the reburial of the remains, as appropriate. All excavation, analysis, and reburial of Native American human remains shall be done in consultation with the Native American Most Likely Descendant, as identified by the California Native American Heritage Commission.

6. Energy

SETTING AND DESCRIPTION

Appendix F (Energy Conservation) of the CEQA Guidelines provides that potentially significant energy implications of a project must be considered in an EIR, with particular emphasis on avoiding or reducing the inefficient, wasteful and unnecessary consumption of energy. As such, this discussion considers the proposed Project's consumption of energy resources, particularly electricity, natural gas, and transportation fuels, during both the project's construction and operational phases.

The proposed mixed use project would be built to meet the California Energy Code requirements and may include the installation of solar panels. Additionally, the project would provide bicycle parking and promote the use of active transportation and public transit to help reduce energy consumed for transportation. The site is located within ¼-mile of a transit stop. The project would incorporate recycling procedures for the disposal of recyclable materials in accordance with the City's recycling ordinance and AB 341.

According to data from the U.S. Energy Information Administration, apartment buildings with 5 or more units typically use less energy than other home types. Households in apartment buildings

with 5 or more units use approximately 50% less energy as other types of homes. The lower energy consumption can be attributed, in part to smaller living spaces and units being bordered by other units or common areas which reduces exposure to outside temperatures and the number of windows in the unit.

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

Impact Analysis

- a) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

The project is not expected to result in potentially significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. The project would be constructed on an in-fill lot that has access to existing electrical and telecommunications services. No new transportation, electrical, or telecommunications facilities are required to support the project leading to unnecessary consumption of energy resources. Compliance with the California Green Building Standards Code, AB 341- Solid Waste Diversion, and the San Joaquin Valley Air Pollution Control District standards during construction and operation of the project will further ensure the efficient consumption of energy resources. Implementation of these regulations would reduce impacts to **less than significant with mitigation.**

Mitigation Measure:

- ENE-1)** The applicant shall comply with all applicable California Energy Code, AB 341, and San Joaquin Valley Air Pollution Control District rules and regulations regulating energy efficiency and waste.
- b) *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

With the implementation of the regulations described in item “a” above, the proposed project would not conflict with a state or local plan for renewable energy or energy efficiency. This impact is **less than significant with mitigation.**

- ENE-2)** Implementation of Mitigation Measure ENE-1.

7. Geology and Soils

SETTING AND DESCRIPTION

The City of Merced is located approximately 150 miles southeast of San Francisco along the west 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 lowlands 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 of Jurassic to recent age. A review of the geologic 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, is 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 as movement or slippage occurring along an active fault. These movements generate shock waves that result in ground shaking.

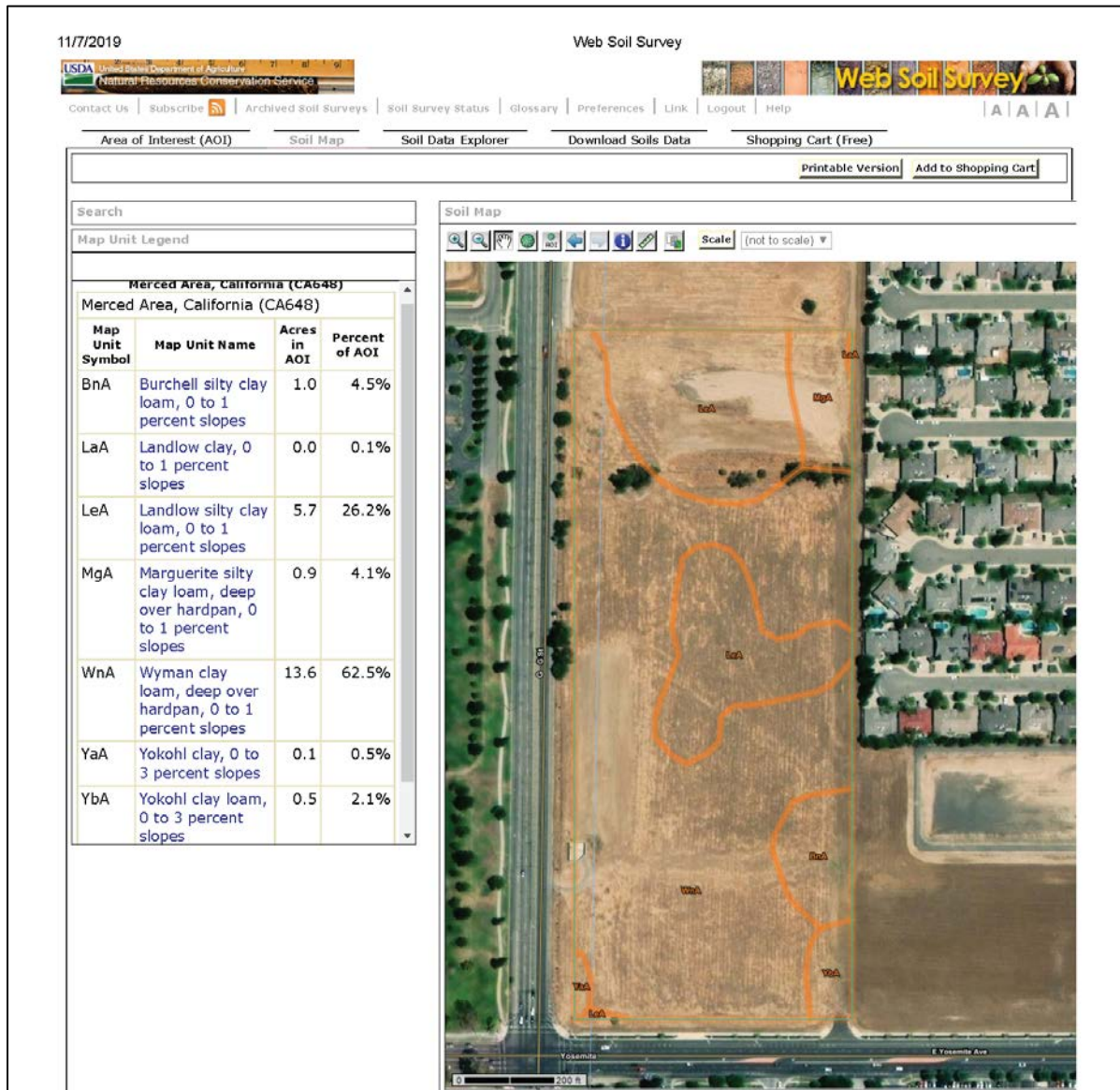
Based on review of geologic maps and reports for the area, there are no known active or potentially active faults, or Alquist-Priolo Earthquake Fault Zones (formerly referred to as a Special Studies Zone) in the SUDP/SOI. In order to determine the distance of known active faults within 50 miles of the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

Soils

According to the USDA Natural Resources Conservation Service website, the soil on the site includes the soils in the table and map found at Figure 7B. 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, flooding, subsidence, shrink-swell potential, and compressibility.

The City of Merced regulates the effects of soils and geological constraints primarily through the enforcement of the California Building Code (CBC), which requires the implementation of engineering solutions for constraints to development posed by slopes, soils, and geology.

Figure 7B – Soil Survey



	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
7. <u>Geology and Soils.</u> Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?			✓	
ii) Strong seismic ground shaking?			✓	
iii) Seismic-related ground failure, including liquefaction?			✓	
iv) Landslides?			✓	
b) Result in substantial soil erosion or loss of topsoil?		✓		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			✓	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			✓	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			✓	

Impact Analysis

Would the project:

- a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
 - i) *Strong seismic ground shaking?*
 - ii) *Strong seismic ground shaking?*
 - iii) *Seismic-related ground failure, including liquefaction?*
 - iv) *Landslides?*

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, and no impact would result from the project.

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 limits development in areas identified as having special seismic hazards. All structures shall be designed and built in accordance with the standards of the California Building Code. Pursuant to CEQA §15162, the project will not create any impacts that warrant additional environmental documentation over and above the impacts addressed in the City’s General Plan EIR.

The project **may** expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. 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, detailed geotechnical engineering investigation required in compliance with the California Building Code (CBC) would be required for the project.

APPLICABLE GENERAL PLAN GOALS AND POLICIES:

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

<i>Goal Area S-2: Seismic Safety:</i>	
Goal	
Reasonable Safety for City Residents from the Hazards of Earthquake and 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.

These impacts are considered **less than significant**.

b) *Result in substantial soil erosion or loss of topsoil?*

Construction of the proposed project could result in temporary soil erosion and the loss of top soil due to construction activities, including clearing, grading, site preparation activities, and installation of the proposed drainage and on-site sewer and water systems. Construction activities disturbing one or more acres are required by the State Water Resources Board (SWRCB) to obtain a General Construction Activity Stormwater Permit, which would require the proposed project to implement a Storm Water Pollution Prevention Plan (SWPPP). Project compliance with SWRCB and the City of Merced regulations to avoid erosion siltation effects would reduce this impact to **less than significant with mitigation**.

Mitigation Measures:

GEO-1) The project shall comply with all requirements of the State Water Resources Board (SWRCB) and obtain a General Construction Activity Stormwater Permit.

GEO-2) The project shall comply with all applicable mitigation measures for Environmental Review #10-06 (Appendix C).

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

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 the SUDP/SOI and the potential for lurch cracking and lateral spreading is, therefore, very low within the SUDP/SOI area. This impact is **less than significant**.

d) *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?*

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 this impact to **less than significant**.

- e) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

The EIR prepared for the City's *Merced Vision 2030 General Plan* states the following:

“According to the Geologic, Geohazards and Environmental Health Hazards Evaluation Report (Geocon Consultants, Inc.), the soils in the SUDP/SOI are not generally considered to be expansive, have a generally low to moderate erosion potential, and are generally considered suitable for wastewater disposal using conventional septic systems.”

However, no new septic systems are allowed in the City and any future construction on the site will be required to connect to the City's sewer system. Based on this evaluation, this impact is **less than significant**.

- f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The proposed project would be located on an in-fill site. The site has been used for previously altered from its native state. Therefore, this impact would be **less than significant**.

8. Greenhouse Gas Emissions

SETTING AND DESCRIPTION

The issue of project-generated Greenhouse Gas (GHG) Emissions is a reflection of the larger concern of Global Climate Change. While GHG emissions can be evaluated on a project level, overall, the issue reflects a more regional or global concern. CEQA requires all projects to discuss a project's GHG contributions. However, from the standpoint of CEQA, GHG impacts on global climate change are inherently cumulative. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, it can safely be assumed that existing conditions do not measurably contribute to a noticeable incremental change in the global climate.

The project applicant provided a Greenhouse Gas study as a part of the Air Quality and Greenhouse Gas Analysis (Appendix A). Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SJVAPCD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that construction of the proposed project would generate approximately 2,138.3 metric tons of CO₂e. Table 14 of Appendix A lists the annual GHG emissions for each construction phase. Implementation of the Mitigation Measure AIR-1 (see Section 3, Air Quality, above) would reduce GHG emissions by reducing the amount of construction vehicle idling and by requiring the use of properly maintained equipment.

Long-term GHG emissions are typically generated from mobile sources (e.g., vehicle trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment. Operational GHG emissions were estimated using CalEEMod and the results are presented in Table 15 of Appendix A.

THRESHOLDS OF SIGNIFICANCE

The proposed project would result in a significant impact on the environment if it would:

- Generate GHG emissions either directly or indirectly, that may have a significant impact on the environment;
- Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

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

Impact Analysis

Would the project:

- a) *Generate greenhouse gas emission, either directly or indirectly, that may have a significant impact on the environment?*

The project would generate 4,726.6 metric tons of CO₂e per year. The City of Merced Climate Action Plan (CAP) is considered a qualified GHG reduction plan and includes a performance-based development approach that includes the measures in the CAP that apply

to new development projects. Therefore, the proposed project's GHG emissions would not be considered a significant impact if the proposed project would be consistent with the PCAP. Although the proposed project would likely implement many of the measures the PCAP has included, the exact selections and corresponding total percent reduction cannot be determined. The CAP states that new projects that do not comply with the CAP measures or the UDM, may elect to conduct a quantitative analysis of GHG emissions. Because the project would begin operations in the post-2020 timeframe, the City's 2020 reduction targets would not apply. Therefore, to be conservative, this analysis evaluates the proposed project's potential GHG emissions based on the City's CAP provisional 2030 target of approximately 38 percent below 2008 baseline levels.

Table 16 of Appendix A provides a comparison of the estimated metric tons of CO₂e per year emissions from the project's operational activities in 2008 and 2030. As provided in Table 16, the project's estimated annual GHG emissions would be approximately 12,426.0 metric tons of CO₂e under 2008 BAU conditions and 6,919.1 metric tons of CO₂e in 2030 for project operations. This represents a 49 percent decrease in emissions, which meets the City's provisional 2030 target of approximately 38 percent below 2008 baseline levels.

In addition, the project, and vehicles traveling to the project site, would implement several measures required by State regulations to reduce GHG emissions, including the following:

- Pavley II (LEV III) Advanced Clean Cars Program;
- 2016 California Green Building Code Standards;
- Renewable Portfolio Standard;
- California Model Water Efficient Landscape Ordinance; and
- CalRecycle Waste Diversion and Recycling Mandate.

The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. The California Green Building Code Standards reduce GHGs by including a variety of different measures, including reduction of construction waste, wastewater, water use, and building energy use. The 2019 Building Energy Efficiency Standards, which will take effect on January 1, 2020, were included in the CalEEMod analysis and are anticipated to reduce energy use by 30 percent compared to the 2016 standards, representing a substantial reduction compared to 2008 levels. The Renewable Portfolio Standard requires electricity purchased for use at the project site to be composed of at least 33 percent renewable energy by 2020. The Water Efficient Landscape Ordinance will reduce outdoor water use by 20 percent and the CalRecycle Waste Diversion and Recycling Mandate will reduce solid waste production by 25 percent.

Implementation of these measures is expected to allow the State to achieve AB 32 emission targets by 2020. The proposed project would not be operational until 2022; however, SB 32, signed in 2016, effectively establishes a new GHG reduction goal for Statewide emissions of 40 percent below 1990 levels by 2030. Therefore, operation of the proposed project would be consistent with the SB 32 goal. Therefore, at this time no additional regulations are required from new development beyond those already established by the State to achieve the AB 32 and SB 32 targets. Therefore, the BAU analysis that indicates

that the project would achieve the reductions required by regulations to meet the AB 32 and SB 32 targets and demonstrates that the project's GHG emissions would not be significant.

Therefore, GHG emissions from the proposed project would be **less than significant**.

- b) *Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

The SJVAPCD has adopted a Climate Change Action Plan (CCAP), which includes suggested Best Performance Standards (BPS) for proposed development projects. Appendix J of the SJVAPCD Final Staff Report for the CCAP contains GHG reduction measures that would be applicable to the proposed project. The proposed project's consistency with these measures is included in Table 17 of the Air Quality and Greenhouse Gas Analysis, shown at Appendix A. As shown in Table 17, the project would be consistent with the CCAP measures.

Absent any other local or regional Climate Action Plan, the proposed project was analyzed for consistency with the CARB's adopted Scoping Plan. The proposed project would be consistent with the Scoping Plan measures, including the following.

- California Light-Duty Vehicle Greenhouse Gas Standards. The standards would be applicable to light-duty vehicles that would access the project site.
- Energy Efficiency. The project would increase its energy efficiency through compliance with the new Title 24 standards.
- Low Carbon Fuel Standard. Vehicles that access the project site would comply with the standard, by way of consuming transportation fuel that will meet the goal of a 10 percent reduction in carbon intensity by 2020.
- Recycling and Waste. The project would contribute toward a Statewide reduction in waste by utilizing the City of Clovis recycling services, which have consistently exceeded State recycling mandates.

Based on Table 17 and the discussion above, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions and impacts would be **less than significant**.

9. 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 while the potential for wildland fires could increase as large blocks of undeveloped land are annexed into the City. Most of the fires are caused by human activities involving motor vehicles, equipment, arson, and burning of debris.

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 eight 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.

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.

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 materials 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
9. <u>Hazards and Hazardous Materials.</u>				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	
d) Be located on a site which is included on a list of hazardous materials site complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				✓

Impact Analysis

Would the project:

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Hazards and hazardous materials are extensively regulated at the federal, state, and local levels. The only known land use at this time that would involve the use of a large amount of a hazardous material would be the gas station. However, as previously mentioned, there are federal and state regulations that govern the use and delivery of gasoline.

Construction activities of the proposed project would involve the use, storage, transport, and disposal of oil, gasoline, diesel fuel, paints, solvents, and other hazardous materials. After construction, the proposed gas station would store and sell gasoline and potentially propane. No other hazardous materials are anticipated to be stored or used on the site after construction. 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). This impact would be **less than significant** with compliance with these requirements.

- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

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.

<i>Goal Area S-7: Hazardous Materials</i>	
Goal	
Hazardous Materials Safety for City Residents	
Policies	
S-2.1	Prevent injuries and environmental contamination due to the uncontrolled release of hazardous materials.
Implementing 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.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

There is one middle school and one college located within a ¼-mile radius of the site. Cruickshank Middle School is located to the northeast along Mercy Avenue approximately 0.18 miles from the subject site. Merced College is directly across G Street from the subject site. Hazardous materials other than the gasoline at the gas and service station are not expected to be at the project site after construction. Compliance with Fire Department regulations, as well as state and federal regulations through annual inspections and permitting requirements makes this impact **less than significant**.

- d) *Be located on a site which is included on a list of hazardous materials site complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

According to the California Department of Toxic Substances Control EnviroStor database search, the project site is not listed as a hazardous waste site, and no significant hazard to the public or the environment would result with project implementation. Therefore, there is **no impact**.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

The project site is located approximately 3.5 miles from the Merced Regional Airport and approximately 5 miles from the Castle Airport. The project site is not located in an area for which an Airport Land Use Plan has been prepared, and no public or private airfields are within two miles of the project area. Therefore, no at-risk population working at the site would be exposed to hazards due to aircraft over-flight. Therefore, implementation of the proposed project would not expose persons to airport-related hazards, and **no impact** would occur.

- f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed project will not adversely affect any adopted emergency response plan or emergency evacuation plan. No additional impacts will 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*. The project would not modify any roadways or cause any other changes that would impair the implementation of an adopted emergency response plan. Therefore, there is **no impact**.

APPLICABLE GENERAL PLAN GOALS AND POLICIES:

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

<i>Goal Area S-1: Disaster Preparedness</i>	
Goal	
General Disaster Preparedness	
Policies	
S-1.1	Develop and maintain emergency preparedness procedures for the City.

Implementing 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.

- g) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

The project site is located within an urban area and is not located within a very high fire hazard severity zone. According to the EIR prepared for the *Merced Vision 2030 General Plan*, the risk for wildland fire in 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 Area of Responsibility" with a Hazard Classification of "Urban Unzoned."

The City of Merced Fire Department is the responsible agency for responding to fires at the subject site. The project site is located within Fire District #5, and is served by Station #55 located at 3520 Parsons Avenue (approximately 0.5 miles from the project site). The proposed project would not expose people or structures to significant loss, injury or death involving wildland fires and there would be **no impact**.

10. Hydrology and Water Quality

SETTING AND DESCRIPTION

Water Supplies and Facilities

The City's water supply system consists of four elevated storage tanks with a combined storage capacity of approximately 1.4 million gallons, 23 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.

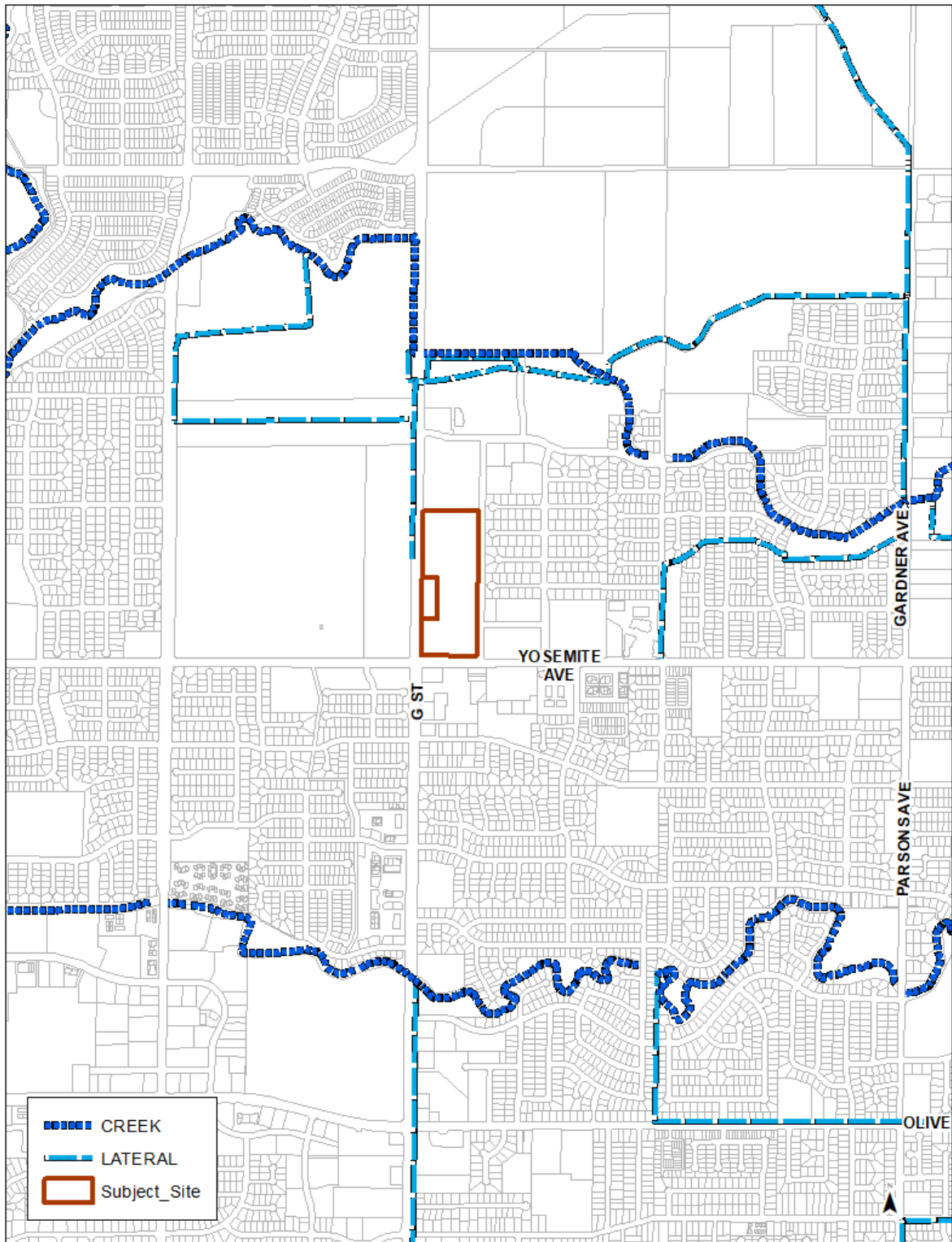
Storm Drainage/Flooding

In accordance with the adopted City of Merced Standard Designs of Common Engineering Structures, percolation/detention basins are designed to temporarily collect run-off so that it can be metered at acceptable rates into canals and streams, which have limited capacity.

Proximity to Existing Waterways

The project site is located at the northeast corner of Yosemite Avenue and G Street. There is an irrigation canal (lateral) across G Street from the site that feeds into Cottonwood Creek. Cottonwood Creek is approximately 0.3 miles to the south of the site and Black Rascal Creek is located approximately 0.6 miles south of the site. Refer to the map at Figure 8.

Figure 8 - Waterways



	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
10. <u>Hydrology and Water Quality.</u>				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		✓		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			✓	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in a substantial erosion or siltation on- or off-site;		✓		
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;		✓		
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or		✓		
iv. impede or redirect flood flows?		✓		
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			✓	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			✓	

Impact Analysis

Would the project:

- a) *Violate any water quality standards or waste discharge requirements?*

The project site is currently vacant. Construction of the proposed mixed-use project and associated parking would result in the majority of the site being covered with impervious surfaces.

The State Water Resources Control Board and nine Regional Water Quality Control Boards regulate the water quality of surface water and groundwater bodies throughout California. The proposed project is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB).

Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During construction activities, excavated soil would be exposed with an increased potential to expose soils to wind and water erosion, which could result in temporary minimal increases in sediment load into the MID nearby water bodies, including the Black Rascal Creek, located approximately 0.5 miles to the south, and Cottonwood Creek, located approximately 0.5 mile to the north. Any potential short-term water quality effects from project related construction activities can be minimized and reduced to a level of **less than significant with mitigation** by implementing the following mitigation measure.

Mitigation Measure:

HYDRO-1) To minimize any potential short-term water quality effects from project-related construction activities, the project contractor shall implement Best Management Practices (BMPs) in conformance with the California Storm Water Best Management Practice Handbook for Construction Activity. In addition, the proposed project shall be in compliance with existing regulatory requirements, including the Water Pollution Control Preparation (WPCP) Manual. In addition, implementation of a Storm Water Pollution Prevention Plan (SWPPP) would be required under the National Pollutant Discharge Elimination System (NPDES) to regulate water quality associated with construction activities.

HYDRO-2) If any storm drainage from the site is to drain into MID facilities, the developer shall first enter into a “Storm Drainage Agreement” with MID and pay all applicable fees.

The nearest water bodies to the proposed project include the Black Rascal Creek, located approximately 0.6 miles to the south, and Cottonwood Creek, located approximately 0.3 miles to the north. Operation of the proposed project could result in surface water pollution associated with chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and waste that may be spilled or leaked and have the potential to be transported via runoff during periods of heavy precipitation into these water bodies. Implementation of Mitigation Measure HYDRO-3, described below, would ensure that stormwater runoff from the proposed project would be appropriately managed to prevent pollutants from

being discharged into these water bodies, reducing any potential impacts to **less than significant with mitigation.**

Mitigation Measure:

HYDRO-3) To reduce the potential for degradation of surface water quality during project operation, a SWPPP shall be prepared for the proposed project. The SWPPP shall describe specific programs to minimize stormwater pollution resulting from the proposed project. Specifically, the SWPPP shall identify and describe source control measures, treatment controls, and BMP maintenance requirements to ensure that the project complies with post-construction stormwater management requirements of the RWQCB.

- b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The City receives all of its water supply from groundwater. Based on the City's Urban Water Management Plan (UWMP), water consumption in 2015 was estimated to be 15.9 million gallons of water per day (mgd) or approximately 17,855 acre-feet per year. The UWMP also estimates the projected acre-feet of water use for years 2020, 2025, 2030, and 2035, which are projected to increase each year. By 2035, the City's projected water use is expected to be 31,960 acre-feet of potable and raw water and 5,869 acre-feet of recycled water.

The proposed project would generate a need for approximately 40,449 gallons per day, broken into 10,560 gallons per day for the residential uses and approximately 29,889 gallons per day for the retail/office/hotel uses. Based on the 2015 water well production of 15.9 mgd, the proposed project would use approximately 0.25% of the total daily water demand for the City.

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 stormwater basin to the east of the site or pervious surfaces with no substantial net loss in recharge potential anticipated. This reduces this impact to a **less than significant** level.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
- i. *result in a substantial erosion or siltation on- or off-site;*
 - ii. *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;*
 - iii. *create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
 - iv. *impede or redirect flood flows?*

Implementation of the project would result in grading and landform alterations on the site that would expose native soils that could be subject to the effects associated with wind and water erosion unless adequate measures are taken to limit the transport of soils in surface water from the site to downstream locations. As discussed above, the project applicant would be required to implement a SWPPP that would identify specific measures to address erosion and siltation resulting from grading and construction as well as the potential long-term water quality impacts.

Construction of the project would include connecting on-site drainage facilities to the City's storm drain system. The City has approximately 112 miles of underground storm drain lines, underground storage pipes, and 141 acres of detention ponds. An 18-inch storm drain line exists in Yosemite Avenue that the on-site storm drainage system would connect to. The project site would consist of approximately 304,920 square feet of impervious surfaces. All storm water run-off would be required to be captured on-site and metered into the City's storm drainage per City Standards. Additionally, at the time of construction, the developer would be required to provide calculations to demonstrate that the proposed on-site retention and the City's storm water system would be able to accommodate the additional run-off from the site.

According to FEMA, the project site as well as the area surrounding the site are located within a Zone X which is considered to be outside the flood plain. As previously mentioned any run-off from the site would be required to be captured on-site and metered into the City's storm drain system. Therefore runoff from the site would not increase the rate or amount of surface water flooding or impede or redirect flood flows.

Implementation of Mitigation Measure HYDRO-1 and Mitigation Measure HYDRO-4 below would reduce any impacts from site drainage to **less than significant with mitigation**.

Mitigation Measure:

HYDRO-4) Prior to issuance of a building permit or as required by the City Engineer, the developer shall demonstrate to the City that storm drainage facilities are adequate to meet the Project demands and that improvements are consistent with the City Standards and the City's Storm Drain Master Plan.

- d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

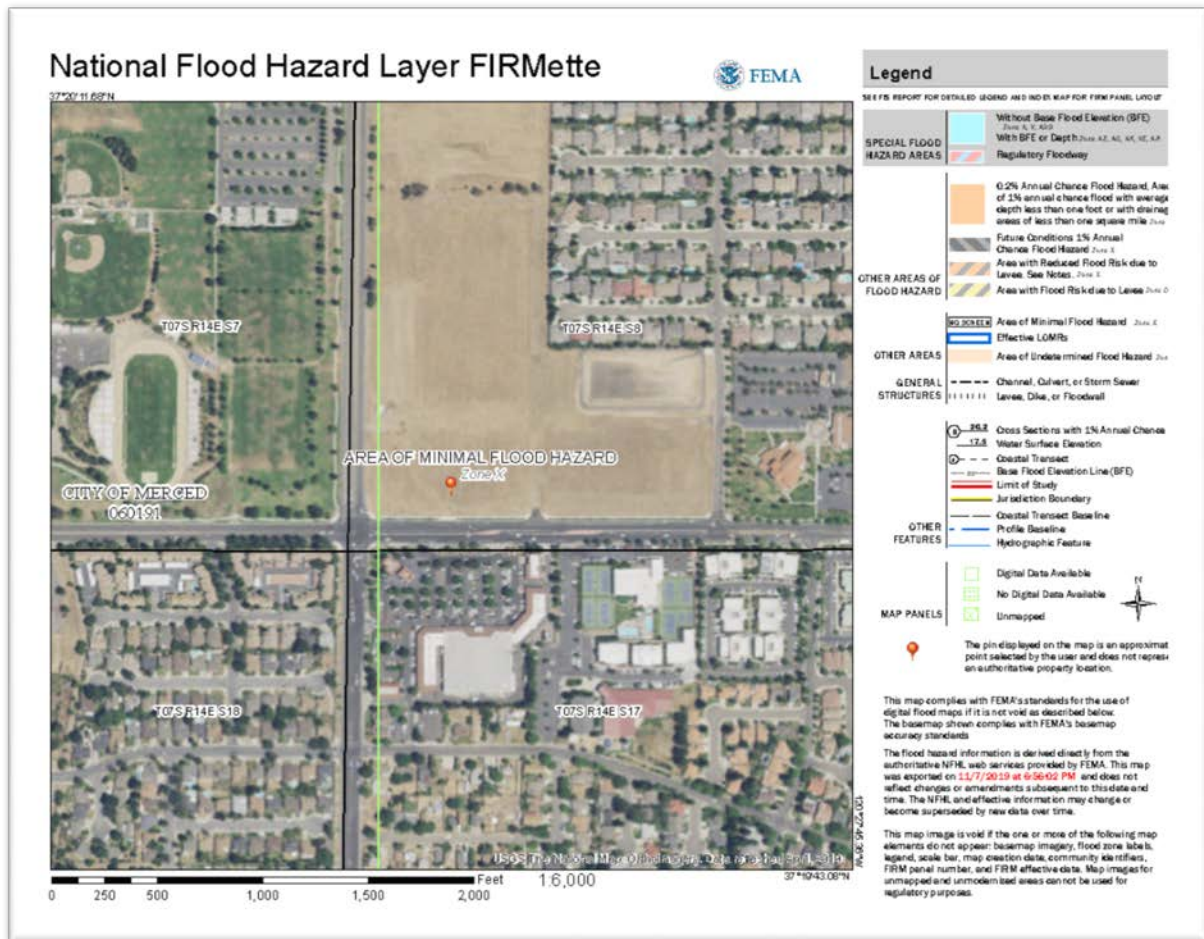
As shown on the map located at Figure 9 on the following page, the project site is located within Flood Zone "X." The Federal Emergency Management Agency (FEMA), defines Zone X as an area of minimal flood hazard. Zone X is the area determined to be outside the 500-year flood and protected by levee from 100-year flood.

The site is not in a tsunami or seiche zone and would not present a risk for release of pollutants due to inundation. This impact is **less than significant**.

- e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The proposed project would not obstruct or conflict with the implementation of a water quality control plan or sustainable groundwater management plan. The project would be required to comply with all City of Merced standards and Master Plan requirements for groundwater and water quality control. This impact is **less than significant**.

Figure 9 - FEMA Flood Map



11. 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). The site has two General Plan designations of Commercial Office (CO) and High to Medium Density Residential (HMD) and a Zoning designation of Planned Development (P-D) #72. The proposed General Plan Amendment would change the General Plan designation to Neighborhood Commercial (CN). The current and proposed General Plan designations are shown on the map at Figure 3.

Surrounding Uses

Refer to Figure 2 on Page 3 and the table below for the surrounding land uses.

Surrounding Land	Existing Use of Land	Zoning Designation	City General Plan Land Use Designation
North	Mercy Medical Center and Vacant Lot	C-O	Commercial Office (CO)
South	Retail, Restaurants, Grocery (across Yosemite Avenue)	P-D #26	Neighborhood Commercial (CN)
East	Single-Family Residential (across extended Sandpiper Avenue)	R-1-6, P-D #72	Low Density Residential (LD), High to Medium Density Residential (HMD), and Neighborhood Commercial (CN)
West	Merced College (across G Street)	R-1-6	School

Current Use/Background

The project site is currently vacant, other than City of Merced Storm Pump Station 10. This small, enclosed area is used by Public Works staff a few times a year and requires enough space for a large vehicle to pull up to the enclosure. The proposed design of the site takes this structure's need into account. The site consists of two individual parcels, Assessor's Parcel Numbers (APN) 231-040-004 and 231-040-005. The site is currently designated on the *Merced Vision 2030 General Plan* Land Use Map as Commercial Office (CO) in the southerly portion, which encompasses the entirety of the smaller parcel, APN 231-040-005, and High to Medium Density Residential (HMD) in the northerly portion. The requested changes would change the land use classification for the entire site to Neighborhood Commercial (CN).

This site was included in General Plan Amendment #10-02, Revision #3 to the Northeast Yosemite Specific Plan, Zone Change #410, and Establishment of Planned Development (P-D) #72 in 2010. These items changed the General Plan designation of the 11.5-acre parcel at the northeast corner of Yosemite Avenue and G Street from High-Medium Density (HMD) Residential to Commercial Office (CO) and allowed for a curb-cut on G Street approximately 520 feet north of the intersection at G Street and Yosemite Avenue. The Planned Development was established and the zoning changed for an area including the 11.5-acre parcel at the northeast corner of Yosemite Avenue and G Street, the adjacent parcel to the north [designated High-Medium Density (HMD) Residential], and the adjacent parcel to the east (also HMD Residential).

The southern half of the parcel to the east (northeast corner of Yosemite Avenue and the future Sandpiper Drive) was sold to the City. The remaining northern half of the parcel and the parcel north of the proposed commercial development planned are for high-medium density residential uses.

With this change, an additional environmental review (Initial Study #14-32) was prepared and also resulted in a Mitigated Negative Declaration (MND). The Mitigation Monitoring Program for Initial Study #10-06, applied to this project (Appendix C).

The project site was also part of General Plan Amendment #11-05, and Site Utilization Plan (SUP) Revision #1 to Planned Development (P-D) #72 in 2011. The General Plan Amendment was to allow an exception to the General Plan Policies addressing the spacing of driveways along arterial roadways (Policies T-1.3.j and T-1.3.k) and the Site Utilization Plan Revision allowed the relocation of the drainage basin previously approved for the northeast side of the parcel located at the corner of G Street and Yosemite Avenue to the newly created parcel between the future Sandpiper Avenue and Mansionette Drive, and the construction of five additional office buildings on the parcel at Yosemite Avenue and G Street.

Project Characteristics

The proposed project includes a General Plan Amendment and Site Utilization Plan Revision for 21.5 acres of land on the Subject Site (refer to the map at Figure 3). As shown on the General Plan and Zoning Map at Figure 3, the site has two General Plan designations of Commercial Office (CO) and High to Medium Density Residential (HMD) and a Zoning designation of Planned Development (P-D) #72. The proposed General Plan Amendment would change the General Plan designation to Neighborhood Commercial (CN).

The Site Utilization Plan (SUP) Revision includes changes to a number of aspects of Planned Development #72, including a four-story, 128-room hotel of approximately 80,104 square feet, and two medical office buildings totaling approximately 66,465 square feet. It also includes 44 Units of Multi-Family Residential Housing totaling approximately 29,887 square feet, fast food uses with drive-through windows totaling approximately 5,494 square feet, and a mixed-use development with approximately 59,616 square feet of other retail and office uses, shown on the Site Plan at Figure 4.

The Zoning Ordinance describes uses that are allowed within a specific zone “by right” and those allowed with a discretionary review such as a Conditional Use Permit. Under ordinary circumstances, drive-through sales, alcoholic beverage sales in restaurants for on-site consumption, multi-family dwellings, and gas and service stations are allowed within a C-N zone with approval of a Conditional Use Permit. Day care centers require a Minor Use Permit and hotels are listed as “use not allowed” in an ordinary C-N zone.

The SUP Revision proposes to condense a number of the typical public hearings for interface along with Conditional Use Permitting, into the single SUP Revision. Notable exceptions are that the hotel and multi-family residential components will still require publicly noticed public hearings for their Site Plan Review Permits if they are on a parcel that is abutting or across from a parcel with R-1 or R-2 zoning. Section 20.32 of the Zoning Ordinance sets out the requirements for interface regulations to help integrate potentially incompatible zones. This section requires Site Plan Review be obtained prior to construction on a parcel with a Neighborhood Commercial (C-N) zone when it is adjacent to or across the street from an R-1-6 zone. In this case, several properties to the east of the larger parcel on the subject site (APN 231-040-004) are zoned R-1-6. The uses in this area include single-family dwellings located on approximately 0.2-acre lots. This project is designed in such a way that may at a future time be desirable to separate the parcels, as noted by the “proposed parcel line” notations on the Site Plan, shown at Figure 4; however, no parcel modifications have been submitted at this time.

The Zoning Ordinance does not specify a density for multi-family housing allowed within a C-N zone. The General Plan has a range of multi-family densities: Low-Medium Density (LMD) – 6

to 12 units/acre; High-medium Density (HMD) – 12 to 24 units/acre; and High Density (HD) 24 to 36 units/acre. The Zoning designations that correlate to the multi-family General Plan designations would be R-2; R-3-1.5; R-3, and R-4. The proposed density for this project, based on the number of units is approximately 16.4 units per acre, considering the size of the proposed parcel the multi-family residential component is shown on. This density fits into an HMD General Plan designation comfortably; the site also currently has the HMD designation for the portion of the site that the multi-family residential component is proposed for.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
11. <u>Land Use and Planning.</u>				
Would the project:				
a) Physically divide an established community?				✓
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

Impact Analysis

Would the project:

- a) *Physically divide an established community?*

The project site was annexed in 1992 and is surrounded by urban uses. The proposed project would develop an existing vacant lot and would become a part of the adjacent, surrounding community. The project would not physically divide the community, therefore, there is **no impact**.

- b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

The Housing Element of the *Merced Vision 2030 General Plan* includes policies supporting mixed-use development.

Policy H 1.1.c Encourage Mixed Use Development

The proposed project would provide a mixture of retail commercial uses to serve the neighborhood and multi-family dwelling units.

Policy 1.8b Prioritize City efforts to encourage residential development by focusing on in-fill development and densification within the existing City Limits.

The proposed project is an in-fill project on a vacant lot. The proposed density of the multi-family residential component, when considering the proposed future parcel size, is in keeping with the current General Plan designation of the property.

Based on the forgoing analysis, the project would comply with the General Plan. Therefore, there is **no impact**.

12. 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 Merced SUDP/SOI. According to the California Geological Survey, Aggregate Availability in California - Map Sheet 52, Updated 2006, 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 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
12. <u>Mineral Resources.</u> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				✓

Impact Analysis

Would the project:

- a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

Based on observed site conditions and review of geological maps for the area, economic deposits of precious or base metals are not known to occur in the Merced SUDP/SOI. Therefore

implementation of the proposed project would have **no impact** on the availability of mineral resources or impact current or future mining operations.

- b) *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

No Mineral Resource Zones or mineral resource recovery sites exist within the City of Merced or in the area designated for future expansion of the City (the SUDP/SOI). Therefore implementation of the proposed project would have **no impact** on the availability of mineral resources or impact current or future mining operations.

13. Noise

SETTING AND DESCRIPTION

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern. According to the *Merced Vision 2030 General Plan*, outdoor noise exposure not exceeding 60 db is considered to be a “normally acceptable” noise level for residential uses.

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.

The existing noise in the area is predominantly traffic related. Merced College, to the west across G Street, has a stadium that when active can generate a large amount of noise during events that only occur occasionally. Otherwise, residential and commercial uses surround the site.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
13. Noise. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		✓		
b) Generation of excessive groundborne vibration or groundborne noise levels?			✓	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			✓	

Impact Analysis

Would the project result in:

- a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Construction Noise

Construction of the project would temporarily increase noise levels in the area during the construction period. The project is proposed to be phased in such a way that the southern portion of the site, consisting primarily of retail uses, is to be constructed first. The applicants project that the hotel and office uses would be the most likely to be constructed in the second phase, along with any of the retail sites that are not built in Phase I. The multi-family residential component is most likely a third phase. Therefore, the noise from construction may be steady for several weeks and then cease all together, with this cycle repeating over the course of several years. Construction activities, including site clearing, building construction, and paving 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. Although construction activities would likely occur only during daytime hours, construction noise could still be considered disruptive to local residents. The City of Merced does not have a noise ordinance, but past practice has been to allow construction activities during daylight hours (between 7:00 a.m. and 7:00 p.m.). Implementation of the mitigation measures below would reduce potential impacts from construction noise to **less than significant with mitigation.**

Operational Noise

Noise from the mixed-use development would be primarily traffic related. Additionally, there would be added noise from outdoor activities such as loading and unloading of materials and products for the retail uses and possible outdoor activities of the tenants, as well as more frequent refuse collection to serve the site. Parking for the site is located on the interior of the property.

To the east of the project are existing single-family residences. There is an approximately 6-foot block wall with openings for pedestrians to pass through along the border of these properties. The project may include outdoor retail activity areas such as restaurant seating; these uses as proposed are not directly adjacent to the existing residential area, mitigating the possibility of noise issues arising.

Acceptable outdoor noise levels in residential areas is not exceeding 60 dB. According to Table 10.2 of the *Merced Vision General Plan*, the current noise level generated by traffic along Yosemite Avenue within 100 feet of the roadway is 61.2 dB. Using this as a reference, it is unlikely that noise from the apartments or outdoor recreation areas would exceed 60 dB. However, the increase in traffic may increase the noise level generated from Yosemite Avenue. According to Table 10.2 at time of the General Plan buildout, it is expected that in order to achieve a rating of 60dB, a sensitive use would have to be 297 feet from the roadway. While it is not expected that this project would increase traffic to the level expected by the General Plan buildout, there will be an increase over the existing traffic in the area, but it is not expected to significantly increase the noise impacts. Therefore, operational noise is expected to be **less than significant**.

Mitigation Measure:

- NOI-1)** To reduce potential construction noise impacts, the following multi-part mitigation measure shall be implemented for the project:
- The construction contractor shall ensure that all internal combustion engine-driven equipment is equipped with mufflers that are in good condition and appropriate for the equipment.
 - The construction contractor shall locate stationary noise-generating equipment as far as feasible from sensitive receptors when sensitive receptors adjoin or are near a construction disturbance area. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
 - The construction contractor shall prohibit unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes is prohibited).
 - The construction contractor shall locate, to the maximum extent practical, on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
 - The construction contractor shall limit all noise producing construction activities, including deliveries and warming up of equipment, to the

hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday. No such work shall be permitted on Sundays or federal holidays without prior approval from the City.

b) *Generation of excessive groundborne vibration or groundborne noise levels?*

No permanent noise sources would be located within the project site that would expose persons to excessive groundborne vibration or noise levels. Construction activities associated with implementation of the proposed project are not expected to result in excessive groundborne vibration or groundborne noise levels. Therefore, implementation of the proposed project would not permanently expose persons within or around the project sites to excessive groundborne vibration or noise and the project impacts would be ***less than significant***

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

The nearest airports to the project site include Merced Regional Airport, located approximately 3.5 miles southwest of the project site, and Castle Airport, located approximately 5 miles northwest of the project site. No portion of the project site lies within the 55 dBA CNEL noise contours of these airports. Given the project site's distance from the nearest airports, project implementation would not expose people residing or working in the project area to excessive noise levels and impacts would be **less than significant**.

14. Population and Housing

SETTING AND DESCRIPTION

The implementation of the proposed project would result in the construction of a mixed use project that would consist of 44 dwelling units, in three two-story buildings, totaling approximately 29,887 square feet. The hotel is projected to have 128 rooms over 80,104 square feet. These are the only residential uses proposed. The project site is surrounded by urban uses.

Expected Population and Employment Growth

According to the State Department of Finance, the City of Merced's population for 2019 is estimated to be 87,110. Population projections estimate that the Merced SUDP/SOI area will have a population of 159,900 by the Year 2030. The 2019 population projections prepared by the State also indicate a vacancy rate of 6.31% and an average household size of 3.24 persons per household.

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
14. <u>Population and Housing.</u> Would the project:				
a) Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			✓	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓

Impact Analysis

Would the project:

- a) *Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The proposed mixed-use project includes the construction of 44 dwelling units. Each unit is expected to house approximately two persons, which would add 88 people to the site on a continual basis. The project would create an internal roadway system, and would extend Sandpiper Avenue as the project reaches full buildout and usage. Sandpiper Avenue appears on the Circulation Map in the City of Merced’s General Plan as a roadway that extends in the manner proposed by this plan. Since the implementation matches the vision of the General Plan, this impact would be **less than significant**.

- b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

Implementation of the proposed project would not displace any existing housing. The subject site is currently vacant. There is **no impact**.

15. 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. The City’s Central Fire Station is located in the downtown area at 16th and G Streets. The City also has four other stations throughout the City. Station #55, located at 3520 Parsons Avenue, would serve the project site.

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's). 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. The Project site falls within the Merced City School District and Merced Union High School District (MUHSD).

As the City grows, new schools will need to be built to serve our growing population. According to the Development Fee Justification Studies from 2017 for MUHSD and MCSD, Merced City Schools students are generated by new multi-family development at the following rate:

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.)
Warehouse	0.041	0.023
Lodging	0.064	0.037
Industrial Park	0.097	0.055
Community Shopping Center	0.101	0.057
Corporate Office	0.155	0.088
Neighborhood Shopping Center	0.162	0.092
Bank	0.164	0.093
Scientific Research & Development	0.176	0.100
Business Park	0.216	0.123
Medical Office	0.248	0.141
Commercial Office	0.273	0.155
Housing Category	Elementary (K-8) (Students per unit)	High School (9-12) (Students per unit)
Single Family	0.441	0.213
Multi-Family	0.195	.074

Based on the generation rates from the table above and the square footages of the proposed mixed-use project, this development would be expected to generate 65 total new students, 41 of them Elementary School (K-8) students, and 24 of them High School students. See the on the next page for individual values.

Commercial/Industrial/Housing Category	Project Site Square Footage	Elementary Students Generated	High School Students Generated
Warehouse	0	0	0
Lodging	80,104	6	3
Industrial Park	0	0	0
Community Shopping Center	0	0	0
Corporate Office	0	0	0
Neighborhood Shopping Center	34,250	6	4
Bank	3,560	1	1
Scientific Research & Development	0	0	0
Business Park	0	0	0
Medical Office	66,465	17	10
Commercial Office	16,804	5	3
Single Family Housing	0	0	0
Multi-Family Housing	29,887	6	3
TOTAL		41	24

Parks

Davenport Park, around ½ mile to the northeast of the site would be the closest park to the project site. Lester K. Yoshida Park is approximately 0.8 miles to the north of the site, the Merced Dog Park is 1 mile to the west, and Rahilly Park and Bob Carpenter Park are each approximately 1 mile away from the project site, both to the southeast.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
15. <u>Public Services.</u> Would the project:				
a) 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:				
i. Fire Protection?			✓	
ii. Police Protection?			✓	
iii. Schools?			✓	
iv. Parks?			✓	
v. Other Public Facilities?			✓	

Impact Analysis

Would the project:

- a) *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:*

- i. *Fire Protection* - The City of Merced Fire Department would provide fire protection services to the site. The project site is located within Fire District #5 and would be served by Fire Station #55, located at 3520 Parsons Avenue. The response from this station would meet the desired response time of 4 to 6 minutes, citywide. The proposed change in land use designation would not affect the City's ability to provide fire protection. Buildings on the project site of 5,000 square feet or more, the day care, and any buildings with fryers or cooking equipment would be required to be constructed with a fire sprinkler system and to meet all buildings are required to meet the requirements of the California Fire Code and the Merced Municipal Code.

At the time a building permit is issued, the developer would be required to pay the fees required by the Public Facility Financing Plan (PFFP). 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 deannex from its existing Maintenance District and annex into the City's Community Facilities District for Services (CFD #2003-2). 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 Impact Fees required by the Public Facilities Financing Program, and annexation into the City's CFD for services makes any potential impacts **less than significant**.

- ii. *Police Protection* - Development of the project would require additional police services in the area. The proposed mixed-use project is located on a site that is currently vacant. Any change to the status of the site would require additional services. However, the impacts from the proposed project would not substantially increase the impacts beyond what was anticipated with the previous Site Utilization Plan. Payment of the required Public Facilities Impact Fees and annexation into the City's Community Facilities District (CFD) for services would reduce any potential impacts to a **less than significant** level.
- iii. *Schools* - Based on the table provided in the "Settings and Description" section above, the proposed mixed-use project would generate 41 Elementary School (K-8) students and 24 High School students. The project would be required to pay all fees required by the Leroy F. Greene School Facilities Act of 1988. The payment of this statutory fee under California Government Code §65995 is

deemed “full and complete mitigation” of school impacts. Thus, these impacts are **less than significant**.

- iv. *Parks* - The development of the mixed use project would not trigger the need to construct a new park in the area. Payment of the fees required under the Public Facilities Financing Program (PFFP) as described above and payment of Quimby Act fees would be required at time of building permit issuance to help fund future parks and maintenance of existing parks as well as the payment of fees in lieu of land dedication for future parks would be required at the building permit stage for the residential buildings. The proposed amenities onsite and the payment of fees would reduce this potential impact to **less than significant**.
- v. *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 (PFFP) as described above would mitigate these impacts to a **less than significant** level.

16. Recreation

SETTING AND DESCRIPTION

The City of Merced has a well-developed network of parks and recreation facilities. Davenport Park is the nearest Neighborhood Park to the site, with the primary section of the park approximately ½ mile from the project site, and the park’s entrance pathway along the nearby creek 0.4 miles from the project site at the intersection of Paulson Road and Cormorant Drive. Lester K. Yoshida Park (a Neighborhood Park) is located within the Bellevue Ranch East Subdivision at the corner of Bixby Way and Revelle Drive, approximately 0.8 miles to the northwest from the site. Bob Carpenter Park (a Neighborhood Park) is located at the corner of Parsons Avenue and Silverado Drive, approximately 1 mile from the site. Rahilly Park (a Regional Park) is also located on Parsons Avenue approximately 1 mile from the project site. The Merced Dog Park is 1 mile to the west of the site, at the corner of Yosemite Avenue and R Street. The Rascal Creek Bike path is also accessible from G Street approximately ½ mile south of the site.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. Recreation. Would the project:				
a) 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?			✓	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			✓	

Impact Analysis

Would the project:

- a) *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?*

The construction of the proposed project would provide 44 units which, in turn, would introduce 88 residents to this area. As described above, there are several parks within a short distance of the site. Additionally, the developer would be required to pay the fees described under the Parks section above which would help fund future recreation needs. This impact would be **less than significant**.

- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

As previously described, the project would be required to pay all impact fees required at the time of building permit issuance which would make any impacts **less than significant**.

17. Transportation/Traffic

SETTING AND DESCRIPTION

The Project proposes to develop 66,465 square feet of medical-dental office space, a 128-room hotel, 11,458 square feet of fast-food restaurant with drive-through window, a gasoline/service station with convenience market (12 fueling positions), 18,222 square feet of shopping center, 5,000 square feet high turnover (sit-down) restaurant, 12,000 square feet of general office space, 4,804 square feet of day care center, and 44 multifamily units. At present, all intersections studied in the Traffic Impact Analysis operate at an acceptable Level of Service (LOS) during both peak periods. The City of Merced has determined that roads must operate at LOS of “D” or greater in order to be acceptable. The Traffic Impact Analysis, prepared by JLB Traffic Engineering, Inc. appears at Appendix B.

Project Access

Based on the latest Project Site Plan, access to and from the Project site will be from five (5) access driveways located along Sandpiper Avenue, G Street, and Yosemite Avenue. Two (2) access points are proposed to be located along the east side of G Street. One is located approximately 1,250 south of Mercy Avenue and is proposed as a full access, with left turns in and out. The other is located approximately 625 feet north of Yosemite Avenue and is proposed as left-in, right-in and right-out access only. The access point off of Yosemite Avenue is located approximately 300 feet east of G Street and is limited to right-in and right-out access only. The remaining two access points are proposed to be located along the extension of Sandpiper Avenue. While Sandpiper Avenue will eventually go through to Mercy Avenue, at the beginning of the project, access to Sandpiper Avenue will be limited to Yosemite Avenue, which will be limited to right-in and right-out access only onto Sandpiper. Sandpiper will connect to Children’s Avenue.

Walkways

Currently, walkways exist in the vicinity of the proposed Project site along G Street, Yosemite Avenue and Mercy Avenue. The *Merced Vision 2030 General Plan* recommends that walkways be implemented during all phases of a Project to guarantee adequate and safe pedestrian facilities at all times. Therefore, it is recommended that the Project implement a walkway along its frontage to Sandpiper Avenue and complete the walkway along its frontage to G Street.

Bikeways

Currently, bikeways exist in the vicinity of the proposed Project site along G Street, Yosemite Avenue, Mercy Avenue and Mansionette Drive. The *Merced Vision 2030 General Plan* recommends that a Class II Bike Lane be implemented on G Street north of Yosemite Avenue and a Class I Bike Lane beginning on G Street and extending approximately 950 feet north of Mercy Avenue. Therefore, it is recommended that the Project implement a Class II Bike Lane along its frontage to G Street.

Transit

The Bus, Merced's Regional Transit System, is the single public transportation service provider for all of Merced County. At present, there are three routes - M3, M4 and UC - that have stops adjacent to the proposed Project and two more - M1 and M2 - that stop approximately 0.5 miles from the Project. Retention of the existing and expansion of future transit routes is dependent on transit ridership demand and available funding.

Route "M3" runs on G Street and Yosemite Avenue adjacent to the proposed Project. Its nearest stops to the Project are located along the south side of Yosemite Avenue approximately 100 feet east of G Street and along the west side of G Street approximately 1,600 feet north of Yosemite Avenue. Route M3 operates at 30-minute intervals on weekdays and 90-minute intervals on weekends. This route provides a direct connection to County Administration, Police Department, Target, Walmart, Merced Mall, Merced College, Social Security, Mercy Hospital, and Raley's.

Route "M4" runs on G Street and Yosemite Avenue adjacent to the proposed Project. Its nearest stops to the Project are located along the south side of Yosemite Avenue approximately 100 feet east of G Street and along the west side of G Street approximately 1,600 feet north of Yosemite Avenue. Route M4 operates at 30-minute intervals on weekdays and 90-minute intervals on weekends. This route provides a direct connection to East Campus, Save Mart, Raley's, Merced College, Mercy Medical, Health Department, Family Care Clinic, Fairgrounds, and Mental Health.

Route "UC" runs on G Street adjacent to the proposed Project. Its nearest stop to the Project is located along the west side of G Street approximately 1,600 feet north of Yosemite Avenue. Route UC operates at 40-minute intervals on weekdays and weekends. This route provides a direct connection to Merced College, Amtrak, Mercy Medical, Promenade, UC Merced, Social Security, Downtown area, and University Medical.

Trip Generation

Trip generation rates for the proposed Project were obtained from the 10th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). The Project buildout is estimated to generate a maximum of 13,160 daily trips, 1,009 AM peak hour trips and 1,059 PM peak hour trips (before internal capture and pass-by rate reductions are taken into account). JLB also analyzed the estimated maximum trip generation of a prior version of the Project Site Plan. Due to a lack of secured users for the site, the exact square footages of the pads shown on the latest Project Site Plan may differ. At buildout, the prior Project Site Plan is anticipated to generate a maximum of 13,741 daily trips, 1,092 AM peak hour trips and 1,074 PM peak hour trips (before internal capture and pass-by rate reductions are taken into account). Compared to the prior Project Site Plan, the latest Project Site Plan is estimated to yield less traffic by 581 daily trips, 83 AM peak hour trips and 15 PM peak hour trips (before internal capture and pass-by rate reductions are taken into account). The TIA assumed the trip generation of the prior Project Site Plan, as it is the more impactful.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
17. <u>Transportation/Traffic.</u>				
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?		✓		
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			✓	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		✓		
d) Result in inadequate emergency access?			✓	

Impact Analysis

Would the project:

- a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Transportation and traffic impacts were analyzed by JLB Traffic Engineering, Inc. in a Traffic Impact Analysis (Appendix B). The conclusions regarding the proposed project would allow the impacts of the project to be **less than significant with mitigation** by implementing the following mitigation measures. The project shall contribute its equitable fair share as listed in Table XV of the Traffic Impact Analysis (Appendix B).

Mitigation Measures

- TRA-01** Project Driveway 1 shall have a minimum throat depth of 150 feet before any vehicular openings to the north.
- TRA-02** The Project shall implement a walkway along its frontage to Sandpiper Avenue and complete the walkway along its frontage to G Street. Based on the implementation progress of the project, the timing of these improvements shall be at the discretion of the City Engineer.
- TRA-03** The Project shall implement a Class II Bike Lane along its frontage to G Street. Based on the implementation progress of the project, the timing of this improvement shall be at the discretion of the City Engineer.
- TRA-04** The intersection of G Street and Project Driveway 1 shall be signalized with protective left-turn phasing in all directions.
- TRA-05** The intersection of Sandpiper Avenue and Mercy Avenue shall be modified as an All-Way Stop with the following details:
- Stripe a westbound left-turn lane;
 - Modify the westbound left-through-right lane to a through-right lane;
 - Stripe a northbound left-turn;
 - Modify the northbound left-through-right lane to a through-right lane; and
 - Implement an all-way stop control.
 - Based on the implementation progress of the project, the timing of these improvements shall be at the discretion of the City Engineer.
- TRA-06** The intersection of G Street and Yosemite Avenue shall have a second southbound left-turn lane added, the traffic signal shall be modified to implement overlap phasing of the northbound right-turn with the westbound left-turn phase, and westbound to eastbound U-turns shall be prohibited. Prior to implementation of this measure, design details and timing are to be approved by the City Engineer.
- TRA-07** The intersection of Paulson Road and Yosemite Avenue shall have an eastbound through-right lane with a receiving lane east of Paulson Road added. Prior to implementation of this measure, design details and timing are to be approved by the City Engineer.

b) *Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?*

Senate Bill (SB) 743 (Steinberg 2013) was approved by then Governor Brown on September 27, 2013. SB 743 created a path to revise the definition of transportation impacts according to CEQA. The revised CEQA Guidelines requiring VMT analysis became effective December 28, 2018; however, agencies have until July 1, 2020 to finalize their local guidelines on VMT analysis. Therefore, as agencies finalize their VMT analysis protocol, CEQA transportation impacts are to be determined using LOS of intersections and roadways, which is a measure of congestion. The intent of SB 743 is to align CEQA transportation study methodology with and promote the statewide goals and policies of reducing vehicle miles traveled (VMT) and greenhouse gases (GHG). Three objectives of SB 743 related to development are to reduce GHG, diversify land uses, and focus on creating a multimodal environment. It is hoped that this will spur infill development.

The Technical Advisory on Evaluating Transportation Impacts in CEQA published by the Governor's Office of Planning and Research (OPR) dated December 2018 acknowledges that lead agencies should set criteria and thresholds for VMT and transportation impacts. However, the Technical Advisory provides guidance to residential, office and retail uses, citing these as the most common land uses. Beyond these three land uses, there is no guidance provided for any other land use type. The Technical Advisory also notes that land uses may have a less than significant impact if located within low VMT areas of a region. Screening maps are suggested for this determination.

VMT is simply the product of a number of trips and the length of those trips. The first step in a VMT analysis is to establish the baseline average VMT, which requires the definition of a region. The Technical Advisory states that existing VMT may be measured at the regional or city level. On the contrary, the Technical Advisory also notes that VMT analyses should not be truncated due to "jurisdictional or other boundaries."

As the Project is within a defined service area, it is likely that the Project would not add VMT per capita of service population to the region. Additionally, the Project site is located near transit services and pedestrian and bicycle networks. In the near future, the City may wish to coordinate with the regional agency (MCAG) and develop criteria and thresholds that balance the direction from OPR and the goals of SB743 with the vision for Merced and economic development, affordable housing, access to goods and services, and overall quality of life. The potential impacts are **less than significant**.

c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Implementation of the proposed project would not alter any existing roads or create new roads in such a way to substantially increase hazards due to a geometric design feature. The proposed project would alter the a number of intersections as required by Mitigation Measures TRA-01 through TRA-07. Construction of the proposed project would create **less than significant impact with mitigation**.

d) *Result in inadequate emergency access?*

The proposed project includes multiple points of access the site, two off of G Street, one off of Yosemite Avenue, and two off of Sandpiper Avenue. Providing two points of access into the site satisfies the Fire Departments requirements for emergency access. Any impacts would be **less than significant**.

18. Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
18. <u>Tribal Cultural Resources</u> Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				✓
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				✓

Impact Analysis

Would the project:

- a) *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

- i. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
- ii. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

As stated in the Cultural Resources Section of this Initial Study, improvements associated with the project include site excavation, grading, paving, and construction of buildings. The areas of the project subject to demolition and construction facilities are likely to have been subject to ground disturbance in the past. No tribal resources are known to have occurred or have been identified at the project site or in the vicinity of the project site. However, as noted in the Cultural Resources Section, implementation of Mitigation Measures CUL-1 and CUL-3 would protect previously unrecorded or unknown cultural resources, including Native American artifacts and human remains, should these be encountered during project construction.

In addition, Assembly Bill (AB) 52 provides for consultation between lead agencies and Native American tribal organizations during the CEQA process. Since AB 52 was enacted in July 2015, the City has not been contacted by any California Native American tribes requesting that they be notified when projects are proposed in Merced. As a result, the City is not required to notify any tribes of this project, and no tribes have requested consultation pursuant to Public Resources Code section 21080.3.1. Therefore, it is assumed that no Tribal Cultural Resources would be adversely affected by the project. As a result, **no impact** would occur.

19. Utilities and Service Systems

SETTING AND DESCRIPTION

Water

The City's water system is composed of 23 groundwater production wells located throughout the City, approximately 350 miles of main lines, and 4 water tower tanks for storage. 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 outage. 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 day 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 geologic 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 assure

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 City requires the construction of storm water percolation/detention basins with new development. Percolation basins are designed to collect storm water and filter it before it is absorbed into the soil and reaches groundwater tables. Detention basins are designed to temporarily collect runoff so it can be metered at acceptable rates into canals and streams which have limited capacity. 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, one and one-half miles north of Old Lake Road. The County of Merced is the contracting agency for landfill operations and maintenance, while the facilities are owned by the Regional Waste Authority. 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
19. <u>Utilities and Service Systems.</u>				
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			✓	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			✓	
c) Result in a determination by the waste water 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?			✓	
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			✓	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			✓	

Impact Analysis

Would the project:

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

The proposed project would be served, largely through lines in Yosemite Avenue and G Street, by the City's existing water, wastewater treatment, and storm water drainage systems. Electrical power, natural gas, and telecommunications facilities are all located near the site. It is not anticipated that any new facilities would be required. This impact would be **less than significant**.

- b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The City's water supply system consists of four elevated storage tanks with a combined storage capacity of approximately 1.4 million gallons, 23 wells and 14 pumping stations. The project is expected to use approximately 53,125 gallons of water per day. There is a 16-inch water line in Yosemite Avenue and another 16-inch line in McKee Road to serve the project site. The City's water supply would be sufficient to serve the proposed project. This impact would be **less than significant**.

- c) *Result in a determination by the waste water 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?*

The City's 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 2 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 WWTP recently finished two major upgrades (Phase IV and Phase V) to improve the quality of the treated water, referred to as plant effluent, and to improve the quality of biosolids and methods of treatment. The Merced Wastewater Treatment Plant is now one of the most advanced facilities in the state. It is capable of treating up to 12 million gallons of influent a day. The proposed project is estimated to generate approximately 35,788 gallons of wastewater per day (based on 213 gallons/dwelling unit, 108 gallons/day/1,000 square feet of floor area for office and commercial uses gallons, and 100 gallons/day/room for the hotel). The additional wastewater generated by the project would be approximately 0.3% of the overall capacity of the WWTP.

There is sufficient capacity at the WWTP, and the existing lines in Yosemite Avenue and G Street have enough capacity during peak hours to accommodate the additional wastewater and transmit it to the WWTP for processing. This impact is **less than significant**.

- d) *Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Solid wastes within the County of Merced are disposed of at two landfill sites owned and operated by the Merced County Regional Waste Management Authority. The west side of the County is served by the Billy Wright Road landfill, and the east side (including the City of Merced) by the Highway 59 landfill, 1.5 miles north of Old Lake Road. The County of Merced is the contracting agency for landfill operation and maintenance. It is estimated that the remaining capacity of the Highway 59 site will last until the year 2030. The City of Merced provides services for all refuse pick-up within the City limits, including green waste and recycling. Street sweeping services are also offered.

The proposed project would be required to provide recycling containers for the multi-family residences as well as general garbage containers. Additionally, in order to reduce the number of containers on site for general waste, the developer may install trash compactors. CalRecycle estimates that the average multi-family unit generates approximately 4 pounds of waste per day (combined trash and recyclables). This equates to 176 pounds/day for the overall project. It is expected that approximately ½ of the total waste generated by the multi-family residential component could be recycled. The City's Refuse Department would be able to serve the project and sufficient capacity is available at the landfill to serve the project. This impact would be **less than significant**.

- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The California Integrated Waste Management Act of 1989 (AB 939) changed the focus of solid waste management from landfill to diversion strategies such as source reduction, recycling, and composting. The purpose of the diversion strategies is to reduce dependence on landfills for solid waste disposal. AB 939 established mandatory diversion goals of 25 percent by 1995 and 50 percent by 2000. The proposed project would be required to comply with all federal, State, and local regulations related to solid waste. Furthermore, the proposed project would be required to comply with all standards related to solid waste diversion, reduction, and recycling during project construction and operation of the project. Therefore, the proposed project is anticipated to result in **less-than-significant** impacts related to potential conflicts with federal, State, and local statutes and regulations related to solid waste.

20. Wildfire

SETTING AND DESCRIPTION

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 surrounded by urban uses. The single-family lots to the south are lots of approximately 0.2 to 0.3 acres in size. These lots contain areas of grass and other vegetation that could be susceptible to fires. 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.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
20. Wildfire. If located in or near stat responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			✓	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			✓	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			✓	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				✓

Impact Analysis

Would the project:

- a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

The project construction of new roadways for the project is limited to the internal roadway network and the extension of Sandpiper Drive, which as previously discussed is contemplated in the City of Merced General Plan through the Circulation Map. The project would also be required to comply with all applicable requirements of the California Fire Code. As such, the project would not have major impact on an adopted emergency response plan or emergency evacuation plan. This impact would be **less than significant**.

- b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

According to the California Department of Forestry and Fire Protection, the project site is not located in any fire hazard zone. The areas surrounding the project site are mostly developed, urban land.

There is a low potential for wildland fires within these parameters. Additionally, the California Building Code and the California Fire Codes work together to regulate building construction and related items such as the care of vacant lots and the storage of flammable liquids.

To provide effective fire prevention activities for low hazard occupancies, the Fire Department conducts seasonal hazard removal programs (primarily weed abatement). The City of Merced employs a weed abatement program, which requires property owners to eliminate flammable vegetation and rubbish from their properties. Each property within the City is surveyed each spring and notices are sent to the property owners whose properties have been identified to pose a fire risk. Since inception of this program in 1992, grass or brush related fires within the City have been greatly reduced. The City also picks up abandoned vehicles, and a "Spring Clean-up" conducted annually allows people to have bulky refuse picked up at transfer stations without charge. A permanent site recently opened near Highway 59 and Yosemite Avenue. Further, staging areas, building areas, and/or areas slated for development using spark-producing equipment are cleared of dried vegetation or other materials that could serve as fuel for combustion; impacts are considered **less than significant**.

- c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

The project would be required to repair/replace any missing or damaged infrastructure along their property frontage. However, the on-going maintenance of roadways would fall to the City. All other infrastructure or utilities exist in the area. No additional infrastructure or on-going maintenance would be required that would cause an impact to the environment. This impact is **less than significant**.

- d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site and surrounding area is relatively flat with no risk of downslope or downstream flooding or landslides. Therefore, there is **no impact**.

21. Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
21. <u>Mandatory Findings of Significance.</u> Would the project:				
a) 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?			✓	
b) 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?)			✓	
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			✓	

Impact Analysis

Would the project:

- a) *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?*

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**.

- b) *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?)*

The Program Environmental Impact Report conducted for the *Merced Vision 2030 General Plan, and 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 of the proposed change will contribute to the cumulative impacts identified in the General Plan EIR. 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. This impact is **less than significant**.

- c) *Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

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 prime agricultural soils, 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 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 has 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 has been adopted by City Council Resolution #2011-63 that indicates that the significant impacts associated with development of the Project are offset by the benefits that will be realized in providing necessary jobs for residents of the City. The analysis and mitigation of impacts has been detailed in the Environmental Impact Report prepared for the *Merced Vision 2030 General Plan*, which are 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 either be **less than significant** or **less than significant with mitigation measures**.

Attachments:

- A) Public Hearing Notice and Notice Area Map
- B) Mitigation Monitoring Program

Appendices:

- A) Air Quality and Greenhouse Gas Impact Analysis for General Plan Amendment #19-03
- B) Traffic Impact Analysis for General Plan Amendment #19-03
- C) Mitigation Monitoring Program for Initial Study #10-06