

ADDENDUM TO THE MERCED VISION 2030 GENERAL PLAN FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT

General Plan Amendment #22-03
Environmental Review #22-25

LEAD AGENCY:

City of Merced
678 W. 18th Street
Merced, CA 95340

Contact: Julie Nelson,
Senior Planner
(209) 385 - 6967

TABLE OF CONTENTS

SECTION 1: INTRODUCTION AND PURPOSE.....	2
1.1 - CEQA Authority for an Addendum	2
1.2 – Previous CEQA Environmental Documents	5
1.3 – Findings.....	5
1.4 – CEQA Approach	5
SECTION 2: PROJECT DESCRIPTION	5
Project Name:.....	5
Project Location:.....	5
Project Applicant:	5
Setting:	6
SECTION 3: Environmental Impact Analysis.....	10
3.1 – Summary	10
3.2 - Merced Vision 2030 General Plan EIR: Transportation and Traffic	10
3.2 – Updated Analysis of Proposed Change	11
Approach.....	11
Development Characteristics	12
Circulation System Assumptions	12
Results	12
SECTION 4: Conclusion	13

SECTION 1: INTRODUCTION AND PURPOSE

The California Environmental Quality Act (“CEQA”) recognizes that between the date an environmental document is completed and the date that the project is fully implemented, CEQA Section 15164 provides that “the lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some change or additions are necessary but none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred.

On January 3, 2012, the Merced City Council approved the *Merced Vision 2030 General Plan* Program Environmental Impact Report (“FEIR”). The FEIR analyzes the implementation and buildout of the General Plan through the 2030 planning period and includes a circulation plan that addresses the City’s major road system, local street patterns, air facilities, bus and rail transit, and bicycle and pedestrian facilities. As a Program level EIR, the FEIR did not review specific proposals, but rather analyzed the development potential of approximately 33,462 acres of land within the Specific Urban Development Planning Area (SUDP) and the Sphere of Influence (SOI). The Transportation/Traffic section of the FEIR identified transportation impacts associated with implementation of General Plan. A traffic analysis was prepared (Fehr and Peers, May 9, 2009) to investigate anticipated traffic conditions with implementation of the proposed General Plan.

The proposed General Plan Amendment would redesignate the section of Mission Avenue from Coffee Street east to Tower Road (extended) from a Divided Arterial to a Collector road, thus reducing the right-of-way from 118 feet to 74 feet (not including landscape areas). This reduction is requested as part of the Merced Gateway Marketplace Shopping Center that was approved in 2017. An Environmental Impact Report (EIR) (SCH #2015101048) was approved by the Merced City Council on August 9, 2017, for the Merced Marketplace. This EIR did not consider the reduction in the roadway classification for Mission Avenue.

1.1 - CEQA Authority for an Addendum

The California Environmental Quality Act (“CEQA”) Guidelines Section 15162 through 15164 specify the type of documentation required when changes are proposed to a project that has been previously approved pursuant to a certified EIR. State CEQA Guidelines Section 15162 states:

“a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record one or more of the following:

- (1) *Substantial changes are proposed in the project, which will require major revisions of the previous EIR or negative declaration due to the involvement of new environmental effects or a substantial increase in the severity of previously identified significant effects;*
 - (2) *Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or,*
 - (3) *New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time of the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:*
 - A. *The project will have one or more significant effects not discussed in the previous EIR or negative declaration;*
 - B. *Significant effects previously examined will be substantially more severe than shown in the previous EIR;*
 - C. *Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or*
 - D. *Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.*
- b) *If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise, the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.*
 - c) *Once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency, which grants the next discretionary approval for the project, if any. In this situation, no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.*
 - d) *A subsequent EIR or subsequent negative declaration shall be given the same notice and public review as required under Section 15087 and 15072. A*

subsequent EIR or negative declaration shall state where the previous document is available and can be reviewed.”

Section 15163 addresses when a supplemental EIR is required:

- “a) The Lead or Responsible Agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:
 - (1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and*
 - (2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.**
- b) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.*
- c) A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.*
- d) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.*
- e) When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised.”*

Section 15164 of the State CEQA Guidelines allows for an addendum when a subsequent or supplemental EIR is not required. State CEQA Guidelines Section 15164 states:

- “a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some change or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.*
- b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.*
- c) An addendum need not be circulated for public review, but can be included in or attached to the final EIR, or adopted negative declaration.*
- d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.*
- e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency’s findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.”*

1.2 – Previous CEQA Environmental Documents

Merced Vision 2030 General Plan EIR

The City's General Plan includes forecasts of long-term conditions, outlines development goals and policies, and includes exhibits and diagrams. It guides growth and development within the City by designating land uses on the proposed land use map and through implementation of the goals and policies of the City's General Plan. It also provides a long-term vision for the City, and through its implementation goals and policies, indicates how that vision may be achieved over time.

The *Merced Vision 2030 General Plan EIR* (SCH #2008071069) was certified on January 4, 2012, and addresses the environmental effects associated with the implementation of the City's General Plan.

1.3 – Findings

For purposes of the Addendum, the project includes amending the Circulation Element by changing the roadway classification for a portion of Mission Avenue [from Coffee Street east Tower Road (extended)] from "Divided Arterial" to "Collector." The proposed change does not require preparation of a new subsequent or supplemental EIR, due to neither the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Therefore, the completion of an Addendum is appropriate CEQA compliance for the project.

1.4 – CEQA Approach

Pursuant to State CEQ Guidelines, this Addendum has been prepared to determine whether changing the roadway classification for a portion of Mission Avenue [from Coffee Street east to Tower Road (extended)] would result in new impacts or new information of substantial importance requiring the preparation of a subsequent or supplemental EIR. As documented within this Addendum, none of the criteria outlined in State CEQA Guidelines Sections 15162 or 15163 have been identified. Thus, this Addendum is sufficient to approve the minor revisions to the Circulation Element of the City's General Plan.

SECTION 2: PROJECT DESCRIPTION

Project Name:

General Plan Amendment #22-03

Project Location:

Mission Avenue, from Coffee Street, east to Tower Road (Figure 1)

Project Applicant:

Eric Pluim, on behalf of Gateway Park Development Partners, LLC
133 Old Wards Ferry Road, Ste. G
Sonora, CA 95370-7822

Figure 1 – Location Map



Setting:

The Circulation Element of the *Merced Vision 2030 General Plan* is Chapter 4 of the General Plan. This element addresses the City's major road system, local street patterns, air facilities, bus and rail transit, and bicycle and pedestrian facilities. The goal is to identify the most effective ways to plan for circulation while enhancing the community and protecting the environment.

City and regional streets and highways are classified by categories that reflect their importance and function. Freeways are the highest level of roadway, with fully controlled access, high operating speeds and volumes, and highest design standards. Local streets and alleys are the lowest function classification, with low speeds and volumes and direct access to adjacent property. Other roadway classifications include:

Road Classification	Right-of-Way	# of Lanes
Major Arterial	128 Ft.	4-6
Arterial	128 Ft.	4-6
Divided Arterial	118 Ft.	4-6
Minor Arterial	94 Ft.	2-4
Major Collector	68-74 Ft.	2-4
Collector	68 Ft.	2
Local	51-62 Ft.	2

Figure 4.1 of the *Merced Vision 2030 General Plan* provides the Circulation Plan for the City (refer to Figure 2 of this document). This map shows the major roadways and their classifications according to the Circulation Plan.

Mission Avenue is an east/west road that extends from SR Hwy 59 to Arboleda Road. West of SR Hwy 59, Mission Avenue becomes Dickenson Ferry Road and extends west to Quinley Road. The sections of Mission Avenue between SR Hwy 59 and Tyler Road and Hwy 99 and Tower Road are within the City Limits (Figure 2.1). The rest of Mission Avenue/Dickenson Ferry Road is in the unincorporated areas of the County.

According to the Circulation Map at Figure 2, Mission Avenue is classified as a Major Arterial (128-foot right-of-way) from the west side of Hwy 99 to SR Hwy 59. On the east side of Hwy 99, Mission Avenue is classified as a Divided Arterial (118-foot right-of-way). The proposed change would reduce the classification for Mission Avenue from Coffee Street east to the end of the City Limits at Tower Road (extended) from a Divided Arterial to a Collector Road (74-foot right-of-way). The section of Mission Avenue between Coffee Street and Hwy 99 was abandoned in 2018 as the road came to a dead-end and this section was no longer needed.

In 2008, the Mission Avenue/Hwy 99 interchange was constructed. This interchange connects to Campus Parkway, which in turn connects north to Yosemite Avenue and will eventually connect to the UC Merced Campus.

In July 2022, the Campus Parkway (a four-lane expressway) opened the second segment of the expressway. This expressway provides cross-town access from Hwy 99 to Yosemite Avenue in North Merced. This expressway has easy access to North and South Hwy 99 as well as connections to East SR Hwy 140. Connections to SR Hwy 59 North and South as well as West SR Hwy 140 can be made via Hwy 99.

Figure 2 Circulation Map

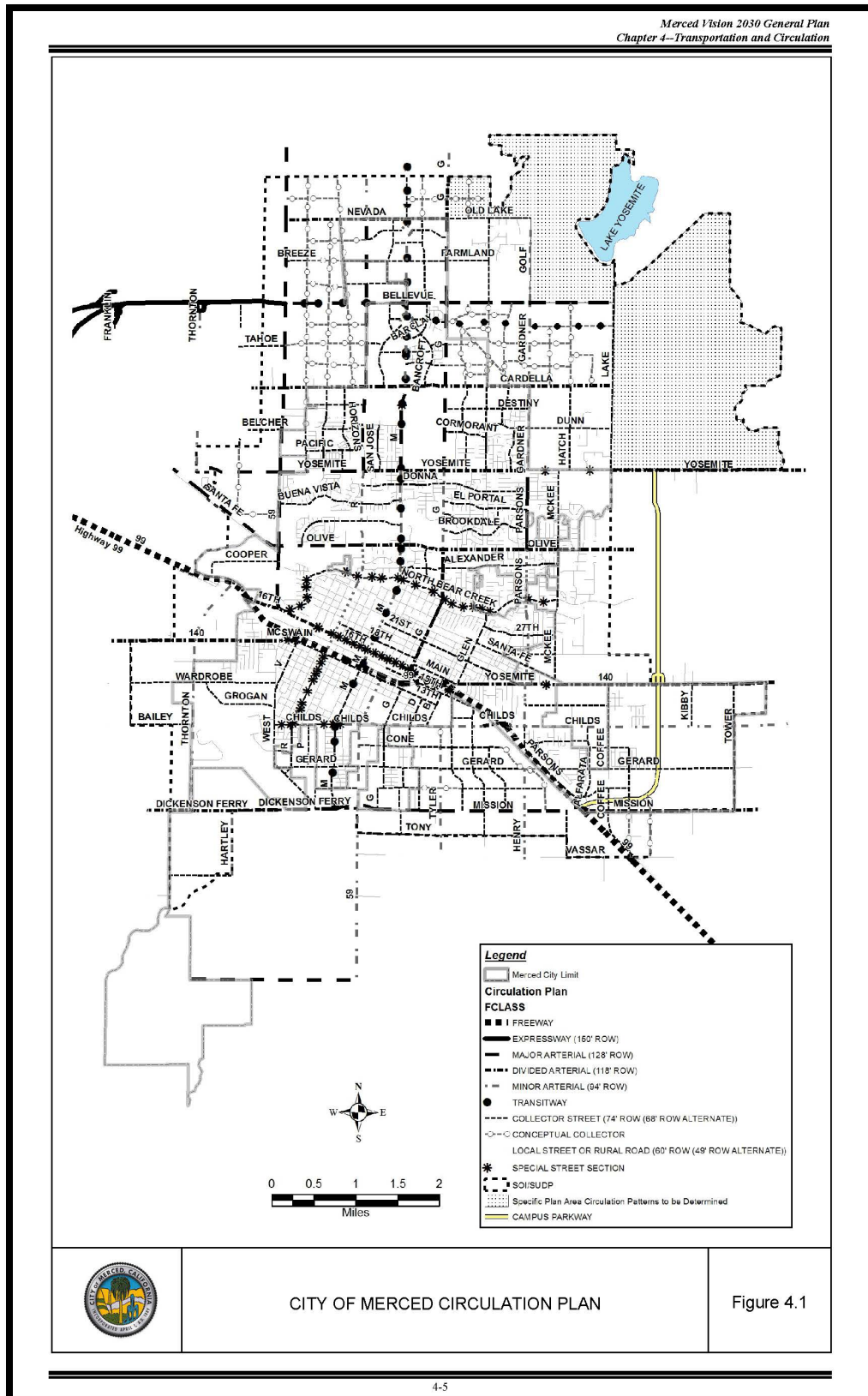
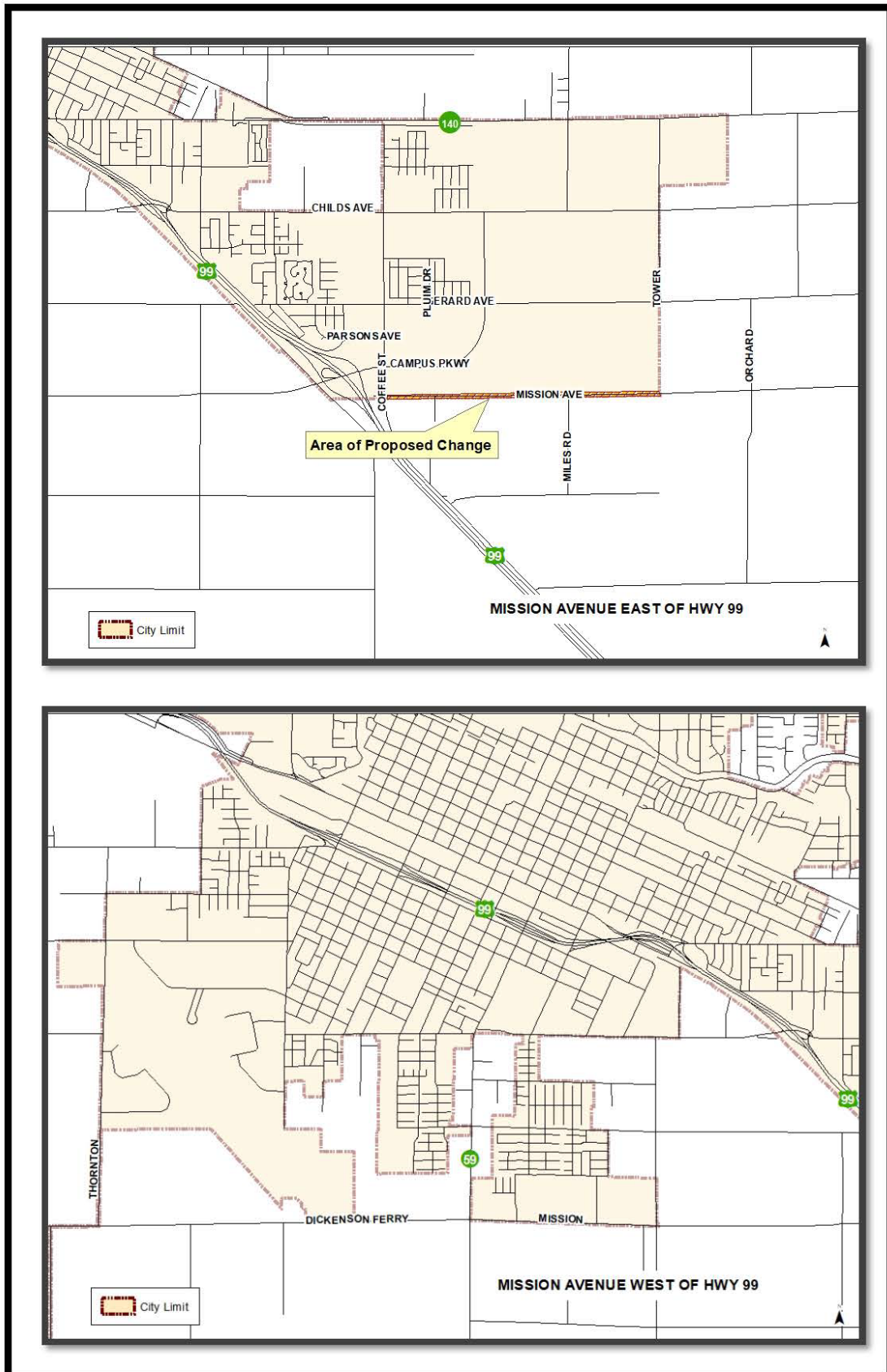


Figure 2.1 – Mission Avenue



With the opening of Campus Parkway, the need for Mission Avenue to be a Divided Arterial on the north side of Hwy 99 was diminished. Mission Avenue no longer provides access to Hwy 99. Campus Parkway now provides access as previously described.

Campus Parkway would provide access to the future Pluim Drive (Collector) which would connect to Mission Avenue. Mission Avenue is proposed to be changed from a Divided Arterial to a Collector from Pluim Drive to Tower Road (extended). East of Tower Road (extended) would remain a Divided Arterial. It should be noted that the area east of Tower Road is outside of the City Limits and the City's SUDP and SOI.

Mission Avenue is the southern boundary for the Merced Gateway Marketplace shopping center. This shopping center extends north to Gerard Avenue and is bisected by Campus Parkway. As this shopping center developed, the developers realized that Mission Avenue would no longer need to be a Divided Arterial along their project frontage due to the access provided by Campus Parkway and Pluim Drive (extended). The Merced Gateway Marketplace Shopping Center site consists of 77.5 acres. The shopping center will include over 600,000 square feet of commercial uses and approximately 200 multi-family apartments. Construction of the first phase of the shopping center has begun between Campus Parkway and Mission Avenue. Currently, this phase includes an Arco AM/PM Mini-Mart/Gas Station, Starbuck's, McDonald's, and Tractor Supply.

The developer immediately to the east of the Merced Gateway Marketplace determined that Mission Avenue would no longer need to be a Divided Arterial to serve their development as well. As the City looked at the roadway classification for the segment of Mission Avenue from Coffee Street to the City Limits at Tower Road (extended), it was determined that a Collector Street would serve this area sufficiently. A Design Assessment prepared by KD Anderson & Associates, Inc. indicated that Mission Avenue would continue to operate at a Level of Service (LOS) D or better from Coffee Street east to Tower Road (extended) if it was changed to a Collector Street.

SECTION 3: Environmental Impact Analysis

3.1 – Summary

The *Merced Vision 2030 General Plan* analyzed potential impacts related to the following sections: Aesthetics, Agriculture and Forest Resource, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Recreation, Public Services, Transportation, Utilities and Services, Public Services, Transportation, Utilities and Services, and Greenhouse Gas Emissions.

The proposed project only seeks to amend the information found in the Circulation Element of the General Plan. The City's preliminary review of the project determined that Traffic and Transportation is the only environmental issue potentially affected by the proposed change to the classification of a segment of Mission Avenue. Therefore, this analysis only addresses potential impacts related to the Transportation section of the EIR.

3.2 - Merced Vision 2030 General Plan EIR: Transportation and Traffic

Section 3.15 of the City's General Plan EIR evaluates the potential transportation and traffic impacts resulting from the implementation of the City's General Plan. Implementation of the proposed *Merced Vision 2030 General Plan* will generate increased

traffic that will affect circulation conditions on the local and regional roadway network. The General Plan Circulation Element includes a broad range of policies for managing and optimizing the function of the transportation system to accommodate this additional traffic, and the proposed Circulation Plan included in the Circulation Element identifies the location of the physical circulation system planned throughout the City.

As part of the EIR, a traffic analysis was prepared. The traffic analysis investigated anticipated traffic conditions with implementation of the proposed General Plan. The analysis focused on the projected roadway and intersection operations at buildout of the *Merced Vision 2030 General Plan* and investigated the adequacy of the proposed Circulation Plan, primarily as it pertains to vehicle traffic on the planned roadways and intersections.

As a result of the traffic analysis, traffic volumes and the Level of Service (LOS) on key roadway segments were included in the EIR and subsequently in the Transportation Section of the General Plan. Table 3.15-4 of the EIR provided the traffic volumes and LOS results. It should be noted that the LOS results presented in Table 3.15-4 represent a worst-case scenario, as the roadway segment analysis was based on buildout of the Merced Vision 2030 General Plan, which most likely will not occur in its entirety by the year 2030, and the analysis does not consider the additional capacity that is provided at intersections for additional turn pockets (i.e. dual left-turn pockets), nor the benefits of signal timing coordination and advanced traffic signal technology that will be phased in over the life of the General Plan.

According to the Transportation Element of the *Merced Vision 2030 General Plan*, Level of Service (LOS) standards are a method for expressing how well traffic is moving on a road or through an intersection in relation to the capacity of that road or intersection. LOS ranks the quality of traffic movement on a scale of A through F, with A being the best.

The traffic analysis prepared for the General Plan included the section of Mission Avenue proposed to be changed [from Coffee Street east to Tower Road (extended)]. The analysis considered this section of Mission Avenue as a Divided Arterial, but it currently only has two lanes. The analysis showed that Mission Avenue from Coffee Street to Tower Road currently operates at a Level of Service (LOS) C+. At build-out of the General Plan, this section of Mission Avenue was considered to be a four-lane Divided Arterial and continued to operate at LOS C+. The average daily trips expected at build-out was 1,890.

3.2 – Updated Analysis of Proposed Change

An updated traffic analysis to consider the proposed change to the segment of Mission Avenue from Coffee Street east to Tower Road (extended) was prepared by Ken Anderson & Associates (Attachment 1). This analysis considered the long-term traffic conditions that represent full buildout of land uses in the area that will be tributary to E. Mission Avenue.

Approach

The analysis presented long-term daily traffic volumes and resulting traffic conditions under the current General Plan circulation plan. This work has involved identifying long term land use assumptions for the southeastern Merced area, including the Industrial areas east of Campus Parkway. The travel demand forecasting model created for the

Merced Gateway EIR (SCH #2015101048) was modified for this purpose, including incorporating relevant future roadways (i.e., Coffee Street and Pluim Drive extensions to Marino Way). The applicable roadway section for Mission Avenue was then determined based on daily traffic volume and the General Plan's applicable LOS thresholds (refer to the excerpt from Table 1 of the analysis Prepared by Ken Anderson & Associates, Inc. – Attachment 1).

Table 1 (excerpt)

Level of Service Thresholds for Roadway Segments					
Roadway Type	Daily Roadway Segment Level of Service Thresholds				
	LOS A	LOS B	LOS C	LOS D	LOS E
2 lane Arterial	-	-	11,600	16,000	16,800
4 lane Arterial	-	4,100	26,800	33,700	35,400
6 lane Arterial	-	6,600	41,800	50,700	53,200
2 lane Collector	-	-	4,800	10,300	13,200
4 lane Collector	-	-	11,300	22,200	26,400

A new 24-hour count collected on May 28, 2021, revealed that Mission Avenue from Coffee Street to Arboleda Drive currently operates at LOS C. The section of Mission Avenue from Coffee Street to Tower Road had 375 average daily trips (ADT's), of which 28 (7%) were trucks. Mission Avenue from Tower Road to Arboleda had 109 ADT's with 14 trucks (13%).

Development Characteristics

Because a lot of the land in the area of Mission Avenue and Coffee Street is vacant, the traffic analysis assumed certain land uses. These assumptions were based on the previous EIR prepared for the Merced Gateway Shopping Center (SCH #2015101048), but were modified to create a "worst case" assessment of the areas traffic volumes. The land uses assumed included the Merced Gateway Shopping Center, Business Park, and Industrial. Table 3 of Attachment 1 provides more details on the assumptions made in the analysis.

Circulation System Assumptions

The traffic analysis at Attachment 1 assumed certain roadways were either existing or would be constructed at buildout of the General Plan (refer to Table 4 of Attachment 1). Consistent with the proposed change, Mission Avenue was assumed to be a Collector rather than a Divided Arterial in these assumptions.

Results

The analysis used the Merced County Association of Government's (MCAG) traffic model. When the model was run, assuming Mission Avenue from Coffee Street, east to Tower Road (extended) is a 2-lane Collector road instead of a Divided Arterial, this section continued to operate at LOS D or better.

Because this segment would maintain the same level of service as a two-lane Collector as it was expected to as a Divided Arterial in the General Plan EIR, there are no impacts associated with the proposed change in the classification of this segment of Mission Avenue.

SECTION 4: Conclusion

As described in Section 3 above, the proposed change to the classification of Mission Avenue from Coffee Street to Tower Road (extended) would not decrease the level of service for this segment or create other traffic-related impacts. Therefore, the Circulation Element of the General Plan would remain consistent with the assumptions in the General Plan Circulation Traffic Study. Additionally, there are no new impacts associated with air quality, noise, or greenhouse gas emissions. All applicable mitigation from the City's General Plan EIR will continue to be applied.

Based on the information provided above, the proposed General Plan Amendment to change the classification of a segment of Mission Avenue from Divided Arterial to Collector does not require revisions to the City's General Plan EIR.

Attachments:

- 1) Traffic Analysis

March 3, 2023

Mr. Eric R. Pluim
GATEWAY PARK DEVELOPMENT PARTNERS, LLC
133 Old Wards Ferry Road, Suite G
Sonora, CA 95370

RE: MISSION AVENUE DESIGN ASSESSMENT, MERCED, CA

Dear Mr. Pluim:

Thank you for contacting KD Anderson & Associates (KDA) regarding the traffic analysis needed by the City of Merced to address the ultimate design requirements of Mission Avenue east of State Route 99 (SR 99).

Background

Purpose of Analysis. As we understand, Dickenson Ferry Road-Mission Avenue extends east-west across southern Merced from Gurr Road on the west across SR 99 to Arboleda Drive on the east, as indicated in Figure 1. The City of Merced General Plan Circulation Element notes that the route will be improved to a multi-lane arterial in the area from Thornton Road on the west to Tower Road on the east. However, with the implementation of Campus Parkway, the segment east of SR 99 (i.e., E. Mission Avenue) no longer has direct access to the freeway, and recent improvements to the SR 99 / Arboleda Drive / Le Grand Road interchange provide another truck route to SR 99 as well. You have suggested to the City of Merced that a four-lane arterial street, as designed in the General Plan is no longer needed east of SR 99. City of Merced staff has indicated that analysis of long-term traffic conditions that represent full buildout of land uses in the area that will be tributary to E. Mission Avenue is needed to address this issue. By comparing “build out” traffic volumes with the roadway capacity threshold included in the General Plan, the analysis herein provides the evidence needed to support or deny the change you request.

Approach. The analysis summarized herein presents long term daily traffic volumes and resulting traffic conditions under the current General Plan circulation plan. This work has involved identifying long term land use assumptions for the southeastern Merced area, including the Industrial areas east of Campus Parkway. The travel demand forecasting model created for the *Merced Gateway EIR* was modified for this purpose, including incorporating relevant future roadways (i.e., Coffee Street and Pluim Drive extensions to Marino Way). The applicable roadway section for Mission Avenue was then determined based on daily traffic volume and the General Plan’s applicable LOS thresholds (i.e., Table 1).

TABLE 1 LEVEL OF SERVICE THRESHOLDS FOR ROADWAY SEGMENTS					
Roadway Type	Daily Roadway Segment Level of Service Thresholds				
	LOS A	LOS B	LOS C	LOS D	LOS E
6 lane Freeway	25,900	42,600	57,800	68,400	76,000
4 lane Freeway	40,000	65,800	89,200	105,600	117,400
4 lane Expressway		3,000	27,800	36,000	37,800
6 lane Expressway		5,900	38,900	48,900	51,300
2 lane Arterial	-	-	11,600	16,000	16,800
4 lane Arterial	-	4,100	26,800	33,700	35,400
6 lane Arterial	-	6,600	41,800	50,700	53,200
2 lane Collector	-	-	4,800	10,300	13,200
4 lane Collector	-	-	11,300	22,200	26,400
2 lane County Road	-	-	7,700	15,000	16,100
Source: Merced Vision 2030 General Plan, 2010					

Current Traffic Volumes / Levels of Service. New 24-hour counts were collected for study area roads on May 27, 2021 to provide perspective on current traffic conditions on relevant segments. These volumes and Levels of Service are shown in Figure 2 and summarized in Table 2.

TABLE 2
CURRENT DAILY TRAFFIC VOLUMES / LEVEL OF SERVICE

Street	Location	Class	Lanes	Daily Volume			LOS
				Total	Trucks	Truck %	
Campus Pkwy	Coffee St to Gerard Ave	Expressway	4	4,432	426	10%	A
	Gerard Ave to Childs Ave		4	3,398	499	15%	A
	Childs Ave to Yosemite Ave (SR 140)		4	1,039	64	6%	A
Yosemite Ave (SR 140)	Campus Pkwy to Tower Rd	Divided Arterial	2	7,178	625	9%	B
Childs Avenue	Campus Pkwy to Tower Rd	Minor Arterial	2	5,044	506	10%	C
Gerard Avenue	Campus Pkwy to Tower Rd	Collector	2	487	35	7%	C
Mission Avenue	Coffee St to Tower Rd	Divided Arterial	2	375	28	7%	C
	Tower Rd to Arboleda Dr	Divided Arterial	2	109	14	13%	C
Coffee Street	Campus Pkwy to Mission Ave	Collector	2	1,548	134	9%	C
	Mission Ave to Marino Way	Collector	2	1,211	121	10%	C
Marino Way	Coffee St to Le Grand Rd	Merced County ¹	2	375	41	11%	C
Kibby Road	SR 140 to Childs Ave	Collector	2	1,336	217	16%	C
Tower Road	SR 140 to Gerard Ave	Collector	2	335	51	15%	C
Arboleda Drive	SR 140 to Mission Ave	Merced County ¹	2	2,224	275	12%	C
	Mission Ave to Le Grand Rd	Merced County ¹	2	934	222	24%	C

¹ LOS based on 2 lane County Road threshold

KDA

Development Characteristics. This analysis makes use of land use assumptions for the cumulative analysis presented in the Merced Gateway EIR (MGEIR) traffic study but modifies those assumptions to create a “worst case” assessment of the area’s traffic volumes. The MGEIR originally assumed cumulative development that was consistent with the Merced County Association of Governments (MCAG) regional travel demand forecasting model for the Year 2035. The MGEIR analysis added build out of the Merced Gateway project.

The analysis contained herein assumes that the non-residential land uses in the southeast Merced area are built out. Figure 3 notes these areas, and the land use assumptions for each area are listed in Table 3. As indicated, this “Build Out” analysis assumes that the southeast Merced area could eventually contain more than 17,000 employees. Because development of the reserves was not assumed in the City of Merced GPEIR and will not proceed without a General Plan amendment, this analysis does not address future conditions with reserve area development.

TABLE 3 SOUTHEAST MERCED DEVELOPMENT ASSUMPTIONS					
Area	Land Use	MGEIR Cumulative		Assumed	
		Development Level	Employees	Development Level	Employees
1	Industrial	Partial	3,176	Build Out	15,544
2	Business Park East of Pluim Drive	Partial	440	Build Out	1,605
3	Merced Gateway	Build Out	720	Build Out	720
Total			4,336		17,869
Retail Commercial density 27.4 employees per acre Office Commercial density 21.4 employees per acre Industrial density 17.6 employees per acre					

Circulations System Assumptions. The volume of traffic in the future on study area roads could vary based on assumptions for improvements to area roadways. This analysis assumes that improvements identified in the City of Merced General Plan will be made, as noted in Table 4.

TABLE 4 CIRCULATION IMPROVEMENTS ASSUMPTIONS			
Roadway	Location	Existing	Improvements
SR 99	Through Merced	4-6 lanes	Widen to 6 lanes
AME	Greensands Ave to Bellevue Rd	-	Construct to 4 lanes
Campus Parkway	SR 99 to Childs Ave	4 lanes	Widen to 6 lanes
	Childs Ave to SR 140	4 lanes	No change
	SR 140 to Yosemite Ave	-	Construct 4 lane
	Yosemite Ave to UCM	-	Construct 4 lanes
Coffee Street	Campus Pkwy to Mission Ave	2 lanes	Widen to 4 lanes
Pluim Drive	Campus Pkwy to Mission Ave	-	Construct 2 lanes
Tower Road	Gerard Ave to Mission Ave	-	Construct 2 lanes
Parsons Avenue	SR 140 to N. Bear Creek Rd	0-4 lanes	Complete to 4 lanes
	N. Bear Creek Rd to Yosemite Ave	2-4 lanes	Complete to 4 lanes
	Yosemite Ave to Bellevue Ave	0-2 lanes	Complete to 4 lanes
Mission Avenue	Coffee St to Tower Road	2 lanes	Collector

Results

Traffic Volume Forecasts. The MCAG traffic model was run to produce roadway segment daily traffic volumes, as noted in Figure 4. Level of Service was identified based on GPEIR thresholds in Table 5. For comparison, the daily traffic volumes and Level of Service reported in the GPEIR have also been presented.

Conditions on Mission Avenue. The unconstrained daily traffic volume on Mission Avenue east of Coffee Street falls below the minimum LOS D threshold for a two-lane Collector street. Thus, Merced General Plan standards will be satisfied with the proposed two-lane facility.

**TABLE 5
FUTURE DAILY TRAFFIC VOLUMES / LEVEL OF SERVICE**

Street	Location	Class	Future Lanes	Daily Volume				
				Existing	Future		GPEIR	
					Volume	LOS	Volume	LOS
Campus Pkwy	SR 99 to Coffee St	Expressway	6	n.a.	37,950	C	46,200	D
	Coffee St to Pluim Dr		6	4,432	27,450	C		
	Pluim Drive to Gerard Ave		6	4,432	19,950	C		
	Gerard Ave to Childs Ave		6	3,398	22,050	C		
	Childs Ave to Yosemite Ave (SR 140)		4	1,039	18,900	C	35,110	D
Yosemite Blvd (SR 140)	Campus Pkwy to Tower Rd	Divided Arterial	2	7,178	27,000	F	n.a.	
Childs Avenue	Campus Pkwy to Tower Rd	Minor Arterial	2	5,044	6,750	C	19,300	F
Gerard Avenue	Campus Pkwy to Tower Rd	Collector	2	487	10,650	C	7,640	D
Mission Avenue	Coffee St to Pluim Dr	Collector	2	375	5,000	D	1,890	C
	Pluim Dr to New Roadway East of BP	Collector	2	375	5,000	D		
	New Roadway East of BP to Tower Road	Collector	2	375	2,850	C		
	Tower Rd to Arboleda Dr	Divided Arterial	2	109	200	C	n.a.	
Coffee Street	Campus Pkwy to Mission Ave	Collector	2	1,548	6,050	D	n.a.	
	Mission Ave to Marino Way	Collector	2	1,211	1,250	C	n.a.	
Pluim Drive	Campus Pkwy to Mission Ave	Collector	2	n.a.	6,150	D	n.a.	
Marino Way	Coffee St to Le Grand Rd	Merced County ¹	2	375	450	C	n.a.	
Kibby Road	SR 140 to Childs Ave	Collector	2	1,336	7,350	D	n.a.	
Tower Road	SR 140 to Gerard Ave	Collector	2	335	2,300	C	n.a.	
Arboleda Drive	SR 140 to Mission Ave	Merced County ¹	2	2,224	2,250	C	n.a.	
	Mission Ave to Le Grand Rd	Merced County ¹	2	934	1,050	C	n.a.	
¹ LOS based on 2 lane County Road threshold								

KDA

*Mr. Eric Pluim
Gateway Park Development Partners, LLC
March 3, 2023
Page 7*

Thank you for reviewing this information. Please feel free to call Wayne Shijo at (916) 205-7032 if you have any questions.

Sincerely yours,

KD Anderson & Associates, Inc.

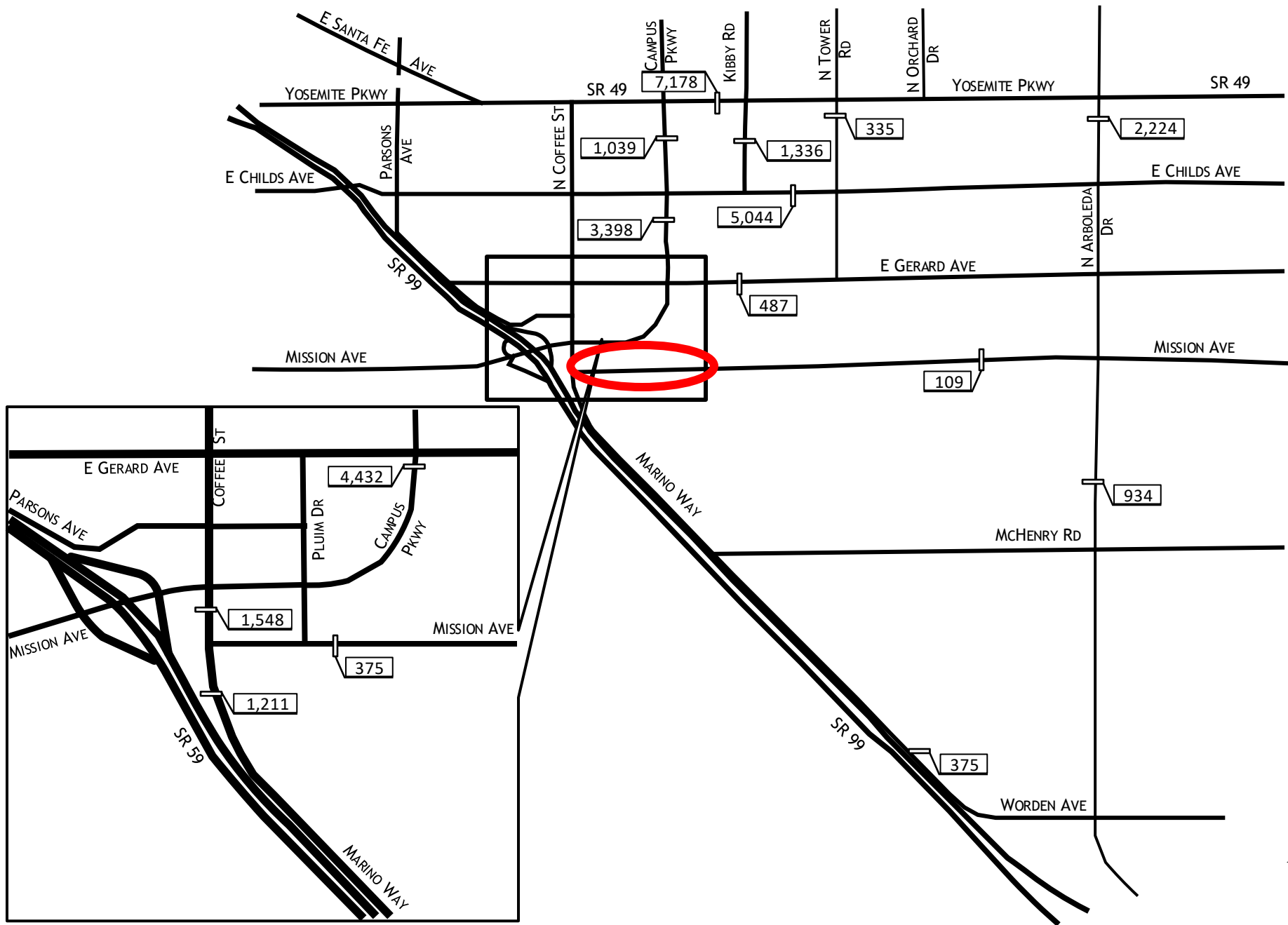
A handwritten signature in blue ink, appearing to read "Jonathan Flecker", with a long horizontal flourish extending to the right.

Jonathan Flecker, P.E.
President

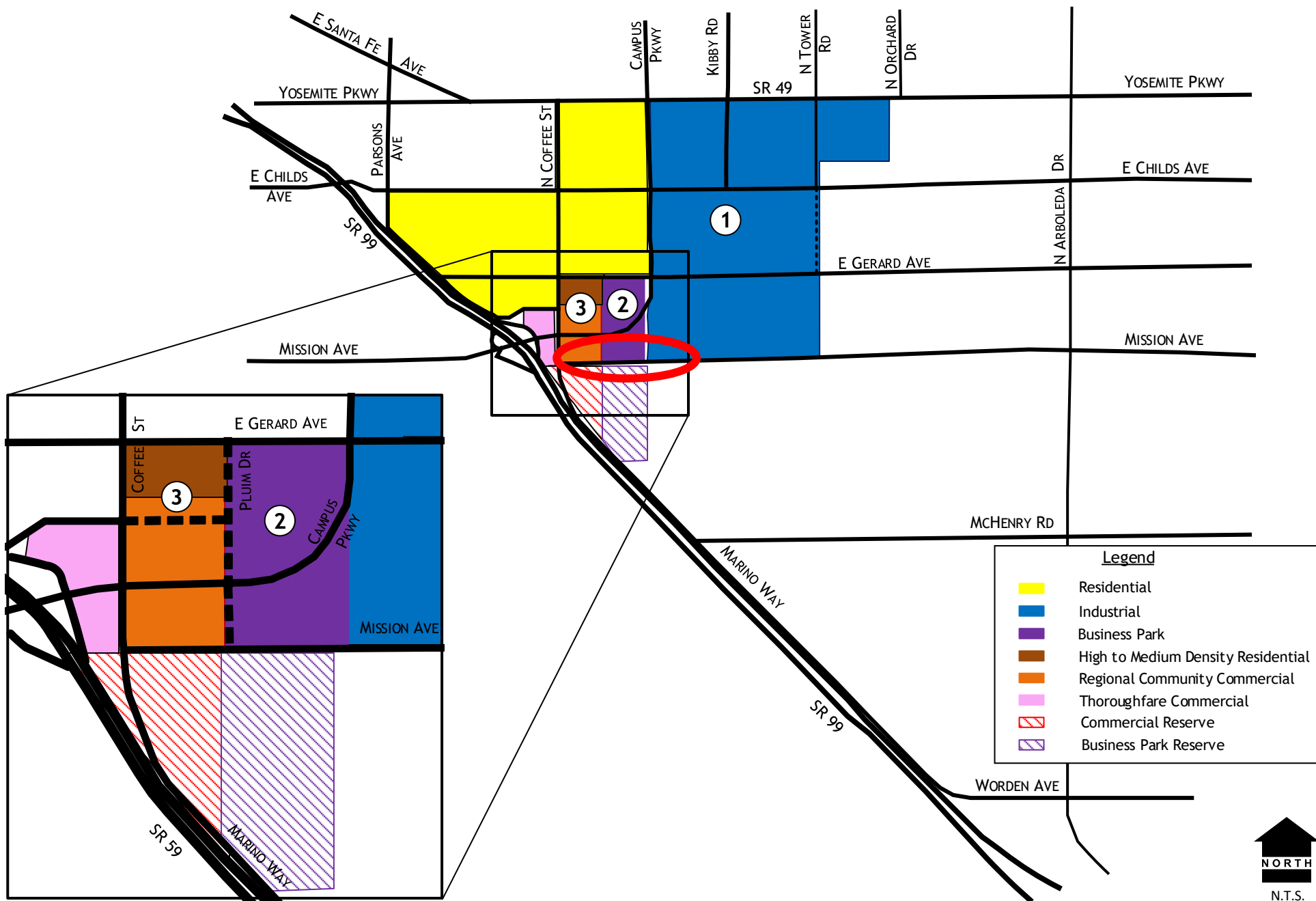
Attachment: figures, traffic counts



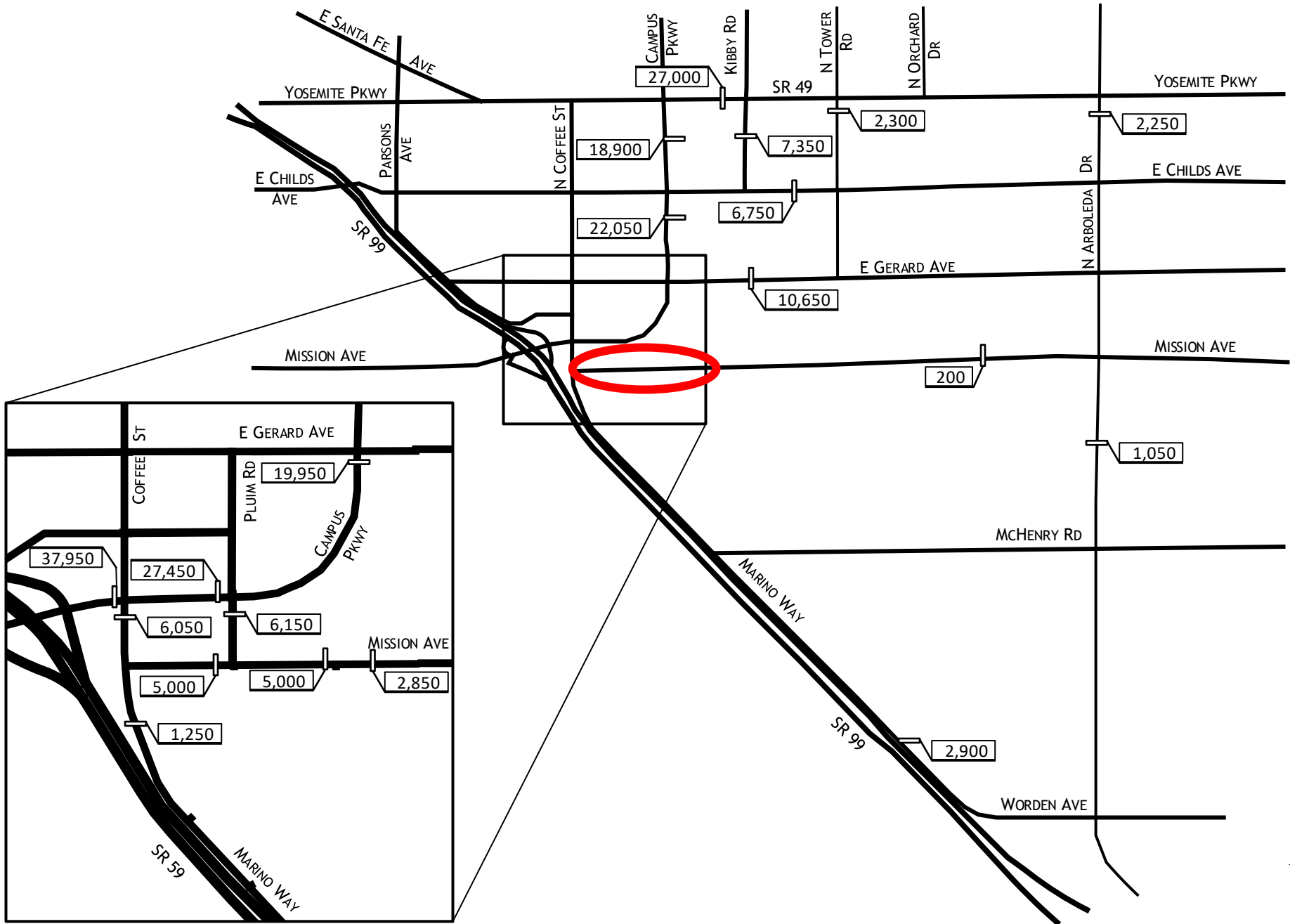
VICINITY MAP



EXISTING DAILY TRAFFIC VOLUMES

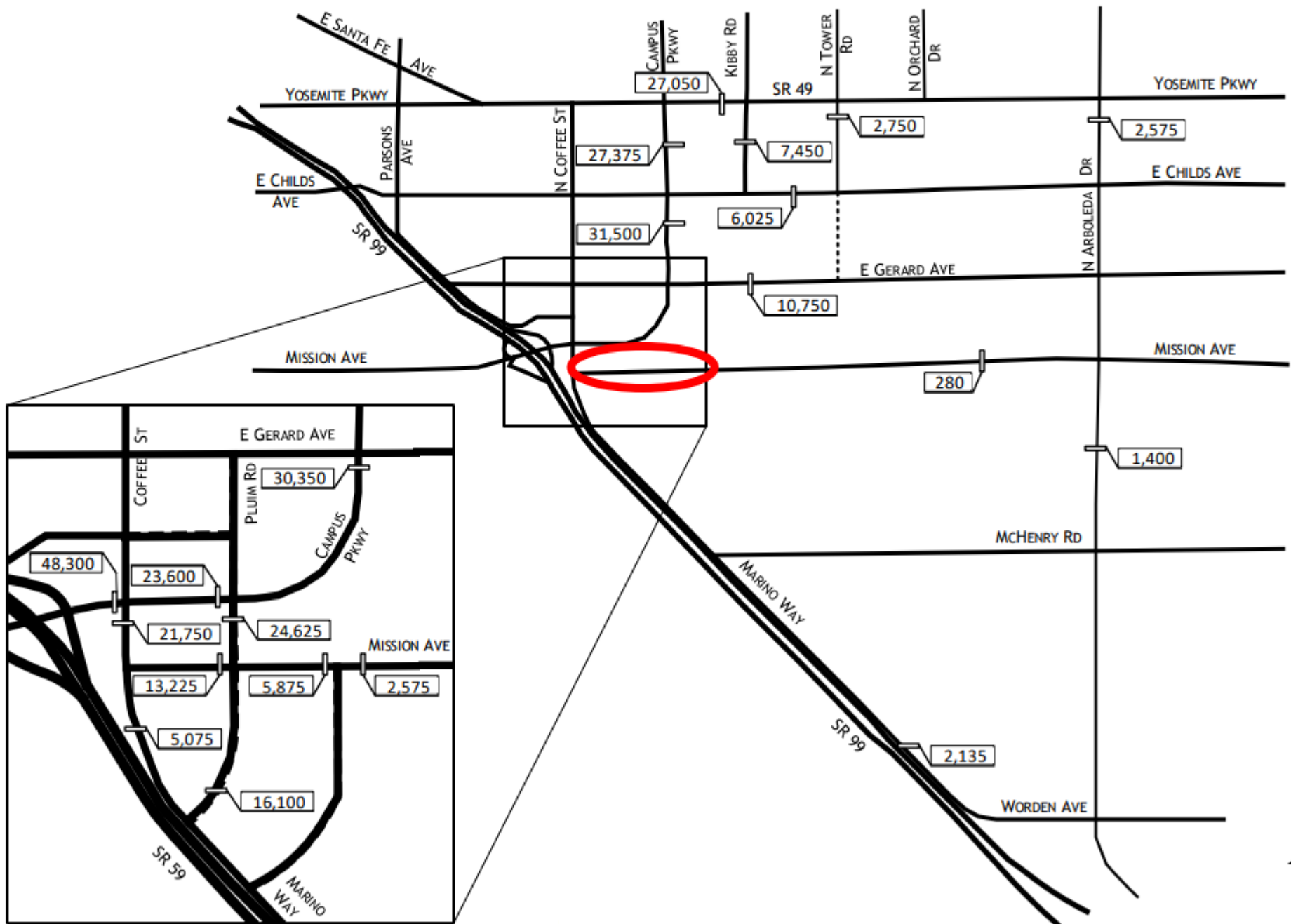


LAND USE MAP



FUTURE DAILY TRAFFIC VOLUMES





FUTURE DAILY TRAFFIC VOLUMES
WITH RESERVES