



## EL DORADO COUNTY PLANNING & BUILDING DEPARTMENT

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2850 Fairlane Court, Placerville, CA 95667  
Phone (530) 621-5355, Fax (530) 642-0508

Date: January 5, 2022  
To: Planning Commissioners  
From: Matthew Aselage, Assistant Planner  
Subject: **Appeal Filed, DR-A21-0004, of Staff Level Approval of Design Review Permit, DR20-0009 (Bean Barn Drive-Thru Coffee Shop)**

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### **Recommendation**

Based on analysis of Design Review Permit, DR20-0009, staff recommends the Planning Commission deny the Appeal and uphold the Staff Level approval of Design Review Permit DR20-0009.

### Alternative Action

Grant the appeal by Jim Dillingham (DR-A21-0004), deny Design Review Permit, DR20-0009, and instruct staff to return with Findings for Denial.

### **Background**

A Design Review Permit, DR20-0009, was submitted on December 14, 2020 for a request to allow the construction and operation of a new 360-square-foot commercial structure to be used as a drive-thru Bean Barn coffee shop on a currently vacant property zoned for commercial use. The project includes a garbage and storage enclosure and associated improvements for landscaping, lighting, and parking. The 0.61-acre property is located on the southeast corner at the intersection of Cameron Park Drive and Mira Loma Drive in the Cameron Park Community Region. The parcel is identified as Assessor's Parcel Number (APN) 083-132-001, has a Zoning Designation of Limited Commercial within the Design Review Community Combining Zone (CL-DC), and a General Plan land use designation of Commercial (C). The CL-DC zone allows for drive-thru and beverage/retail sales uses by right on this parcel, subject to design review. In accordance with the California Environmental Quality Act (CEQA) Guidelines, the project was found to be Categorical Exempt from CEQA pursuant to Section 15303 (New Construction or Conversion of Small Structures).

The project was processed in accordance with the authorizations of the El Dorado County Zoning Code Section 130.52.030 (Design Review Permit), and tentatively approved, subject to the standards found in Title 130, Article 5, Section 130.50.040 (General Review Procedure), as a Staff Level Review with Public Notice. As stated in the Public Notice, the decision to approve the project may be appealed to the Planning Commission by filing an appeal application and applicable fees to the County of El Dorado Planning and Building Department within the 10-

working-day appeal period; starting on date of approval December 8, 2021 ending at 5pm on December 22, 2021.

## **Appeal Filed**

On December 22, 2021 an appeal was timely filed by Jim Dillingham. Concerns expressed by Mr. Dillingham include stormwater runoff, traffic generation and circulation, frontage improvements, on-site improvements, completion of a rare plant survey, future development, and noticing of Cameron Park Design Review Committee (CPDRC) meetings. Pursuant to Zoning Code 130.52.090 - Appeals, a Planning Director-Staff Level decision is appealable to the Planning Commission. The appeal, DR-A21-0004, is scheduled for the January 27, 2022 Planning Commission meeting.

## **Staff Response**

Stormwater: The appellant requested that the project address current onsite drainage and meet stormwater capture requirements. During the Technical Advisory Committee (TAC) review, comments concerning stormwater drainage were submitted by Amy Phillips, County Storm Water Coordinator, on February 23, 2021. The project has been conditioned to comply with the requirements of the State of California Phase II Municipal Separate Storm Sewer System (MS4) Permit of which the County's post construction water quality requirements follow those outlined in MS4 Permit Section E.12.

Traffic/Circulation and Frontage Improvements: The appellant requested that the traffic study evaluate project-related effects on westbound wait time at the intersection of Mira Loma Drive and Cameron Park Drive and potential traffic spillage of the queuing line onto Mira Loma Drive. The project was required to submit a Traffic Impact Analysis or Study (TIA/S). A TIA was completed by KD Anderson & Associates on December 14, 2020 (attached). The inclusion of a new traffic signal requires the project result in traffic increases that would raise Level of Service (LOS) impacts to the next, more impactful LOS threshold. Based upon El Dorado County Department of Transportation's (DOT) review of the TIA, the Bean Barn would increase the delay at the westbound (Mira Loma) approach from the existing 39.9 seconds to 46.1 seconds. Including additional traffic associated with Bean Barn operations, the LOS would remain at the existing LOS E. More specifically, the delay and volume threshold is met only for the peak hour times of day which typically include increased traffic such as rush hour. However, the normal eight-hour and four-hour warrants have not yet been met. Additionally, the project includes an excess of space which will allow approximately nine vehicles to queue on site. The project has been conditioned to enter into a deferred frontage agreement with the DOT for improvements along Cameron Park Drive and Mira Loma Drive. These improvements will include asphalt concrete dike on Mira Loma Drive and portland cement concrete curb, gutter, and sidewalk on Cameron Park Drive.

Onsite Improvements: The project includes limited drive-thru building attached signage as well as one (1) freestanding sign near the intersection between Mira Loma Drive and Cameron Park Drive. There will be a company art piece on one side of the drive-thru window and a menu board on the other side of the drive-thru window. These are the only proposed signs associated with the project. As menu boards are allowed by right up to a maximum sign area of 60-square-feet, with no individual sign being greater than 30-square-feet of sign area. The two (2) drive-thru signs proposed do not exceed these development standards. The proposed freestanding sign will include a total area – including sign area and base support – of 50-square-feet. As the maximum sign area allowed along the primary frontage for a single establishment within the CL

zone district is 50-square-feet, this proposed sign is compliant with applicable development standards. Additionally, the drive-thru sign area does not count towards the 50-square-foot maximum.

The project will include outdoor lighting which has been conditioned to not result in additional off-site glare impacts. Given site plan changes resulting from CPDRC comments, exact locations of lighting will be included within the building permit submission. Outdoor lighting will be reviewed for compliance during the plan check process.

Rare Plant Survey: The appellant requested that the project materials include a rare plant survey and that the project comply with rare plant requirements. A Botanical Survey Report (BSR) was completed on August 18, 2020 by Sycamore Environmental Consultants, Inc. (attached). Per the BSR, no special status plant species were found on the project site during a botanical survey conducted on July 20, 2020. The BSR indicates that the site has been leveled at least once since 2002 (18 years ago). As such, the BSR did not indicate that any mitigation was required. Because the site is located within the County's Rare Plant Mitigation Area 1, the project would be subject to payment of the appropriate in lieu fee.

Future Development: The appellant requested that any proposed commercial uses other than the Bean Barn be included in the evaluation. Initial project plans included a future commercial pad. That feature was removed from the requested entitlement by the applicant. Any development sought that is outside the scope of the project as described in the Staff Report and associated exhibits would require an application for a revision to this Design Review Permit (Design Review Permit, DR20-0009).

Cameron Park Design Review Committee Meetings: The appellant expressed disappointment that he had not been invited to the CPDRC meeting when the project was on their agenda. The CPDRC website identifies that the committee meets every fourth Monday of each month at Fire Station #89 in Cameron Park. In addition to maintaining regularly scheduled meetings, the CPDRC meeting agendas are posted at least a week in advance of each meeting. Individual meeting notices are not mailed prior to CPDRC meetings; however, interested parties are able to sign up for an email subscription via the CPDRC website to receive agendas automatically.

## **Staff Conclusion**

Planning staff reviewed the application for a Design Review Permit (DR20-0009) and determined it to be in conformance with established County regulations and Design Review considerations including stormwater runoff, traffic generation and circulation, frontage improvements, on-site improvements, completion of a rare plant survey, future development, and noticing of CPDRC meetings. The project has been sufficiently reviewed pursuant to the County's Design Review Permit requirements, CEQA, and has been conditioned to conform to various agency and departmental requirements, as well as to address the CPDRC's comments. Based on this analysis, staff recommends the Planning Commission deny the Appeal and uphold the Staff Level approval.

Enclosures: (135 pages total)

Appeal Form, DR-A21-0004 (4 pages)  
Botanical Survey Report (39 pages)  
Traffic Impact Analysis (92 pages)

File Number: DR-A21-0004  
Date Received: 12/20/2021

Receipt No.: E11203  
Amount: \$239.<sup>00</sup>

**APPEAL FORM**

(For more information, see Section 130.52.090 of the Zoning Ordinance)

Appeals must be submitted to the Planning Department with appropriate appeal fee. Please see fee schedule or contact the Planning Department for appeal fee information.

APPELLANT Jim Dillingham  
ADDRESS 3389 Mira Loma Dr.  
DAYTIME TELEPHONE 530 677-0900

A letter from the Appellant authorizing the Agent to act in his/her behalf must be submitted with this appeal.

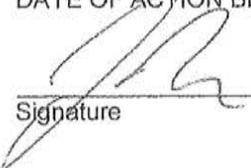
AGENT \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
DAYTIME TELEPHONE \_\_\_\_\_

APPEAL BEING MADE TO:      Board of Supervisors       Planning Commission

ACTION BEING APPEALED (Please specify the action being appealed, i.e., approval of an application, denial of an application, conditions of approval, etc., and specific reasons for appeal. If appealing conditions of approval, please attach copy of conditions and specify appeal.)

Design review approval without proper notification given to neighboring properties. Also requires community design review to make certain all improvements proposed ~~are~~ within standards for sidewalks, curbs, gutters, landscape, lighting, signage, drainage, fire life safety.

DATE OF ACTION BEING APPEALED 12/18/21

  
Signature

12/16/21  
Date



Matthew Aselage <matthew.aselage@edcgov.us>

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## Bean Barn Appeal Follow-Up

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jdillingham@dz-engineering.com <jdillingham@dz-engineering.com>

Tue, Dec 28, 2021 at 12:24 PM

To: Matthew Aselage <matthew.aselage@edcgov.us>

Cc: Dave Spiegelberg <dave.spiegelberg@edcgov.us>, Dani Dillingham <ddillingham@dz-engineering.com>

Hi Mathew,

Thank you for checking in.

The reason for my appeal is to make sure the design accounts for design review athletics for both the small shack and the future proposed office building. Also it needs to address the current drainage problems on the lot plus comply with the storage requirements for storm water capture so the current drainage mess does not become worse. It is a mess in from of that property every time it storms. Because I have had to comply with the rare plant requirements on my projects and this project falls into the rare plant survey requirements I would expect this survey to be completed and reviewed by the county similar to what happens to all commercial lots and for me also it has been residential lots. I would also like the traffic study to account for the traffic line and see if it would spill out onto the road creating a dangerous situation at the intersection. I would also like to have the traffic study analyze the effects of the project on traffic turning left onto Cameron Park drive from Mira Loma going North. I think this would show the longest wait time at the intersection. I can wait there for a good 5 minutes at times to turn left to go towards Green Valley Road.

I would expect to see site improvements that included sidewalk curb and gutter plus lighting and a signage that follows sign guidelines and is reviewed by design review. These are standard items for a commercial development. If the future office building is part of the approval I expect this to go to the planning commission for final approval instead of the pathway its currently on. This is a significant corner and should be properly vetted to make sure the development improves the location with a properly designed site.

Let me know if you can share the proposed design documents with me so I can see if these items have been addressed. If I had been invited to the design review for the project I would have brought up all these above concerns. I wish I did not have to do this appeal process but I feel like I was blindsided by the rush to administratively approve this.

Thanks,

Jim Dillingham, P.E.

D&Z Engineering

3389 Mira Loma Drive

Cameron Park, CA 95682

530-677-0900

[www.dz-engineering.com](http://www.dz-engineering.com)

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**Cash Register Receipt**  
County of El Dorado

**Receipt Number**  
**E11203**

DESCRIPTION	ACCOUNT	QTY	PAID
ProjectTRAK			\$239.00
DR-A21-0004	Address: 3408 MIRA LOMA DR	APN: 083132001	\$239.00
APPEALS FEES			\$239.00
ALL APPEALS	3720200 0240	0	\$239.00
<b>TOTAL FEES PAID BY RECEIPT:E11203</b>			<b>\$239.00</b>

Date Paid: Wednesday, December 22, 2021

Paid By: Jim Dillingham

Cashier: EPRS

Pay Method: ONLINE CREDIT 49537S|564417002

You can check the status of your case/permit/project using our online portal etrakit <https://edc-trk.aspgov.com/etrakit/>

Your local Fire District may have its' own series of inspection requirements for your permit/project. Please contact them for further information. Fire District inspections (where required) must be approved prior to calling for a frame and final inspection through the building department.

Due to the large number of structures destroyed in the Caldor Fire, it is anticipated that there will be a large number of applications for building permits in the burn area after fire debris and hazardous materials have been cleaned up. Building permits in the Caldor Fire area will not be issued until after a property has been cleared of fire debris and hazardous materials as a result of the Caldor Fire. Even if a property has been cleared of fire debris and hazardous materials or never had any fire debris and hazardous materials, it does not mean that there are no other health hazards or dangers on the property, including dangers resulting from fire-damaged or hazard trees. Property owners and residents must do their own investigation to determine whether there are any other health hazards or dangers on the property. The issuance of a building permit for the property does not accomplish this task. A building permit is a ministerial action requiring only limited review by the County to ensure that the structure meets all applicable building standards. In most zones, an individual is allowed by right to construct a residence after receiving a building permit that only requires conformity to building standards. The building permit is issued based on information supplied by the applicant without independent investigation by the County of the property or potential health hazards or dangers. Given the limited scope of enforcement, it is not possible for the County to identify potential health hazards or dangers that are not directly associated with the permitted structure. The applicant is in a position to inspect the property, identify potential health hazards or dangers, and tailor the application to avoid any potential health hazards or dangers.

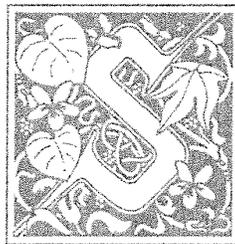
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Botanical Survey Report  
for  
Bean Barn 3 Project  
El Dorado County, CA

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RECEIVED  
PLANNING DEPARTMENT



**FILE COPY**

Prepared by:

*Sycamore Environmental Consultants, Inc.*

6355 Riverside Blvd., Suite C  
Sacramento, CA 95831-1143

Phone: 916/ 427-0703

Contact: R. John Little, Ph.D.

Prepared for:

*Ms. Angela Copeland*

PO Box 632

Diamond Springs, CA 95619

Phone: 530/ 919-1069

18 August 2020

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Botanical Survey Report  
for  
Bean Barn 3 Project  
El Dorado County, CA

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## **SUMMARY OF FINDINGS AND CONCLUSIONS**

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The 0.61-acre, Bean Barn 3 Project occurs in Cameron Park, El Dorado County, CA, at the SE corner of Cameron Park Drive and Mira Loma Drive. The Project engineer provided the study area boundary. This area was used as the Biological Study Area (BSA).

The BSA occurs in El Dorado County Rare Plant Mitigation Area 1, which includes areas of gabbro soils that may support Pine Hill plants. Protocol botanical surveys were conducted 20 July 2020. No special-status plant species were found in the BSA during the survey.

No sensitive biological communities occur in the BSA. Four oak trees occur in the BSA. The Applicant has stated that the Project will not result in oak tree removal. Sixty-five species were identified in the BSA; 22 (34%) native and 43 (66%) nonnative.

### **I. INTRODUCTION**

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#### **A. Purpose of Report**

This Botanical Survey Report responds to the Applicant's request to conduct a botanical survey of the Project site. This report does not analyze impacts or propose mitigation measures.

#### **B. Project Location**

The 0.61-acre BSA is located in unincorporated El Dorado County on the Shingle Springs USGS topographic quad. Figure 1 is a Project Location Map based on the USGS quad (T10N, R9E, Section 33). Figure 2 is an aerial photograph of the BSA and the surrounding area, with nearby roads labeled. The Project is assessor's parcel number (APN) 083-132-001. The BSA is in the Upper Cosumnes River Watershed (Hydrologic Unit Code 18040013. Its centroid is 38° 41' 4.55" north, 120° 59' 7.11" west (1983 NAD, UTM Zone 10 North). The BSA occurs on gabbro soils of the Rescue soils series (RfC). Figure 3 shows the BSA location on a soils map.

#### **C. Project Applicant**

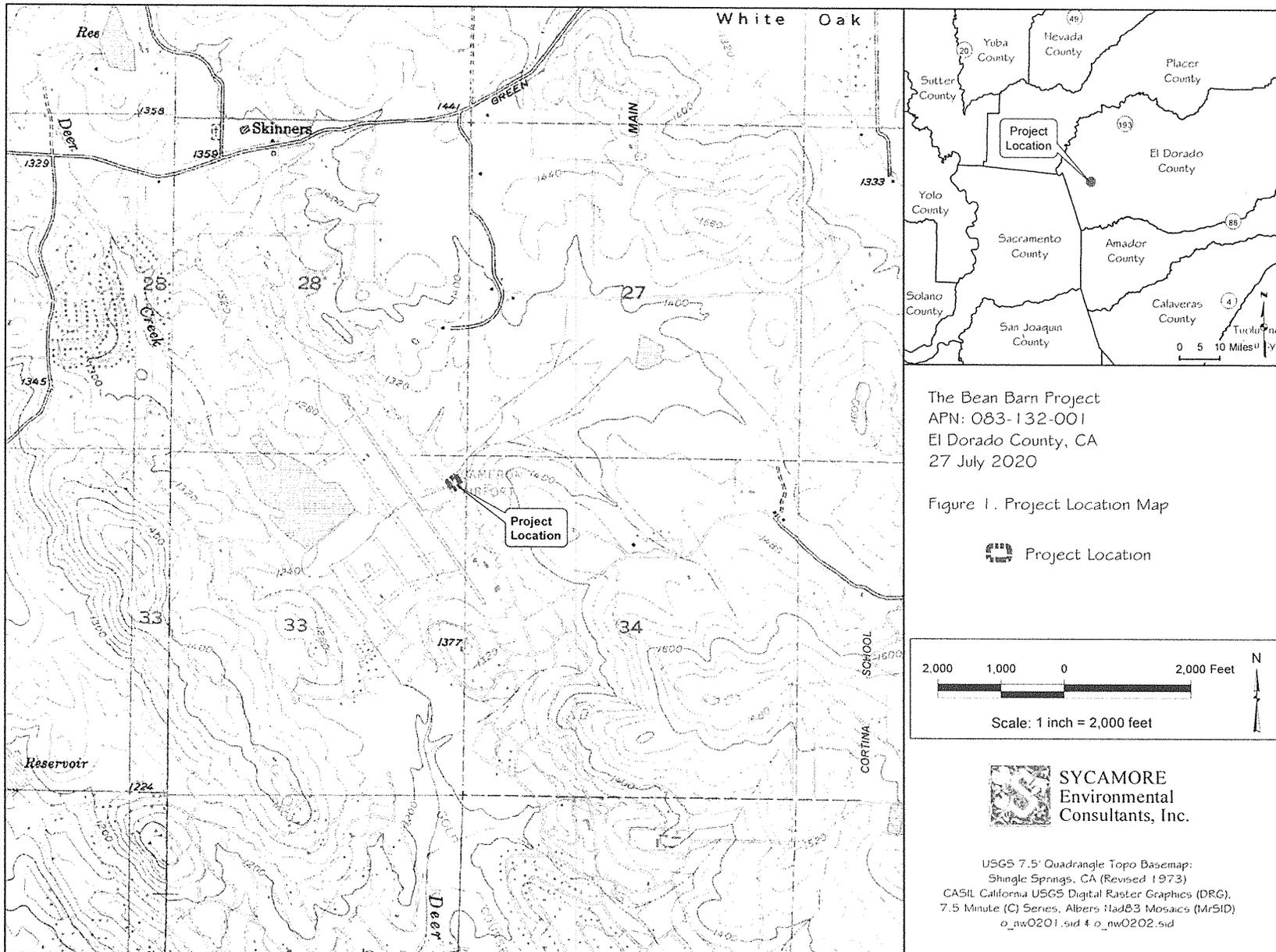
Ms. Angela Copeland  
PO Box 632  
Diamond Springs, CA 95619  
Phone: 530-919-1069

#### **D. Project Engineer**

Lebeck Engineering, Inc.  
3430 Robin Lane, Bldg. # 2  
Cameron Park, CA 95682  
Office: (530) 677-4080

#### **E. Project Description**

The Applicant intends to create a drive-through coffee shop.



20068BeanBarn3\_Fig1LocationMap.mxd



The Bean Barn Project  
 APN: 083-132-001  
 El Dorado County, CA  
 27 July 2020



Botanical Study Area (BSA)



**SYCAMORE**  
 Environmental  
 Consultants, Inc.

Aerial Photograph: 7 November 2019  
 WVO2 Vivid Maxar Imagery  
 ESRI ArcGIS Basemap Layer

Figure 2. Aerial Photograph



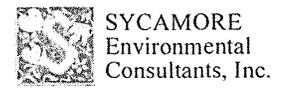
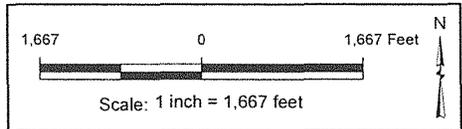
The Bean Barn Project  
 APN: 083-132-001  
 El Dorado County, CA  
 27 July 2020

Figure 3. Soils Map

-  Botanical Study Area (BSA)
-  Soil Boundary

Soil Mapping Unit

Symbol	Name
RIC	Rescue very stony sandy loam, 3 to 15 percent slopes



Soil Survey Geographic (SSURGO) database for  
 El Dorado Area, California, USDA, NRCS  
 URL: <http://SoilDataMart.nrcs.usda.gov/>

Aerial Photograph: 7 November 2019  
 WVO2 Vivid Maxar Imagery  
 ESRI ArcGIS Basemap Layer

2020-07-27 10:00 AM

## II. STUDY METHODS

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### A. Studies Conducted

An evaluation of biological resources was conducted to determine whether any special-status plant or wildlife species, their habitat, or sensitive habitats occur in the BSA. Data on known special-status species and habitats in the area were obtained from state and federal agencies. A field survey was conducted to determine the habitats present. The field survey and a review of the biology of evaluated species and habitats were used to determine special-status species and sensitive habitats that could occur in the BSA.

Special-status species evaluated in this Report are species listed (or candidate or proposed) under the federal or state endangered species acts, under the California Native Plant Protection Act, as a California species of special concern or fully protected by CDFW, or that are California Rare Plant Rank (CRPR) 1 or 2 (CNPS 2020). This is consistent with special-status species definitions in the El Dorado County General Plan EIR (2004b). Bisbee Peak rush-rose, although a California Rare Plant Rank 3 plant, is included because it is regulated by El Dorado County ordinance (Chapter 17.71).

Special-status natural communities include waters, wetlands, riparian communities, any natural community ranked S1, S2, or S3 by CDFW (2019a), and any community identified as sensitive in the El Dorado County General Plan (2018).

### B. Literature and Database Review

Sycamore Environmental obtained an online list from USFWS that identifies federal-listed species and sensitive habitats that could potentially occur in or be affected by a project in the BSA. The California Natural Diversity Database (CNDDDB) and the CNPS Inventory were queried for the Shingle Springs quad and eight surrounding USGS quads to determine known records of special-status species that occur in the vicinity of the BSA. The results of these three database queries are in Appendix A. Table 1 lists the nine USGS quads evaluated.

Table 1. USGS Quads Evaluated for the Bean Barn 3 Project.

Pilot Hill	Coloma	Garden Valley
Clarksville	<b>Shingle Springs</b>	Placerville
Folsom SE	Latrobe	Fiddletown

Standard references used for the biology and taxonomy of plants included Baldwin et al., eds. (2012). On-line references included CNPS (2020); CalPhotos (2020); Consortium of California Herbaria (CCH 2020); Jepson eFlora (2020); and Flora of North America (FNA 1993+). References pertaining to natural communities included CDFW (2019b).

Two special-status species lists produced by CDFW were also reviewed: 1) Special Vascular Plants, Bryophytes, and Lichens List (CDFW, January 2020a); and 2) State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW, January 2020b).

## C. Field Survey Methods

### 1. Survey Dates and Personnel

R. John Little, Ph.D., Botanist/Biologist, conducted a botanical survey of the BSA on 20 July 2020. Photographs are in Appendix C.

### 2. Weather Conditions

Historic average precipitation for the nearby Placerville gauge from 1 October through 30 June is 38.13 inches (CDEC 2020). From 1 October 2019 through 30 June 2020 the Placerville gauge reported 24.95 inches of precipitation. Precipitation preceding the survey was 65% of normal at the nearby Placerville Gauge for the period of 1 October 2020 to 30 June 2020. The BSA had below normal hydrologic conditions prior to the survey.

### 3. Botanical Survey

The botanical survey followed survey guidelines of USFWS (2000), CDFW (2018), and CNPS (2001). Except for chaparral sedge (*Carex xerophila*) and Red Hills soaproot (*Chlorogalum grandiflorum*), the 2020 survey was conducted during the published blooming period of special-status species with potential to occur in the BSA. Due to its growth habit, chaparral sedge is easily identified without flowers. No *Chlorogalum* species occur in the BSA. The published blooming times of all other species evaluated state that blooming occurs through July or August. Many annual herbaceous plants and grasses in the BSA were dried out, but were able to be identified based on morphological characters.

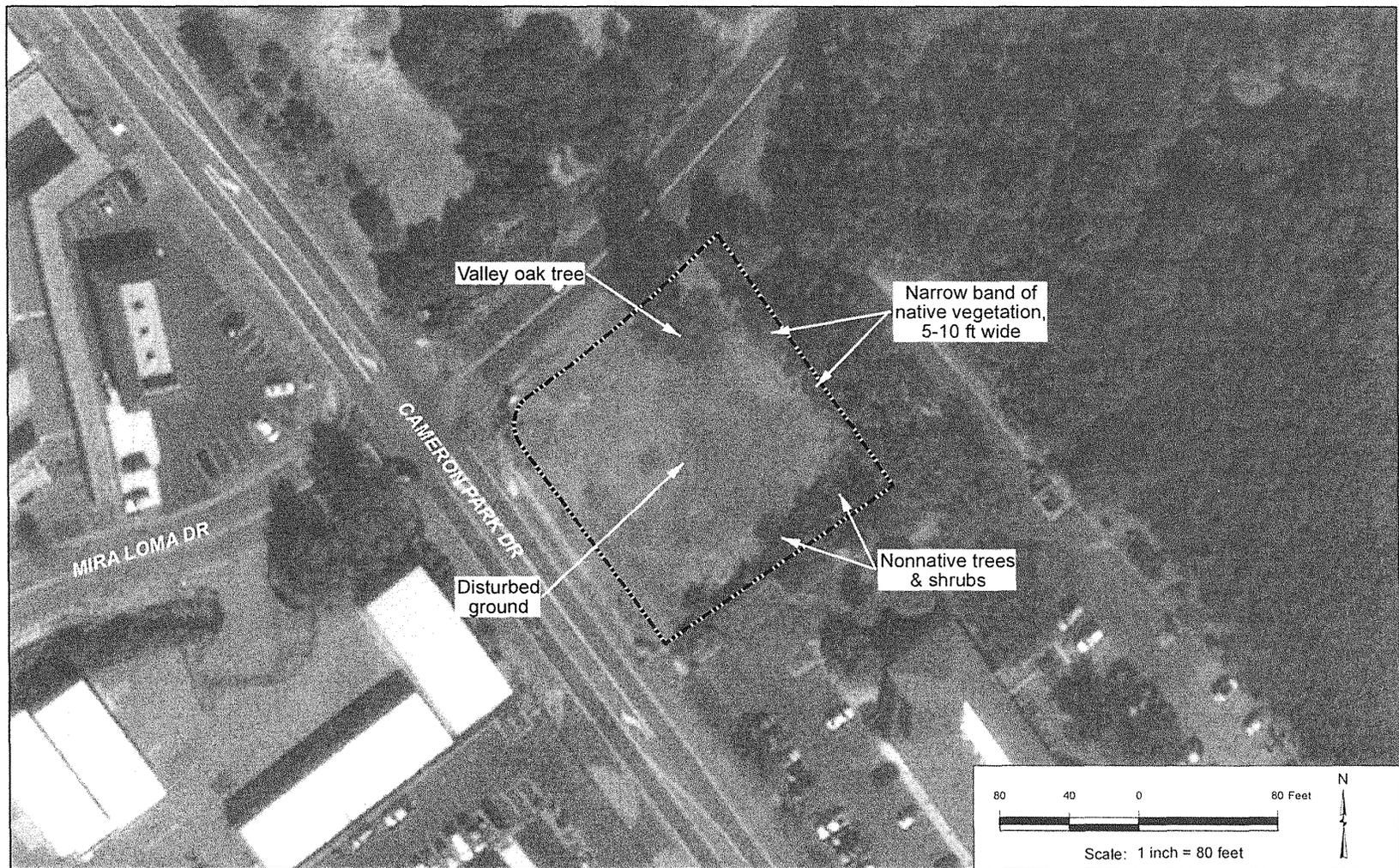
The botanical survey was floristic, meaning that every plant taxon found was identified to the taxonomic level necessary to determine rarity and listing status. Plant species observed were either identified on-site or collected and identified later with a microscope and dichotomous keys in Baldwin et al. (2012) and/or Jepson eFlora (2020). Approximately 5 person-hours were spent in the field during the 20 July 2020 survey of the 0.61-acre BSA. An additional 2 hours were spent keying plants collected on-site. A list of vascular plants observed is in Appendix B. Scientific nomenclature follows Baldwin et al. (2012) or Jepson eFlora (2020).

## D. Mapping

A Trimble Nomad 5, handheld GPS unit coupled to a sub-meter accurate R-1 receiver was used to identify project boundaries. A digital topographic survey of the legal parcel boundary was provided by the Project engineer. GPS data were exported to ArcMap and aligned with the BSA boundary based on common control points taken on existing infrastructure in the engineer's digital topographic survey data. The aerial photograph used as the base for Figure 4 was also aligned based on GPS control points collected in the field. Biological community boundaries were identified based on field notes and aerial photographs. The aerial photo for Figure 4, dated 7 November 2019, WV02 Vivid Maxar Imagery, was downloaded from ESRI ArcGIS World Imagery Basemap layer service.

## E. Problems Encountered and Limitations That May Influence Results

No problems were encountered that would influence the results.



The Bean Barn Project  
 APN: 083-132-001  
 El Dorado County, CA  
 29 July 2020

 Botanical Study Area (0.61 ac)

 **SYCAMORE**  
 Environmental  
 Consultants, Inc.

Aerial Photograph: 7 November 2019  
 WVO2 Vivid Maxar Imagery  
 ESRI ArcGIS Basemap Layer

Figure 4.  
 Botanical Resources Map

20068BeanBarn3\_Fig4BotresMap.mxd

## **F. The Existing Level of Disturbance**

Based on Google historical photos, the site has been leveled at least since 2002 (18 years ago). Client's realtor reported the site was leveled at least 30 years ago (pers. comm. A. Copeland). A narrow band of vegetation 5-10 ft wide along the eastern property boundary is all that remains of native vegetation previously on-site, except for a 30 inch dbh Valley oak near the northern border of the BSA, south of Mira Loma Drive. The eastern property boundary is on average over 10 ft higher than the center of the BSA. The adjacent property south of the BSA is also over 10 ft higher than the center of the BSA. These elevation differences are due to the parcel being leveled. To help support the higher ground south of the BSA and to keep it from slumping into the BSA, the western half of the southern BSA boundary is shored up with a block retaining wall and the northern half with a wood retaining wall. Most of the BSA is periodically disced to remove weeds.

### III. BIOLOGICAL RESOURCES IN STUDY AREA

#### A. Wetlands and Waters of the U.S.

No potential wetlands or waters of the U.S. were observed in the BSA.

#### B. Determination of Special-Status Species and Communities in the Study Area

Special-status species for which suitable habitat is present in the BSA are listed in Table 2. The BSA is not in the El Dorado County Important Biological Corridor (IBC) or Ecological Preserve overlays (El Dorado County 2004a). The BSA is not in the USFWS recommended preserve area for the gabbro soil (Pine Hill) plants (USFWS August 2002). There are no special-status natural communities in the BSA.

Table 2. Special-status Plant Species with Potential Habitat in the BSA

Special-Status Species	Common Name	Federal Status <sup>a</sup>	State Status <sup>a</sup>	Source <sup>b</sup>	Habitat Present?/ Species Observed?
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	Big-scale balsamroot	--	--/ 1B.3	2	Yes/ No
<i>Calystegia stebbinsii</i>	Stebbins' morning-glory	E	E/ 1B.1	1, 2	Yes/ No
<i>Calystegia vanzuukiae</i>	Van Zujuk's morning-glory	--	--/ 1B.3	2	Yes/ No
<i>Carex xerophila</i>	Chaparral sedge	--	--/ 1B.2	2	Yes/ No
<i>Ceanothus roderickii</i>	Pine Hill ceanothus	E	R/ 1B.1	1, 2	Yes/ No
<i>Chlorogalum grandiflorum</i>	Red Hills soaproot	--	--/ 1B.2	2	Yes/ No
<i>Crocianthemum suffrutescens</i>	Bisbee Peak rush-rose	--	--/ 3.2	2	Yes/ No
<i>Fremontodendron decumbens</i>	Pine Hill flannelbush	E	R/ 1B.2	1, 2	Yes/ No
<i>Galium californicum</i> ssp. <i>sierrae</i>	El Dorado bedstraw	E	R/ 1B.2	1, 2	Yes/ No
<i>Packera layneae</i>	Layne's butterweed	T	R/ 1B.2	1, 2	Yes/ No
<i>Viburnum ellipticum</i>	Oval-leaved viburnum	--	--/ 2B.3	2	Yes/ No
<i>Wyethia reticulata</i>	El Dorado County mule ears	--	--/ 1B.2	2	Yes/ No

<sup>a</sup> **Status:** E = Endangered; T = Threatened; P = Proposed; C = Candidate; R = California Rare; \* = Possibly extinct; SSC = CDFW Species of Special Concern; FP = CDFW Fully Protected; Prot = CDFW Protected; CH = Critical habitat designated.

**CNPS Rare Plant Rank:** 1A = Presumed Extinct in CA; 1B = Rare or Endangered (R/E) in CA and elsewhere; 2 = R/E in CA and more common elsewhere; 3 = Need more information; 4 = Plants of limited distribution; 0.1 = Seriously endangered in CA; 0.2 = Fairly endangered in CA; 0.3 = Not very endangered in CA.

<sup>b</sup> **Source:** 1 = USFWS letter; 2 = CNDDDB

### C. Evaluation of Special-Status Plants

The BSA is in El Dorado County Rare Plant Mitigation Area 1. Mitigation Areas 0 and 1 include areas of gabbro soils that may support Pine Hill plants. The eight Pine Hill plants are Stebbins' morning-glory, Pine Hill ceanothus, Red Hills soaproot, Pine Hill flannelbush, El Dorado bedstraw, Bisbee Peak rush-rose, Layne's butterweed, and El Dorado County mule ears. None of these species were found in the BSA.

#### **Big-scale balsamroot (*Balsamorhiza macrolepis*; syn. *Balsamorhiza m. var. macrolepis*)**

**HABITAT AND BIOLOGY:** A perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes on serpentine soils, from 295 to 5,100 feet. Blooms March through June (CNPS 2020); March through July (Jepson eFlora 2020).

**RANGE:** This species is endemic to California. Known from Alameda, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Shasta, Solano, Sonoma, Tehama, and Tuolumne counties (CNPS 2020).

**KNOWN RECORDS:** There is one CNDDDB record for big-scale balsamroot in the nine-quad area surrounding the BSA. The closest (Occurrence #14), is about 10.4 miles NW of the BSA on the Pilot quad.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for big-scale balsamroot.

**DISCUSSION:** Big-scale balsamroot was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

#### **Stebbins' morning-glory (*Calystegia stebbinsii*)**

**HABITAT AND BIOLOGY:** A perennial rhizomatous herb found in serpentine or gabbroic soils in chaparral openings and cismontane woodland from 600 to 2,400 feet elevation. Blooms April through July (CNPS 2020; Jepson eFlora 2020).

**RANGE:** This species is endemic to CA. Known from El Dorado and Nevada counties (CNPS 2020).

**KNOWN RECORDS:** There are 8 CNDDDB records for Stebbins' morning-glory in the nine-quad area surrounding the BSA. The closest (Occurrence #6), is about 0.4 mile SE of the BSA.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for Stebbins' morning-glory.

**DISCUSSION:** Stebbins' morning-glory was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

#### **Van Zuur's morning-glory (*Calystegia vanzuukiae*)**

**HABITAT AND BIOLOGY:** A perennial rhizomatous herb found in serpentine or gabbroic soils in chaparral and cismontane woodland from 1,640 to 3,870 feet elevation. This species is probably a stabilized hybrid between *C. stebbinsii* and *C. occidentalis* ssp. *occidentalis* (CNPS 2020). Blooms May through August (CNPS 2020).

**RANGE:** This species is endemic to CA. Known only from El Dorado and Placer counties (CNPS 2020).

**KNOWN RECORDS:** There is one CNDDDB record of Van Zuur's morning-glory in the nine-quad area surrounding the BSA. The closest (Occurrence #1), is about 15.7 miles NE of the BSA on the Garden Valley quad.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for Van Zuur's morning-glory. The known range of Van Zuur's morning-glory does not extend into Cameron Park.

**DISCUSSION:** Van Zuur's morning-glory was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

**Chaparral sedge (*Carex xerophila*)**

**HABITAT AND BIOLOGY:** Chaparral sedge is a perennial, cespitose herb found on serpentine and gabbro soils in chaparral, cismontane woodland, and lower montane coniferous forest. Occurs in uplands in full sun to partial shade, in open forest or chaparral from 1,475 to 2,525 feet (Zika et al. 2014; CNPS 2020). Blooms March through June (CNPS 2020; Jepson eFlora 2020).

**RANGE:** This species is endemic to CA. Known from Butte, El Dorado, Nevada, and Yuba counties (CNPS 2020).

**KNOWN RECORDS:** There are seven CNDDDB records of chaparral sedge in the nine-quad area surrounding the BSA. The closest (Occurrence #3), is about 0.8 mile NE of the BSA on the Shingle Springs quad.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for chaparral sedge.

**DISCUSSION:** Chaparral sedge was not found during the July 2020 botanical survey. Although the published blooming date for this species is March-June, this species is a perennial plant and would have been detected during the survey based on persistent, distinctive foliage.

**Pine Hill ceanothus (*Ceanothus roderickii*)**

**HABITAT AND BIOLOGY:** A low-growing, perennial, evergreen shrub found in serpentine or gabbroic soils in chaparral and cismontane woodland from 800 to 3,600 feet. Blooms April through June (CNPS 2020); March through June (Jepson eFlora 2020). Pine Hill ceanothus is an evergreen shrub that is evident and identifiable year-round.

**RANGE:** This species is endemic to CA. Known only from El Dorado County (CNPS 2020).

**KNOWN RECORDS:** There are nine CNDDDB records for Pine Hill ceanothus in the nine-quad area surrounding the BSA. The closest (Occurrence #1), is about 0.1 mile SE of the BSA on the Shingle Springs quad.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for Pine Hill ceanothus.

**DISCUSSION:** Pine Hill ceanothus was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

**Red Hills soaproot (*Chlorogalum grandiflorum*)**

**HABITAT AND BIOLOGY:** A perennial bulbiferous herb found in serpentine, gabbroic, and other soils in chaparral, cismontane woodland, and lower montane coniferous forest from 800 to 4,100 feet. Blooms May through June (CNPS 2020; Jepson eFlora 2020).

**RANGE:** This species is endemic to CA. Known from Amador, Butte, Calaveras, El Dorado, Placer, and Tuolumne counties (CNPS 2020).

**KNOWN RECORDS:** There are 14 CNDDDB records for Red Hills soaproot in the nine-quad area surrounding the BSA. The closest (Occurrence #33), is about 0.2 mile SE of the BSA on the Shingle Springs quad.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for Red Hills soaproot.

**DISCUSSION:** Red Hills soaproot was not found during the July 2020 botanical survey. Although the published blooming date for this species is May-June, this species is a perennial plant that would have been detected during the survey based on persistent, distinctive inflorescences.

**Bisbee Peak rush-rose (*Crocanthemum suffrutescens*)**

**HABITAT AND BIOLOGY:** An evergreen shrub found in chaparral from 250 to 2,200 feet. Often found on gabbroic or lone soils; often in burned or disturbed areas in chaparral. Blooms April through August (CNPS 2020); April through June (Jepson eFlora 2020).

**RANGE:** This species is endemic to CA. Known from Amador, Calaveras, and El Dorado counties (CNPS 2020).

**KNOWN RECORDS:** There are 16 CNDDDB records for Bisbee Peak rush-rose in the nine-quad area surrounding the BSA. The closest (Occurrence #22), is about 0.1 mile east of the BSA.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for Bisbee Peak rush-rose.

**DISCUSSION:** Bisbee Peak rush-rose was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

**Pine Hill flannelbush (*Fremontodendron decumbens*)**

**HABITAT AND BIOLOGY:** An evergreen shrub found in rocky areas of serpentine or gabbroic soils in chaparral and cismontane woodland from 1,400 to 2,500 feet. Blooms April through July (CNPS 2020; Jepson eFlora 2020). Pine Hill flannelbush is a perennial evergreen shrub that is evident and identifiable year-round.

**RANGE:** This species is endemic to CA. Known from El Dorado, Nevada, and Yuba counties (CNPS 2020).

**KNOWN RECORDS:** There are seven CNDDDB records for Pine Hill flannelbush in the nine-quad area surrounding the BSA. The closest (Occurrence #12), is about 1.7 miles north of the BSA on the Shingle Spring quad.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for Pine Hill flannelbush.

**DISCUSSION:** Pine Hill flannelbush was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

**El Dorado bedstraw (*Galium californicum* ssp. *sierrae*)**

**HABITAT AND BIOLOGY:** A low-growing, perennial herb found in gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 300 to 1,900 feet elevation. Blooms May through June (CNPS 2020); March through July (Jepson eFlora 2020). El Dorado bedstraw is more likely to be found under oak trees and in oak leaf litter, particularly of black oak (BLM 2010).

**RANGE:** This species is endemic to CA. Known only from El Dorado County (CNPS 2020).

**KNOWN RECORDS:** There are 17 CNDDDB records for El Dorado bedstraw in the nine-quad area surrounding the BSA. The closest (Occurrence #8), is about 0.8 mile east of the BSA on the Shingle Springs quad.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for El Dorado bedstraw.

**DISCUSSION:** El Dorado bedstraw was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

**Layne's Butterweed (*Packera layneae*; syn. *Senecio layneae*)**

**HABITAT AND BIOLOGY:** A perennial herb found in rocky areas with serpentine or gabbroic soils in chaparral and cismontane woodland from 650 to 3,560 feet elevation. Blooms April through August (CNPS 2020); April through June (Jepson eFlora 2020).

**RANGE:** This species is endemic to CA. Known from El Dorado, Placer, Tuolumne, and Yuba counties (CNPS 2020).

**KNOWN RECORDS:** There are 36 CNDDDB records for Layne's butterweed in the nine-quad area surrounding the BSA. The closest (Occurrence #2), is 0.04 mile NW of the BSA on the Shingle Springs quad.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for Layne's butterweed.

**DISCUSSION:** Layne's butterweed was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

**Oval-leaved viburnum (*Viburnum ellipticum*)**

**HABITAT AND BIOLOGY:** Oval-leaved viburnum is a deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 705 to 4,590 feet. It is generally found on north-facing slopes (Baldwin et al. 2012). Blooms May through June (CNPS 2020); June through August (Jepson eFlora 2020).

**RANGE:** Alameda, Contra Costa, El Dorado, Fresno, Glenn, Humboldt, Lake, Mendocino, Mariposa, Napa, Placer, Shasta, Solano, Sonoma, and Tehama counties (CNPS 2020). Also occurs in Oregon and Washington.

**KNOWN RECORDS:** There is one CNDDDB record for oval-leaved viburnum in the nine-quad area surrounding the BSA. The closest (Occurrence #5), is based on two collections, one in 1900 and the other in 1901. This locations is about 9.6 miles NE of the BSA on the Placerville quad. This is the only CNDDDB record for oval-leaved viburnum in El Dorado County.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for oval-leaved viburnum.

**DISCUSSION:** Oval-leaved viburnum was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

**El Dorado County mule ears (*Wyethia reticulata*)**

**HABITAT AND BIOLOGY:** A perennial rhizomatous herb found in clay or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 600 to 2,060 feet. Blooms April through August (CNPS 2020); May through August (Jepson eFlora 2020).

**RANGE:** This species is endemic to CA. Known from El Dorado and Yuba counties (CNPS 2020).

**KNOWN RECORDS:** There are 25 CNDDDB records for El Dorado County mule ears in the nine-quad area surrounding the BSA. The closest (Occurrence #1) from 2016, is about 0.14 mile SE of the BSA on the Shingle Springs quad.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for El Dorado County mule ears.

**DISCUSSION:** El Dorado County mule ears was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

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## V. PREPARERS

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**R. John Little, Ph.D.** Botany, Claremont Graduate School, Claremont, CA. Over 30 years' experience managing and conducting environmental projects involving impact assessment and preparation of numerous NEPA/CEQA compliance documents, Biological Assessments, and Caltrans Natural Environmental Studies. Experience includes conducting special-status plant and wildlife species surveys, jurisdictional wetland delineations, general biological surveys, permitting and biological report preparation. Dr. Little is a trained wetland delineator and an ESA certified Senior Ecologist. He holds a California Department of Fish and Wildlife Rare, Threatened and Endangered Plant Voucher Collecting Permit (2081(a)-16-021-V), and is an authorized individual on the CDFW Scientific Collecting Permit (SC-7617).

Responsibilities: Botanical survey, plant identification, report preparation.

**Aramis Respall, GIS Analyst/ CAD Operator.** Over 20 years' experience in drafting and spatial analysis using AutoCAD map and ArcGIS for public and private projects. He prepares figures for biological and permitting documents such as project location maps, aerial photograph exhibits, biological resource maps, CNDDB proximity maps, wetlands/waters delineation maps, impact analysis maps, tree location maps and other supporting graphics. Mr. Respall provides geospatial analysis and support for projects involving geodesy, hydrology, watershed studies, project impact analysis, CNDDB species, and critical habitat and mitigation information. Primary experience evolved from conventional surveying and civil engineering practices to advanced GPS and GIS based technology.

Responsibilities: Figure preparation and spatial analysis.

## **APPENDIX A.**

Database Queries (USFWS; CNDDDB; CNPS)

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# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

El Dorado County, California

## Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

## Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

### Amphibians

NAME

STATUS

California Red-legged Frog *Rana draytonii*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/2891>

## Fishes

NAME

STATUS

Delta Smelt *Hypomesus transpacificus*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/321>

## Flowering Plants

NAME

STATUS

El Dorado Bedstraw *Galium californicum* ssp. *sierrae*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/5209>

Layne's Butterweed *Senecio layneae*

Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4062>

Pine Hill Ceanothus *Ceanothus roderickii*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/3293>

Pine Hill Flannelbush *Fremontodendron californicum* ssp. *decumbens*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4818>

Stebbins' Morning-glory *Calystegia stebbinsii*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/3991>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE.

"BREEDS ELSEWHERE" INDICATES  
THAT THE BIRD DOES NOT LIKELY  
BREED IN YOUR PROJECT AREA.)

**Bald Eagle** *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

**California Thrasher** *Toxostoma redivivum*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

**Golden Eagle** *Aquila chrysaetos*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Breeds Jan 1 to Aug 31

**Lawrence's Goldfinch** *Carduelis lawrencei*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9464>

Breeds Mar 20 to Sep 20

**Lewis's Woodpecker** *Melanerpes lewis*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9408>

Breeds Apr 20 to Sep 30

**Nuttall's Woodpecker** *Picoides nuttallii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

Breeds Apr 1 to Jul 20

**Oak Titmouse** *Baeolophus inornatus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

Breeds Mar 15 to Jul 15

**Rufous Hummingbird** *selasphorus rufus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

Breeds elsewhere

**Song Sparrow** *Melospiza melodia*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Feb 20 to Sep 5

**Spotted Towhee** *Pipilo maculatus clementae*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  
<https://ecos.fws.gov/ecp/species/4243>

Breeds Apr 15 to Jul 20

**Wrentit** *Chamaea fasciata*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 15 to Aug 10

**Yellow-billed Magpie** *Pica nuttalli*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/9726>

Breeds Apr 1 to Jul 31

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (0)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

**Breeding Season ( )**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

**Survey Effort (|)**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

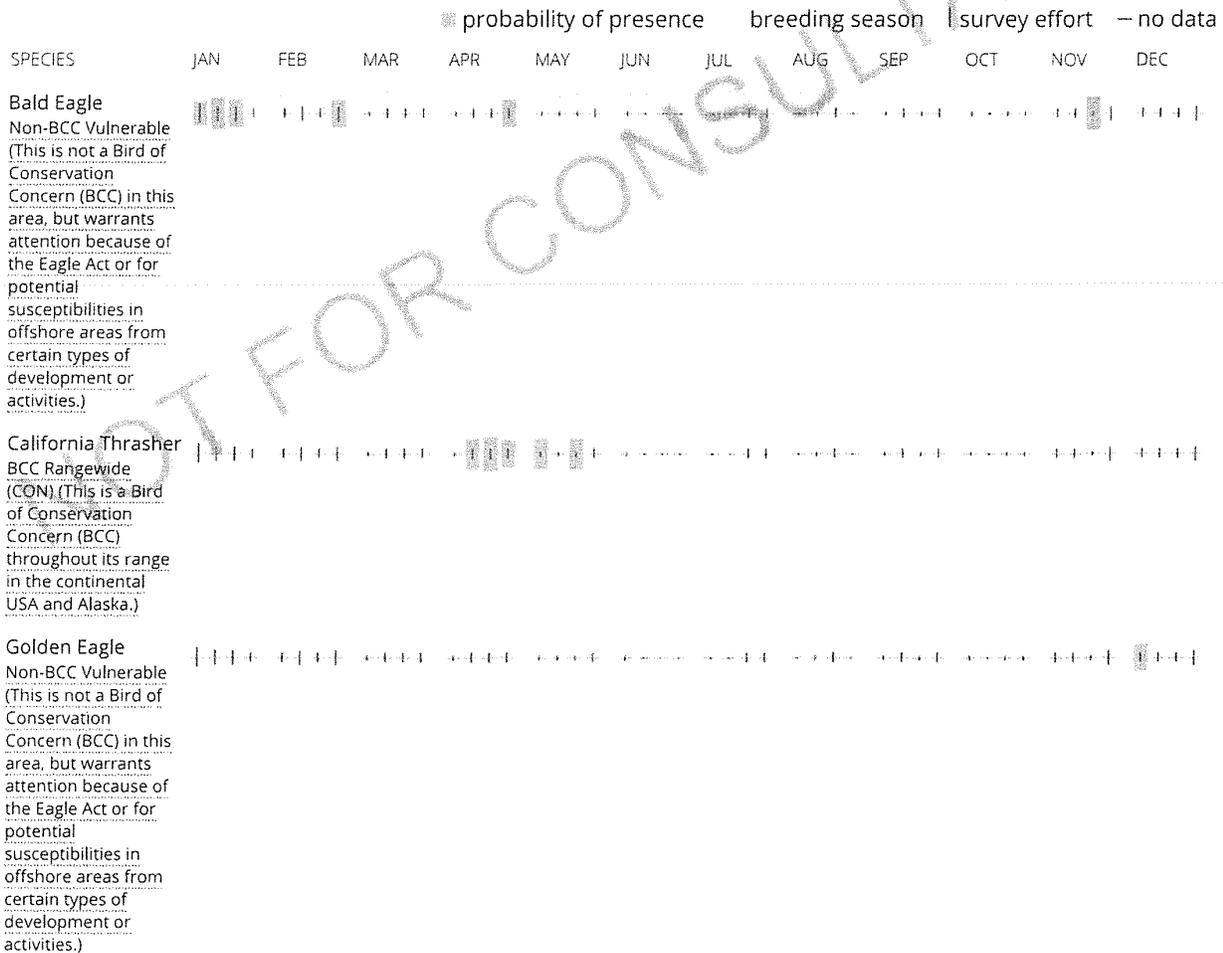
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

**No Data (—)**

A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Lawrence's Goldfinch  
 BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Lewis's Woodpecker  
 BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

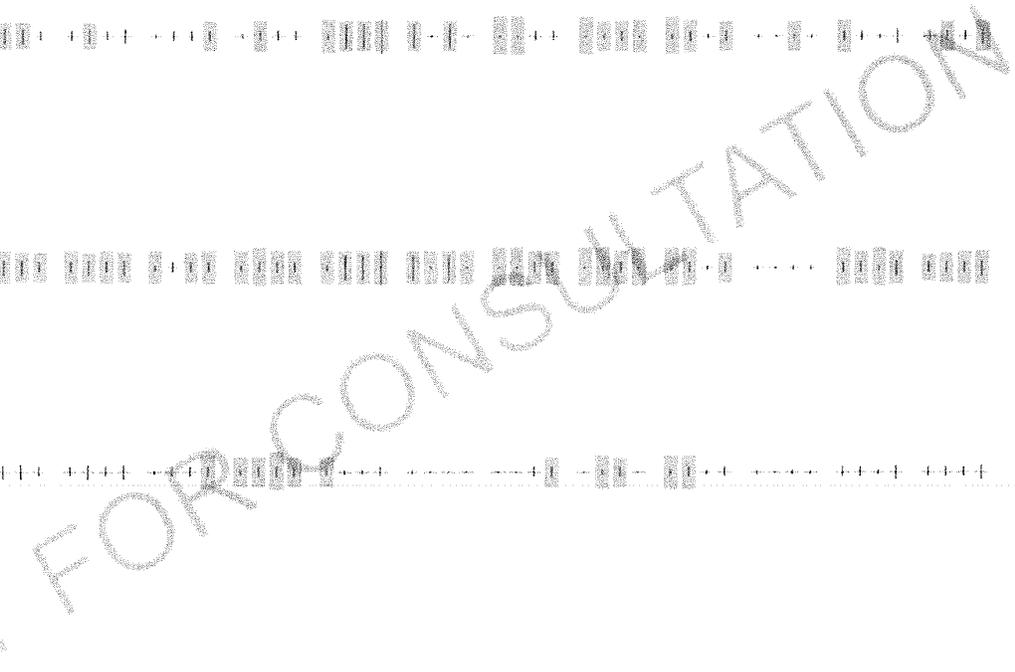
Nuttall's Woodpecker  
 BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Oak Titmouse  
 BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Rufous Hummingbird  
 BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Song Sparrow  
 BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Spotted Towhee  
 BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Wrentit  
BCC Rangewide  
(CON) (This is a Bird  
of Conservation  
Concern (BCC)  
throughout its range  
in the continental  
USA and Alaska.)



Yellow-billed  
Magpie  
BCC Rangewide  
(CON) (This is a Bird  
of Conservation  
Concern (BCC)  
throughout its range  
in the continental  
USA and Alaska.)



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the [Probability of Presence Summary](#). [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the [Probability of Presence Summary](#) and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to

confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

### Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

#### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



Selected Elements by Scientific Name  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Query Criteria: Quad> IS </span>(Pilot Hill (3812171)> OR </span>Coloma (3812078)>  
> OR </span>Garden Valley (3812077)> OR </span>Clarksville (3812161)>  
> OR </span>Shingle Springs (3812068)> OR </span>Placerville (3812067)> OR  
> OR </span>Folsom SE (3812151)> OR </span>Latrobe (3812058)> OR </span>Fiddletown  
 (3812057))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter gentilis</i> northern goshawk	ABNKC12060	None	None	G5	S3	SSC
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Allium jepsonii</i> Jepson's onion	PMLIL022V0	None	None	G2	S2	1B.2
<i>Ammodramus savannarum</i> grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
<i>Andrena blennospermatis</i> Blennosperma vernal pool andrenid bee	IIHYM35030	None	None	G2	S2	
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Aquila chrysaetos</i> golden eagle	ABNKC22010	None	None	G5	S3	FP
<i>Arctostaphylos nissenana</i> Nissenan manzanita	PDERI040V0	None	None	G1	S1	1B.2
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Atractelmis wawona</i> Wawona riffle beetle	IICOL58010	None	None	G3	S1S2	
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
<i>Banksula californica</i> Alabaster Cave harvestman	ILARA14020	None	None	GH	SH	
<i>Bombus occidentalis</i> western bumble bee	IIHYM24250	None	Candidate Endangered	G2G3	S1	
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Buteo regalis</i> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	



Selected Elements by Scientific Name  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Calystegia stebbinsii</i> Stebbins' morning-glory	PDCON040H0	Endangered	Endangered	G1	S1	1B.1
<i>Calystegia vanzuukiae</i> Van Zuurk's morning-glory	PDCON040Q0	None	None	G2Q	S2	1B.3
<i>Carex cyrtostachya</i> Sierra arching sedge	PMCYP03M00	None	None	G2	S2	1B.2
<i>Carex xerophila</i> chaparral sedge	PMCYP03M60	None	None	G2	S2	1B.2
<i>Ceanothus roderickii</i> Pine Hill ceanothus	PDRHA04190	Endangered	Rare	G1	S1	1B.1
<i>Central Valley Drainage Hardhead/Squawfish Stream</i> Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	GNR	SNR	
<i>Chlorogalum grandiflorum</i> Red Hills soaproot	PMLIL0G020	None	None	G3	S3	1B.2
<i>Clarkia biloba ssp. brandegeeeae</i> Brandegee's clarkia	PDONA05053	None	None	G4G5T4	S4	4.2
<i>Cosumnoperla hypocreana</i> Cosumnes stripetail	IIPLE23020	None	None	G2	S2	
<i>Crocianthemum suffrutescens</i> Bisbee Peak rush-rose	PDCIS020F0	None	None	G2?Q	S2?	3.2
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Erethizon dorsatum</i> North American porcupine	AMAFJ01010	None	None	G5	S3	
<i>Eryngium pinnatisectum</i> Tuolumne button-celery	PDAP10Z0P0	None	None	G2	S2	1B.2
<i>Fremontodendron decumbens</i> Pine Hill flannelbush	PDSTE03030	Endangered	Rare	G1	S1	1B.2
<i>Galium californicum ssp. sierrae</i> El Dorado bedstraw	PDRUB0N0E7	Endangered	Rare	G5T1	S1	1B.2
<i>Haliaeetus leucocephalus</i> bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
<i>Horkelia parryi</i> Parry's horkelia	PDROS0W0C0	None	None	G2	S2	1B.2
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
<i>Lasionycteris noctivagans</i> silver-haired bat	AMACC02010	None	None	G5	S3S4	

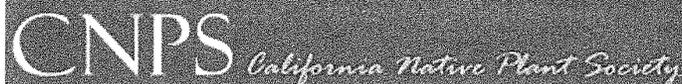


Selected Elements by Scientific Name  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
<i>Myotis yumanensis</i> Yuma myotis	AMACC01020	None	None	G5	S4	
<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
<i>Packera layneae</i> Layne's ragwort	PDAST8H1V0	Threatened	Rare	G2	S2	1B.2
<i>Pekania pennanti</i> fisher - West Coast DPS	AMAJF01021	None	Threatened	G5T2T3Q	S2S3	SSC
<i>Phrynosoma blainvillii</i> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
<i>Rana boylei</i> foothill yellow-legged frog	AAABH01050	None	Endangered	G3	S3	SSC
<i>Rana draytonii</i> California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2	
<i>Sagittaria sanfordii</i> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<i>Spea hammondi</i> western spadefoot	AAABF02020	None	None	G3	S3	SSC
<i>Thamnophis gigas</i> giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
<i>Viburnum ellipticum</i> oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3
<i>Wyethia reticulata</i> El Dorado County mule ears	PDAST9X0D0	None	None	G2	S2	1B.2

Record Count: 53



\*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

## Plant List

30 matches found. [Click on scientific name for details](#)

### Search Criteria

Found in Quads 3812171, 3812078, 3812077, 3812161, 3812068, 3812067, 3812151 3812058 and 3812057;

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<a href="#">Allium jepsonii</a>	Jepson's onion	Alliaceae	perennial bulbiferous herb	Apr-Aug	1B.2	S2	G2
<a href="#">Allium sanbornii var. congdonii</a>	Congdon's onion	Alliaceae	perennial bulbiferous herb	Apr-Jul	4.3	S3	G4T3
<a href="#">Allium sanbornii var. sanbornii</a>	Sanborn's onion	Alliaceae	perennial bulbiferous herb	May-Sep	4.2	S3S4	G4T3T4
<a href="#">Arctostaphylos mewukka ssp. truei</a>	True's manzanita	Ericaceae	perennial evergreen shrub	Feb-Jul	4.2	S3	G4?T3
<a href="#">Arctostaphylos nissenana</a>	Nissenan manzanita	Ericaceae	perennial evergreen shrub	Feb-Mar(Jun)	1B.2	S1	G1
<a href="#">Balsamorhiza macrolepis</a>	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
<a href="#">Calandrinia breweri</a>	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	4.2	S4	G4
<a href="#">Calystegia stebbinsii</a>	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jul	1B.1	S1	G1
<a href="#">Calystegia vanzuukiae</a>	Van Zuurk's morning-glory	Convolvulaceae	perennial rhizomatous herb	May-Aug	1B.3	S2	G2Q
<a href="#">Carex cyrtostachya</a>	Sierra arching sedge	Cyperaceae	perennial herb	May-Aug	1B.2	S2	G2
<a href="#">Carex xerophila</a>	chaparral sedge	Cyperaceae	perennial herb	Mar-Jun	1B.2	S2	G2
<a href="#">Ceanothus fresnensis</a>	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	May-Jul	4.3	S4	G4
<a href="#">Ceanothus roderickii</a>	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Apr-Jun	1B.1	S1	G1
<a href="#">Chlorogalum grandiflorum</a>	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	May-Jun	1B.2	S3	G3
<a href="#">Clarkia biloba ssp. brandegeae</a>	Brandegee's clarkia	Onagraceae	annual herb	May-Jul	4.2	S4	G4G5T4
	streambank spring	Montiaceae	annual herb	Feb-May	4.2	S3	G5T3

<a href="#"><u>Claytonia parviflora ssp. grandiflora</u></a>	beauty							
<a href="#"><u>Crocanthemum suffrutescens</u></a>	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	Apr-Aug	3.2	S2?	G2?Q	
<a href="#"><u>Delphinium hansenii ssp. ewanianum</u></a>	Ewan's larkspur	Ranunculaceae	perennial herb	Mar-May	4.2	S3	G4T3	
<a href="#"><u>Erigeron miser</u></a>	starved daisy	Asteraceae	perennial herb	Jun-Oct	1B.3	S3?	G3?	
<a href="#"><u>Eriophyllum jepsonii</u></a>	Jepson's woolly sunflower	Asteraceae	perennial herb	Apr-Jun	4.3	S3	G3	
<a href="#"><u>Eryngium pinnatisectum</u></a>	Tuolumne button-celery	Apiaceae	annual / perennial herb	May-Aug	1B.2	S2	G2	
<a href="#"><u>Fremontodendron decumbens</u></a>	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	Apr-Jul	1B.2	S1	G1	
<a href="#"><u>Galium californicum ssp. sierrae</u></a>	El Dorado bedstraw	Rubiaceae	perennial herb	May-Jun	1B.2	S1	G5T1	
<a href="#"><u>Horkelia parryi</u></a>	Parry's horkelia	Rosaceae	perennial herb	Apr-Sep	1B.2	S2	G2	
<a href="#"><u>Lilium humboldtii ssp. humboldtii</u></a>	Humboldt lily	Liliaceae	perennial bulbiferous herb	May-Jul(Aug)	4.2	S3	G4T3	
<a href="#"><u>Packera layneae</u></a>	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2	
<a href="#"><u>Sagittaria sanfordii</u></a>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	1B.2	S3	G3	
<a href="#"><u>Trichostema rubisepalum</u></a>	Hernandez bluecurls	Lamiaceae	annual herb	Jun-Aug	4.3	S4	G4	
<a href="#"><u>Viburnum ellipticum</u></a>	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	G4G5	
<a href="#"><u>Wyethia reticulata</u></a>	El Dorado County mule ears	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2	

### Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 27 July 2020].

#### Search the Inventory

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#### Information

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#### Questions and Comments

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## APPENDIX B

Plant and Wildlife Species Observed  
 Bean Barn 3  
 20 July 2020

Plant Species Observed.

Family	Scientific Name	Common Name	N/I <sup>1</sup>	In Bloom?	Cal-IPC <sup>2</sup>
<b>EUDICOTS</b>					
<b>Anacardiaceae</b>	<i>Schinus molle</i>	Pepper tree	I	No	Limited
	<i>Toxicodendron diversilobum</i>	Western poison oak	N	No	
<b>Apiaceae</b>	<i>Daucus carota</i>	Carrot, Queen Anne's lace	I	Yes	
	<i>Torilis arvensis</i>	Tall sock-destroyer	I	No	Moderate
<b>Asteraceae</b>	<i>Artemisia douglasiana</i>	Mugwort	N	No	
	<i>Baccharis pilularis</i>	Coyote brush	N	No	
	<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>	Italian thistle	I	No	Moderate
	<i>Centaurea solstitialis</i>	Yellow star-thistle	I	Yes	High
	<i>Chondrilla juncea</i>	Skeleton weed	I	Yes	Moderate
	<i>Eriophyllum lanatum</i>	Common woolly sunflower	N	No	
	<i>Holocarpha virgata</i> ssp. <i>virgata</i>	Tarweed	N	Yes	
	<i>Hypochaeris radicata</i>	Rough cat's-ear	I	No	Moderate
	<i>Lactuca serriola</i>	Prickly lettuce	I	No	
	<i>Logfia gallica</i> (Syn. <i>Filago gallica</i> )	Daggerleaf cottonrose	I	No	
	<i>Madia elegans</i>	Common madia	N	Yes	
	<i>Silybum marianum</i>	Milk thistle	I	No	
	<i>Sonchus asper</i> ssp. <i>asper</i>	Prickly sow thistle	I	No	
	<i>Tragopogon</i> sp.	Goat's beard, Salsify	I	Yes	
<b>Boraginaceae</b>	<i>Eriodictyon californicum</i>	California yerba santa	N	No	
<b>Brassicaceae</b>	<i>Hirschfeldia incana</i>	Summer mustard	I	Yes	Moderate
<b>Convolvulaceae</b>	<i>Convolvulus arvensis</i>	Bindweed	I	Yes	
<b>Ericaceae</b>	<i>Arctostaphylos viscida</i> ssp. <i>viscida</i>	Manzanita	N	No	
<b>Euphorbiaceae</b>	<i>Croton setigerus</i>	Turkey-mullein	N	Yes	
<b>Fabaceae</b>	<i>Acmispon americanus</i> var. <i>americanus</i> (Syn. <i>Lotus purshianus</i> )	Deervetch	N	Yes	
	<i>Trifolium hirtum</i>	Rose clover	I	No	Limited
	<i>Vicia</i> sp.	Vetch	I	No	
<b>Fagaceae</b>	<i>Quercus douglasii</i>	Blue oak	N	No	
	<i>Quercus lobata</i>	Valley oak	N	No	
	<i>Quercus wislizeni</i> var. <i>wislizeni</i>	Interior live oak	N	No	
<b>Geraniaceae</b>	<i>Erodium</i> sp. 1	Storksbill, filaree	I	No	
	<i>Erodium</i> sp. 2	Storksbill, filaree	I	No	
<b>Lamiaceae</b>	<i>Salvia rosmarinus</i>	Rosemary	I	No	
<b>Linaceae</b>	<i>Linum bienne</i>	Flax	I	No	
<b>Onagraceae</b>	<i>Epilobium brachycarpum</i>	Willowherb	N	No	
<b>Plantaginaceae</b>	<i>Kickxia spuria</i>	Kickxia	I	No	
	<i>Plantago lanceolata</i>	English plantain	I	No	Limited
<b>Polygonaceae</b>	<i>Rumex crispus</i>	Curly dock	I	No	Limited
<b>Rhamnaceae</b>	<i>Ceanothus cuneatus</i> var. <i>cuneatus</i>	Buckbrush	N	No	
	<i>Ceanothus lemmonii</i>	California-lilac	N	No	
	<i>Rhamnus ilicifolia</i>	Hollyleaf redberry	N	No	
<b>Rosaceae</b>	<i>Heteromeles arbutifolia</i>	Toyon	N	No	
	<i>Pyrus calleryana</i>	Bradford plum	I	No	
<b>Rubiaceae</b>	<i>Galium parisiense</i>	Wall bedstraw	I	No	

MONOCOTS					
<b>Cyperaceae</b>	<i>Cyperus</i> sp.	Nutsedge	--	No	
<b>Iridaceae</b>	<i>Sisyrinchium bellum</i>	Western blue-eyed-grass	N	No	
<b>Poaceae</b>	<i>Aegilops triuncialis</i>	Barbed goat grass	I	No	High
	<i>Avena</i> sp.	Wild oat	I	No	Moderate
	<i>Brachypodium distachyon</i>	False brome	I	No	Moderate
	<i>Briza minor</i>	Small quaking grass	I	No	
	<i>Bromus diandrus</i>	Ripgut grass	I	No	Moderate
	<i>Bromus hordeaceus</i>	Soft chess	I	No	Limited
	<i>Bromus madritensis</i>	Foxtail chess	I	No	
	<i>Cynodon dactylon</i>	Bermuda grass	I	No	Moderate
	<i>Cynosurus echinatus</i>	Bristly dogtail grass	I	No	Moderate
	<i>Dactylis glomerata</i>	Orchard grass	I	No	Limited
	<i>Elymus caput-medusae</i> (Syn. <i>Taeniatherum caput-medusae</i> )	Medusa head	I	No	High
	<i>Elymus glaucus</i>	Blue or western wild-rye	N	No	
	<i>Festuca perennis</i> (Syn. <i>Lolium perenne</i> )	Rye grass	I	No	Moderate
	<i>Gastridium phleoides</i>	Nit grass	I	No	
	<i>Panicum capillare</i>	Witch grass	N	No	
	<i>Paspalum dilatatum</i>	Dallis grass	I	No	
	<i>Phalaris</i> sp.	Canary grass	I	No	
	<i>Stipa</i> sp.	Needle grass	N	No	
<b>Themidaceae</b>	<i>Brodiaea</i> sp.	Brodiaea	N	No	
<b>Typhaceae</b>	<i>Typha</i> sp.	Cattail	N	No	

<sup>1</sup> N = Native to CA; I = Introduced.

<sup>2</sup> Degree of negative ecological impact (Cal-IPC 2020).

## **APPENDIX C.**

### Photographs

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Photo 1. View north, east of Cameron Park Dr., from SW property corner. Mira Loma Drive in background (below trees). Mostly weedy species in this photo. 20 July 2020

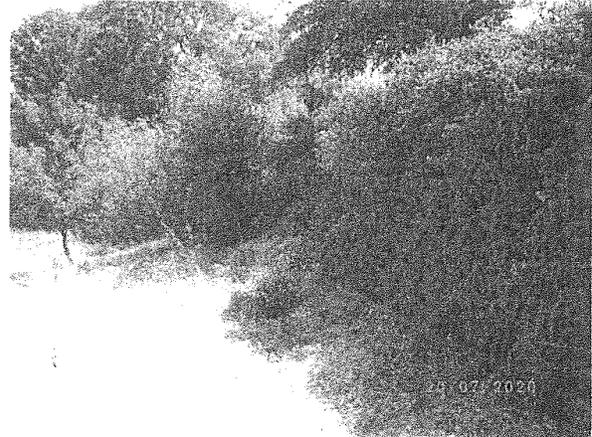


Photo 2. View east from near SW corner along southern property boundary; nonnative Rosemary plants on right side of photo growing in gaps in the block wall. 20 July 2020



Photo 3. Detail of block wall shown in Photo 2. Rosemary plants cascading down face of wall. 20 July 2020



Photo 4. View west from near SE property corner. 20 July 2020

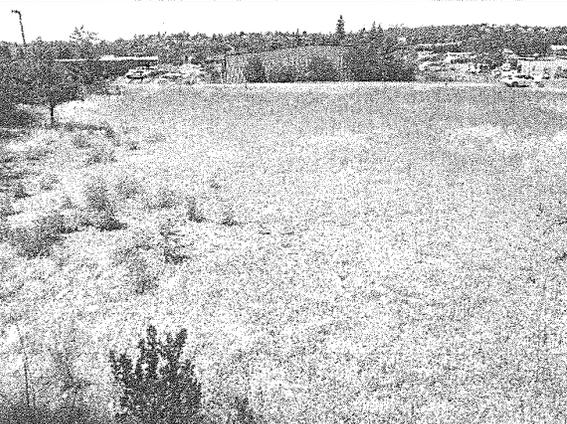


Photo 5. View west from east property boundary; Cameron Park Airport in background. Mostly nonnative herbaceous annual grasses and forbs in the BSA. 20 July 2020



Photo 6. View SE toward native vegetation on east boundary. Nonnative yellow star-thistle in foreground. 20 July 2020

**TRAFFIC IMPACT ANALYSIS**  
**FOR**  
**BEAN BARN COFFEE**  
Cameron Park, El Dorado County CA

Prepared For:

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December 14, 2020

7365-01

*0 Bean Barn Coffee TIA.rpt*

**TRAFFIC IMPACT ANALYSIS FOR  
BEAN BARN COFFEE**  
Cameron Park, El Dorado County CA

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# TRAFFIC IMPACT ANALYSIS FOR BEAN BARN COFFEE

Cameron Park, El Dorado County CA

## EXECUTIVE SUMMARY

- **Project Description.** This study evaluates the traffic impacts associated with the construction of a coffee kiosk off of Cameron Park Drive in Cameron Park. The project is located in the southeast quadrant of the Cameron Park Drive / Mira Loma Drive intersection. Access to the site will be a single driveway located on Mira Loma Drive about 160 feet east of Cameron Park Drive. The coffee kiosk is projected to generate approximately 121 a.m. peak hour trips and 30 p.m. peak hour trips. After accounting for pass-by trips the site will generate 21 new a.m. peak hour trips and 5 new p.m. peak hour trips.

The traffic study included the following analysis scenarios:

1. Existing Traffic Conditions
2. Existing Plus Project Conditions for Sophia Parkway Commercial

The project is consistent with current general plan land use and zoning conditions; therefore, a future 2040 analysis was not conducted.

- **Existing Setting.** The study areas addressed traffic conditions at three existing intersections. Due to Covid-19 conditions, traffic volumes are generally lower than pre-Covid19 conditions. Therefore, intersection turning movements were developed through data collected by *Streetlight Data* and adjusted based on County ADT counts conducted in 2019 when school was in session.

### Intersections

All intersections operate within acceptable El Dorado County LOS thresholds.

### Queues

Under current conditions queues at the Cameron Park Drive / Mira Loma Drive intersection are maintained in each turn lane.

- **Existing Plus Project Impacts.** The operation of the proposed project will increase the volume of traffic on the study area circulation system.

### Vehicle Miles Traveled

The proposed project is a drive-through coffee kiosk. Based on the location of the site the location provides a proximate location relative to residents and businesses in the Cameron Park area. The drive-through kiosk allows customers in this area better accessibility to the specific use, i.e. a drive-through coffee shop. As noted in the *Technical Advisory on Evaluating*

*Transportation Impacts in CEQA* locally-serving retail projects are presumed to have a less than significant transportation impact.

#### Intersections

All intersections will operate within acceptable El Dorado County LOS thresholds. The following mitigations are noted:

- The project shall contribute its fair share to the cost of regional circulation improvements via the existing countywide traffic impact mitigation (TIM) fee program.
- The following on-site mitigation should be constructed:
  - o Landscaping along the project frontage should be limited to vegetation no higher than 2 feet to provide adequate visibility along Mira Loma Drive.
  - o Tree limbs and bushes should be cut back or removed as practicable between the project driveway and the Point Loma Commercial Center driveway a minimum of 15 feet from edge of travel way along Mira Loma Drive.

#### Queues

Under Existing plus Project conditions, all queues at the Cameron Park Drive / Meder Road intersection will continue to queue within their respective turn lanes.

**TRAFFIC IMPACT ANALYSIS FOR  
BEAN BARN COFFEE**

Cameron Park, El Dorado County CA

**INTRODUCTION**

**Study Purpose and Objectives**

This study evaluates the traffic impacts associated with the construction of a coffee kiosk project off of Cameron Park Drive in Cameron Park. The project is located in the southeast quadrant of the Cameron Park Drive / Mira Loma Drive intersection. Project access will be from Mira Loma Drive.

The 2018 CEQA Guidelines Update includes new and revised provisions for analyzing the significance of transportation impacts. Specifically, CEQA Guidelines section 15064.3 was adopted, effective December 28, 2018, and states that Vehicle Miles Travelled for land use projects “exceeding an applicable threshold of significance may indicate a significant impact.” (14 CCR § 15064.3, subd. (b)(1)). This new metric took effect state-wide July 1, 2020. As a result of this new section, the significance threshold for transportation impacts in both CEQA Guidelines section 15064 and Appendix G (Environmental Checklist Form) are described in terms of VMT rather than LOS.

A project must still be evaluated individually and cumulatively to determine whether the project is consistent with the local agency’s General Plan. The project was evaluated under an Existing condition. The project is consistent with the El Dorado County General Plan which identifies the project site within a commercial land use. The site is zoned Commercial, Limited and is consistent with the zoning.

The Level of Service (LOS) analysis was evaluated for General Plan consistency and to identify feasible improvements to meet the General Plan Vehicle LOS Standards. Vehicle LOS is used to identify potential improvement projects that may be included in conditions of approval for the project entitlements.

The scope of this traffic analysis has been identified through consideration of El Dorado County traffic study guidelines in consultation with El Dorado County Long Range Planning (LRP). In addition to VMT analysis, this study addresses the following scenarios for LOS analysis:

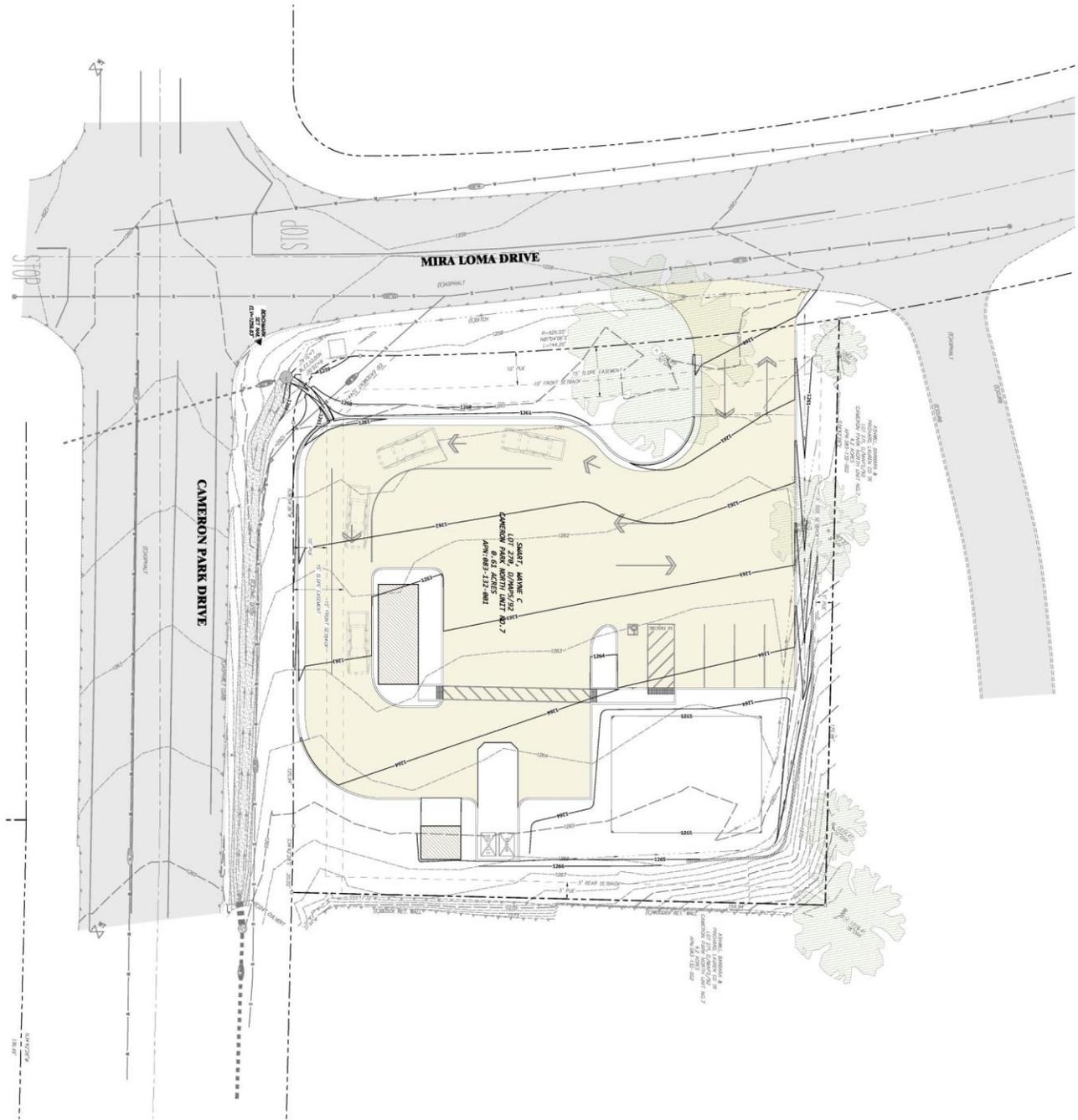
1. Existing Traffic Conditions
2. Existing Plus Project Conditions

The objective of this study is to identify those roads and street intersections that may be impacted by development of each project based on El Dorado County significance criteria. Figure 1 presents a map of the vicinity.

### **Project Description**

The Bean Barn Coffee project will construct a drive-through coffee kiosk in the southeast quadrant of the Cameron Park Drive / Mira Loma Drive intersection. The project will have access from Mira Loma Drive, just west of the Point Loma Commercial center driveway. The site is vacant, and the project will construct a 360 square foot coffee kiosk on the west side of the site, away from the proposed driveway. One driveway is proposed and will allow counterclockwise traffic flow around the kiosk. In addition, the site includes five parking spaces which would allow some walk-up sales. Figure 2 presents the proposed site plan.





## **EXISTING SETTING**

### **Study Area**

This study addresses traffic conditions at three existing intersections in Cameron Park, El Dorado County. The text that follows describes the facilities included in this analysis. The quality of traffic flow is typically governed by the operation of major intersections and the daily volume of traffic along the roadways. The study locations include:

### **Study Area Roadways and Intersections**

The **Cameron Park Drive / Virada Road intersection** provides access between Green Valley Drive and US 50. The intersection is a tee with the stem, Virada Road, heading east. The intersection is about 750 feet north of the project location. The intersection is stop controlled along Virada Road. Each approach consists of single lanes.

The **Cameron Park Drive / Mira Loma Drive intersection** is a four-way intersection adjacent to the project site. The intersection is unsignalized with stop control along the Mira Loma Drive legs. The Cameron Park Drive approaches include a shared through-right lane and dedicated left turn lanes.

The **Cameron Park Drive / Meder Road intersection** is a major intersection along Cameron Park Drive and provides access between Green Valley Drive and US 50 north to south, and between Cameron Park Drive and Ponderosa Drive, west to east. The tee intersection is about ½ mile south of the project site. The intersection is signalized and provides a dedicated left turn lane and through lane along southbound Cameron Park Drive. Northbound Cameron Drive consists of a through lane and a right turn lane while Meder Road consists of a left turn and right turn lanes.

### **Alternative Transportation Modes**

#### **Public Transit**

El Dorado County Transit Authority (EDCTA) operates buses throughout El Dorado County. In the vicinity of the site, the Cameron Park / Shingle Springs loop, Route 40, operates every hour from 6:30 a.m. to 7:20 p.m. Monday through Friday. This route also provides transfers to the Route 50 Express and the Sacramento Commuter at Cambridge Road Park and Ride. The route operates in both directions along Cameron Park Drive with stops northbound at Point Loma Commercial Center and stops southbound at Meder Road.

#### **Non-Motorized Transportation**

The available facilities for bicycles and pedestrians in the area of the project were inventoried.

**Sidewalks / Trails.** Due to the rural nature of Cameron Park Drive sidewalk is not present along either side of Cameron Park Drive, nor along Mira Loma Drive. The closest sidewalk is at the La Canada Drive intersection north of the site and Palmer Drive to the south.

Bicycle Facilities. Few designated bicycle routes currently exist throughout El Dorado County due to the rural nature of the county. Bicycle lanes are discontinuous along Cameron Park Drive with bike lanes available from Palmer Drive north to Hacienda Road. To the north bike lanes are present beginning about 850 feet south of La Canada Drive and continue to Maple Drive.

### **Analysis Criteria**

**Vehicle Miles Traveled.** In the El Dorado County Traffic Impact Study Guidelines, the impact of a project on LOS is an important factor in determining whether a project has a significant impact. However, recent changes to CEQA have changed how lead agencies use LOS in determining whether a project has a significant impact on transportation. As noted in the California Governor’s Office of Planning and Research (OPR) document *Technical Advisory on Evaluating Transportation Impacts in CEQA* (California Governor’s Office of Planning and Research 2018),

“Senate Bill 743 (Steinberg, 2013), which was codified in Public Resources Code section 21099, required changes to the guidelines implementing CEQA (CEQA Guidelines) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 15000 et seq.) regarding the analysis of transportation impacts. . . OPR has proposed, and the California Natural Resources Agency (Agency) has certified and adopted, changes to the CEQA Guidelines that identify vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project’s transportation impacts. With the California Natural Resources Agency’s certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by “level of service” and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3).)”

Notably, the *El Dorado County Traffic Impact Study Guidelines* were prepared before the recent changes to CEQA due to Senate Bill 743 (Steinberg 2013). As a result, the County guidelines specify use of LOS in determining whether a project has a significant impact. Consistent with the approach described in the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA*, LOS will not be used in this traffic impact study as a basis for identifying significant impacts. Rather, the methods, assumptions and significance thresholds presented in the County guideline will be used to determine whether the project is consistent or inconsistent with General Plan policies on LOS, and whether the magnitude of inconsistency should be considered significant or less than significant.

Certain types of projects as identified in statute, the CEQA Guidelines, or in OPR’s Technical Advisory are presumed to have a less than significant impact on VMT and therefore a less than significant impact on transportation. Generally, the identified projects contribute to efficient land use patterns enabling higher levels of walking, cycling, and transit as well as lower average trip length. These projects include, for example, projects in transit priority areas, projects consisting of residential infill or those located in low VMT areas.

Caltrans references OPR's December 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which identifies projects and areas presumed to have a less than significant transportation impact. Those include:

1. Residential, office, or retail projects within a Transit Priority Area, where a project is within a ½ mile of an existing or planned major transit stop or an existing stop along a high-quality transit corridor.
  - a. A major transit stop is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (Pub. Resources Code, § 21064.3).
  - b. A high-quality transit corridor is defined as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (Pub. Resources Code, § 21155).
2. An area pre-screened by an agency as having low residential or office VMT:
  - a. An area where existing residential projects exhibit VMT per capita 15 percent or more below city or regional average.
  - b. An area where existing office projects exhibit VMT per capita 15 percent or more below regional average.
3. Residential projects composed of 100 percent or near-100 percent affordable housing located in any infill location. Additionally, per OPR's Technical Advisory, "Lead agencies may develop their own presumption of less than significant impact for residential projects (or residential portions of mixed use projects) containing a particular amount of affordable housing, based on local circumstances and evidence. Furthermore, a project which includes any affordable residential units may factor the effect of the affordability on VMT into the assessment of VMT generated by those units."
4. A locally-serving retail project (such a project typically reduces vehicle travel by providing a more proximate shopping destination, i.e., better accessibility).
5. Mixed-use projects composed entirely of the above low-VMT project types.
6. In any area of the state, absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.

However, a land use project near transit may have a significant impact on VMT if it:

1. Has a floor area ratio less than 0.75.
2. Includes more parking than required by the local permitting agency.
3. Is inconsistent with the region's Sustainable Communities Strategy (i.e., development is outside region's development footprint, or in area specified as open space).
4. Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

In very limited situations, analysis or mitigation may be appropriate in low VMT areas to address specific multimodal access management issues directly caused by the project such as issues related to line of sight caused by the placement of a driveway. These situations are to be determined based on the details of development proposals and their setting and will be addressed in future guidance.

Should a project not meet the minimum screening thresholds, a VMT analysis should be conducted. The OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* (California Governor's Office of Planning and Research 2018) identifies a threshold of 15 percent below the baseline for determining the significance of VMT impacts associated with residential and office land use developments. Locally-serving retail projects, such as a project that reduces vehicle travel by providing a more proximate shopping destination, i.e., better accessibility is considered to have a less than significant transportation impact.

**General Plan Policy Consistency Level of Service Methodology.** *Level of Service Analysis* has been employed to provide a basis for describing existing traffic conditions and for evaluating whether deficiencies exist within the local roadway network. Level of Service measures the *quality* of traffic flow and is represented by letter designations from "A" to "F", with a grade of "A" referring to the best conditions, and "F" representing the worst conditions. The guidelines and analyses used for this report follow El Dorado County standards.

Local agencies adopt minimum Level of Service standards for their facilities. The analysis techniques presented in the *Highway Capacity Manual* were used to calculate Level of Service and to provide a basis for describing existing traffic conditions and evaluating deficiencies in the roadway network. The *HCM 6<sup>th</sup> Edition* methodology was used to analyze all intersections.

**Intersections.** Various software programs have been developed to assist in calculating intersection Level of Service, and the level of sophistication of each program responds to factors that affect the overall flow of traffic. Synchro software was used for intersection analysis. Signal timing plans provided by El Dorado County were used in the Synchro analysis.

The intersection Levels of Service presented in this analysis are based on the weighted average total delay per vehicle for the intersection as a whole at signalized intersections and at locations controlled by all-way stops. The average delay experienced by motorists yielding the right of way is the basis for identification of Level of Service at locations controlled by side street stop signs. Applicable Level of Service thresholds based on average delay are shown in Table 1.

**El Dorado County General Plan Intersection Thresholds of Significance.** El Dorado County identifies LOS 'E' as the acceptable Level of Service on roadways and state highways within the unincorporated areas of the County in the Community Regions and LOS D in the Rural Centers and Rural Regions except as specified in the General Plan. Cameron Park is identified as a Community Region.

An intersection is considered to be deficient under El Dorado County guidelines if the project causes an intersection to change from LOS E to LOS F. Worsening of conditions at facilities already operating at unacceptable levels of service is also considered a deficiency. The County's General Plan Policy TC-Xe defines worsen as any of the following conditions:

- a. a 2% increase in traffic during the a.m. peak hour, p.m. peak hour or daily trips, or
- b. the addition of 100 or more daily trips, or
- c. the addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

At the time of approval of a tentative map for a single family residential subdivision of five or more parcels that worsens (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element based on existing traffic plus traffic generated from the development plus forecasted traffic growth at 10-years from project submittal; or (2) ensure the commencement of construction of the necessary road improvements are included in the County's 10-year CIP.

For all other discretionary projects that worsen (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element; or (2) ensure the construction of the necessary road improvements are included in the County's 20-year CIP.

County policy notes that impacts to Caltrans facilities shall use Caltrans LOS standards and significance thresholds. Caltrans uses LOS E as the significance threshold on freeway facilities in this area of El Dorado County.

**TABLE 1  
LEVEL OF SERVICE DEFINITIONS**

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay $\leq 10.0$ sec	Little or no delay. Delay $\leq 10$ sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay $> 10.0$ sec and $\leq 20.0$ sec	Short traffic delays. Delay $> 10$ sec/veh and $\leq 15$ sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay $> 20.0$ sec and $\leq 35.0$ sec	Average traffic delays. Delay $> 15$ sec/veh and $\leq 25$ sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestion of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay $> 35.0$ sec and $\leq 55.0$ sec	Long traffic delays. Delay $> 25$ sec/veh and $\leq 35$ sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay $> 55.0$ sec and $\leq 80.0$ sec	Very long traffic delays, failure, extreme congestion. Delay $> 35$ sec/veh and $\leq 50$ sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay $> 80.0$ sec	Intersection blocked by external causes. Delay $> 50$ sec/veh	Forced flow, breakdown.
Sources: <u>Highway Capacity Manual 6<sup>th</sup> Edition</u> , Transportation Research Board (TRB)			

**Traffic Signal Warrants.** The extent to which existing or projected traffic volumes may justify signalization at un-signalized intersections has been determined based on consideration of traffic signal warrant presented in the *Manual of Uniform Traffic Control Devices, 2014*. For this analysis, the volume thresholds associated with Warrant 3 (Peak Hour Volume) have been assessed.

**Existing Traffic Conditions**

Due to the Covid-19 pandemic, travel patterns have been affected downward due to work and school closures. Intersection turning movements (ITM) are therefore, generally lower than usual traffic counts. ITM's were developed based on data analytics provided from *Streetlight Data*. *Streetlight Data* uses "Big-Data" derived travel pattern analytics against publicly available traffic movement ratios derived from traffic counts to project current ITM's. 2019 daily traffic volume

data in the project vicinity that was provided by El Dorado County was reviewed and compared to 2019 *Streetlight Data* in the same locations. Where appropriate, ITM's were adjusted based on the relative ADT proportions. The peak hours used for this study occurred between 7:00 and 8:00 a.m. and 5:00 to 6:00 p.m.

**Intersection Levels of Service.** The intersection turning movements developed through *Streetlight Data* are presented in Figure 3. Table 2 summarizes current operating Levels of Service at the study area intersections for each time period. All study intersections operate at acceptable Levels of Service, at LOS E or better, during the a.m. and p.m. peak hours. Additionally, a peak hour warrant analysis was conducted for the two unsignalized intersections. The Cameron Park Drive / Mira Loma Drive intersection currently meets the peak hour signal warrant in the p.m. peak hour, meeting both delay and volume segments of Warrant 3. However, while it meets the peak hour signal warrant, the intersection operates acceptably.

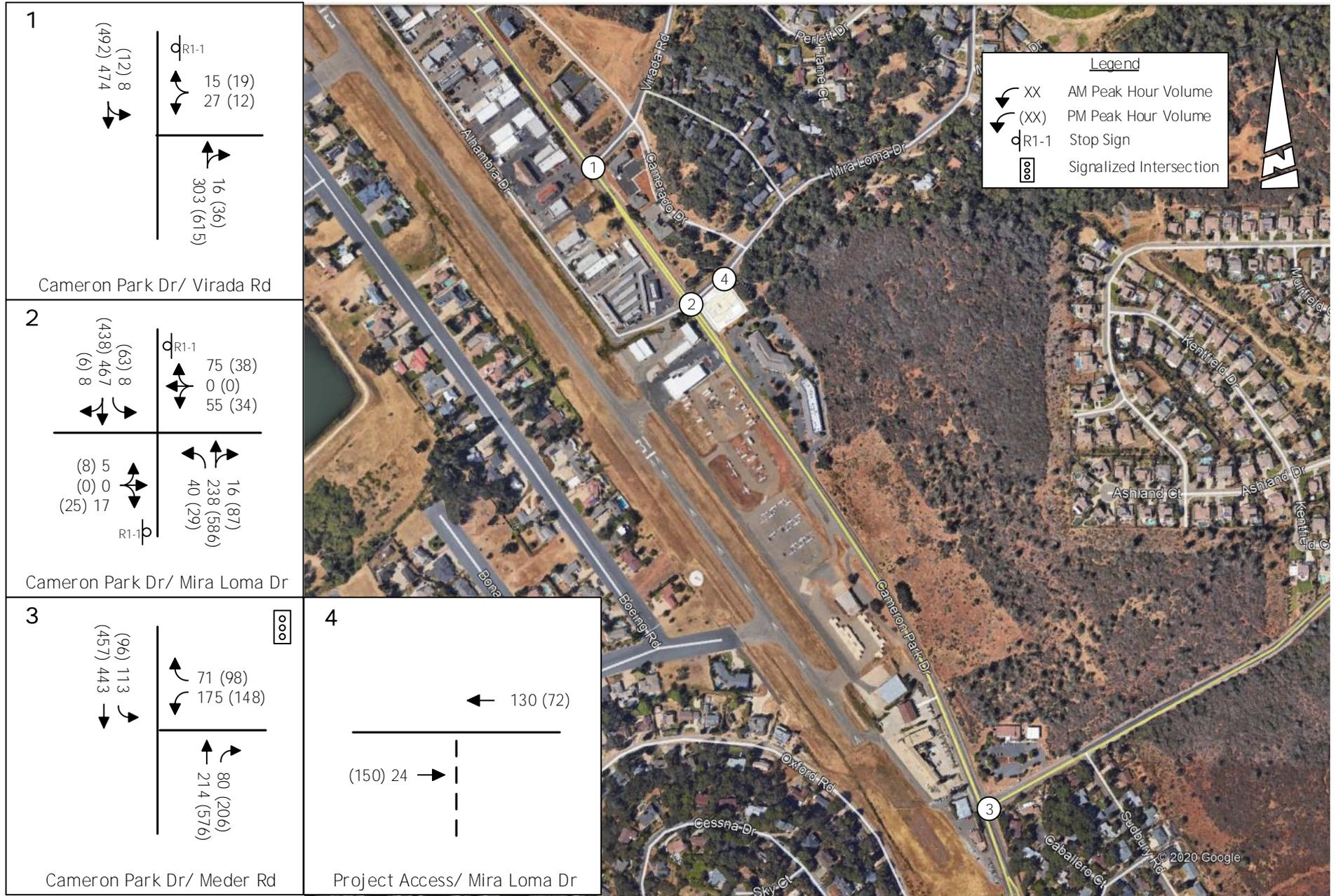
**TABLE 2  
EXISTING PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS**

Location	Control	AM Peak Hour		PM Peak Hour		Peak Hour Traffic Signal Warrant Met?
		LOS	Average Delay	LOS	Average Delay	
1. Cameron Park Dr / Virada Rd SB Left WB	WB Stop	A C	8.0 15.3	A C	9.1 19.0	No
2. Cameron Park Drive / Mira Loma Drive NB Left SB Left EB WB	EB / WB Stop	A A B C	8.6 7.8 14.3 18.7	A A C E	8.4 9.5 20.3 39.9	Yes*
3. Cameron Park Drive / Meder Road	Signal	A	3.3	A	3.9	N/A

\* meets delay and volume warrants in p.m. peak hour.

**Intersection Queues.** Table 3 presents information regarding current peak period queuing in turn lanes at the signalized study intersection. The available storage is presented along with current peak hour traffic volumes and the 95<sup>th</sup> percentile queue length.

The 95<sup>th</sup> percentile queues indicate that vehicles can store within each lane without spillback into a through lane. The longest queue occurs in the westbound left turn lane with a 107-foot queue in the p.m. peak hour. This turn lane is the extension of the westbound lane along Meder Road approaching the intersection.



EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

**TABLE 3  
EXISTING PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS**

Location	Length (feet)	AM Peak Hour		PM Peak Hour	
		VPH	Queue (feet)	VPH	Queue (feet)
1. Cameron Park Drive / Meder Road					
SB left	260	113	95	96	93
NB right	220	80	26	206	38
WB left	155*	175	104	148	107
WB right	155	71	25	98	33
* through lane from Meder Road					

## PROJECT CHARACTERISTICS

The development of this project will attract traffic to the project site. The amount of additional traffic on a particular section of the street network is dependent upon two factors:

- Trip Generation, the number of new trips generated by the project, and
- Trip Distribution and Assignment, the specific routes that the new traffic takes.

### Trip Generation

Trip generation is determined by identifying the type and size of land use being developed. Recognized sources of trip generation data may then be used to calculate the total number of trip ends resulting from the day to day operation of the businesses in the project.

The trip generation for this project was calculated using trip generation rates published in the *Trip Generation Manual* (Institute of Transportation Engineers, 10th Edition, 2017). The project will construct a 360 square foot coffee kiosk for drive-through traffic. The kiosk will serve customers through a single driveway with counterclockwise movement through the site.

Table 4 displays the daily, a.m. peak hour, and p.m. peak hour trip generation for the proposed project. Trips generated by retail commercial projects fit into two categories. Some trips will be made by patrons who would not otherwise be on the local street system and who go out of their way to reach the site. These are "new" trips. Other trips will be made by patrons who are already in the roadway network and stop by the site as part of a trip made for another purpose. These "pass-by" trips do not add traffic to the overall system.

ITE research has suggested typical "pass-by" percentages for various land uses. The ITE *Trip Generation Handbook, 3<sup>rd</sup> Edition* was used to determine pass-by rates.

After accounting for pass-by trip reductions, the commercial project is expected to generate 122 'new' daily trips, 21 'new' a.m. peak hour trips and 5 'new' p.m. peak hour trips.

**TABLE 4  
TRIP GENERATION**

Land Use	Unit Quantity	Size	Trips Per Unit						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Coffee / Donut Drive Thru / No Indoor Seating (LU 938)	KSF	0.36	2,000.00	50%	50%	337.04	50%	50%	83.33
Coffee / Donut Drive Thru / No Indoor Seating (LU 938)			720	61	61	121	15	15	30
<b>Sub-Total Trips</b>			<b>720</b>	61	61	<b>121</b>	15	15	<b>30</b>
<i>Pass-By Trips</i>									
Coffee / Donut Drive Thru / No Indoor Seating (LU 938) – 83% AM, PM, Daily			(598)	(50)	(50)	(101)	(12)	(12)	(25)
<b>Total Pass-By Trips</b>			<b>(598)</b>	(50)	(50)	<b>(101)</b>	(12)	(12)	<b>(25)</b>
<b>Net New Trips</b>			<b>122</b>	<b>10</b>	<b>10</b>	<b>21</b>	<b>3</b>	<b>3</b>	<b>5</b>

KSF – thousand square feet

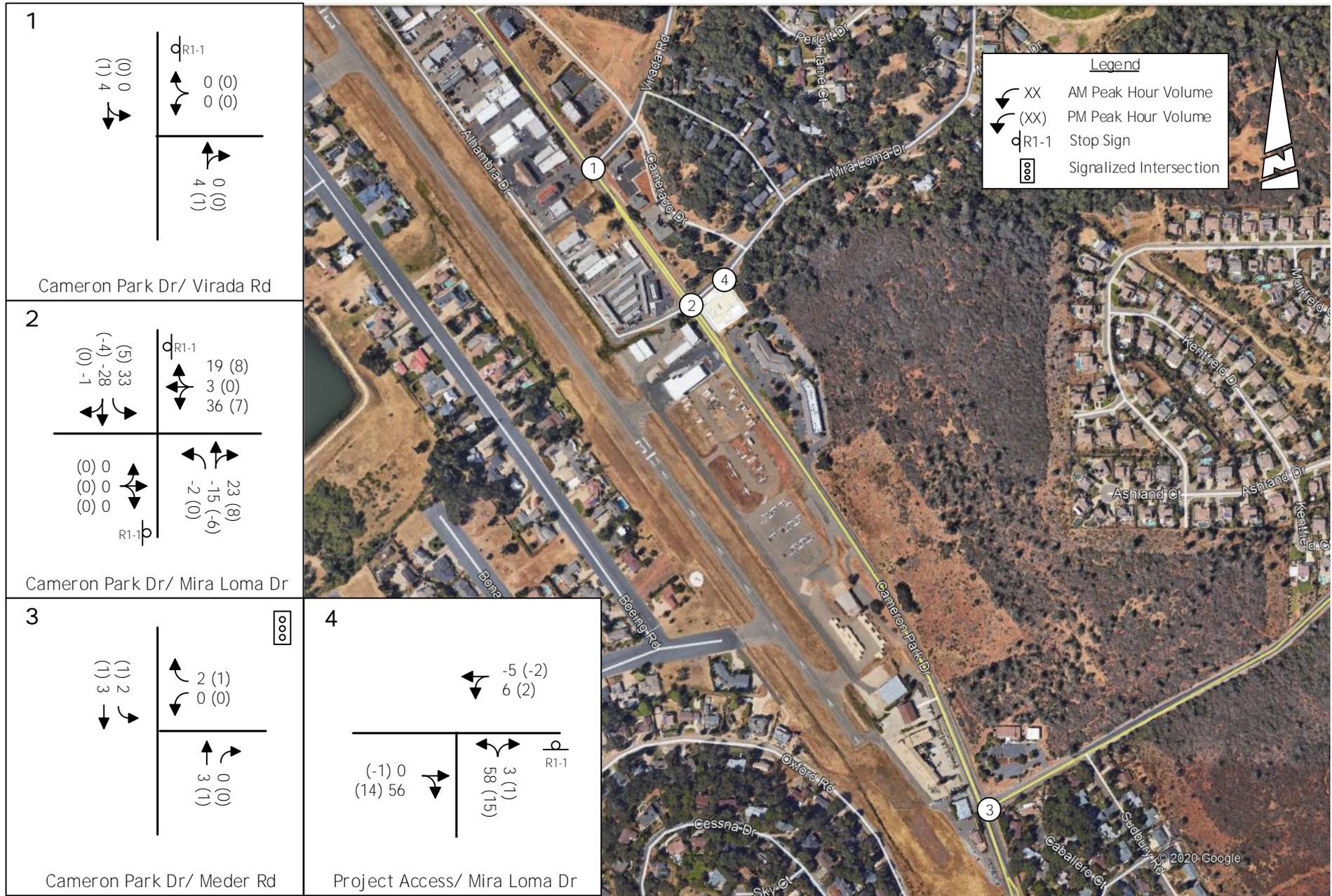
Numbers may not match due to rounding

**Trip Distribution & Assignment**

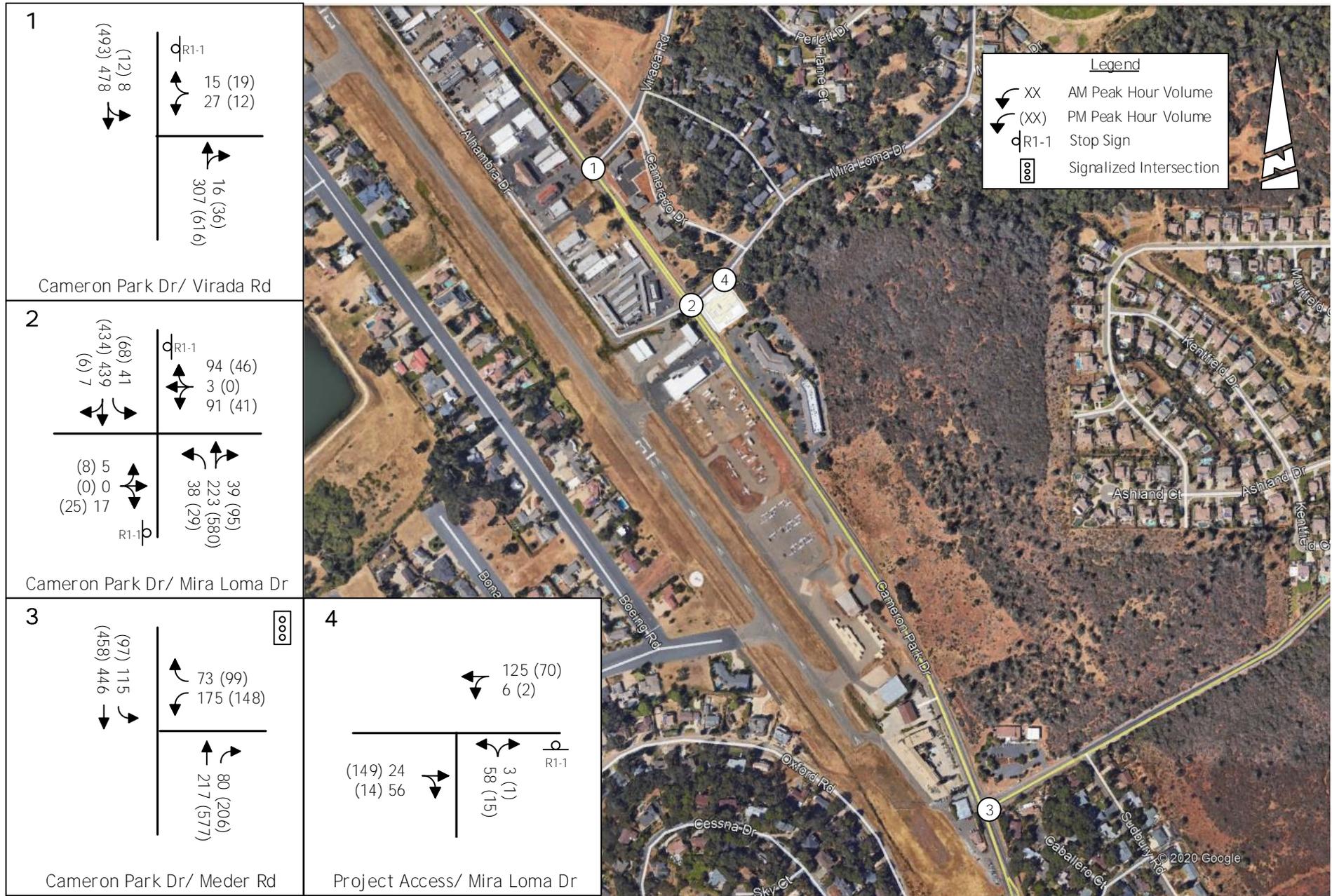
The distribution of project traffic was determined based on review of existing traffic counts and the travel patterns in the area relative to the land use. Table 5 presents the projected trip distribution. Traffic generated by the project is shown in Figure 4. This traffic was added to existing peak hour volumes based on the distribution percentages. Figure 5 displays the Existing plus Project generated traffic anticipated for each study intersection in both a.m. and p.m. peak hours.

**TABLE 5  
PROJECT TRIP DISTRIBUTION**

Direction	Distribution
North on Cameron Park Dr	40%
East on Mira Loma Dr	10%
South on Cameron Park Dr	30%
East on Meder Rd	20%
Total	100%



PROJECT ONLY TRAFFIC VOLUMES AND LANE CONFIGURATIONS



EXISTING PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

## **EXISTING PLUS PROJECT TRAFFIC IMPACTS**

**Vehicle Miles Traveled.** The proposed project is a drive-through coffee kiosk. Based on the location of the site the location provides a proximate location relative to residents in the Cameron Park Drive area, as well as the surrounding local businesses. The drive-through kiosk allows customers in this area better accessibility to the specific use, i.e. a drive-through coffee shop. As noted in the *Technical Advisory on Evaluating Transportation Impacts in CEQA* locally-serving retail projects are presumed to have a less than significant transportation impact.

**Intersection Levels of Service.** Intersection Levels of Service were calculated and used as the basis for evaluating General Plan Consistency. Table 6 displays the peak hour Levels of Service at each study intersection and compares the existing Levels of Service with those accompanying the project. All intersections will continue to operate above the minimum El Dorado County standard (i.e., LOS E). The Cameron Park Drive / Mira Loma Drive intersection will continue to meet both delay and volume segments of Warrant 3 in the p.m. peak hour. It will also meet the volume portion of the warrant in the a.m. peak hour. While it meets the peak hour signal warrant, as noted under Existing Conditions, the intersection will continue to operate acceptably.

**Intersection Queues.** Table 7 identifies peak period queues with the addition of project trips. The queues in each of the turn lanes will continue to be queued within the existing pockets.

**TABLE 6  
PEAK HOUR INTERSECTION LEVELS OF SERVICE  
EXISTING PLUS PROJECT CONDITIONS**

Location	Control	AM Peak Hour				PM Peak Hour				Peak Hour Traffic Signal Warrant Met?
		Existing		Ex Plus Project		Existing		Ex Plus Project		
		LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	
1. Cameron Park Dr / Virada Rd SB Left WB	WB Stop	A C	8.0 15.3	A C	8.0 15.4	A C	9.1 19.0	A C	9.1 19.1	No
2. Cameron Park Drive / Mira Loma Drive NB Left SB Left EB WB	EB / WB Stop	A A B C	8.6 7.8 14.3 18.7	A A B C	8.5 7.9 14.7 28.2	A A C E	8.4 9.5 20.3 39.9	A A C E	8.4 9.5 20.8 46.1	Yes*
3. Cameron Park Drive / Meder Road	Signal	A	3.3	A	3.4	A	3.9	A	3.9	N/A
4. Mira Loma Drive / Driveway NB WB Left	NB Stop	--- ---	--- ---	B A	10.0 7.4	--- ---	--- ---	A A	9.9 7.6	No†

\* meets delay and volume warrant in p.m. peak hour and volume warrant in a.m. peak hour

† insignificant volume departing site to warrant signal

**TABLE 7  
EXISTING PLUS PROJECT  
PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS**

<b>Location</b>	<b>Length (feet)</b>	<b>AM Peak Hour</b>		<b>PM Peak Hour</b>	
		<b>VPH</b>	<b>Queue (feet)</b>	<b>VPH</b>	<b>Queue (feet)</b>
1. Cameron Park Drive / Meder Road					
SB left	260	115	96	97	94
NB right	220	80	26	206	38
WB left	155*	175	104	148	107
WB right	155	73	25	99	33
* through lane from Meder Road					

## **CUMULATIVE IMPACTS (2040)**

The analysis of the long range 2040 cumulative condition is intended to consider the impact of this project within the context of buildout of the General Plan circulation element occurring in 2040. This project is consistent with the General Plan which identifies the land for commercial use, and the Zoning Map which identifies the area as Commercial, Limited. Therefore, due to this consistency, a Cumulative analysis is not required.

## **ON-SITE TRANSPORTATION REVIEW**

An on-site review of the facilities was conducted based on the County's TIS Guidelines.

**Accident Review of Local Roadways.** SWITRS collision data in the project location was reviewed for the three-year period 2017 through 2019. In the vicinity of the project, within 300 feet of the Cameron Park Drive / Mira Loma Drive intersection. Seven crashes were identified in this time period. Of these, three occurred within 50 feet or within the intersection while three occurred 100 feet or more outside of the intersection on Cameron Park Drive; the seventh crash occurred along Mira Loma Drive 300 feet west of the Cameron Park Drive intersection.

A review of the three crashes occurring in the vicinity of the intersection does not indicate a recurrence of a specific type of collision as the primary collision factors included failure to yield after stopping, a broadside crash and a sideswipe. The crashes outside of the intersection include two hit objects, one being a DDUI and a broadside crash while performing a U-turn. The crash on the west side of Mira Loma Drive was categorized as an unsafe turn.

**Site Circulation / Driveway Locations / Driveway Throat Depth.** One driveway is proposed for the site and will be located at the far east side of the parcel. Full access will be provided, and the kiosk is situated consistent with County standards having the drive-through situated at the rear of the site, relative to the driveway. Customers will enter the site and proceed in counterclockwise movement around the perimeter. As this site contains only the drive-through coffee kiosk there is no internal site circulation other than customers entering and exiting.

El Dorado County Parking and Loading Standards identifies requirements for fast food restaurants with drive-through facilities; it is assumed that coffee kiosks would follow the same requirements. Drive-through facilities are to be located at the back of a parcel with the stacking lane physically separated from other on-site circulation. This allows any possible overflow of the stacking lane to be contained on the site. A minimum of four cars per drive-through window in addition to the car receiving service is required.

As noted earlier, the kiosk is situated at the back of the site, along the Cameron Park Drive frontage, but allowing vehicles to circulate between the kiosk and the property line. The location of the kiosk is shifted slightly south, allowing queuing on site to be maximized. The kiosk is situated to allow about nine vehicles to queue. The driveway provides a throat depth of about 50 feet; however, additional queuing is available on-site between the throat and the kiosk.

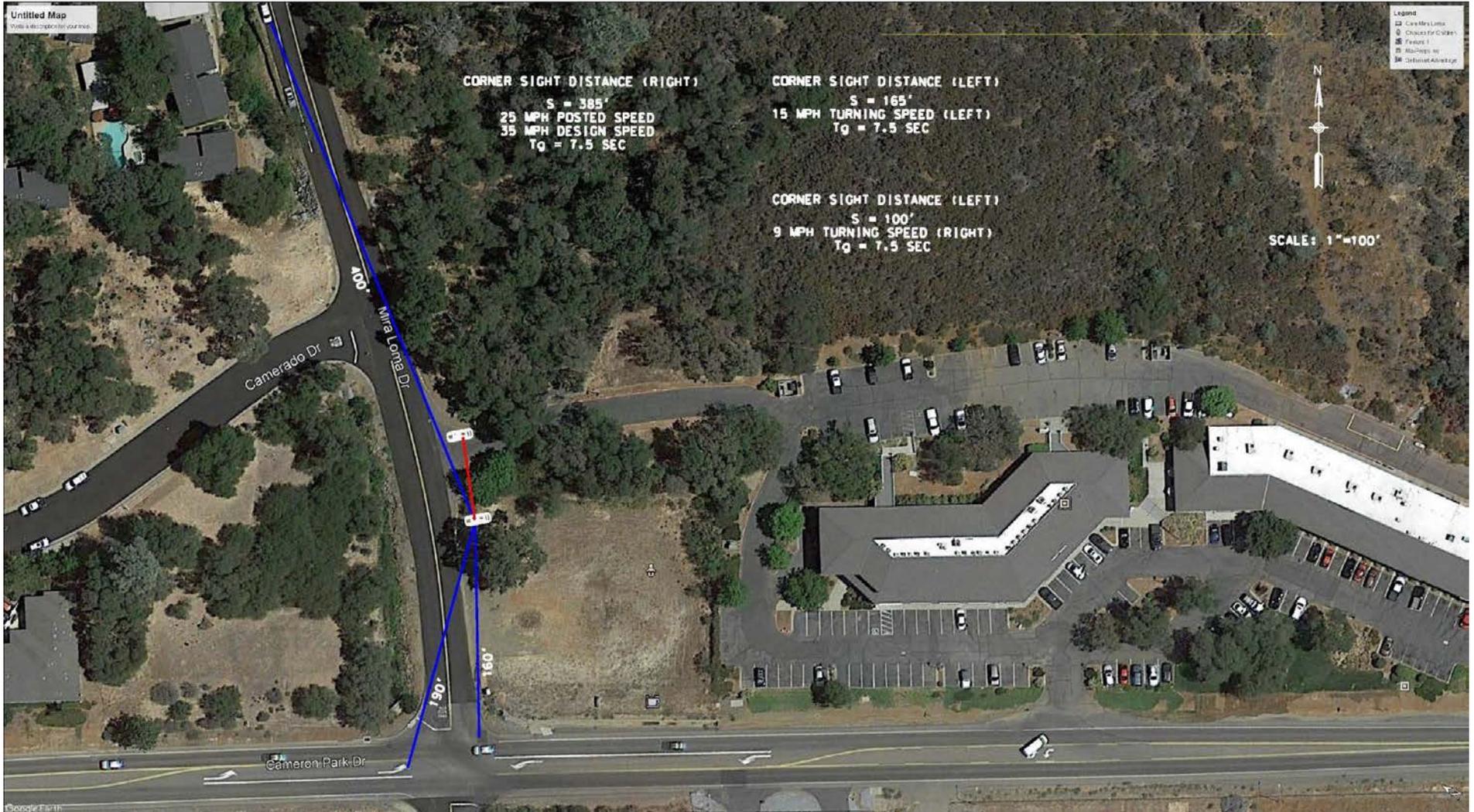
**Parking and Drive-Through Requirements.** Parking requirements were reviewed to determine needed parking due to the zoning code and requirements relative to projected parking demand. The County does not have a parking requirement specific to this land use. Instead, the “Restaurant and Brewpub” Use Type was used. This land use identifies that there should be one parking stall for every 250 square feet of Gross Floor Area (GFA). Under this condition and the 360 square foot kiosk, two parking stalls are required. The project layout identifies five parking stalls along the south side of the site. This will allow staffing of the kiosk to be maintained and could allow some customers to walk up and order.

**Sight Distance.** Sight distance was analyzed for the driveway. Available sight distance was evaluated using the standards documented in the Caltrans *Highway Design Manual* (HDM). Based on the locations of the driveways “**Minimum Stopping Sight Distance**” (MSSD) and “**Corner Sight Distance**” (CSD) was considered. These criteria are documented in Tables 201.1 and 405.1A of the HDM.

The speed limit along Mira Loma Drive is posted at 25 miles per hour (mph). A 35-mph speed, 10 mph over the posted speed, was used to establish sight distance conditions for Mira Loma Drive traffic. Point Loma Commercial Center is adjacent to the project. The commercial center has a driveway access along Mira Loma Drive with the centerline of the driveway about 50 feet east of the project’s east property line. Visibility of outbound Point Loma Center vehicles was reviewed to determine whether adequate visibility is available between motorists on both driveways. The Cameron Park Drive intersection is about 160 feet to the west. Sight distance to the west was considered using turning speeds used in analyzing level of service. Left turns were assumed to be made at 15 mph while right runs were issued at 9 mph. Figure 6 presents the sight lines from the approximate driveway location while Table 8 presents the corresponding MSSD, CSD and available sight distance for each of the criteria. Figure 6 also presents the line of sight for motorists exiting both the coffee kiosk and the Point Loma Commercial Center with vehicles stopped at both locations.

**TABLE 8  
SIGHT DISTANCE CRITERIA**

Location	MSSD	CSD	Available
Looking East on Mira Loma Dr (35 mph)	250’	385’	400’
Looking to SB left turn lane on Cameron Park Dr (15 mph)	100’	165’	190’
Looking to NB right turn lane on Cameron Park Dr (9 mph)	50’	100’	160’

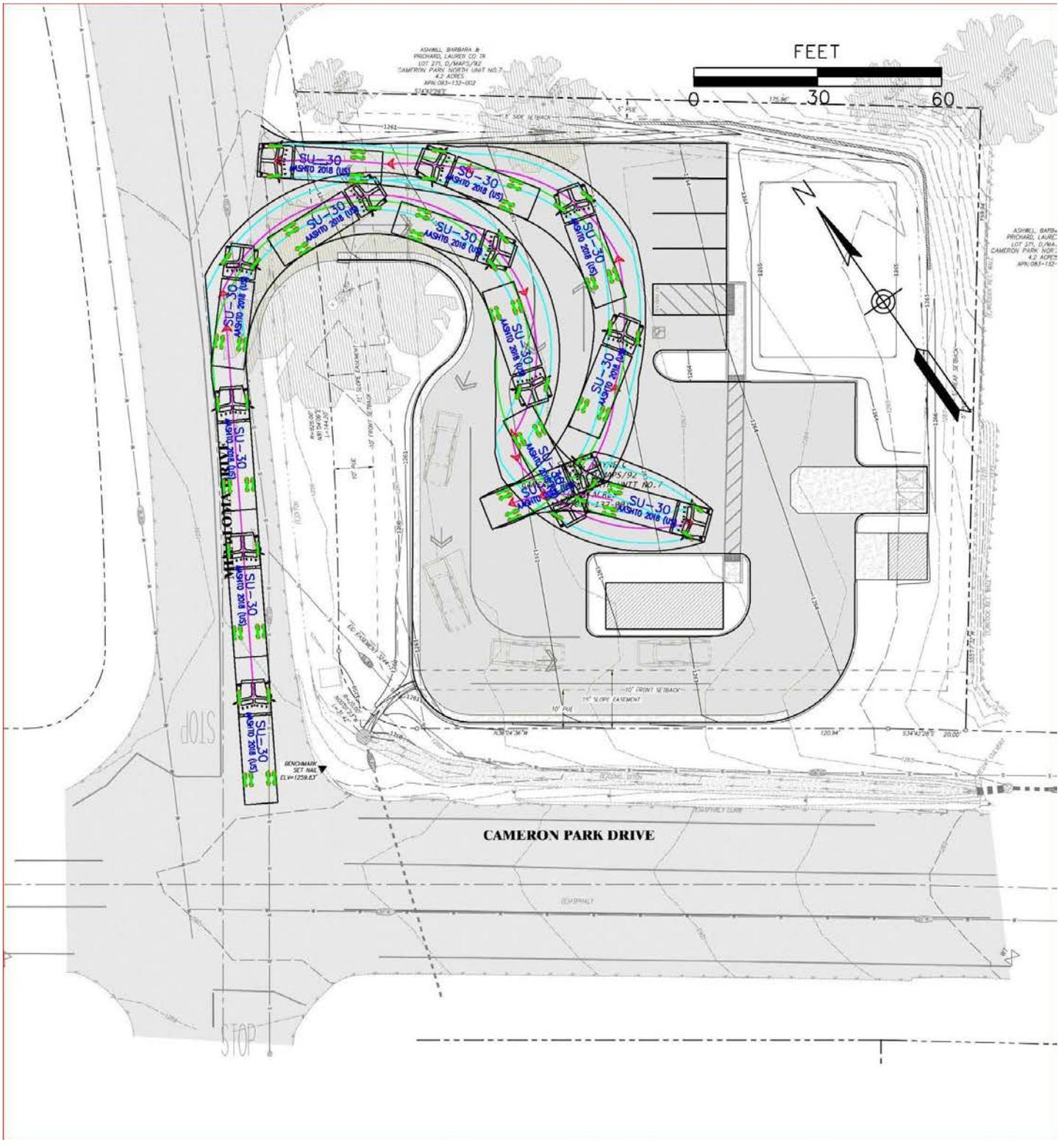


## SIGHT DISTANCE

All distances should be confirmed during preparation of the site civil engineering plan set. To maintain adequate sight distance the lines of sight should be kept clear, without any landscaping materials over 2 feet in height. Signage should also be placed outside of the sight triangles where practicable. Tree limbs and bushes should be cut back or removed as practicable between the project driveway and the Point Loma Commercial Center driveway a minimum of 15 feet from edge of travel way along Mira Loma Drive.

**On-Site Truck Loading Demand.** The County requires an analysis of truck loading when the number of service calls exceed 10 trucks per day. The project may result in a truck delivery on an infrequent basis. Given the size of the kiosk the anticipated truck would likely be a single unit type. The number of deliveries would be less than 10 trucks per day; therefore, an analysis of truck loading is not required.

While the truck loading will not be met the site will have a truck deliver supplies to the site. The delivery truck is a single-unit truck, 30 feet long. An *AutoTurn* assessment was conducted to confirm that the movements interior to the site can be completed. Figure 7 presents the evaluation showing trucks able to enter the site, parking and then existing. To exit the site, the vehicle will need to back up and then turn to avoid overtopping the curbs or encroaching within the parking spaces. The drive-through lane will not be affected by the backing movement.



## **FINDINGS / DEFICIENCIES / IMPROVEMENTS**

The preceding analysis has identified project deficiencies that may occur without improvements to the roadway system. The text that follows identifies a strategy for implementing any improvements. Recommendations are identified for facilities that have deficiencies in the roadway network without the project. If the project causes a deficiency, improvements are identified for the facility.

### **Existing Conditions**

#### Intersections

All intersections operate within acceptable El Dorado County LOS thresholds.

#### Queues

Under current conditions all queues at the Cameron Park Drive / Meder Road intersection are maintained within their respective turn lanes.

### **Existing Plus Project Impacts**

#### Intersections

All intersections will operate within acceptable El Dorado County LOS thresholds. The following mitigations are noted:

- The project shall contribute its fair share to the cost of regional circulation improvements via the existing countywide traffic impact mitigation (TIM) fee program.
- The following on-site mitigation should be constructed:
  - o Landscaping along the project frontage should be limited to vegetation no higher than 2 feet to provide adequate visibility along Mira Loma Drive.
  - o Tree limbs and bushes should be cut back or removed as practicable between the project driveway and the Point Loma Commercial Center driveway a minimum of 15 feet from edge of travel way along Mira Loma Drive.

#### Queues

Under Existing plus Project conditions, all queues at the Cameron Park Drive / Meder Road intersection will continue to queue within their respective turn lanes.

## REFERENCES

1. Transportation Research Board, *Highway Capacity Manual*, 2000 and 6<sup>th</sup> Edition
2. Caltrans *Highway Design Manual*, 2020
3. California *Manual of Uniform Traffic Control Devices*, 2014
4. Institute of Transportation Engineers. 2017. *Trip Generation*, 10<sup>th</sup> Edition. Washington, D.C.
5. *Trip Generation Handbook*, Institute of Transportation Engineers, 3<sup>rd</sup> Edition, 2017

## **APPENDICES**









**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      March 6, 2019**

Count Station:	1100200	Counter ID:	72
City/Town:	Cameron Park	Mile Post:	<b>0.02</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>100 Ft. N. of Robin Lane</b>
Lanes:	2	Direction:	NORTHBOUND

Date	10	11	12	6	7	8	9	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	16	11	19	12	15	14	24	16	14
200	13	6	13	13	11	13	9	11	11
300	12	4	7	5	5	6	11	7	5
400	13	5	3	14	12	9	6	9	9
500	6	15	21	17	15	15	7	14	17
600	13	48	43	50	46	38	23	37	45
700	28	108	107	72	93	100	31	77	96
800	37	139	186	158	165	170	89	135	164
900	88	212	226	221	245	230	189	202	227
1000	160	254	265	260	249	322	247	251	270
1100	203	288	327	321	323	334	319	302	319
1200	263	358	415	392	390	428	389	376	397
1300	350	470	440	464	426	450	408	430	450
1400	350	409	429	407	391	474	402	409	422
1500	346	432	415	423	395	481	351	406	429
1600	289	491	491	443	467	502	323	429	479
1700	319	509	527	421	437	496	327	434	478
1800	280	487	579	468	486	519	320	448	508
1900	221	336	373	333	344	357	235	314	349
2000	186	224	245	205	177	247	203	212	220
2100	102	145	130	99	114	168	153	130	131
2200	69	81	95	74	91	118	91	88	92
2300	47	30	45	34	39	58	48	43	41
2400	31	31	27	23	14	34	41	29	26
<b>Totals</b>	<b>3442</b>	<b>5093</b>	<b>5428</b>	<b>4929</b>	<b>4950</b>	<b>5583</b>	<b>4246</b>	<b>4810</b>	<b>5197</b>
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
AM Count	263	358	415	392	390	428	389	376	397
PM Peak Hr	1:00	5:00	6:00	6:00	6:00	6:00	1:00	6:00	6:00
PM Count	350	509	579	468	486	519	408	448	508

**TOTAL ADT:                      9,788**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      March 6, 2019**

Count Station:	1100200	Counter ID:	72
City/Town:	Cameron Park	Mile Post:	<b>0.02</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>100 Ft. N. of Robin Lane</b>
Lanes:	2	Direction:	SOUTHBOUND

Date	10	11	12	6	7	8	9	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	18	12	13	14	11	11	16	14	12
200	11	6	8	13	15	11	12	11	11
300	14	6	5	3	6	3	4	6	5
400	9	1	6	3	8	3	9	6	4
500	9	30	35	28	38	21	12	25	30
600	12	61	80	53	55	66	18	49	63
700	21	159	129	119	161	134	50	110	140
800	29	212	197	209	198	219	107	167	207
900	80	222	292	255	308	261	143	223	268
1000	143	249	246	270	251	293	211	238	262
1100	200	290	328	269	301	328	291	287	303
1200	255	356	350	342	307	364	360	333	344
1300	286	389	404	374	372	395	350	367	387
1400	299	377	383	393	369	434	333	370	391
1500	273	384	349	357	347	427	333	353	373
1600	263	410	369	350	352	422	317	355	381
1700	285	406	372	332	372	382	302	350	373
1800	253	368	455	334	322	384	270	341	373
1900	172	282	319	243	245	264	205	247	271
2000	138	200	220	138	141	141	138	159	168
2100	81	103	96	72	76	100	85	88	89
2200	71	68	72	53	70	77	66	68	68
2300	41	33	66	34	33	52	49	44	44
2400	23	21	27	21	22	39	34	27	26
Totals	2986	4645	4821	4279	4380	4831	3715	4237	4591
AM Peak Hr	12:00	12:00	12:00	12:00	9:00	12:00	12:00	12:00	12:00
AM Count	255	356	350	342	308	364	360	333	344
PM Peak Hr	2:00	4:00	6:00	2:00	1:00	2:00	1:00	2:00	2:00
PM Count	299	410	455	393	372	434	350	370	391

**TOTAL ADT:                      9,788**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1100200	Counter ID:	62
City/Town:	Cameron Park	Mile Post:	<b>0.02</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>100 Ft. N. of Robin Lane</b>
Lanes:	2	Direction:	NORTHBOUND

Date	27	28	29	30	31	25	26	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	19	5	19	13	20	22	22	17	16
200	10	6	8	11	8	12	11	9	9
300	12	4	6	7	6	12	6	8	7
400	2	4	8	7	5	5	5	5	6
500	10	19	25	17	19	24	8	17	21
600	8	38	56	55	47	54	25	40	50
700	27	121	100	124	135	129	38	96	122
800	79	173	195	208	200	177	86	160	191
900	219	208	261	247	249	258	196	234	245
1000	220	280	280	305	267	300	306	280	286
1100	268	306	376	306	319	386	440	343	339
1200	319	422	443	432	452	486	488	435	447
1300	333	451	555	518	534	532	496	488	518
1400	293	401	536	500	470	515	455	453	484
1500	270	451	474	500	505	529	448	454	492
1600	216	431	509	527	498	557	427	452	504
1700	199	469	527	507	552	499	345	443	511
1800	194	434	521	518	516	489	356	433	496
1900	132	369	310	381	303	384	400	326	349
2000	66	173	230	228	171	306	153	190	222
2100	45	94	126	128	102	167	75	105	123
2200	18	72	55	82	83	132	40	69	85
2300	16	20	33	51	48	62	35	38	43
2400	9	21	20	15	24	32	24	21	22
Totals	2984	4972	5673	5687	5533	6069	4885	5115	5587
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
AM Count	319	422	443	432	452	486	488	435	447
PM Peak Hr	1:00	5:00	1:00	4:00	5:00	4:00	1:00	1:00	1:00
PM Count	333	469	555	527	552	557	496	488	518

**TOTAL ADT:                      10,438**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1100200	Counter ID:	62
City/Town:	Cameron Park	Mile Post:	<b>0.02</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>100 Ft. N. of Robin Lane</b>
Lanes:	2	Direction:	SOUTHBOUND

Date	27	28	29	30	31	25	26	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	28	12	7	11	11	10	20	14	10
200	10	2	7	8	13	12	9	9	8
300	8	5	10	11	9	5	6	8	8
400	6	3	9	7	7	10	5	7	7
500	6	8	44	45	45	33	12	28	35
600	5	45	81	87	80	80	25	58	75
700	12	117	138	151	143	141	41	106	138
800	59	146	214	189	189	220	84	157	192
900	110	165	286	304	290	297	190	235	268
1000	184	200	317	309	313	333	282	277	294
1100	199	236	337	334	306	374	378	309	317
1200	236	330	385	391	337	408	437	361	370
1300	233	366	435	465	450	417	410	397	427
1400	199	361	424	461	425	420	416	387	418
1500	187	372	412	466	446	447	358	384	429
1600	163	359	417	414	425	514	332	375	426
1700	189	400	374	430	379	411	286	353	399
1800	153	344	356	396	311	366	263	313	355
1900	100	277	304	271	217	311	262	249	276
2000	72	158	190	166	126	192	130	148	166
2100	49	81	77	90	140	116	84	91	101
2200	36	48	50	47	87	79	72	60	62
2300	16	28	35	46	39	63	47	39	42
2400	10	24	22	21	38	33	25	25	28
<b>Totals</b>	<b>2270</b>	<b>4087</b>	<b>4931</b>	<b>5120</b>	<b>4826</b>	<b>5292</b>	<b>4174</b>	<b>4386</b>	<b>4851</b>
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
AM Count	236	330	385	391	337	408	437	361	370
PM Peak Hr	1:00	5:00	1:00	3:00	1:00	4:00	2:00	1:00	3:00
PM Count	233	400	435	466	450	514	416	397	429

**TOTAL ADT:                      10,438**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1200200	Counter ID:	62
City/Town:	Cameron Park	Mile Post:	<b>0.16</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>100 Ft. N. of Coach Ln</b>
Lanes:	2	Direction:	NORTHBOUND

Date	27	28	29	30	31	25	26	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	60	12	45	52	53	42	108	53	41
200	24	11	24	36	34	31	50	30	27
300	28	7	24	22	32	39	32	26	25
400	20	14	25	22	20	24	35	23	21
500	23	36	49	44	43	53	26	39	45
600	43	88	128	123	134	146	92	108	124
700	100	212	266	314	285	340	142	237	283
800	230	353	398	413	413	433	232	353	402
900	496	432	528	539	522	548	433	500	514
1000	588	572	604	609	586	668	658	612	608
1100	626	630	721	677	661	758	864	705	689
1200	640	747	845	842	814	874	970	819	824
1300	685	871	1066	1072	1000	1030	1000	961	1008
1400	615	872	1078	1033	958	1090	1046	956	1006
1500	536	926	1012	1038	1016	1028	970	932	1004
1600	516	898	1036	1006	1024	1093	870	920	1011
1700	481	943	1120	1079	1075	1034	794	932	1050
1800	488	964	1070	1051	1052	993	811	918	1026
1900	366	876	903	938	788	920	951	820	885
2000	242	620	642	632	496	730	540	557	624
2100	160	369	450	400	465	536	274	379	444
2200	108	232	250	306	333	418	196	263	308
2300	68	135	145	178	204	276	134	163	188
2400	46	82	91	98	108	124	86	91	101
<b>Totals</b>	<b>7189</b>	<b>10902</b>	<b>12520</b>	<b>12524</b>	<b>12116</b>	<b>13228</b>	<b>11314</b>	<b>11399</b>	<b>12258</b>
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
AM Count	640	747	845	842	814	874	970	819	824
PM Peak Hr	1:00	6:00	5:00	5:00	5:00	4:00	2:00	1:00	5:00
PM Count	685	964	1120	1079	1075	1093	1046	961	1050

**TOTAL ADT:                      26,567**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1200200	Counter ID:	62
City/Town:	Cameron Park	Mile Post:	<b>0.16</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>100 Ft. N. of Coach Ln</b>
Lanes:	2	Direction:	<b>SOUTHBOUND</b>

Date	27	28	29	30	31	25	26	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	77	20	28	52	49	40	72	48	38
200	28	14	26	32	32	30	47	30	27
300	30	20	36	30	34	31	32	30	30
400	32	23	30	44	43	46	34	36	37
500	30	41	123	100	109	112	76	84	97
600	46	127	208	232	238	234	138	175	208
700	94	220	373	408	383	426	177	297	362
800	290	389	615	604	585	635	372	499	566
900	486	540	788	874	812	840	598	705	771
1000	684	704	896	840	840	956	840	823	847
1100	683	751	948	956	858	1010	1082	898	905
1200	718	960	1127	1099	970	1124	1189	1027	1056
1300	734	1176	1299	1258	1214	1226	1234	1163	1235
1400	668	1104	1142	1198	1126	1119	1085	1063	1138
1500	572	1063	1153	1162	1154	1238	1042	1055	1154
1600	559	1137	1184	1138	1136	1360	968	1069	1191
1700	569	1116	1216	1229	1186	1135	764	1031	1176
1800	516	1079	1175	1164	1047	1151	798	990	1123
1900	384	946	950	871	710	959	792	802	887
2000	235	552	582	540	487	666	493	508	565
2100	178	298	334	323	542	438	312	346	387
2200	144	187	208	230	328	396	235	247	270
2300	85	134	98	138	150	213	146	138	147
2400	40	74	81	94	98	118	90	85	93
Totals	7882	12675	14620	14616	14131	15503	12616	13149	14309
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
AM Count	718	960	1127	1099	970	1124	1189	1027	1056
PM Peak Hr	1:00	1:00	1:00	1:00	1:00	4:00	1:00	1:00	1:00
PM Count	734	1176	1299	1258	1214	1360	1234	1163	1235

**TOTAL ADT:                      26,567**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      March 6, 2019**

Count Station:	1600200	Counter ID:	63
City/Town:	Cameron Park	Mile Post:	<b>0.54</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>500 Ft. S. of Hacienda Dr.</b>
Lanes:	2	Direction:	NORTHBOUND

Date	10	11	12	6	7	8	9	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	75	53	46	47	49	49	74	56	49
200	47	23	17	18	29	29	33	28	23
300	47	13	16	11	7	14	37	21	12
400	48	11	7	10	13	17	15	17	12
500	21	28	22	18	19	20	11	20	21
600	19	68	69	63	59	74	29	54	67
700	54	167	169	167	169	164	90	140	167
800	74	364	369	333	366	401	159	295	367
900	159	418	463	446	444	449	300	383	444
1000	318	441	428	399	411	463	426	412	428
1100	384	511	506	489	465	538	509	486	502
1200	530	611	618	601	546	634	619	594	602
1300	658	701	637	690	658	675	662	669	672
1400	666	669	667	705	695	785	728	702	704
1500	659	810	752	736	753	869	666	749	784
1600	691	917	917	856	882	956	725	849	906
1700	588	1012	1008	934	924	746	697	844	925
1800	639	1065	1002	974	1012	656	648	857	942
1900	509	786	757	712	784	701	534	683	748
2000	444	546	578	446	490	538	430	496	520
2100	327	407	436	388	391	393	403	392	403
2200	214	220	303	235	267	296	264	257	264
2300	130	140	149	143	147	196	215	160	155
2400	77	81	84	83	87	133	103	93	94
<b>Totals</b>	<b>7378</b>	<b>10062</b>	<b>10020</b>	<b>9504</b>	<b>9667</b>	<b>9796</b>	<b>8377</b>	<b>9258</b>	<b>9810</b>
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
AM Count	530	611	618	601	546	634	619	594	602
PM Peak Hr	4:00	6:00	5:00	6:00	6:00	4:00	2:00	6:00	6:00
PM Count	691	1065	1008	974	1012	956	728	857	942

**TOTAL ADT:                      19,547**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      March 6, 2019**

Count Station:	1600200	Counter ID:	63
City/Town:	Cameron Park	Mile Post:	<b>0.54</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>500 Ft. S. of Hacienda Dr.</b>
Lanes:	2	Direction:	SOUTHBOUND

Date	10	11	12	6	7	8	9	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	42	28	20	20	25	31	34	29	25
200	39	22	14	13	17	15	33	22	16
300	39	17	12	8	14	20	15	18	14
400	31	31	29	28	27	30	26	29	29
500	36	90	84	94	83	70	38	71	84
600	58	243	235	251	264	246	91	198	248
700	107	483	496	519	498	493	189	398	498
800	179	765	808	820	835	807	319	648	807
900	311	740	744	780	717	797	526	659	756
1000	415	588	646	561	583	654	599	578	606
1100	573	614	610	605	578	655	636	610	612
1200	598	679	670	619	641	687	747	663	659
1300	663	702	621	707	700	708	701	686	688
1400	649	690	651	628	637	718	621	656	665
1500	588	695	691	675	647	727	581	658	687
1600	543	781	799	598	638	788	591	677	721
1700	541	757	692	644	682	588	595	643	673
1800	501	643	659	599	635	533	553	589	614
1900	351	554	526	478	517	556	436	488	526
2000	295	352	376	254	230	355	286	307	313
2100	229	217	245	193	204	193	245	218	210
2200	147	131	145	114	153	164	171	146	141
2300	78	93	100	83	67	123	123	95	93
2400	55	36	45	45	51	77	73	55	51
Totals	7068	9951	9918	9336	9443	10035	8229	9140	9737
AM Peak Hr	12:00	8:00	8:00	8:00	8:00	8:00	12:00	12:00	8:00
AM Count	598	765	808	820	835	807	747	663	807
PM Peak Hr	1:00	4:00	4:00	1:00	1:00	4:00	1:00	1:00	4:00
PM Count	663	781	799	707	700	788	701	686	721

**TOTAL ADT:                      19,547**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning: February 28, 2019**

Count Station:	1700200	Counter ID:	TLS #2
City/Town:	Cameron Park	Mile Post:	1.81
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>200 Ft. S. of Meder Rd.</b>
Lanes:	2	Direction:	SOUTHBOUND

Date	3	4	5	6	28	1	2	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	41	19	19	22	19	20	31	24	20
200	21	12	7	13	18	16	23	16	13
300	21	22	16	8	19	16	27	18	16
400	18	18	27	21	25	23	18	21	23
500	22	76	67	71	65	60	32	56	68
600	44	210	196	180	193	190	80	156	194
700	89	365	386	399	371	381	113	301	380
800	174	645	631	652	622	643	223	513	639
900	292	587	599	603	623	633	337	525	609
1000	364	459	503	428	456	515	456	454	472
1100	432	476	479	486	483	530	486	482	491
1200	407	562	488	493	529	579	530	513	530
1300	468	583	555	591	606	650	512	566	597
1400	459	623	514	509	556	622	512	542	565
1500	400	569	564	662	652	648	507	572	619
1600	337	625	674	530	624	658	463	559	622
1700	364	622	621	557	587	697	443	556	617
1800	357	593	537	519	555	695	431	527	580
1900	294	408	427	417	485	508	316	408	449
2000	206	227	215	226	246	305	255	240	244
2100	148	151	159	169	175	217	182	172	174
2200	97	114	115	98	137	151	163	125	123
2300	63	53	66	73	86	102	103	78	76
2400	41	52	38	38	48	63	72	50	48
<b>Totals</b>	<b>5159</b>	<b>8071</b>	<b>7903</b>	<b>7765</b>	<b>8180</b>	<b>8922</b>	<b>6315</b>	<b>7474</b>	<b>8168</b>
AM Peak Hr	11:00	8:00	8:00	8:00	9:00	8:00	12:00	9:00	8:00
AM Count	432	645	631	652	623	643	530	525	639
PM Peak Hr	1:00	4:00	4:00	3:00	3:00	5:00	1:00	3:00	4:00
PM Count	468	625	674	662	652	697	512	572	622

**TOTAL ADT: 16,320**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning: February 28, 2019**

Count Station:	1700200	Counter ID:	TLS #2
City/Town:	Cameron Park	Mile Post:	1.81
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>200 Ft. S. of Meder Rd.</b>
Lanes:	2	Direction:	NORTHBOUND

Date	3	4	5	6	28	1	2	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	65	31	40	41	36	47	56	45	39
200	29	18	24	17	19	25	33	24	21
300	27	12	11	6	14	14	30	16	11
400	13	13	10	13	19	7	15	13	12
500	13	18	19	12	16	13	18	16	16
600	22	49	60	54	64	59	28	48	57
700	33	230	237	229	242	224	59	179	232
800	82	408	378	354	356	402	120	300	380
900	158	378	388	384	417	430	216	339	399
1000	221	350	357	325	381	416	289	334	366
1100	324	387	370	441	393	442	432	398	407
1200	353	505	544	478	452	512	468	473	498
1300	512	591	494	536	562	601	504	543	557
1400	424	583	550	588	576	611	526	551	582
1500	476	605	624	600	668	735	513	603	646
1600	466	732	727	674	716	778	506	657	725
1700	390	829	821	686	777	807	490	686	784
1800	394	801	790	755	761	793	487	683	780
1900	357	596	522	551	591	566	407	513	565
2000	290	324	361	342	391	399	311	345	363
2100	212	253	267	284	310	342	211	268	291
2200	132	164	180	160	215	232	213	185	190
2300	103	100	112	104	234	178	154	141	146
2400	57	65	55	63	118	119	99	82	84
Totals	5153	8042	7941	7697	8328	8752	6185	7443	8152
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
AM Count	353	505	544	478	452	512	468	473	498
PM Peak Hr	1:00	5:00	5:00	6:00	5:00	5:00	2:00	5:00	5:00
PM Count	512	829	821	755	777	807	526	686	784

**TOTAL ADT: 16,320**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1700200	Counter ID:	TLS #4
City/Town:	Cameron Park	Mile Post:	1.81
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>200 Ft. S. of Meder Rd.</b>
Lanes:	2	Direction:	SOUTHBOUND

Date	20	21	22	16	17	18	19	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	59	25	18	14	25	25	55	32	21
200	33	15	11	20	11	16	29	19	15
300	18	14	14	15	12	16	16	15	14
400	25	32	29	19	25	18	23	24	25
500	18	71	57	64	64	66	29	53	64
600	42	204	218	203	206	192	93	165	205
700	100	375	383	397	387	379	119	306	384
800	173	648	683	714	659	620	257	536	665
900	354	618	623	626	652	639	389	557	632
1000	419	470	477	562	518	496	471	488	505
1100	466	451	498	499	467	531	577	498	489
1200	508	575	538	557	534	546	606	552	550
1300	476	622	584	568	537	613	555	565	585
1400	479	627	551	583	574	574	566	565	582
1500	449	599	593	592	663	640	510	578	617
1600	444	582	660	623	613	717	491	590	639
1700	411	582	593	633	634	628	485	567	614
1800	395	599	657	611	549	575	449	548	598
1900	353	445	493	488	475	479	331	438	476
2000	231	247	274	253	266	337	227	262	275
2100	158	156	176	193	189	226	220	188	188
2200	110	107	111	95	137	158	173	127	122
2300	54	76	64	85	73	148	128	90	89
2400	38	42	30	39	52	108	88	57	54
<b>Totals</b>	<b>5813</b>	<b>8182</b>	<b>8335</b>	<b>8453</b>	<b>8322</b>	<b>8747</b>	<b>6887</b>	<b>7820</b>	<b>8408</b>
AM Peak Hr	12:00	8:00	8:00	8:00	8:00	9:00	12:00	9:00	8:00
AM Count	508	648	683	714	659	639	606	557	665
PM Peak Hr	2:00	2:00	4:00	5:00	3:00	4:00	2:00	4:00	4:00
PM Count	479	627	660	633	663	717	566	590	639

**TOTAL ADT:                      16,770**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1700200	Counter ID:	TLS #4
City/Town:	Cameron Park	Mile Post:	1.81
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>200 Ft. S. of Meder Rd.</b>
Lanes:	2	Direction:	NORTHBOUND

Date	20	21	22	16	17	18	19	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	73	28	31	40	40	23	74	44	32
200	45	24	16	13	14	24	34	24	18
300	27	6	14	7	9	14	21	14	10
400	16	9	18	15	17	14	19	15	15
500	6	20	14	18	18	18	21	16	18
600	11	52	61	61	58	58	19	46	58
700	40	219	239	236	237	227	64	180	232
800	85	402	399	404	397	392	121	314	399
900	214	437	415	456	400	385	261	367	419
1000	267	372	377	374	398	368	351	358	378
1100	379	415	437	458	408	432	473	429	430
1200	395	503	466	512	449	497	531	479	485
1300	496	588	547	549	543	561	536	546	558
1400	500	636	557	629	561	586	555	575	594
1500	456	625	717	638	659	708	550	622	669
1600	500	683	713	711	659	758	543	652	705
1700	479	788	819	788	787	785	537	712	793
1800	489	831	842	816	827	827	491	732	829
1900	416	589	602	631	614	603	402	551	608
2000	302	325	420	423	440	415	350	382	405
2100	261	270	331	328	342	343	236	302	323
2200	156	157	198	177	165	279	228	194	195
2300	90	103	107	107	115	167	194	126	120
2400	53	67	50	50	71	118	134	78	71
Totals	5756	8149	8390	8441	8228	8602	6745	7759	8362
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
AM Count	395	503	466	512	449	497	531	479	485
PM Peak Hr	2:00	6:00	6:00	6:00	6:00	6:00	2:00	6:00	6:00
PM Count	500	831	842	816	827	827	555	732	829

**TOTAL ADT:                      16,770**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      March 6, 2019**

Count Station:	1800200	Counter ID:	73
City/Town:	Cameron Park	Mile Post:	<b>2.39</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>600 Ft. N. of Mira Loma Dr.</b>
Lanes:	2	Direction:	NORTHBOUND

Date	10	11	12	6	7	8	9	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	56	29	36	28	34	41	50	39	34
200	31	18	19	13	15	14	19	18	16
300	31	13	16	15	7	14	31	18	13
400	45	16	15	12	16	12	13	18	14
500	17	24	12	15	15	13	5	14	16
600	21	59	54	49	44	50	35	45	51
700	43	166	184	183	187	182	95	149	180
800	58	333	342	345	348	334	110	267	340
900	107	348	385	359	349	395	221	309	367
1000	206	308	284	266	308	325	318	288	298
1100	290	330	342	347	335	355	353	336	342
1200	331	365	353	327	334	390	388	355	354
1300	402	444	394	448	485	439	417	433	442
1400	421	407	455	472	423	546	468	456	461
1500	433	555	553	535	540	592	362	510	555
1600	457	573	619	529	568	661	418	546	590
1700	426	665	650	535	576	532	463	550	592
1800	367	674	629	607	627	586	401	556	625
1900	304	484	454	436	441	450	357	418	453
2000	262	325	356	268	289	341	245	298	316
2100	230	257	267	231	220	241	210	237	243
2200	133	141	167	123	139	186	161	150	151
2300	84	90	100	80	99	119	130	100	98
2400	46	60	57	45	54	89	80	62	61
<b>Totals</b>	<b>4801</b>	<b>6684</b>	<b>6743</b>	<b>6268</b>	<b>6453</b>	<b>6907</b>	<b>5350</b>	<b>6172</b>	<b>6611</b>
AM Peak Hr	12:00	12:00	9:00	9:00	9:00	9:00	12:00	12:00	9:00
AM Count	331	365	385	359	349	395	388	355	367
PM Peak Hr	4:00	6:00	5:00	6:00	6:00	4:00	2:00	6:00	6:00
PM Count	457	674	650	607	627	661	468	556	625

**TOTAL ADT:                      13,276**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      March 6, 2019**

Count Station:	1800200	Counter ID:	73
City/Town:	Cameron Park	Mile Post:	<b>2.39</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>600 Ft. N. of Mira Loma Dr.</b>
Lanes:	2	Direction:	SOUTHBOUND

Date	10	11	12	6	7	8	9	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	45	22	24	15	20	27	33	27	22
200	22	14	13	10	13	20	27	17	14
300	22	10	10	8	8	16	15	13	10
400	28	17	21	19	17	17	15	19	18
500	29	58	46	56	50	47	29	45	51
600	37	141	126	129	141	129	54	108	133
700	69	328	337	376	332	341	112	271	343
800	111	483	532	519	560	524	189	417	524
900	195	474	480	457	455	510	329	414	475
1000	260	320	383	352	398	420	389	360	375
1100	342	345	377	367	370	394	397	370	371
1200	412	403	360	366	422	437	462	409	398
1300	455	459	397	393	433	468	443	435	430
1400	376	406	428	421	405	460	384	411	424
1500	367	502	512	536	474	555	388	476	516
1600	361	565	595	425	500	612	396	493	539
1700	363	546	497	451	514	537	398	472	509
1800	360	462	477	449	470	517	349	441	475
1900	253	420	421	326	351	397	302	353	383
2000	235	273	281	208	174	283	229	240	244
2100	174	191	192	159	151	160	179	172	171
2200	119	111	131	94	115	144	147	123	119
2300	60	71	78	63	59	104	113	78	75
2400	43	41	46	33	49	66	68	49	47
Totals	4738	6662	6764	6232	6481	7185	5447	6216	6665
AM Peak Hr	12:00	8:00	8:00	8:00	8:00	8:00	12:00	8:00	8:00
AM Count	412	483	532	519	560	524	462	417	524
PM Peak Hr	1:00	4:00	4:00	3:00	5:00	4:00	1:00	4:00	4:00
PM Count	455	565	595	536	514	612	443	493	539

**TOTAL ADT:                      13,276**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1800200	Counter ID:	69
City/Town:	Cameron Park	Mile Post:	<b>2.39</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>600 Ft. N. of Mira Loma Dr.</b>
Lanes:	2	Direction:	NORTHBOUND

Date	27	28	29	30	31	25	26	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	70	32	23	28	24	39	41	37	29
200	34	14	16	11	24	20	42	23	17
300	24	11	7	9	15	13	28	15	11
400	9	6	16	13	17	10	24	14	12
500	16	15	17	17	25	21	13	18	19
600	22	47	43	57	57	39	25	41	49
700	48	114	128	167	166	204	74	129	156
800	84	227	274	340	340	359	122	249	308
900	175	255	344	369	386	422	219	310	355
1000	301	279	302	330	293	333	304	306	307
1100	297	327	363	347	315	347	393	341	340
1200	295	344	391	372	396	399	481	383	380
1300	329	354	481	528	541	474	489	457	476
1400	250	342	482	477	434	487	470	420	444
1500	337	434	530	605	579	596	454	505	549
1600	285	453	546	539	612	645	433	502	559
1700	250	480	622	615	744	629	407	535	618
1800	273	531	651	675	728	620	405	555	641
1900	251	466	486	494	551	545	469	466	508
2000	197	323	291	332	378	407	319	321	346
2100	146	214	225	248	340	272	190	234	260
2200	112	126	145	173	255	332	169	187	206
2300	64	90	81	104	121	166	134	109	112
2400	37	53	56	51	79	106	104	69	69
<b>Totals</b>	<b>3906</b>	<b>5537</b>	<b>6520</b>	<b>6901</b>	<b>7420</b>	<b>7485</b>	<b>5809</b>	<b>6225</b>	<b>6773</b>
AM Peak Hr	10:00	12:00	12:00	12:00	12:00	9:00	12:00	12:00	12:00
AM Count	301	344	391	372	396	422	481	383	380
PM Peak Hr	3:00	6:00	6:00	6:00	5:00	4:00	1:00	6:00	6:00
PM Count	337	531	651	675	744	645	489	555	641

**TOTAL ADT:                      13,581**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1800200	Counter ID:	69
City/Town:	Cameron Park	Mile Post:	<b>2.39</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>600 Ft. N. of Mira Loma Dr.</b>
Lanes:	2	Direction:	SOUTHBOUND

Date	27	28	29	30	31	25	26	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	35	15	18	18	18	19	34	22	18
200	16	9	14	17	16	14	28	16	14
300	26	8	19	21	9	18	20	17	15
400	21	18	17	20	26	19	22	20	20
500	23	34	48	52	45	39	28	38	44
600	39	110	134	156	166	147	69	117	143
700	80	221	259	370	362	335	115	249	309
800	161	318	439	492	518	544	189	380	462
900	282	334	474	481	448	487	325	404	445
1000	322	328	408	359	412	419	417	381	385
1100	335	368	372	383	413	415	516	400	390
1200	359	378	390	421	410	441	522	417	408
1300	377	432	450	442	484	478	502	452	457
1400	294	410	446	474	520	424	464	433	455
1500	319	412	447	565	483	529	420	454	487
1600	296	479	516	502	512	564	464	476	515
1700	332	435	492	528	501	643	373	472	520
1800	272	497	513	509	564	560	372	470	529
1900	245	382	402	413	419	480	467	401	419
2000	175	245	294	239	310	340	288	270	286
2100	133	179	154	152	327	202	195	192	203
2200	95	108	98	133	273	150	176	148	152
2300	58	69	60	84	131	111	130	92	91
2400	32	26	30	36	58	59	74	45	42
Totals	4327	5815	6494	6867	7425	7437	6210	6368	6808
AM Peak Hr	12:00	12:00	9:00	8:00	8:00	8:00	12:00	12:00	8:00
AM Count	359	378	474	492	518	544	522	417	462
PM Peak Hr	1:00	6:00	4:00	3:00	6:00	5:00	1:00	4:00	6:00
PM Count	377	497	516	565	564	643	502	476	529

**TOTAL ADT:                      13,581**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      March 7, 2019**

Count Station:	1900200	Counter ID:	69
City/Town:	Cameron Park	Mile Post:	<b>3.35</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>200 Ft. S. of Green Valley Rd.</b>
Lanes:	2	Direction:	NORTHBOUND

Date	10	11	12	13	7	8	9	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	29	16	22		25	26	24		22
200	14	8	9		12	8	8		9
300	24	6	8		5	5	16		6
400	21	11	11		13	6	13		10
500	14	28	17		15	17	9		19
600	19	77	65		60	61	29		66
700	32	164	183		181	176	97		176
800	54	319	300		341	316	122		319
900	118	332	402		348	341	208		356
1000	197	262	277		259	254	305		263
1100	266	281	253		264	298	310		274
1200	281	332	298		254	309	314		298
1300	297	371	318		342	336	339		342
1400	307	362	335		327	404	376		357
1500	354	405	421		425	460	273		428
1600	378	434	445		410	455	318		436
1700	314	465	459		431	415	341		443
1800	293	501	431		437	439	305		452
1900	219	351	338		326	322	240		334
2000	191	207	253		202	251	173		228
2100	145	167	186		148	175	152		169
2200	102	102	117		101	129	95		112
2300	53	52	56		53	87	68		62
2400	30	32	36		18	47	44		33
Totals	3752	5285	5240		4997	5337	4179		5215
AM Peak Hr	12:00	9:00	9:00		9:00	9:00	12:00		9:00
AM Count	281	332	402		348	341	314		356
PM Peak Hr	4:00	6:00	5:00		6:00	3:00	2:00		6:00
PM Count	378	501	459		437	460	376		452

**TOTAL ADT:                      9,957**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      March 7, 2019**

Count Station:	1900200	Counter ID:	69
City/Town:	Cameron Park	Mile Post:	<b>3.35</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>200 Ft. S. of Green Valley Rd.</b>
Lanes:	2	Direction:	SOUTHBOUND

Date	10	11	12	13	7	8	9	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	31	11	15		23	21	23		18
200	22	9	7		6	12	23		9
300	11	5	8		7	7	7		7
400	13	8	11		6	7	10		8
500	24	39	26		27	29	18		30
600	15	63	57		72	65	23		64
700	41	169	171		167	184	64		173
800	54	282	331		361	342	125		329
900	118	348	351		329	365	188		348
1000	174	223	285		277	292	253		269
1100	235	237	258		233	267	277		249
1200	262	300	249		288	305	348		286
1300	328	335	287		301	334	310		314
1400	259	287	298		276	315	276		294
1500	272	360	368		345	400	277		368
1600	256	434	436		391	482	285		436
1700	287	401	353		390	399	289		386
1800	253	342	337		340	380	255		350
1900	187	295	324		285	293	202		299
2000	181	187	208		147	202	177		186
2100	113	172	142		116	113	133		136
2200	82	83	85		94	112	96		94
2300	33	54	53		42	97	85		62
2400	25	22	28		26	41	45		29
Totals	3276	4666	4688		4549	5064	3789		4742
AM Peak Hr	12:00	9:00	9:00		8:00	9:00	12:00		9:00
AM Count	262	348	351		361	365	348		348
PM Peak Hr	1:00	4:00	4:00		4:00	4:00	1:00		4:00
PM Count	328	434	436		391	482	310		436

**TOTAL ADT:                      9,957**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1900200	Counter ID:	66
City/Town:	Cameron Park	Mile Post:	3.35
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>200 Ft. S. of Green Valley Rd.</b>
Lanes:	2	Direction:	NORTHBOUND

Date	27	28	29	30	31	25	26	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	29	10	9	16	15	27	30	19	15
200	15	7	10	10	14	9	16	12	10
300	14	4	7	11	8	10	9	9	8
400	7	3	11	8	11	7	10	8	8
500	10	12	22	21	31	15	12	18	20
600	19	46	64	74	72	66	32	53	64
700	35	112	155	183	180	224	98	141	171
800	80	221	271	307	307	344	135	238	290
900	163	234	294	342	353	375	227	284	320
1000	305	261	281	265	279	265	275	276	270
1100	256	276	279	297	257	284	331	283	279
1200	279	309	329	304	318	326	371	319	317
1300	302	289	377	388	399	354	387	357	361
1400	211	286	374	413	321	379	360	335	355
1500	248	324	419	445	412	448	354	379	410
1600	227	315	419	388	454	474	348	375	410
1700	194	328	411	434	485	438	324	373	419
1800	186	368	443	478	497	412	311	385	440
1900	186	300	325	341	379	374	329	319	344
2000	111	213	211	216	275	295	221	220	242
2100	65	156	163	166	245	197	113	158	185
2200	63	93	88	97	165	216	108	119	132
2300	33	52	45	64	74	103	67	63	68
2400	13	20	27	30	37	58	54	34	34
Totals	3051	4239	5034	5298	5588	5700	4522	4776	5172
AM Peak Hr	10:00	12:00	12:00	9:00	9:00	9:00	12:00	12:00	9:00
AM Count	305	309	329	342	353	375	371	319	320
PM Peak Hr	1:00	6:00	6:00	6:00	6:00	4:00	1:00	6:00	6:00
PM Count	302	368	443	478	497	474	387	385	440

**TOTAL ADT:                      10,075**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1900200	Counter ID:	66
City/Town:	Cameron Park	Mile Post:	<b>3.35</b>
Road Name:	<b>Cameron Park Drive</b>	Location:	<b>200 Ft. S. of Green Valley Rd.</b>
Lanes:	2	Direction:	SOUTHBOUND

Date	27	28	29	30	31	25	26	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	26	11	18	13	9	9	28	16	12
200	17	7	10	10	6	7	21	11	8
300	19	3	11	18	7	9	20	12	10
400	11	6	7	10	12	9	7	9	9
500	16	15	18	30	26	20	12	20	22
600	22	55	62	80	91	84	29	60	74
700	42	107	137	195	180	172	77	130	158
800	90	182	291	318	352	342	126	243	297
900	180	214	348	344	289	340	231	278	307
1000	208	234	306	251	327	316	282	275	287
1100	273	270	250	275	292	286	348	285	275
1200	270	286	290	329	324	326	385	316	311
1300	281	336	345	319	377	331	346	334	342
1400	225	304	317	345	397	300	343	319	333
1500	243	289	347	427	362	381	323	339	361
1600	245	371	413	353	391	441	353	367	394
1700	267	350	389	386	375	480	317	366	396
1800	216	370	386	387	413	411	277	351	393
1900	193	300	327	314	323	360	290	301	325
2000	148	214	230	188	220	263	198	209	223
2100	114	128	124	137	267	158	174	157	163
2200	85	93	86	83	196	118	142	115	115
2300	45	48	40	64	85	80	97	66	63
2400	18	26	16	24	33	33	61	30	26
Totals	3254	4219	4768	4900	5354	5276	4487	4608	4903
AM Peak Hr	11:00	12:00	9:00	9:00	8:00	8:00	12:00	12:00	12:00
AM Count	273	286	348	344	352	342	385	316	311
PM Peak Hr	1:00	4:00	4:00	3:00	6:00	5:00	4:00	4:00	5:00
PM Count	281	371	413	427	413	480	353	367	396

**TOTAL ADT:                      10,075**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1050135	Counter ID:	TLS #4
City/Town:	Cameron Park	Mile Post:	<b>0.04</b>
Road Name:	<b>Meder Road</b>	Location:	<b>200 Ft. E. of Cameron Park Dr.</b>
Lanes:	2	Direction:	<b>EASTBOUND</b>

Date	20	21	22	16	17	18	19	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	23	6	6	11	7	7	16	11	7
200	9	4	3	5	4	8	6	6	5
300	6	1	5	3	3	2	10	4	3
400	4	3	2	2	6	5	4	4	4
500	1	2	0	2	1	2	4	2	1
600	2	6	12	7	9	10	1	7	9
700	6	202	224	224	230	223	16	161	221
800	26	201	184	197	183	191	36	145	191
900	50	92	123	183	132	124	84	113	131
1000	85	113	107	106	134	110	102	108	114
1100	111	120	113	118	116	127	135	120	119
1200	106	126	129	147	134	114	160	131	130
1300	156	261	140	173	163	155	155	172	178
1400	159	210	189	198	229	189	170	192	203
1500	145	223	266	285	249	290	160	231	263
1600	161	230	238	217	216	264	178	215	233
1700	151	221	259	253	223	227	167	214	237
1800	157	246	286	269	279	229	146	230	262
1900	113	209	207	212	203	186	120	179	203
2000	113	111	151	132	119	165	85	125	136
2100	66	89	94	99	97	117	84	92	99
2200	40	46	66	63	61	101	75	65	67
2300	23	16	34	28	31	68	54	36	35
2400	21	9	11	8	19	53	48	24	20
<b>Totals</b>	<b>1734</b>	<b>2747</b>	<b>2849</b>	<b>2942</b>	<b>2848</b>	<b>2967</b>	<b>2016</b>	<b>2586</b>	<b>2871</b>
AM Peak Hr	11:00	7:00	7:00	7:00	7:00	7:00	12:00	7:00	7:00
AM Count	111	202	224	224	230	223	160	161	221
PM Peak Hr	4:00	1:00	6:00	3:00	6:00	3:00	4:00	3:00	3:00
PM Count	161	261	286	285	279	290	178	231	263

**TOTAL ADT:                      6,000**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 25, 2019**

Count Station:	1050135	Counter ID:	TLS #4
City/Town:	Cameron Park	Mile Post:	0.04
Road Name:	<b>Meder Road</b>	Location:	<b>200 Ft. E. of Cameron Park Dr.</b>
Lanes:	2	Direction:	WESTBOUND

Date	20	21	22	16	17	18	19	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	34	4	4	4	3	3	18	10	4
200	6	4	5	3	3	2	8	4	3
300	9	3	2	4	1	4	3	4	3
400	10	11	6	3	11	4	4	7	7
500	2	22	16	17	17	16	10	14	18
600	6	53	59	55	56	53	19	43	55
700	32	180	201	176	190	195	36	144	188
800	47	323	324	325	312	316	93	249	320
900	116	213	217	252	220	250	148	202	230
1000	153	145	171	203	187	182	169	173	178
1100	147	152	153	162	139	165	152	153	154
1200	159	188	167	205	191	164	201	182	183
1300	165	259	204	216	208	205	160	202	218
1400	134	301	195	264	280	233	172	226	255
1500	132	258	262	255	326	295	151	240	279
1600	138	202	267	236	197	351	152	220	251
1700	144	189	206	224	205	191	143	186	203
1800	136	197	247	224	180	194	180	194	208
1900	95	117	141	174	152	142	94	131	145
2000	76	62	103	61	94	90	74	80	82
2100	58	30	52	84	69	88	59	63	65
2200	45	27	27	26	49	52	38	38	36
2300	13	11	16	18	16	41	37	22	20
2400	8	4	11	7	15	78	19	20	23
<b>Totals</b>	<b>1865</b>	<b>2955</b>	<b>3056</b>	<b>3198</b>	<b>3121</b>	<b>3314</b>	<b>2140</b>	<b>2807</b>	<b>3129</b>
AM Peak Hr	12:00	8:00	8:00	8:00	8:00	8:00	12:00	8:00	8:00
AM Count	159	323	324	325	312	316	201	249	320
PM Peak Hr	1:00	2:00	4:00	2:00	3:00	4:00	6:00	3:00	3:00
PM Count	165	301	267	264	326	351	180	240	279

**TOTAL ADT:                      6,000**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 1, 2019**

Count Station:	1200135	Counter ID:	71
City/Town:	Cameron Park	Mile Post:	2.33
Road Name:	<b>Meder Road</b>	Location:	<b>500 Ft. W. of Ponderosa Rd.</b>
Lanes:	2	Direction:	EASTBOUND

Date	6	7	1	2	3	4	5	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	3	5	2	0	0	0	5	2	1
200	2	1	2	3	2	1	1	2	2
300	0	0	0	2	2	1	1	1	1
400	1	5	4	8	6	5	0	4	6
500	1	13	11	7	4	4	5	6	8
600	7	22	30	23	26	19	8	19	24
700	10	263	312	275	272	292	47	210	283
800	34	243	206	214	211	185	49	163	212
900	77	145	131	157	153	150	105	131	147
1000	111	80	83	86	79	87	121	92	83
1100	86	100	78	81	83	99	122	93	88
1200	92	80	75	79	110	110	96	92	91
1300	83	192	95	77	108	94	108	108	113
1400	70	149	88	105	90	131	91	103	113
1500	65	118	169	212	200	302	69	162	200
1600	61	116	161	129	113	219	74	125	148
1700	61	105	137	133	202	161	83	126	148
1800	61	143	179	178	160	142	76	134	160
1900	48	63	95	120	187	84	55	93	110
2000	36	57	74	70	74	73	62	64	70
2100	15	26	23	36	23	41	59	32	30
2200	13	15	9	15	17	32	35	19	18
2300	9	5	7	9	4	18	28	11	9
2400	1	3	4	2	2	8	4	3	4
Totals	947	1949	1975	2021	2128	2258	1304	1797	2066
AM Peak Hr	10:00	7:00	7:00	7:00	7:00	7:00	11:00	7:00	7:00
AM Count	111	263	312	275	272	292	122	210	283
PM Peak Hr	1:00	1:00	6:00	3:00	5:00	3:00	1:00	3:00	3:00
PM Count	83	192	179	212	202	302	108	162	200

**TOTAL ADT:                      4,213**

**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**Count Summary Beginning:                      October 1, 2019**

Count Station:	1200135	Counter ID:	71
City/Town:	Cameron Park	Mile Post:	2.33
Road Name:	<b>Meder Road</b>	Location:	<b>500 Ft. W. of Ponderosa Rd.</b>
Lanes:	2	Direction:	WESTBOUND

Date	6	7	1	2	3	4	5	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	4	3	7	2	6	6	11	6	5
200	6	4	2	6	2	3	7	4	3
300	4	3	1	1	2	2	2	2	2
400	2	0	0	1	0	2	2	1	1
500	1	1	4	2	2	1	0	2	2
600	4	8	7	9	7	5	5	6	7
700	4	107	165	207	198	175	23	126	170
800	13	151	150	166	137	143	28	113	149
900	31	81	82	89	94	99	58	76	89
1000	41	66	65	60	80	75	71	65	69
1100	82	95	70	81	81	86	107	86	83
1200	90	120	74	86	99	94	106	96	95
1300	89	236	131	148	260	141	110	159	183
1400	88	243	165	83	110	160	82	133	152
1500	83	113	192	355	230	217	106	185	221
1600	84	158	225	146	162	218	128	160	182
1700	86	142	182	174	217	154	140	156	174
1800	55	170	196	218	207	121	95	152	182
1900	62	129	171	141	138	81	79	114	132
2000	50	69	94	104	94	91	66	81	90
2100	32	41	72	86	118	100	43	70	83
2200	15	30	26	37	86	47	33	39	45
2300	11	14	15	22	13	23	27	18	17
2400	5	5	8	7	6	20	11	9	9
<b>Totals</b>	<b>942</b>	<b>1989</b>	<b>2104</b>	<b>2231</b>	<b>2349</b>	<b>2064</b>	<b>1340</b>	<b>1860</b>	<b>2147</b>
AM Peak Hr	12:00	8:00	7:00	7:00	7:00	7:00	11:00	7:00	7:00
AM Count	90	151	165	207	198	175	107	126	170
PM Peak Hr	1:00	2:00	4:00	3:00	1:00	4:00	5:00	3:00	3:00
PM Count	89	243	225	355	260	218	140	185	221

**TOTAL ADT:                      4,213**

*KDA*

**Intersection**

Int Delay, s/veh 0.8

**Movement** WBL WBR NBT NBR SBL SBT

Lane Configurations	W		T			T
Traffic Vol, veh/h	27	15	303	16	8	474
Future Vol, veh/h	27	15	303	16	8	474
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	16	329	17	9	515

**Major/Minor** Minor1 Major1 Major2

Conflicting Flow All	871	338	0	0	346	0
Stage 1	338	-	-	-	-	-
Stage 2	533	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	322	704	-	-	1213	-
Stage 1	722	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	319	704	-	-	1213	-
Mov Cap-2 Maneuver	319	-	-	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	582	-	-	-	-	-

**Approach** WB NB SB

HCM Control Delay, s 15.3 0 0.1  
HCM LOS C

**Minor Lane/Major Mvmt** NBT NBRWBLn1 SBL SBT

Capacity (veh/h)	-	-	396	1213	-
HCM Lane V/C Ratio	-	-	0.115	0.007	-
HCM Control Delay (s)	-	-	15.3	8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↑	↑		↑	↑	
Traffic Vol, veh/h	5	0	17	55	0	75	40	238	16	8	467	8
Future Vol, veh/h	5	0	17	55	0	75	40	238	16	8	467	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	200	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	18	60	0	82	43	259	17	9	508	9

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	926	893	513	894	889	268	517	0	0	276	0	0
Stage 1	531	531	-	354	354	-	-	-	-	-	-	-
Stage 2	395	362	-	540	535	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	249	281	561	262	282	771	1049	-	-	1287	-	-
Stage 1	532	526	-	663	630	-	-	-	-	-	-	-
Stage 2	630	625	-	526	524	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	215	268	561	244	268	771	1049	-	-	1287	-	-
Mov Cap-2 Maneuver	215	268	-	244	268	-	-	-	-	-	-	-
Stage 1	510	522	-	636	604	-	-	-	-	-	-	-
Stage 2	540	599	-	505	520	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.3		18.7		1.2		0.1	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1049	-	-	411	403	1287	-	-
HCM Lane V/C Ratio	0.041	-	-	0.058	0.351	0.007	-	-
HCM Control Delay (s)	8.6	-	-	14.3	18.7	7.8	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	1.5	0	-	-

HCM 6th Signalized Intersection Summary  
3: Meder Rd & Cameron Park Dr

Existing AM  
10/14/2020

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	175	71	214	80	113	443
Future Volume (veh/h)	175	71	214	80	113	443
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	190	77	233	87	123	482
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	0	0	613	519	186	1220
Arrive On Green	0.00	0.00	0.33	0.33	0.10	0.65
Sat Flow, veh/h	0		1870	1585	1781	1870
Grp Volume(v), veh/h	0.0		233	87	123	482
Grp Sat Flow(s),veh/h/ln			1870	1585	1781	1870
Q Serve(g_s), s			1.6	0.6	1.1	2.0
Cycle Q Clear(g_c), s			1.6	0.6	1.1	2.0
Prop In Lane				1.00	1.00	
Lane Grp Cap(c), veh/h			613	519	186	1220
V/C Ratio(X)			0.38	0.17	0.66	0.40
Avail Cap(c_a), veh/h			3539	2999	979	4567
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			4.2	3.9	7.1	1.3
Incr Delay (d2), s/veh			0.1	0.1	1.5	0.1
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			4.4	4.0	8.5	1.4
LnGrp LOS			A	A	A	A
Approach Vol, veh/h			320			605
Approach Delay, s/veh			4.3			2.9
Approach LOS			A			A
Timer - Assigned Phs	1	2				6
Phs Duration (G+Y+Rc), s	5.3	11.1				16.4
Change Period (Y+Rc), s	3.6	5.7				5.7
Max Green Setting (Gmax), s	9.0	31.0				40.0
Max Q Clear Time (g_c+l1), s	3.1	3.6				4.0
Green Ext Time (p_c), s	0.0	0.5				1.0
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			3.3			
HCM 6th LOS			A			
<b>Notes</b>						
User approved pedestrian interval to be less than phase max green.						



**Intersection**

Int Delay, s/veh 0.6

**Movement** WBL WBR NBT NBR SBL SBT

Lane Configurations	W					
Traffic Vol, veh/h	12	19	615	36	12	492
Future Vol, veh/h	12	19	615	36	12	492
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	21	668	39	13	535

**Major/Minor** Minor1 Major1 Major2

Conflicting Flow All	1249	688	0	0	707	0
Stage 1	688	-	-	-	-	-
Stage 2	561	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	191	446	-	-	891	-
Stage 1	499	-	-	-	-	-
Stage 2	571	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	187	446	-	-	891	-
Mov Cap-2 Maneuver	187	-	-	-	-	-
Stage 1	499	-	-	-	-	-
Stage 2	559	-	-	-	-	-

**Approach** WB NB SB

HCM Control Delay, s 19 0 0.2  
HCM LOS C

**Minor Lane/Major Mvmt** NBT NBRWBLn1 SBL SBT

Capacity (veh/h)	-	-	290	891	-
HCM Lane V/C Ratio	-	-	0.116	0.015	-
HCM Control Delay (s)	-	-	19	9.1	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

**Intersection**

Int Delay, s/veh 3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↑	↑		↑	↑	
Traffic Vol, veh/h	8	0	25	34	0	38	29	586	87	63	438	6
Future Vol, veh/h	8	0	25	34	0	38	29	586	87	63	438	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	200	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	27	37	0	41	32	637	95	68	476	7

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1385	1412	480	1378	1368	685	483	0	0	732	0	0
Stage 1	616	616	-	749	749	-	-	-	-	-	-	-
Stage 2	769	796	-	629	619	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	121	138	586	122	147	448	1080	-	-	873	-	-
Stage 1	478	482	-	404	419	-	-	-	-	-	-	-
Stage 2	394	399	-	470	480	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	101	123	586	107	131	448	1080	-	-	873	-	-
Mov Cap-2 Maneuver	101	123	-	107	131	-	-	-	-	-	-	-
Stage 1	464	444	-	392	406	-	-	-	-	-	-	-
Stage 2	347	387	-	413	443	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.3		39.9		0.3		1.2	
HCM LOS	C		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1080	-	-	271 179	873	-	-
HCM Lane V/C Ratio	0.029	-	-	0.132 0.437	0.078	-	-
HCM Control Delay (s)	8.4	-	-	20.3 39.9	9.5	-	-
HCM Lane LOS	A	-	-	C E	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5 2	0.3	-	-

HCM 6th Signalized Intersection Summary  
3: Meder Rd & Cameron Park Dr

Existing PM  
10/14/2020

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	148	98	576	206	96	457
Future Volume (veh/h)	148	98	576	206	96	457
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	161	107	626	224	104	497
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	0	0	835	708	156	1336
Arrive On Green	0.00	0.00	0.45	0.45	0.09	0.71
Sat Flow, veh/h	0		1870	1585	1781	1870
Grp Volume(v), veh/h	0.0		626	224	104	497
Grp Sat Flow(s),veh/h/ln			1870	1585	1781	1870
Q Serve(g_s), s			5.6	1.8	1.1	2.1
Cycle Q Clear(g_c), s			5.6	1.8	1.1	2.1
Prop In Lane				1.00	1.00	
Lane Grp Cap(c), veh/h			835	708	156	1336
V/C Ratio(X)			0.75	0.32	0.66	0.37
Avail Cap(c_a), veh/h			2904	2461	803	3747
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			4.6	3.6	8.8	1.1
Incr Delay (d2), s/veh			0.5	0.1	1.8	0.1
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.1	0.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			5.1	3.7	10.6	1.2
LnGrp LOS			A	A	B	A
Approach Vol, veh/h			850			601
Approach Delay, s/veh			4.7			2.8
Approach LOS			A			A
Timer - Assigned Phs	1	2				6
Phs Duration (G+Y+Rc), s	5.4	14.6				20.0
Change Period (Y+Rc), s	3.6	5.7				5.7
Max Green Setting (Gmax), s	9.0	31.0				40.0
Max Q Clear Time (g_c+l1), s	3.1	7.6				4.1
Green Ext Time (p_c), s	0.0	1.4				1.0
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			3.9			
HCM 6th LOS			A			
<b>Notes</b>						
User approved pedestrian interval to be less than phase max green.						



**Intersection**

Int Delay, s/veh 0.8

**Movement** WBL WBR NBT NBR SBL SBT

Lane Configurations	W					
Traffic Vol, veh/h	27	15	307	16	8	478
Future Vol, veh/h	27	15	307	16	8	478
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	16	334	17	9	520

**Major/Minor** Minor1 Major1 Major2

Conflicting Flow All	881	343	0	0	351	0
Stage 1	343	-	-	-	-	-
Stage 2	538	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	317	700	-	-	1208	-
Stage 1	719	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	314	700	-	-	1208	-
Mov Cap-2 Maneuver	314	-	-	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	579	-	-	-	-	-

**Approach** WB NB SB

HCM Control Delay, s 15.4 0 0.1  
HCM LOS C

**Minor Lane/Major Mvmt** NBT NBRWBLn1 SBL SBT

Capacity (veh/h)	-	-	391	1208	-
HCM Lane V/C Ratio	-	-	0.117	0.007	-
HCM Control Delay (s)	-	-	15.4	8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↑	↑		↑	↑	
Traffic Vol, veh/h	5	0	17	91	3	94	38	223	39	41	439	7
Future Vol, veh/h	5	0	17	91	3	94	38	223	39	41	439	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	200	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	18	99	3	102	41	242	42	45	477	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	969	937	481	925	920	263	485	0	0	284	0	0
Stage 1	571	571	-	345	345	-	-	-	-	-	-	-
Stage 2	398	366	-	580	575	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	233	265	585	250	271	776	1078	-	-	1278	-	-
Stage 1	506	505	-	671	636	-	-	-	-	-	-	-
Stage 2	628	623	-	500	503	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	189	246	585	229	251	776	1078	-	-	1278	-	-
Mov Cap-2 Maneuver	189	246	-	229	251	-	-	-	-	-	-	-
Stage 1	487	487	-	646	612	-	-	-	-	-	-	-
Stage 2	522	599	-	467	485	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.7		28.2		1.1		0.7	
HCM LOS	B		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1078	-	-	396 354	1278	-	-
HCM Lane V/C Ratio	0.038	-	-	0.06 0.577	0.035	-	-
HCM Control Delay (s)	8.5	-	-	14.7 28.2	7.9	-	-
HCM Lane LOS	A	-	-	B D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2 3.5	0.1	-	-

HCM 6th Signalized Intersection Summary  
 3: Meder Rd & Cameron Park Dr

Existing plus Project AM  
 10/15/2020

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	175	73	217	80	115	446
Future Volume (veh/h)	175	73	217	80	115	446
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	190	79	236	87	125	485
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	0	0	614	521	189	1222
Arrive On Green	0.00	0.00	0.33	0.33	0.11	0.65
Sat Flow, veh/h	0		1870	1585	1781	1870
Grp Volume(v), veh/h	0.0		236	87	125	485
Grp Sat Flow(s),veh/h/ln			1870	1585	1781	1870
Q Serve(g_s), s			1.6	0.6	1.1	2.0
Cycle Q Clear(g_c), s			1.6	0.6	1.1	2.0
Prop In Lane				1.00	1.00	
Lane Grp Cap(c), veh/h			614	521	189	1222
V/C Ratio(X)			0.38	0.17	0.66	0.40
Avail Cap(c_a), veh/h			3527	2989	975	4551
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			4.2	3.9	7.1	1.3
Incr Delay (d2), s/veh			0.1	0.1	1.5	0.1
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			4.4	4.0	8.6	1.4
LnGrp LOS			A	A	A	A
Approach Vol, veh/h			323			610
Approach Delay, s/veh			4.3			2.9
Approach LOS			A			A
Timer - Assigned Phs	1	2				6
Phs Duration (G+Y+Rc), s	5.3	11.1				16.4
Change Period (Y+Rc), s	3.6	5.7				5.7
Max Green Setting (Gmax), s	9.0	31.0				40.0
Max Q Clear Time (g_c+l1), s	3.1	3.6				4.0
Green Ext Time (p_c), s	0.0	0.5				1.0
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			3.4			
HCM 6th LOS			A			
<b>Notes</b>						
User approved pedestrian interval to be less than phase max green.						

Intersection						
Int Delay, s/veh	2.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Vol, veh/h	24	56	6	125	58	3
Future Vol, veh/h	24	56	6	125	58	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	61	7	136	63	3
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	87	0	207	57
Stage 1	-	-	-	-	57	-
Stage 2	-	-	-	-	150	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1509	-	781	1009
Stage 1	-	-	-	-	966	-
Stage 2	-	-	-	-	878	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1509	-	777	1009
Mov Cap-2 Maneuver	-	-	-	-	777	-
Stage 1	-	-	-	-	966	-
Stage 2	-	-	-	-	874	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0.3	10			
HCM LOS			B			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	786	-	-	1509	-	
HCM Lane V/C Ratio	0.084	-	-	0.004	-	
HCM Control Delay (s)	10	-	-	7.4	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.3	-	-	0	-	

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	12	19	616	36	12	493
Future Vol, veh/h	12	19	616	36	12	493
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	21	670	39	13	536

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1252	690	0	0	709
Stage 1	690	-	-	-	-
Stage 2	562	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	190	445	-	-	890
Stage 1	498	-	-	-	-
Stage 2	571	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	186	445	-	-	890
Mov Cap-2 Maneuver	186	-	-	-	-
Stage 1	498	-	-	-	-
Stage 2	559	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.1	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	289	890
HCM Lane V/C Ratio	-	-	0.117	0.015
HCM Control Delay (s)	-	-	19.1	9.1
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.4	0

**Intersection**

Int Delay, s/veh 4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↑	↑		↑	↑	
Traffic Vol, veh/h	8	0	25	41	0	46	29	580	95	68	434	6
Future Vol, veh/h	8	0	25	41	0	46	29	580	95	68	434	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	200	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	27	45	0	50	32	630	103	74	472	7

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1395	1421	476	1383	1373	682	479	0	0	733	0	0
Stage 1	624	624	-	746	746	-	-	-	-	-	-	-
Stage 2	771	797	-	637	627	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	119	136	589	121	146	450	1083	-	-	872	-	-
Stage 1	473	478	-	405	421	-	-	-	-	-	-	-
Stage 2	393	399	-	465	476	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	97	121	589	106	130	450	1083	-	-	872	-	-
Mov Cap-2 Maneuver	97	121	-	106	130	-	-	-	-	-	-	-
Stage 1	459	437	-	393	408	-	-	-	-	-	-	-
Stage 2	339	387	-	406	436	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.8	46.1	0.3	1.3
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1083	-	-	264	178	872	-
HCM Lane V/C Ratio	0.029	-	-	0.136	0.531	0.085	-
HCM Control Delay (s)	8.4	-	-	20.8	46.1	9.5	-
HCM Lane LOS	A	-	-	C	E	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	2.7	0.3	-

HCM 6th Signalized Intersection Summary  
3: Meder Rd & Cameron Park Dr

Existing plus Project PM  
10/15/2020

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	148	99	577	206	97	458
Future Volume (veh/h)	148	99	577	206	97	458
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	161	108	627	224	105	498
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	0	0	836	708	157	1337
Arrive On Green	0.00	0.00	0.45	0.45	0.09	0.72
Sat Flow, veh/h	0		1870	1585	1781	1870
Grp Volume(v), veh/h	0.0		627	224	105	498
Grp Sat Flow(s),veh/h/ln			1870	1585	1781	1870
Q Serve(g_s), s			5.6	1.8	1.1	2.1
Cycle Q Clear(g_c), s			5.6	1.8	1.1	2.1
Prop In Lane				1.00	1.00	
Lane Grp Cap(c), veh/h			836	708	157	1337
V/C Ratio(X)			0.75	0.32	0.67	0.37
Avail Cap(c_a), veh/h			2898	2456	801	3739
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			4.6	3.6	8.8	1.1
Incr Delay (d2), s/veh			0.5	0.1	1.8	0.1
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.1	0.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			5.1	3.7	10.6	1.2
LnGrp LOS			A	A	B	A
Approach Vol, veh/h			851			603
Approach Delay, s/veh			4.7			2.8
Approach LOS			A			A
Timer - Assigned Phs	1	2				6
Phs Duration (G+Y+Rc), s	5.4	14.6				20.0
Change Period (Y+Rc), s	3.6	5.7				5.7
Max Green Setting (Gmax), s	9.0	31.0				40.0
Max Q Clear Time (g_c+l1), s	3.1	7.6				4.1
Green Ext Time (p_c), s	0.0	1.4				1.0
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			3.9			
HCM 6th LOS			A			
<b>Notes</b>						
User approved pedestrian interval to be less than phase max green.						

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	👉			👈	👈	👈
Traffic Vol, veh/h	149	14	2	70	15	1
Future Vol, veh/h	149	14	2	70	15	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	162	15	2	76	16	1
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	177	0	250	170
Stage 1	-	-	-	-	170	-
Stage 2	-	-	-	-	80	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1399	-	739	874
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	943	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1399	-	738	874
Mov Cap-2 Maneuver	-	-	-	-	738	-
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	942	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0.2	9.9			
HCM LOS			A			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	745	-	-	1399	-	
HCM Lane V/C Ratio	0.023	-	-	0.002	-	
HCM Control Delay (s)	9.9	-	-	7.6	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

Queues  
3: Meder Rd & Cameron Park Dr

Existing AM  
10/14/2020



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	190	77	233	87	123	482
v/c Ratio	0.41	0.16	0.39	0.15	0.38	0.50
Control Delay	16.9	5.4	15.1	4.8	22.4	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.9	5.4	15.1	4.8	22.4	8.8
Queue Length 50th (ft)	31	0	35	0	20	46
Queue Length 95th (ft)	104	25	125	26	95	187
Internal Link Dist (ft)	1158		1009			2407
Turn Bay Length (ft)		150		215	250	
Base Capacity (vph)	1107	1019	1566	1344	575	1736
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.08	0.15	0.06	0.21	0.28

Intersection Summary

Queues  
3: Meder Rd & Cameron Park Dr

Existing PM  
10/14/2020



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	161	107	626	224	104	497
v/c Ratio	0.41	0.25	0.62	0.23	0.39	0.38
Control Delay	23.4	6.7	17.1	2.9	29.5	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	6.7	17.1	2.9	29.5	6.6
Queue Length 50th (ft)	40	0	135	0	27	52
Queue Length 95th (ft)	107	33	#430	38	93	188
Internal Link Dist (ft)	1158		1009			2407
Turn Bay Length (ft)		150		215	250	
Base Capacity (vph)	916	870	1274	1153	463	1592
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.12	0.49	0.19	0.22	0.31

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queues  
3: Meder Rd & Cameron Park Dr

Existing plus Project AM  
10/15/2020

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	190	79	236	87	125	485
v/c Ratio	0.41	0.17	0.39	0.15	0.38	0.50
Control Delay	16.9	5.4	15.1	4.8	22.5	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.9	5.4	15.1	4.8	22.5	8.8
Queue Length 50th (ft)	31	0	36	0	21	47
Queue Length 95th (ft)	104	25	127	26	96	188
Internal Link Dist (ft)	1158		1009			2407
Turn Bay Length (ft)		150		215	250	
Base Capacity (vph)	1104	1017	1562	1341	574	1736
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.08	0.15	0.06	0.22	0.28
<b>Intersection Summary</b>						

Queues  
3: Meder Rd & Cameron Park Dr

Existing plus Project PM  
10/15/2020



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	161	108	627	224	105	498
v/c Ratio	0.41	0.25	0.62	0.23	0.39	0.38
Control Delay	23.4	6.6	17.2	2.9	29.6	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	6.6	17.2	2.9	29.6	6.6
Queue Length 50th (ft)	41	0	135	0	27	52
Queue Length 95th (ft)	107	33	#431	38	94	188
Internal Link Dist (ft)	1158		1009			2407
Turn Bay Length (ft)		150		215	250	
Base Capacity (vph)	915	870	1273	1152	463	1590
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.12	0.49	0.19	0.23	0.31

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

KDA

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Exist AM  
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Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 1 Cam Prk / Virada	No / No	No / No
# 2 Cam Prk / Mira Loma	No / No	No / Yes

Exist AM

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #1 Cam Prk / Virada

\*\*\*\*\*

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
Initial Vol:	0	303	16		8	474	0		0	0	0	0		27	0		15			
ApproachDel:	12.1				15.7				xxxxxx				xxxxxx							

Approach[northbound][lanes=1][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=1.1]  
FAIL - Vehicle-hours less than 4 for one lane approach.  
Signal Warrant Rule #2: [approach volume=319]  
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.  
Signal Warrant Rule #3: [approach count=3][total volume=843]  
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Approach[southbound][lanes=1][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=2.1]  
FAIL - Vehicle-hours less than 4 for one lane approach.  
Signal Warrant Rule #2: [approach volume=482]  
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.  
Signal Warrant Rule #3: [approach count=3][total volume=843]  
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*

Intersection #1 Cam Prk / Virada

\*\*\*\*\*

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
Initial Vol:	0	303	16		8	474	0		0	0	0	0		27	0		15			

Major Street Volume: 42  
Minor Approach Volume: 482  
Minor Approach Volume Threshold: 621

SIGNAL WARRANT DISCLAIMER

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Exist + Project AM

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #1 Cam Prk / Virada

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
Initial Vol:	0	307	16			8	478	0			0	0	0	0		27	0		15	
ApproachDel:	12.2				15.8				xxxxxx				xxxxxx							

Approach[northbound][lanes=1][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=1.1]  
FAIL - Vehicle-hours less than 4 for one lane approach.  
Signal Warrant Rule #2: [approach volume=323]  
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.  
Signal Warrant Rule #3: [approach count=3][total volume=851]  
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Approach[southbound][lanes=1][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=2.1]  
FAIL - Vehicle-hours less than 4 for one lane approach.  
Signal Warrant Rule #2: [approach volume=486]  
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.  
Signal Warrant Rule #3: [approach count=3][total volume=851]  
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*

Intersection #1 Cam Prk / Virada

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
Initial Vol:	0	307	16			8	478	0			0	0	0	0		27	0		15	

Major Street Volume: 42  
Minor Approach Volume: 486  
Minor Approach Volume Threshold: 621

SIGNAL WARRANT DISCLAIMER

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Exist AM

Peak Hour Delay Signal Warrant Report

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Intersection #2 Cam Prk / Mira Loma

\*\*\*\*\*

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0
Initial Vol:	40	238	16		8	467	8		5	0	17		55	0	75					
ApproachDel:	14.5				20.2				xxxxxx				xxxxxx							

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.2]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=294]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=929]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=2.7]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=483]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=929]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*

Intersection #2 Cam Prk / Mira Loma

\*\*\*\*\*

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0
Initial Vol:	40	238	16		8	467	8		5	0	17		55	0	75					

Major Street Volume: 152

Minor Approach Volume: 483

Minor Approach Volume Threshold: 535

SIGNAL WARRANT DISCLAIMER

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Exist + Project AM

Peak Hour Delay Signal Warrant Report

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Intersection #2 Cam Prk / Mira Loma

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0
Initial Vol:	38	223	39		41	439	7		5	0	17		91	3	94					
ApproachDel:	16.5				24.2				xxxxxx				xxxxxx							

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.4]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=300]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=997]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=3.3]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=487]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=997]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*

Intersection #2 Cam Prk / Mira Loma

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0
Initial Vol:	38	223	39		41	439	7		5	0	17		91	3	94					

Major Street Volume: 210

Minor Approach Volume: 487

Minor Approach Volume Threshold: 466

SIGNAL WARRANT DISCLAIMER

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Exist PM  
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Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 1 Cam Prk / Virada	No / No	No / No
# 2 Cam Prk / Mira Loma	Yes / Yes	Yes / Yes

Exist PM

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #1 Cam Prk / Virada

\*\*\*\*\*

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1!	0	0
Initial Vol:	0	615	36			12	492	0			0	0	0	0		12	0		19	
ApproachDel:	21.1				16.5				xxxxxx				xxxxxx							

-----|-----|-----|-----|-----|

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=3.8]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=651]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1186]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

-----|-----|-----|-----|-----|

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=2.3]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=504]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1186]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Rural]

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Intersection #1 Cam Prk / Virada

\*\*\*\*\*

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1!	0	0
Initial Vol:	0	615	36			12	492	0			0	0	0	0		12	0		19	

-----|-----|-----|-----|-----|

Major Street Volume: 31  
Minor Approach Volume: 651  
Minor Approach Volume Threshold: 671

SIGNAL WARRANT DISCLAIMER

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Exist + Project PM

Peak Hour Delay Signal Warrant Report

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Intersection #1 Cam Prk / Virada

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
Initial Vol:	0	616	36		12	493	0		0	0	0	0	12	0	19					
ApproachDel:	21.2				16.6				xxxxxx				xxxxxx							

Approach[northbound][lanes=1][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=3.8]  
FAIL - Vehicle-hours less than 4 for one lane approach.  
Signal Warrant Rule #2: [approach volume=652]  
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.  
Signal Warrant Rule #3: [approach count=3][total volume=1188]  
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Approach[southbound][lanes=1][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=2.3]  
FAIL - Vehicle-hours less than 4 for one lane approach.  
Signal Warrant Rule #2: [approach volume=505]  
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.  
Signal Warrant Rule #3: [approach count=3][total volume=1188]  
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*

Intersection #1 Cam Prk / Virada

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
Initial Vol:	0	616	36		12	493	0		0	0	0	0	12	0	19					

Major Street Volume: 31  
Minor Approach Volume: 652  
Minor Approach Volume Threshold: 671

SIGNAL WARRANT DISCLAIMER

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Exist PM

Peak Hour Delay Signal Warrant Report

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Intersection #2 Cam Prk / Mira Loma

\*\*\*\*\*

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0
Initial Vol:	29	586	87		63	438	6		8	0	25		34	0	38					
ApproachDel:	32.0				19.6				xxxxxx				xxxxxx							

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=6.2]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=702]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1314]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=2.8]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=507]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1314]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*

Intersection #2 Cam Prk / Mira Loma

\*\*\*\*\*

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0
Initial Vol:	29	586	87		63	438	6		8	0	25		34	0	38					

Major Street Volume: 105

Minor Approach Volume: 702

Minor Approach Volume Threshold: 615

SIGNAL WARRANT DISCLAIMER

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Exist + Project PM

Peak Hour Delay Signal Warrant Report

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Intersection #2 Cam Prk / Mira Loma

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0
Initial Vol:	29	580	95		68	434	6		8	0	25		41	0	46					
ApproachDel:	35.8				21.4				xxxxxx				xxxxxx							

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=7.0]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=704]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1332]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=3.0]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=508]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1332]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*

Intersection #2 Cam Prk / Mira Loma

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0
Initial Vol:	29	580	95		68	434	6		8	0	25		41	0	46					

Major Street Volume: 120

Minor Approach Volume: 704

Minor Approach Volume Threshold: 586

SIGNAL WARRANT DISCLAIMER

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