LAKE CALIFORNIA

SECONDARY ACCESS COLLECTOR ROAD EVALUATION



Prepared For

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TABLE OF CONTENTS

CHAP	TERS	Page
	Executive Summary	i
1.0	Background	1
2.0	Project Objectives	7
3.0	Engineering Design Standards	9
4.0	Right-of-Way & Easement Needs	15
5.0	Regulatory & Permit Requirements	18
6.0	Stormwater & Soil Erosion Management	23
7.0	Potential Environmental Issues	25
8.0	Movement of Livestock & Wildlife	37
9.0	Opinion of Estimated Costs	38
10.0	Concept Designs & Evaluation Matrix	41
11.0	Public Outreach	43

APPENDICES

- A June 18,2001 Second Egress from Lake California A Preliminary Report
- B Tehama County Circulation Element Figure 3.0-2
- C September 12, 2016 Technical Memorandum Lake California Tract 1017 and Technical Memorandum Lake California Tract 1017 Sunset Hills Estates Alternative 5
- D December 12, 2017 Diaz Associates Wild Thyme Ranch Secondary Access Road Letter
- E February 21, 2018 Tract 1017 / Lake California Property Owners Association Letter
- F March 20, 2018 Board of Supervisors Approval and Authorization of a Letter for the Chairman's Signature to Mr. Michael Smith, Wild Thyme Ranch, LLC
- G June 19, 2018 Board of Supervisors Wild Thyme Ranch Secondary Access Road 2nd Request Letter
- H September 21, 2018 Diaz Associates Memorandum to Mr. Bill Goodwin, Lake California Tract 1017 Secondary Access
- I September 25, 2018 Board of Supervisors Lake California Second Access Study Session
- J Summary of Applicable Tehama County Design Standards
- K-1 Riverview Ranch Road Concept Design Alignment
- K-2 Snively Road Concept Design Alignment
- L California Environmental Quality Act Initial Study Checklist
- M California Natural Diversity Data Base
- N Public Workshops Information
- O August 26, 2019 and November 8, 2019 BR Enterprises Letters

FIGUR	ES	Page
ES-1	Lake California Secondary Access Collector Road Alternative Alignments	ii
ES-2	Proposed Collector Road Section	iv
3-1	Collector Road ADT>12,000	9
3-2	Proposed Collector Road Section	13
8-1	Typical Undercrossing Structure	37
TABLE	S	Page
3-1	Riverview Ranch Road Alignment Parcels, Lots, ADTs & Trip Distribution	12
3-2	Snively Road Alignment Parcels, Lots, ADTs & Trip Distribution	12
4-1	Riverview Ranch Road Alignment Concept Design ROW & Easement Needs	16
4-2	Snively Road Alignment Concept Design ROW & Easement Needs	17
9-1	Riverview Ranch Road Alternative Alignment Opinion of Estimated Construction	40
	Costs	
9-2	Snively Road Alternative Alignment Opinion of Estimated Construction Costs	40
10-1	Lake California Secondary Access Alternative Alignments Evaluation matrix	42

EXECUTIVE SUMMARY

This summary provides a brief overview of the key points, the main results and conclusions of this report, the *Lake California Secondary Access Collector Road Evaluation*. The full text should be reviewed for specific details.

In 2001 the Lake California Property Owners Association (LCPOA) began formally evaluating the need for a secondary access road to and from Lake California. On June 18, 2001 the Government Liaison Committee for the LCPOA submitted the Second Egress from Lake California — A Preliminary Report, June 18, 2001 to the LCPOA Board of Directors (refer to *Appendix A*). The report was requested by the LCPOA Board to address concerns regarding Lake California Drive being the only access to and from Lake California.

In May 2017, the LCPOA engaged Diaz Associates to undertake a study to evaluate potential secondary access alternatives. Initially, five secondary access alternative locations were identified. Coordination between Tehama County Supervisor Dennis Garton and Mr. Bill Goodwin, Chief Administrator and other staff members ensued during 2017 and 2018. In August 2018, a sixth alternative that went to Snively Road was evaluated and added to the list of potential secondary access road locations.

The Carr Fire beginning in August 2018 provided an impetus for the County to consider a secondary access road to and from Lake California. Then on September 25, 2018, a Study Session was held by the Tehama County Board of Supervisors to review the six secondary access road alignments and provide direction regarding a preferred secondary access road to and from Lake California. It was at this meeting that the Board selected the Riverview Ranch Road and Snively Road Alternative Alignments to be further evaluated.

On May 14, 2019 the LCPOA engaged Diaz Associates to prepare a Phase 1 Lake California secondary access road study that evaluated the two alternative alignments. The Camp Fire in Paradise, which began in November 2018 and the snowstorm in February 2019 provided a reminder of the need for a second access for Lake California residents. During the snowstorm, Lake California residents, law enforcement, fire fighters and medical response personnel had no vehicular access to and from Lake California due to downed trees blocking Lake California Drive.

This report titled *Lake California Secondary Access Collector Road Evaluation* by Diaz Associates, Planning and Environmental Consultants and their associate, Project Delivery Group, LLC, Civil Engineers and Surveyors, provides an evaluation of the Riverview Ranch Road and Snively Road Alternative Alignments. *Figure ES-1, Lake California Secondary Access Collector Road Alternative Alignments*, illustrates the location of the two alignments.

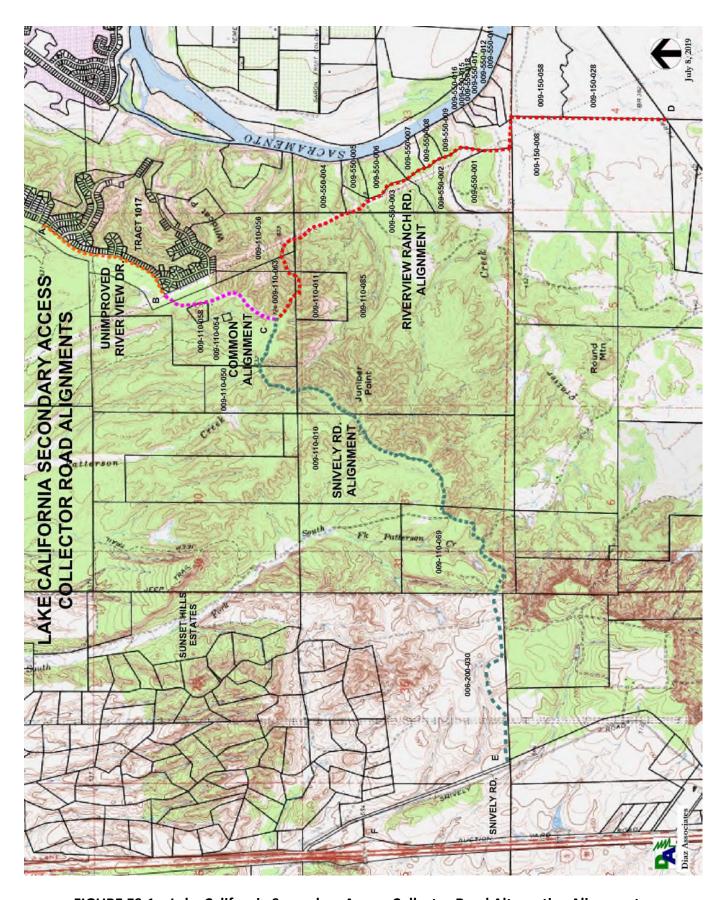


FIGURE ES-1 – Lake California Secondary Access Collector Road Alternative Alignments

Major infrastructure projects such as the proposed Lake California secondary access collector roadway (Project) typically include six major phases: general concept planning, concept design, engineering design, acquisition and construction funding, construction, and maintenance. As a planning stage tool, this report contributes to the framework used to refine the general concept planning efforts and initiate and complete the concept design phase, which in this case addresses two alternative alignments for a secondary access collector road to and from Lake California.

While much of the report focuses on technical information to assist in identifying a preferred roadway alignment, the report introduces issues necessary for the ensuing engineering design and the acquisition and construction funding phases.

Executive Summary

- 1.0 Background
- 2.0 Project Objectives
- 3.0 Engineering Design Standards
- 4.0 Right-of-Way & Easement Needs
- 5.0 Regulatory & Permit Requirements
- 6.0 Stormwater & Soil Erosion Management
- 7.0 Potential Environmental Issues
- 8.0 Movement of Livestock & Wildlife
- 9.0 Opinion of Estimated Costs
- 10.0 Concept Designs & Evaluation Matrix
- 11.0 Public Outreach

Appendices

The Riverview Ranch Road Alternative Alignment, beginning at the current edge of pavement of River View Drive in Lake California and ending at the intersection of Riverview Ranch Road and Jellys Ferry Road, is approximately 3.87-miles long. The distance from this intersection to Interstate 5 (I-5) is another approximate 5.8-miles. The Snively Road Alternative Alignment, also beginning at the same location as the Riverview Ranch Road Alignment is approximately 4.49-miles in length to its intersection with Snively Road. From this intersection, traffic can proceed southerly then westerly to the I-5 and Hooker Creek ramps, approximately 2.03-miles; or northerly to the Sunset Hills Estates Drive and I-5 interchange, approximately 0.8-miles.

Tehama County determined that the roadway is to be classified as a Collector Road. The Project Design Team, as a result of reviewing the existing topographic conditions and the timeframe within which future development is anticipated, is recommending that the initial roadway be constructed with a typical section to accommodate traffic volumes of approximately 6,000 ADTs. This roadway's typical section would include two 12-foot travel lanes and two 8-foot paved shoulders. Depending on the density and rate of growth, future development will be required to construct additional travel lanes and/or turn lanes as the level of service (LOS) of the roadway dictates. The typical section or the roadway is illustrated in *Figure ES-2, Collector Road Section*.

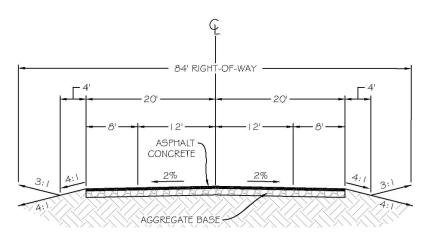


Figure ES-2 - Proposed Collector Road Section

In order to utilize the proposed Collector Road section, the Board of Supervisors will need to grant an exception to the County road design standards which calls for an ultimate road section that would be 64 feet wide from the edge of pavement to edge of pavement to accommodate four, 12-foot wide travel lanes and two -foot wide shoulders within a 120-foot wide right-of-way (ROW). The Project Design Team is not aware of any roadway in the County that is classified as a Collector that has such ROW and pavement widths.

The Riverview Ranch Road Alternative will directly and indirectly affect 22 parcels, of which 13 parcels will need to provide land for ROW, slope easements, and temporary construction easements. Leviathan has expressed a willingness to allow its lands affected by the alignment (four parcels) to be acquired for the roadway. On July 20, 2018, Mr. Michael Smith, a representative of the owners of the Wild Thyme Ranch where two parcels would be affected by the alignment, informed Mr. Goodwin of their opposition to acquisition of their land for the alignment. On August 5, 2019, the President, Mr. Craig Smith, President of the Riverview Ranch Road Homeowners Association provided an e-mail stating the majority of their members are "not in favor of access from Lake California to Riverview Ranch Road.

The Snively Road Alternative will require land for ROW from seven parcels, and easements from eight parcels. Leviathan owns four of the parcels, including the one parcel where only easements are needed, Wild Thyme Ranch owns three parcels, and BR Enterprises owns one parcel. Leviathan is willing for the roadway alignment to be acquired. However, as previously noted for the Riverview Ranch Road Alignment, Wild Thyme Ranch is opposed to providing land for acquisition for the roadway.

On August 26, 2019, Mr. J. Randall Memeo, an attorney representing BR Enterprises, provided a letter noting that his client "is not interested in providing an additional access point through the middle of its project (Sunset Hills) or relocating the current easement to the south (the Snively Road Alignment) and will vigorously defend any efforts brought in that regard." However, after further consideration, Mr. Memeo identified in a November 8, 2019 letter that his client, BR Enterprises "acknowledge that access through the existing Ramelli easement with security

fencing would eliminate my client's concerns. If the existing easement isn't wide enough, my client would be amenable to extending the width as needed."

Whereas, only Wild Thyme Ranch has expressed an unwillingness to make their lands available for acquisition, the LCPOA desires to continue the dialogue with Wild Thyme Ranch to determine if there is the possibility of a solution, including some form of relocation of the roadway, to a mutually agreeable suitable location. BR Enterprises has expressed a willingness to identify an alternative route, which will be further evaluated.

The report identifies a list of environmental issues and utilizes the State of California *Environmental Quality Act (CEQA) Initial Study Checklist* to identify environmental impacts that are *Potentially Significant, Less Than Significant with Mitigation Incorporated, Less Than Significant*, or if there is *No Impact* associated with each of the Alternative Alignments. A cursory discussion is provided for each alignment and notes the additional environmentally related studies that will be necessary. The Snively Road Alignment had less overall potential significant environmental impacts.

Opinion of estimated costs is provided for each Alternative Alignment. The Riverview Ranch Road Alignment has a subtotal cost of approximately \$10.35 million and with a 30-percent contingency is projected to total approximately \$13.46 million. For the Snively Road Alignment, the subtotal cost is approximately \$9.2 million and with a 30-percent contingency is projected to total approximately \$12.06 million. The cost opinion of estimated costs does not include ROW and easement acquisition, or services, included but not limited to those associated with additional studies, testing, legal, engineering, surveying and permit fees.

The Riverview Ranch Road and Snively Road Concept Design Alignments were evaluated with respect to the effects they may have, when compared to each other, for 14 categories identified in an *Evaluation Matrix Table*. The following categories were evaluated and assigned a point score of 1 to 4 (whereby 1 has the minimal, if any effect and 4 is substantially significant).

- Tehama County Land Development and Engineering Design Standards Compliance
- Stormwater Management Erosion Transport & Sediment Control
- Utility Provider Coordination
- Potential Significant Environmental Impacts
- Traffic & Noise Effects
- Agricultural Operation Effects
- Fire & Law Enforcement Protection
- Fire, Law Enforcement & Medical Response Times
- County, State & Federal Permit Requirements
- Right-of-way, Easement Needs, Acquisition Cost Opinion
- Construction Cost Opinion
- Risk Associated Cost Opinion
- County Department's Input

• Property Owners & Residents Input

It was determined that the Snively Road Alternative Alignment had no substantial significant effects and only one significant effect, whereas, the Riverview Ranch Road Alternative Alignment had seven substantially significant effects and four significant effects. The point totals were about twice as high for the Riverview Ranch Road Alignment compared to the Snively Road Alignment, 44 and 21 points, respectively.

The eventual alignment to pursue will be determined after review and consideration of this report by the Tehama County Board of Supervisors. A public hearing is anticipated to be held to obtain input from the public, property owners directly and indirectly affected by the alignments, County Departments, public and private agencies and groups, and other interested persons.

1.0 BACKGROUND

Major infrastructure projects such as the proposed Lake California Secondary Access Collector Road Project (Project) typically include six major phases: general concept planning, concept design, engineering design, acquisition and construction funding, construction, and maintenance. Any successful public or private infrastructure project requires strong public outreach, education and communication during the general concept planning and concept design, and acquisition and construction funding phases. As a planning stage tool, this Concept Design Report contributes to the framework used to refine the general concept planning efforts and initiate and complete the concept design phase, which in this case addresses two alternative alignments for a secondary access collector road to and from Lake California.

While much of this report focuses on technical information to assist in identifying a preferred roadway alignment, the report introduces issues necessary for the engineering design and the acquisition and construction funding, this chapter provides background information that led to the preparation of this report.

On June 18, 2001 the Government Liaison Committee for the LCPOA submitted the Second Egress from Lake California – A Preliminary Report, June 18, 2001 to the LCPOA Board of Directors (refer to Appendix A). The report was requested by the LCPOA Board to address concerns regarding Lake California Drive being the only access to and from Lake California.

The Committee reviewed five options and four were deemed to "have actual potential." Each option would "take residents into one of three directions, from:

- 1. Wildcat Point, just beyond Rio Alto in 1017 on unpaved River View Drive, heading toward Jelly's Ferry Road.
- 2. Wildcat Point heading to Snively Road.
- 3. River View Dr. on an existing unpaved road and down to Lake CA drive, adjacent to the north fork of Patterson Creek, at the green gate.
- 4. River View Dr. on an existing unpaved road, crossing Patterson Creek, connecting with the future Rodriguez Development."

The various "directions" are very similar in concept to evaluations that were more formal and later discussed in this Background Chapter. The first "direction" was accessed from Tract 1017 along the unpaved River View Drive in Lake California "heading to Jellys Ferry Road." The second "direction" was accessed from Tract 1017 to Snively Road. The third "direction" would result with access from the unpaved River View Drive down to Lake California Drive adjacent to the north fork of Patterson Creek, at the north gate." The fourth "direction" would begin at River View Drive and would require "crossing Patterson Creek connecting with the future, BR Enterprise (Sunset Hills Estates) Development."

The report concluded:

"At this point we think the Board should be very clear about the purpose of a second egress. As mentioned, if it is for emergency use only, with the LC development road system, excellent ground and air support, and our two excellent emergency locations, it does not seem to be needed at this time. If it is for handing additional traffic as the development grows, the Government Liaison Committee could work with Tehama County in their upcoming revision to the General Plan, which is over a year long process. In addition, the POA could start a road fund in the annual budget to pay for this costly project. If the Board would like a cost estimate for road construction, it could ask the engineers who wrote our road plan for this information."

Over the ensuing years since the 2001 Preliminary Report was completed, the LCPOA represented by Mr. Paul E. Mitchel and Mr. Norm Gruver participated in the formulation of the *Tehama County General Plan Update 2009 – 2029*. Secondary access from Lake California was incorporated into the *General Plan* as discussed later in this Chapter.

The Tehama County General Plan Transportation and Circulation Element of the Tehama County General Plan Update 2009 – 2029 identifies the need for a north/south "Proposed New Road" on Figure 3.0-1, Circulation Map between Lake California Drive and Jelly's Ferry Road and one running west/east between the Hooker Creek Interstate 5 (I-5) Interchange and Jelly' Ferry Road. Figure 3.0-2, Roadway Master Plan Proposed Safety and Circulation Enhancements also identifies these two routes as "Future Circulation Enhancements — Alternative Route (With Improvements)." As previously noted, it was the initial and ongoing efforts of the LCPOA that resulted in the General Plan recognizing the need for secondary access to and from Lake California.

In April 2016, Diaz Associates entered into an agreement with the LCPOA to undertake a study of the recorded Tract 1017. The study was to provide an overview of development options, including the pros and cons of reconfiguring the lots, of reverting some lots to acreage, or redesigning the current plan for Tract 1017 to provide the most efficient build out for the least cost of new infrastructure.

A meeting with key Tehama County Staff decision-makers needed to occur whereby, the nature of the discussion would need to be "big picture." It was determined that an evaluation needed to be undertaken regarding that since a secondary access was required could: infrastructure standards be reduced; could the County assist in acquiring the land necessary for the secondary access; and could the access be looped from the south end of Tract 1017 back to Lake California Drive, instead of to Jellys Ferry Road?

On July 27, 2016 a meeting was held at the Tehama County Administration Building with Mr. Bill Goodwin - Chief Administrator, Mr. Arthur Wylene - County Counsel, Mr. Gary Antone - Director of Public Works, Mr. Brian DeSmet - Battalion Chief/Fire Marshal, Mr. Jim Wildauer - Interim

Planning Director, Mr. Scot Timboe - Senior Planner, Mr. Scott Nielsen – LCPOA General Manager and Mr. Eihnard Diaz – Diaz Associates.

The meeting was not only productive, but very "solution oriented." Tehama County Staff was extremely cooperative and very candid. The following conclusions were reached:

- 1. Discussed was the possibility of routing the secondary access back through the Leviathan property and connecting back to Lake California Drive east of Patterson Creek. The distance from the existing gate would be approximately 1-1/2 miles to the west. The Fire Marshal noted that the State Fire Code would not permit such an access because a dead-end road situation would still exist. If Lake California Drive west of this access point were blocked, access to and from Lake California would not be possible. At this time, it appeared that the only alternative was secondary access to Jellys Ferry Road.
- 2. The January 1, 2016 California Code of Regulations, Title 14 Natural Resources, Division 1.5 Department of Forestry, Chapter 7 Fire Protection, Subchapter 2 State Responsibility Area (SRA) Fire Safe Regulations, Article 2. Emergency Access and Egress requires that the following minimum standards be met:
 - A. Two ten (10) foot traffic lanes or 20 feet wide plus shoulder widths. The County would require four (4) foot wide shoulders. However, one-foot shoulders may be acceptable.
 - B. Roadways would be designed and maintained to support fire apparatus loads weighing at least 75,000 pounds and provide an aggregate (gravel) base.
 - C. Grades cannot exceed 16 percent. Any grades in excess of 13 percent will be paved.
 - D. The County will require a dedicated right-of-way width of 50 or 60 feet and not an easement.
- 3. The County could not afford to participate financially in acquiring or constructing the secondary access road. The County would assist to obtain some form of grant and/or low interest loan for health and safety purposes, if available.
- 4. The County would work with the LCPOA to determine if the funds collected per the 2008 Stipulation and Proposed Order could be used towards the secondary access road.

Based on the July 27, 2017 meeting, the LCPOA determined the need to evaluate the filing of some form of application to provide for secondary access from Lake California Tract 1017 through properties to the south, to Jellys Ferry Road.

A request to prepare a "plan line" study of the secondary access route for adoption by the County was considered an appropriate mechanism. This request was consistent with *Figure 3.0-2* of the *Tehama County Circulation Element*, and accompanying text, which identifies that "substantial new roadways and new linkages will be required within the North I-5 area. New facilities would include a southerly exit out of Lake California, as well as new roads providing a connection between Jelly's Ferry Road and Lake California Drive" (refer to *Appendix B, Tehama County Circulation Element – Figure 3.0-2*).

Direction was given to Diaz Associates to evaluate potential secondary access routes from Lake California's southwest terminus, which is where Tract 1017 is located, to Jelly's Ferry Road. Four alternatives were initially evaluated and then a fifth was included toward the end of the evaluation. The fifth alternative evaluated constructing a bridge and following a recorded easement granted by Sunset Hills Estates that crossed Patterson Creek then follows Sunset Hills Estates Drive to the I-5 interchange.

Diaz Associates prepared a Technical Memorandum dated September 12, 2016 that provided background information that discussed the status of the initial evaluation of Tract 1017 and how the services morphed into the evaluation of secondary access alternatives. A second Technical Memorandum also dated September 12, 2016 provided essentially a summary of the lengths of each alternative, an opinion of very preliminary acquisition and construction costs based on a right-of-way width of 50-feet, a 20-foot wide pavement width with one (1) foot gravel shoulders (refer to Appendix C, September 12, 2018 Technical Memorandum Lake California Tract 1017 and Technical Memorandum Lake California Tract 1017 – Sunset Hills Estates Alternative 5).

During the time period that the alternative alignments were being evaluated, Mr. Wright was again contacted by Mr. Diaz to ask the Wild Thyme Ranch owners to reconsider their initial refusal and to enter into discussions regarding the possible provision of a permanent road right-of-way or, at minimum, a permanent road easement for emergency purposes only. Mr. Wright conveyed the request and the owners, who again said they were not interested in either scenario.

In May 2017, the LCPOA engaged Diaz Associates to undertake a Phase 2 evaluation of the September 12, 2016 Technical Memorandum discussing alternative secondary access alignments from Tract 1017 and Lake California to Jelly's Ferry Road. Specifically, Diaz Associates were too:

- Coordinate with the LCPOA General Manager
- Coordinate with the Tehama County Planning, Public Works, Fire Department, Legal Counsel, Chief Administrator and County Supervisor Dennis Garton
- Contact the underlying property owners regarding the proposed alignment to determine their interest in dedication
- Prepare a Technical Memorandum discussing findings and an opinion of construction costs
- Present the findings to the LCPOA Board

A sixth alignment was also to be evaluated that would originate, similarly to the other alignments, at the southwestern terminus of Tract 1017, then proceed southwesterly, and then westerly through Sunset Hills Estates to Sunset Hills Drive, which provides access to the I-5 interchange.

On August 10, 2017, a meeting was held with Supervisor Dennis Garton, Mr. Bill Goodwin, Ms. Kristin Maze – Planning Director and Scot Nielsen to discuss the potential use of eminent domain. Supervisor Garton clearly stated that he could not support the use of eminent domain due to concerns regarding private property rights. Therefore, a third attempt was made to reach out to Wild Thyme Ranch. In a letter dated December 12, 2017, Wild Thyme Ranch representative Mr. Michael Smith was contacted by Diaz Associates requesting an initiation of discussions regarding the roadway. No response was ever received (refer to Appendix D, December 12, 2017 Diaz Associates Wild Thyme Ranch Secondary Access Road Letter).

In January 2018, Mr. Diaz reached out to Mr. Goodwin (January 7, 2018 e-mail) regarding the lack of response from the Wild Thyme Ranch and in February via e-mail (February 2, 2018) Mr. Goodwin contacted Supervisor Garton, County Counsel Mr. Richard Stout and Public Works Director Mr. Tim McSorley noting the efforts by Mr. Diaz to contact Wild Thyme Ranch and the lack of any response to Mr. Diaz. On February 14, 2018, a meeting was held, attended by: Supervisor Garton, Mr. Goodwin, Mr. Stout, Mr. McSorley, all representing the County; Mr. Nielsen and Board President Mr. Dan DeArman representing the LCPOA; and Mr. Diaz and an associate of Mr. Diaz's, Mr. Keith Whisenhunt, Civil Engineer with Project Delivery Group (PDG).

A letter dated February 21, 2018 by the LCPOA was delivered to the Board of Supervisor requesting Board "financial, engineering, and legal support to the construction of a secondary access road to Lake California." (Refer to Appendix E, February 21, 2018 Tract 1017 / Lake California Property Owners Association Letter).

On March 20, 2018 Mr. Goodwin requested that the Board of Supervisors approve and authorized the Board Chairman to sign a letter to Wild Thyme Ranch representative Mr. Michael Smith, to initiate dialog regarding a secondary access road. (Refer to *Appendix F, March 20, 2018 Board of Supervisors Approval and Authorization of a Letter for the Chairman's Signature to Mr. Michael Smith, Wild Thyme Ranch, LLC).* The Board approved and authorized the Chairman to sign the letter to Mr. Smith. After no response from Wild Thyme Ranch representatives, another letter was sent to Mr. Smith on June 19, 2018 (refer to *Appendix G, June 19, 2018 Board of Supervisors Wild Thyme Ranch Secondary Access Road – 2nd Request Letter).* Mr. Smith again did not respond.

On July 20, 2018, Mr. Goodwin was able to make contact with Mr. Smith via telephone and was informed that the ownership of the property was likely not interested in the proposed access road across their property. Mr. Goodwin requested that Mr. Smith discuss this with the other owners and provide a response in writing. To date, no written response has been received by Mr. Goodwin.

On September 21, 2018 a Memorandum was prepared by Mr. Diaz and provided to Mr. Goodwin that identified initial parameters for a secondary access and summarized each of the six alternatives evaluated to date on behalf of the LCPOA (refer to *Appendix H, September 21, 2018 Diaz Associates Memorandum to Mr. Bill Goodwin, Lake California Tract 1017 Secondary Access*).

On September 25, 2018, a Study Session was held by the Tehama County Board of Supervisors requesting the Board to provide direction regarding a secondary access road to and from Lake California. It was at this public meeting that the Board selected the Riverview Ranch Road and Snively Road Alternative Alignments to be further evaluated (refer to *Appendix I – September 25, 2018 Board of Supervisors Lake California Second Access Study Session*).

Since the September 21st Board Meeting over the ensuing months, Mr. Diaz and Mr. Goodwin engaged in dialog regarding the evaluation of the two alignments. On December 21, 2018 a meeting was held attended by Mr. Goodwin, Mr. McSorley, Mr. Whisenhunt and Mr. Diaz. Direction was provided by the County that the road should be eventually constructed to a collector road standard, based on the potential traffic trip generation foreseen at that time. The preference by the County was that the underlying roadway width be graded to the eventual standard even if the roadway pavement section is constructed in phases. The road would initially be private with an irrevocable offer of dedication to the County. Conceptual alignments should be provided with an accompanying matrix providing an overview and scoring evaluation of related environmental, permitting, construction and opinions of costs issues. Over the next several months, Diaz Associates developed a scope of services that were reviewed by the LCPOA and the County. Revisions were made and on May 14, 2019 an agreement was entered into to undertake an evaluation of the two alignments selected by the Board of Supervisors.

This report titled *Lake California Secondary Access Collector Road Evaluation Study* is comprised of the following chapters. *Chapter 11.0, Public Outreach* will be completed once this report is provided to the Tehama County Board of Supervisors for review and consideration.

Executive Summary

- 1.0 Background
- 2.0 Project Objectives
- 3.0 Engineering Design Standards
- 4.0 Right-of-Way & Easement Needs
- 5.0 Regulatory & Permit Requirements
- 6.0 Stormwater & Soil Erosion Management
- 7.0 Potential Environmental Issues
- 8.0 Movement of Livestock & Wildlife
- 9.0 Opinion of Estimated Costs
- 10.0 Concept Designs & Evaluation Matrix
- 11.0 Public Outreach

Appendices

2.0 PROJECT OBJECTIVES

Project Objectives were defined in collaboration with LCPOA representatives (Mr. Dan DeArman, Dr. Sharon Crawford and Mr. Scott Nielsen) and County representatives (Mr. Goodwin and Mr. McSorley). The following are the initial objectives:

Objective 1 – Collector Road Sections and Widths

The County identified that that the road would be developed to an eventual Collector Road Standard based on the potential traffic trip generation initially foreseen. Designated in the County's General Plan, "collectors generally accommodate traffic between arterials and/or activity centers. Access is limited where feasible." Collector Roads are classified under three categories based on the anticipated average daily trips (ADTs); ADTs 2000 to 6000, ADTs 6000 to 12000, ADTs >12,000.¹ A Collector Road with greater that 12,000 ADTs) has a ROW of 120-feet with a 64-foot wide asphalt pavement section that includes four 12-foot wide travel lanes and two paved 8-foot shoulders. For a Collector Road carrying 6,000 to 12,000 ADTs, the ROW is to be 100-feet wide with 52-feet wide pavement widths that include three 12-foot wide travel lanes and two 8-foot paved shoulders. A Collector Road with 2,000 to 6,000 ADTs has a 40-foot wide pavement width with two travel lanes and two 8-foot paved shoulders.

The Design Team was tasked to identify a recommended ROW and pavement width based on an evaluation of future land uses and other road design features. The recommended widths are identified in *Chapter 3.0, Engineering Design Standards* and *Chapter 4.0, Road Right-of-Way & Easement Needs*. The preference by the County was that the underlying roadway width be graded to the eventual standard even if the roadway pavement section was constructed in phases.

Objective 2 – Public or Privately Owned and Maintained Road

The roadway is proposed to be privately or publicly acquired and privately constructed. The roadway would then be offered to be dedicated to the County. The road would then be subject to County maintenance. However, any portion of the roadway system that is accessed via a gate will be privately owned and maintained.

Objective 3 – Gated or Open to Full Time Traffic

It is preferred that the road is gated at the future entrance to Lake California at Tract 1017. Leviathan could have the option of a gate, which also benefits Lake California at the southern boundary of their parcels. From this point south, and or south, then southwest to either Jelly's Ferry Road or Snively Road, respectively, the roadway could be public.

7

¹ Tehama County Department of Public Works. Road Classes. Page 2-3. November 2007. *Land Development and Engineering Design Standards*.

Objective 4 – Utilities

It was determined by County staff that streetlights are not required as a component of the future roadway regardless of alignment selected. Furthermore, the extension of dry utilities (power, communication, and cable) along either alignment can be accomplished in the future as these will be overhead facilities. Therefore, no utilities need to be initially accommodated as part of the Project.

3.0 ENGINEERING DESIGN STANDARDS

Engineering design standards are minimum requirements to be used in the design and plan preparation for a specific improvement. The standards represent minimum values for various aspects of the design recommended for public safety, environmental and property protection, and allow for an acceptable level of maintenance by the owner(s) of the facility. *Appendix J, Summary of Applicable Tehama County Design Standards* provides a summary of the Tehama County land development and engineering design standards applicable to the design of the proposed collector roadway.

In a roadway design project, the projected traffic volumes determine the functional classification (local, collector, arterial, etc.) of the roadway. The traffic volumes and general terrain characteristics (level, rolling, and mountainous) then establish the design speed, pavement width, and pavement thickness requirements. The design speed sets forth the minimum curve radius and minimum length of vertical curves. Furthermore, the design standards include other requirements addressing street intersection and driveway spacing, stormwater treatment and detention, and other improvements that may be applicable to this Project.

The initial design standards for the proposed Project were evaluated and applied as follows:

1. The roadway was initially required to ultimately transport more than 12,000 vehicle trips per day. This established the functional classification of the roadway as a Collector. With this volume of vehicles, the street width must provide four, 12-foot wide travel lanes. The ultimate street section would be 64 feet from the edge of pavement to edge of pavement within a 120-foot ROW as shown in Figure 3-1, Collector Road ADT>12,000 provides the cross-section of the roadway per Tehama County standards.

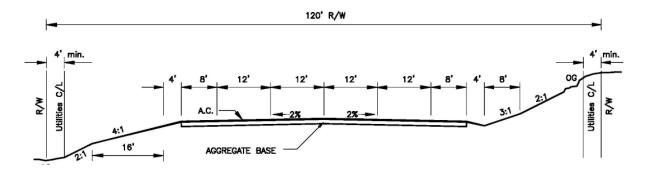


FIGURE 3-1, Collector Road ADT>12,000

2. The ridgetop terrain was evaluated and determined to be rolling in character. In initial discussions with County staff, this along with the functional classification of a collector, established a roadway design speed of 50 miles per hour (mph).

3. The design speed established the minimum vertical curve length, as well as the minimum horizontal curve radius and corresponding superelevation required to address safety and sight distance requirements.

After a significant effort in the application of the design standards summarized above and contained in *Appendix J*, the Project Design Team met with County Staff to review the results. The initial design resulted in grading that would have resulted in potential significant environmental impacts for both options. In addition, the grading limits resulted in potentially significant acquisition and construction costs.

To address the potentially significant grading and associated costs, the Project Design Team first reviewed the projected traffic volumes based on future land uses for the proposed roadway. Research related to the anticipated traffic volumes, including a cursory traffic impact analysis with traffic generation projections and Level-of-Service (LOS) criteria for roadways was undertaken by first projecting potential land use development scenarios with associated densities. ² The densities were based on the type of development (i.e. residential, commercial, industrial and agriculture) which in turn determined the ADTs per dwelling unit (DU), building square footage, or acreage (where applicable).

The Transportation Research Board's *Highway Capacity Manual* was referenced to determine the capacity of various roadway standards. Capacity is the maximum number of vehicles that can pass a given point whereby one is travelling at a comfortable level, during a specified period of time, which in this case is 24-hours. A comfortable level would be referred to as a "quality of service" level, which requires quantitative measures to characterize operational conditions within a traffic stream. Levels of service (LOS) is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruption, and comfort and convenience." A letter grade "A" through "F" is assigned to an intersection, roadway, or freeway segment representing progressively worsening traffic conditions.³

Many cities and counties have adopted LOS standards to define acceptable operations and provide a benchmark against which traffic impacts can be measured. Such standards are quite common in urban areas, while many rural areas typically may not have developed such standards. Tehama County currently has not adopted a formal LOS policy to define roadway and intersection operations. However, accepted practice by many communities throughout the State is to use a peak hour intersection and daily roadway segment LOS "C" as the minimum acceptable LOS for all intersections and roadways.

² Institute of Transportation Engineers. *Trip Generation Manual, 10th Edition.*

³ Transportation Research Board, 2000. *Highway Capacity Manual*.

It should be noted that instead of using LOS to determine transportation impacts, CEQA will require that by July 1, 2020, all projects will determine transportation impacts based on vehicle miles traveled (VMT). The following provides the reasoning for this requirement:

"Several states across the U.S. have enacted policies to reduce greenhouse gas (GHG) emissions, including policies aimed at reducing emissions from transportation. Many of these policies promote technological innovations, but some state and local policies also aim to reduce GHG emissions from transportation by reducing the amount of driving, measured in vehicle miles traveled (VMT), through land use and transportation planning. Most notably, California Assembly Bill 32 of 2006 led to the creation of a statewide target to reduce GHG emissions, a cap-and-trade market for GHG emissions and engendered a series of policies and funding programs to help the state achieve its goals through efficient land use and transportation. In 2008, California Senate Bill 375 established targets for reducing GHG emissions from transportation, in part by reducing VMT through coordinated land use and transportation planning at the regional level. Metropolitan Planning Organizations (MPOs) in California must demonstrate that their federallyrequired regional transportation plans and state-required Sustainable Communities Strategies will meet regional targets for VMT and GHG reductions. Because cities and counties hold the authority to make land use decisions, the state enacted grant programs that encourage local implementation of the regional transportation plans and Sustainable Communities Strategies."4

The total number of vehicles projected to use the roadway was based on existing and potential development for the area essentially between Lake California Drive to the north, the Sacramento River to the east (includes Lake California), Patterson Creek to the west (except for the area south of Sunset Hills Estates which are lands owned by BR Enterprises, and to Jellys Ferry Road to the south.

As shown in *Table 3-1, Riverview Ranch Road Alignment Parcels, Lots, ADTs & Trip Distribution*, those parcels that would utilize the Riverview Ranch Road Alternative Alignment total approximately 4,463-acres. Parcels that would use the Snively Road Alternative Alignment total approximately 4,475-acres as identified in *Table 3-2, Snively Road Alignment Parcels, Lots ADTs & Trip Distribution*. The tables also identify the number of existing dwelling units (DUs), potential DUs, total DUs, trip generation factors for the two types of residences, total number of ADTs, and the ADT trip distribution.⁵ It was determined that the ADTs generated using either alignment are very similar.

This report assumes that for the Riverview Ranch Road Alignment, two-thirds of the Lake California existing and future DUs would utilize Lake California Drive to access I-5 at the Main Street Interchange and that one-third of the traffic would proceed south to Jellys Ferry Road. The trip distribution for the Snively Road Alignment would be identical; however, the trips would

11

⁴ Lee, Amy E. and Handy, Susan, Research in Transportation Business & Management. 2018. *Leaving level-of-service behind: The implications of a shift to VMT impact metrics*. https://doi.org/10.1016/j.rtbm.2018.02.003

⁵ Institute of Transportation Engineers. *Trip Generation Manual, 10th Edition.*

proceed in a southwesterly direction to Snively Road. Regardless of which alternative alignment is selected, a traffic impact analysis will need to be prepared to more succinctly determine trip distribution. In addition, Caltrans will more than likely require the analysis to address traffic impacts at the on and off-ramps at the I-5 interchanges impacted by each alignment.

TABLE 3-1 RIVERVIEW RANCH ROAD ALIGNMENT PARCELS, LOTS, ADTS & TRIP DISTRIBUTION								
APN	Parcel	Existing	Potential	Total	ADTs/	ADTs	ADTs	ADT
	(Acres)	DUs	DUs	DUs	DU ⁶		North	South
009-110-072	307.53	0	22	22	9.57	215	131	72
009-110-073	153.03	0	11	11	9.57	107	65	36
009-110-085	542.44	0	40	40	9.57	380	231	127
009-150-008	241.84	0	18	18	9.57	169	103	56
009-150-028	130.84	0	10	10	9.57	92	56	31
009-150-058	84.52	0	6	6	9.57	59	36	20
Leviathan, Inc.	3,003	0	220	220	9.57	2,102	1,276	700
Other Parcels	0	15	0	15	9.57	144	87	48
Lake California	0	1,382	867	2,249	7.5	16,868	10,239	5,617
TOTALS	4,463	1,397	1,194	2,591		20,136	12,224	6,707

TABLE 3-2 SNIVELY ROAD ALIGNMENT PARCELS, LOTS, ADTS & TRIP DISTRIBUTION								
APN	Parcel (Acres)	Existing DUs	Potential DUs	Total DUs	ADTs/ DU ⁷	ADTs	ADTs North	ADT South
009-110-010	316.53	0	23	23	9.57	222	148	74
009-110-069	152.88	0	11	107	9.57	107	71	36
009-110-072	307.53	0	22	22	9.57	215	131	72
009-110-073	153.03	0	11	11	9.57	107	65	36
009-110-085	542.44	0	40	40	9.57	380	231	127
Leviathan, Inc.	3,003	0	220	220	9.57	2,102	1,276	700
Lake California	0	1,382	867	2,249	7.5	16,868	10,239	5,617
TOTALS	4,475	1,382	1,194	2,672		20,001	12,161	6,662

Discussions with Ms. Martha Slack, General Manager of the Rio Alto Water District have determined that future development of the properties outside of Lake California, even though some are within the District's sphere of influence, will not be able to receive wastewater treatment services since the existing plant will be essentially at capacity when all the existing lots, including lots in Tract 1017, in Lake California are developed.

The cost to construct a new treatment plant to serve the vacant land identified in the tables would be economically unfeasible. Therefore, Leviathan determined that their lands would be best suited to be developed similar to the Sunset Hills Estates development project.

12

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⁶ The Institute of Transportation Engineers *Trip Generation Manual* identifies that a Planned Unit Development which is how Lake California developed has a trip generation of 7.5 per dwelling unit.

⁷ Ibid.

The density proposed for potential future development is based on the Sunset Hills Estates density where 1,200-acres were developed resulting in 88 residential parcels. This is a density of approximately one residential dwelling unit per 13.67 acres which was used to determine the number of potential dwelling units for the undeveloped lands for both roadway alignments. The Riverview Ranch Road Alignment also includes the 15 parcels, some of which have residences within the Riverview Ranch Road Homeowners Association that front the existing road.

The terrain was also discussed with County staff and as a result of the alignment not remaining on the ridgetops it was agreed that the terrain should be considered mountainous (10-percent or greater). The combination of the reduction in projected traffic volumes and the reconsideration of the terrain condition resulted in a two-lane roadway with a design speed requirement of 40 mph. The revised design speed resulted in a shorter required horizontal curve radius and reduced minimum vertical curve lengths. These factors contributed to the Concept Designs addressed in this report.

After review with County staff, a trip generation value of 9,000 average daily trips (ADTs) was initially agreed on with the understanding that if necessary, future development would construct additional lanes. However, the Project Design Team as a result of reviewing the existing topographic conditions and the timeframe within which future development is anticipated, is recommending that the initial roadway be constructed with a typical section to accommodate traffic volumes of approximately 6,000 ADTs. This is greater than the currently projected traffic volumes anticipated to use the new roadway from the existing land uses. Depending on the density and rate of growth, future development will be required to construct additional travel lanes and/or turn lanes as the LOS of the roadway dictates. This roadway typical section will include two 12-foot travel lanes and two 8-foot paved shoulders. The proposed section is illustrated in *Figure 3-2, Collector Road Section*. As previously stated, regardless of which alternative alignment is selected, a traffic impact analysis will need to be prepared.

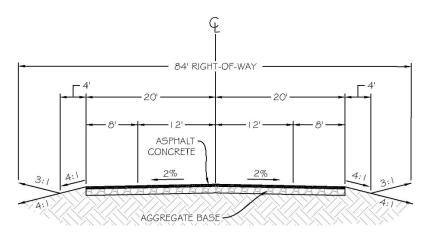


Figure 3-2, Proposed Collector Road Section

Appendix K-1, Riverview Ranch Road Concept Design Alignment and Appendix K-2, Snively Road Concept Design Alignment provide a plan, plan view stations, and profiles of the respective alternative alignments. The alignments are superimposed over aerial photographs illustrating underlying natural and man-made features including vegetation, trees, waterways, ponds, homes, roads, driveways, and parcel lines with associated assessor parcel numbers. Topography at 10-foot intervals is shown as are cut and fill slopes. It needs to be understood that the aerial photograph and associated property lines are for Illustrative purposes only. They are shown for the convenience of the viewer to understand the general location of the property lines relative to the proposed ROW and associated improvements. The accuracy level is insufficient to determine specific details such as encroachments between adjoining properties and/or exact locations of the proposed improvements with respect to the adjacent property lines. Drawings at a scale of 1-inch equal 400-feet are available for viewing at the LCPOA Office.

4.0 ROAD RIGHT-OF-WAY AND EASEMENT NEEDS

There are three types of property "rights" necessary to be acquired to construct the proposed roadway. These include road right-of-way (ROW), slope easements, and temporary construction easements.

The ROW and easement types are used as follows:

- In Tehama County, roadway ROW is established to accommodate the travel lanes, paved shoulders and/or aggregate shoulders, drainage ditches, stormwater management facilities and private utility facilities. The ROW to be acquired for either alternative is proposed to be fenced along both sides of the right-of-way lines and, therefore not available for use by the adjoining owner unless a means of access is provided, such as gates.
- 2. Slope easements are acquired to establish limitations on utilization of the slope areas created by the construction of the roadway. While these areas will not be fenced, use of these areas will be limited to prevent damage to the slopes resulting from the construction of the proposed roadway. These easements will extend an appropriate distance beyond the limit of grading required to create the slope contained within the easement. This additional distance is included to accommodate minor differences in the location of the top or toe of the slope that may result from minor topographic variations encountered during construction; drainage at the toe of the slope; maintenance of the slope as needed; and to reduce the complexity of the easement description. The area within the slope easement will be restored by placing topsoil over the cut/fill slope and seeding it with a mixture of native, perennial grass seed. Furthermore, healthy trees removed exceeding 6-inch diameter at breast height (DBH) within the temporary construction easements will be addressed by way of compensation to the landowner at an amount to be determined.
- 3. Temporary construction easements are utilized to provide for encroachment outside the roadway ROW and/or the slope easements to accommodate construction related activities. These activities include movement of equipment and workers, construction surveys, and placement of tools and materials, among other activities to perform the work required to construct the proposed roadway. The area within a temporary construction easement will be restored, as much as possible, to its preconstruction condition upon completion of the roadway construction. Furthermore, any healthy trees removed exceeding 6-inch DBH within the temporary construction easements will be addressed by way of compensation to the landowner at an amount yet to be determined. Shrubs and grasses within the construction area will be removed and disposed of properly along with other construction related materials removed. The areas where shrubs and grasses are removed will be restored with native grasses indigenous to the area. These easements are extinguished upon the termination of the contractor's warranty period.

It should be understood that the ROW and easement areas presented in this report are conceptual and subject to change as the design is refined. The results of the Concept Designs are based on the best available information related to topographic and property boundary data. The term, "best available information", means available for use without the time and expense of the collection of highly accurate, site specific field data. The information used in the development of the Concept Designs is sufficient for the purpose of identifying and comparing the overall impacts of the proposed alternative alignments and profiles.

When an alignment is selected, refined topographic and boundary data will be collected and utilized to refine the alignment and profile accordingly. At that time, the acquisition areas will be updated to reflect the detailed design and the areas of the various acquisition types based on that design.

Based on the Concept Designs for each of the two alternative alignments and profiles and the base mapping information, *Tables 4-1* and *4-2* summarize the right-of-way and easement needs for each Assessor's Parcel impacted by the two alternative alignments.

TABLE 4-1 RIVERVIEW RANCH ROAD ALIGNMENT CONCEPT DESIGN ROW & EASEMENT NEEDS						
APN	ROW (Sq. Ft.)	Slope Easement (Sq. Ft.)	Temporary Construction Easement (Sq. Ft.)	Length of Roadway (Linear Feet)		
009-110-011	60,300	115,400	24,600	720		
009-110-054	282,000	247,100	175,400	3,290		
009-110-056	43,200	74,300	13,100	455		
009-110-058	None	None	None	None		
009-110-059	32,600	10,400	14,000	470		
UNKNOWN	342,100	117500	121,300	4,070		
009-110-063	80,600	172,000	33,600	1,060		
009-110-085	145,800	340,000	50,000	1,455		
009-150-008	254,800	92,700	89,600	2,975		
009-150-028	65,300	17,000	22,900	790		
009-150-058	None	None	None	None		
009-550-001	None	None	None	None		
009-550-002	None	None	None	None		
009-550-004	None	None	None	None		
009-550-005	None	None	None	None		
009-550-006	None	None	None	None		
009-550-007	45,900	50,100	17,600	555		
009-550-008	44,200	33,000	16,600	545		
009-550-009	184,900	145,700	69,200	2,245		
009-550-011	None	None	None	None		
009-550-012	None	None	None	None		
009-550-019	132,100	143,200	58,100	1,795		
TOTALS	1,713,800	1,558,400	706,000	20,425		
	39.34 Ac.	35.78 Ac.	16.21 Ac.	3.87 Miles		

TABLE 4-2 SNIVELY ROAD ALIGNMENT CONCEPT DESIGN ROW & EASEMENT NEEDS							
APN	ROW (Sq. Ft.)	Slope Easement (Sq. Ft.)	Temporary Construction Easement (Sq. Ft.)	Length of Roadway (Linear Feet)			
006-420-030	450,000	101,500	142,200	4975			
009-110-069	300,000	167,800	99,400	3165			
009-110-010	360,000	94,400	118,500	3895			
009-110-050	120,000	158,000	53,800	1415			
009-110-054	227,500	62,400	129,400	3765			
009-110-058	None	None	None	None			
009-110-059	23,300	None	9,300	395			
009-110-085	140,000	16,700	47,600	1565			
UNKNOWN	None	4,500	126,690	4520			
TOTALS	1,620,800	605,300	726,890	23,695			
	37.19 Ac.	13.90 Ac.	16.69 Ac.	4.49 Miles			

5.0 REGULATORY & PERMIT REQUIREMENTS

Federal, State and County agencies and departments will have authority related to certain permit requirements for the approval and construction of the proposed roadway. At this stage in the process, it is not known if Federal permits related to environmental issues, particularly with respect to wetlands, will be required. The following permits are required for either roadway alternative alignment:

<u>County Encroachment Permits</u> – The Riverview Ranch Road Alignment will require an encroachment permit to access Jelly's Ferry Road, whereas, the Snively Road Alignment will require a permit to improve Snively Road.

<u>County Grading Permit</u> – Chapter 9.43 of the Tehama County Code of Ordinances addresses grading and erosion control requirements that establishes the submittal requirements and process for review and approval, in addition to the overall permit requirements. As stated in the Tehama County Code, "The purpose of this chapter is to promote and protect the public safety, convenience, comfort, prosperity, protection of water quality, environmental health and watershed functions, general welfare and the county's natural resources by establishing minimum requirements for grading, excavating, and filling." Whether or not the Project is constructed as a private or public project, the proposed improvements are not exempt from this permit requirement.

<u>Tehama County Air Pollution Control District Permits</u>

- Authority to Construct Rule 2:2 Any person building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, shall first obtain written authorization for such construction from the Air Pollution Control Officer. An authority to construct shall remain in effect for one year from the date of issuance or until the permit to operate the equipment for which the authority was issued is granted or denied or the application for a permit to operate is cancelled, whichever occurs first. An authority to construct may be extended on an annual basis by the Air Pollution Control Officer at the request of the applicant.
- Fugitive Dust Permit This is required for any grading operation.

In general, any proposed project, which has the potential to emit greater than 25 lbs/day of reactive organic gases (ROG) or oxides of nitrogen (NOx), or greater than 80 lbs/day of particulate matter less than 10 microns (PM10) should be submitted to the Tehama County Air Pollution Control District (District) for review. Projects that may result in a significant public exposure to toxic air contaminants (such as diesel particulate matter, exhaust, and asbestos) require separate analysis, as discussed in Section 2.4. The project will be evaluated to determine the potential for significant air quality impacts, with further analysis or mitigation recommended if appropriate. The Lead Agency should include a list of District rules that the project would be required to comply with. Compliance with these rules is independent of the CEQA process. Listed below are

descriptions of District rules that would be applicable, but not all inclusive, to typical development projects, which would also be applicable to the Project.

- Emissions must be prevented from creating a nuisance to surrounding properties as regulated under District Rule 4:4 *Nuisance*.
- Visible emissions from stationary diesel-powered equipment are not allowed to exceed 40 percent opacity for more than three minutes in any one-hour, as regulated under District Rule 4:1 Visible Emissions.
- Fugitive dust emissions must be prevented from being airborne beyond the property line, as regulated under District Rule 4:24 *Fugitive Dust Emissions*. This rule applies to activities such as grading, soil stockpiling, and demolition.
- Owners or operators of portable engines and certain other types of portable equipment, other than vehicles, must be registered with the Air Resources Board's Portable Equipment Registration Program (PERP).
- Owners or operators of on-road or off-road diesel equipment greater than 50 HP must be registered with the Air Resources Board's Diesel Off-Road Online Reporting System (DOORS) or the Truck and Bus Regulation Reporting System (TRUCRS).
- Cutback and emulsified asphalt application shall be conducted in accordance with the District Rule 4:26 *Cutback and Emulsified Asphalt*.

<u>Tehama County use of Eminent Domain</u> – The US Constitution Fifth Amendment and Article I, Section 19 of the California Constitution authorizes federal, state and local public agencies including cities, counties, transportation authorities, water districts, sanitation districts, and other entities authorized by statute, to take private property by eminent domain for public use by paying just compensation. The definition of public use is broad, including roadways, public buildings, utilities, parks, schools and other uses that confer some public benefit or advantage, even if the project is not actually open to the public. In 2005, the US Supreme Court held that the definition of "public use" included any structure that was intended to generally benefit the community, including shopping malls, hotels, condos, and health clubs. In some cases, use of eminent domain has been authorized for the sole purpose of increasing tax revenues.

When an infrastructure project includes property that must be acquired through eminent domain, the public agency must find that the project selected is located in such a manner as to offer the greatest public benefit with the least private detriment. The process begins when the public agency finds that project and property selected are necessary; determine the fair market value of the property; makes a written offer to purchase the property at a price no lower than the appraised value; holds a public hearing and adopts a resolution of necessity establishing the public use and necessity of the project, and prior written offer to purchase the property, and again attempts to reach an agreement to acquire the property.

If no agreement is reached to sell the property, the public agency will file an eminent domain action in court, and deposit the court determined probable amount of just compensation with the State Treasurer. At that point, the public agency can petition for early possession. If early possession is granted, the courts can allow the property owner

to withdraw the probable compensation amount. If settlement is not reached following appraisal, the parties must participate in mediation no later than 20 days before trial to attempt to reach a mediated settlement before a jury trial is held to determine the fair market value of the property, which the public agency must pay within 30 days. After payment is made, the court transfers title to the property to the public agency.

National Pollutant Discharge Elimination System (NPDES) – The NPDES program is administered by the EPA, which delegated oversight in California to the State Water Quality Control Boards (SWQCB). The NPDES program provides general permits and individual permits. The general permits are for construction projects that disturb more than one acre of land. The general permit requires the applicant to file a public *Notice of Intent* (NOI) to discharge stormwater and to prepare and implement a *Stormwater Pollution Prevention Plan* (SWPPP). The SWPPP includes a site map, description of proposed activities, demonstration of compliance with applicable ordinances and regulations, and a description of best management practices (BMPs) that would be implemented to reduce erosion and discharge of construction-related pollutants.

The SWQCB-established NPDES permit program regulates municipal and industrial discharges to surface waters of the United States from their municipal separate storm sewer systems (MS4s). Under the NPDES program, all facilities that discharge pollutants into waters of the United States are required to obtain a NPDES permit. Requirements for stormwater discharges are also regulated under this program.

The NPDES has a variety of measures designed to minimize and reduce pollutant discharges. All counties with storm drain systems that serve a population of 50,000 or more must file for and obtain an NPDES permit, as must construction sites of 1 acre or more. Another measure for minimizing and reducing pollutant discharges to a publicly owned conveyance or system of conveyances is the EPA's Storm Water Phase II Final Rule. The Phase II Final Rule requires an operator (such as the County) of a regulated municipal separate storm sewer system (MS4) to develop, implement, and enforce a program (e.g., BMPs, ordinances, or other regulatory mechanisms) to reduce pollutants in postconstruction runoff to the County's storm drain system, where developed, from new development and redevelopment projects that result in the land disturbance of greater than or equal to 1 acre.

<u>Statewide General Construction Permit (GCP)</u> – Construction projects of 1 acre or more are regulated under the Construction General Permit, Order No. 2012-0006-DWQ, issued by the SWRCB. Under the terms of the permit, applicants must file permit registration documents with the SWQCB prior to the start of construction, including a NOI, risk assessment, site map, SWPPP, annual fee, and signed certification statement.

The SWPPP must demonstrate conformance with applicable BMPs, including a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the Project location. The SWPPP must list BMPs that would be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring

program for nonvisible pollutants if there is a failure of the BMPs, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303 (d) list for sediment.

Section 401 Water Quality Certification – Section 401 of the Clean Water Act requires that as a prerequisite to the issuance of a 404 permit for a project pursuant to Section 404 of the Clean Water Act, the respective federal agency may not issue a permit or license to conduct any activity that may result in any discharge into waters of the United States unless a state where the discharge would originate issues a Section 401 water quality certification verifying compliance with existing water quality requirements or waives the certification requirement. This permit normally can take three to six months to acquire following acceptance of a complete application by the SWQCB.

<u>Section 404 Permit</u> – Section 404 of the Clean Water Act regulates the discharge of dredged or fill materials into waters of the United States. The program includes two types of permits, a general permit and an individual permit.

The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions of the general permit are met.

A general permit takes approximately six months following acceptance of a complete application to acquire. An individual permit could take up to two or more years, depending on the complexity of the associated project environmental impacts.

<u>Section 1602 Streambed Alteration Agreement</u> – The requirements related to this agreement and the process to acquire one is set forth in Section 1602 of the California State Fish and Game Code. The process is administered by the California Department of Fish and Wildlife (CDFW).

An application is required when the work includes modification of the bed, bank, or channel of a stream, river, or lake; including water diversion and damming, and removal of vegetation from the floodplain to the landward extent of the riparian zone. The permit process takes approximately 90-days following acceptance of a complete application.

Section 7 Consultation – The Federal Endangered Species Act (FESA) generally prohibits the "taking" of a species listed as endangered or threatened (16 USC 1532, 50 CFR 17.3). Under the FESA, the "take" of a threatened or endangered species is deemed to occur when an intentional or negligent act or omission results in any of the following actions: "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The term "harm" includes acts that results in death or injury to wildlife. Such acts may include significant habitat modification or degradation if it results in death or injury to wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. For projects with a federal nexus, Section 7 of the FESA requires that federal agencies, in consultation with USFWS or NOAA Fisheries, use their authorities to further the purpose of FESA and to ensure that their actions are not likely to jeopardize the continued existence of listed species or result in

destruction or adverse modification of critical habitat. Section 10(a)(1)(B) allows non-federal entities to obtain permits for incidental taking of threatened or endangered species through consultation with USFWS or NOAA Fisheries.

6.0 STORMWATER & SOIL EROSION MANAGEMENT

Stormwater management for the proposed roadway includes two components. The first is the treatment of the stormwater, which provides for the removal of hydrocarbons, brake dust, sediment, and similar contaminants.

The second component is the peak flow attenuation of the runoff from the developed area. To accomplish this objective, sufficient volume of stormwater storage is required in order to contain the additional volume of runoff and then to release the stormwater from the storage facility at a rate no greater than the existing condition peak flow for the specified precipitation return interval.

The stormwater management requirements are proposed to be met for either alignment by creating treatment and storage areas within each low point in the roadway profile. This distributed facility approach has several advantages. First, it reduces the amount of pipe needed to convey stormwater runoff from one watershed to adjacent watersheds and then to a consolidated "end of pipe" facility. It also allows for the stormwater runoff to generally remain in the watershed in which it was generated.

A stormwater facility will be located on one side of the roadway for either alternative. Inlets connected by a cross culvert will collect the stormwater from the roadside ditches and convey it to the stormwater management facility. Here, the rainfall runoff will be treated and stored to allow for the peak runoff rate to be attenuated to the predevelopment runoff rate. The water will also be treated to remove the pollutants anticipated from the use of the proposed roadway.

During construction activities for either alternative alignment, waterways must be protected from sediment resulting from the work being performed. Best Management Practices (BMPs) are implemented to minimize pollutants from discharging from the construction site to the maximum extent practicable. The selection of BMPs is situational based and influenced by the topography of the disturbed area, the stormwater flowing into and/or out of the work, the size of the disturbed area, and the type of work being performed.

The BMPs that must be implemented, can be categorized into two major categories: 1) erosion and sediment control BMPs, and 2) non-storm water management and materials management BMPs. Erosion and sediment control BMPs fall into four main subcategories:

- Erosion controls
- Sediment controls
- Wind Erosion controls
- Tracking controls

<u>Erosion controls</u> include practices to stabilize soil, in order to protect the soil in its existing location and prevent soil particles from migration. Examples of erosion control BMPs are preserving existing vegetation, mulching and hydroseeding. <u>Sediment controls</u> are practices to collect soil particles after they have migrated, but before the sediment leaves the site. Examples of sediment control BMPs are street sweeping, fiber rolls, silt fencing, gravel bags, sandbags,

storm drain inlet protection, sediment traps and detention basins. <u>Wind Erosion controls</u> prevent soil particles from leaving the site in the air. Examples of wind erosion control BMPs include applying water or other dust suppressants to exposed soils on the site. <u>Tracking controls</u> prevent sediment from being tracked off site via vehicles leaving the site, to the extent practicable.

A stabilized construction truck and vehicle entrance not only limits the access points to the construction site, but also functions to partially remove sediment from vehicles prior to leaving the site. Non-storm water management and material management controls reduce non-sediment related pollutants from potentially leaving the construction site to the extent practicable. The GCP prohibits the discharge of materials other than storm water and authorized non-storm water discharges (such as irrigation and pipe flushing and testing). Non-storm water BMPs are management practices with the purpose of preventing storm water from coming into contact with potential pollutants. Examples of non-storm water BMPs include preventing illicit discharges and implementing good practices for vehicle and equipment maintenance, cleaning and fueling operations, such as using drip pans under vehicles. Waste and materials management BMPs include implementing practices and procedures to prevent pollution from materials used on construction sites. Examples of materials management BMPs include:

- Good housekeeping activities, such as covering and/or containing stockpiled materials, covering stored materials and elevating them off the ground, if necessary, in a central location.
- Securely locating portable toilets away from the storm drainage system and performing routine maintenance.
- Providing a central location for wash out and performing routine maintenance.
- Providing dumpsters and trash cans throughout the site for litter/floatable management.

7.0 POTENTIAL ENVIRONMENTAL ISSUES

Environmental issues and potential associated environmental impacts were preliminarily identified in a cursory manner using the State CEQA Initial Study Checklist (*Appendix G* of the State CEQA Guidelines as amended in 2018). Biological, wetlands, cultural resources, and other potential environmental constraints were identified based on the best available information and Project Design Team Members' knowledge of CEQA. Detailed field data collection and environmental studies were not undertaken. Actual CEQA clearance would be sought as part of the engineering design and acquisition phases. The checklist serves to provide future guidance as to which studies would likely be required to be prepared once a preferred alignment is identified. *Appendix L, CEQA Initial Study Checklist* identifies each environmental issue and associated potential impacts. Potential impacts are checked to identify if the applicable impact is: *Potentially Significant, Less Than Significant with Mitigation Incorporated, Less Than Significant*, or if there is *No Impact*.

The following provides a cursory overview of potential impacts associated with respective environmental issues identified in the *CEQA Initial Study Checklist*. Each issue is briefly discussed where applicable.

Aesthetics

Aesthetic effects relate to obstruction of scenic vistas or views, creation of a negative aesthetic effect, and creation of light or glare. The issue of aesthetics can be extremely subjective, however, there are accepted standards that the majority of the public can agree on, particularly when related to road construction. Standards address view obstructions, needless removal of trees, "scarring" from grading, landscaping, sign clutter and street lighting. Another important criterion for visual impacts is visual consistency. The project design should be consistent with natural surroundings and adjacent land uses. For example, a residential development might contrast visually with an industrial facility. Such incompatibilities can be partially mitigated through such measures as fences, and landscaping, to soften the harshness of the contrasts. In a largely undeveloped area, such as the area where the two alternative alignments are located, it is more practical and effective to prevent offensive visual contrasts through a combination of fencing and landscaping. Furthermore, future area development can undertake measures to screen the roadway, to the extent feasible, through site planning and design.

Existing Riverview Ranch Road residents will be impacted the most by the Riverview Ranch Road Alternative Alignment since due to widening of an existing approximate 18-foot wide roadway, which basically currently functions as a driveway, to a 40-foot wide asphalt paved road. The roadway presents new sources of light and glare on developed and undeveloped parcels. This impact could consist of street lighting, headlights from automobiles and trucks, and glare from paved surfaces. Street lighting is not proposed therefore the only potential source for lighting and glare is from vehicles utilizing the roadway. Light and glare effects must be evaluated from two viewing perspectives: 1) the impacts from the project on surrounding uses; and, 2) the impacts from surrounding uses on the project, which for the proposed Project is not applicable. The degree of impact is proportional to the perceived negative effect on surrounding land uses and visa-versa.

The Snively Road Alternative Alignment will not affect current residents along the proposed roadway since none currently exist. However, similar to the Riverview Ranch Road Alternative Alignment, future residents will be impacted by new sources of light and glare primarily from vehicle headlights. However, future residences along the roadway could be sited in such a manner to minimize or avoid the impact.

Potential aesthetic impacts for both alternatives are similar, except that the Riverview Ranch Road Alternative will impact existing residences, whereas, the Snively Road Alternative does not. Mitigation measures can be advanced to reduce potential impacts for both alternatives.

Agricultural Resources

The Farmland Mapping and Monitoring Program is a farmland classification system for Important Farmland that is administered by the California Department of Conservation. The system classifies agricultural land according to its soil quality and irrigation status. The best quality agricultural land is Prime Farmland which is land that has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed according to current farming methods. The land must have been used for production of irrigated crops at least sometime during the two crop cycles prior to the mapping date.

Based on a review of the *Important Farmland Overlay* for Tehama County, no *Prime* or *Unique Farmlands* were identified within or directly adjacent to either roadway alignment. The land and surrounding area are mapped as *Grazing Land* which is "land on which the existing vegetation is suited to the grazing of livestock.

Potential agricultural resource impacts are similar for both alternatives except that the Riverview Ranch Road Alternative has "valley floor" type topographic features whereas, the Snively Road Alternative is located along the ridge tops. *Chapter 8.0 – Movement of Livestock & Wildlife* provides additional discussion regarding agricultural resources.

Air quality

Tehama County is located in a non-attainment area for the state ambient air quality standard for ozone and particulate matter. In February 2018, the California Resource Board (CARB) adopted modifications to attainment/non-attainment designations for several areas in the State. The State Office of Administrative Law granted final approval of the revised designations, and the revised designations went into effect on September 24, 2018.

As discussed, air districts within the State that have not attained air quality standards are required to develop and implement attainment plans. To this end, the air districts of the NSVAB have jointly prepared and adopted the *Northern Sacramento Valley Planning Area 2015 Triennial Air Quality Attainment Plan* (2015 Plan). The purpose of the 2015 Plan is to obtain compliance with State air quality standards. Like the preceding plans, the 2015 Plan focuses on the adoption and implementation of control measures for stationary sources, area-wide sources, indirect sources, and public information and education

programs. The 2015 Plan also addresses the effect that pollutant transport has on the NSVABs ability to meet and attain the state standards.

The Tehama County Air Pollution Control District (TCAPCD) is designated by law to adopt and enforce regulations to achieve and maintain ambient air quality standards. In addition, the TCAPCD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs, and it regulates agricultural burning. Other responsibilities include monitoring air quality, preparing clean air plans, and responding to citizen complaints concerning air quality. All projects in Tehama County are subject to applicable TCAPCD rules and regulations in effect at the time of construction.

Both alternative alignments would have similar construction related emissions impacting air quality. Construction of either alternative alignment combined with future development utilizing the roadway would lead to cumulative impacts to air quality. The Riverview Ranch Road Alternative due to the vehicle miles travelled would result in greater air quality emissions than the Snively Road Alternative. Furthermore, existing Riverview Ranch Road residents would be initially impacted by the increase number of vehicles utilizing the roadway.

Biological Resources

Records reviewed consisted of *California Natural Diversity Data Base* (CNDDB) records, the U.S. Fish and Wildlife Service's official species list for the project area, National Marine Fisheries Service records, soils records maintained by the U.S. Department of Agriculture's Natural Resources Conservation Service, and *National Wetlands Inventory* (NWI) maps. The CNDDB records search covered a five-mile radius around Lake California. Because work affecting waters of the U.S. would trigger federal oversight, an official species list was obtained from the U.S. Fish and Wildlife Service regarding listed anadromous fish. Records maintained by the Natural Resources Conservation Service (NRCS) and the U.S. Fish and Wildlife Service *National Wetlands Inventory Surface Waters and Wetlands* were reviewed to determine the soil types on the site and their potential to support wetlands. NWI maps were reviewed to determine if wetland features have been previously mapped.

Appendix M, California Natural Diversity Data Base Maps provides a graphic overview of special-status fish, wildlife and plant species and habitats located within a five-mile radius of the general beginning of the secondary access road at Lake California. The mapping provides a general synopsis of potential impacts resulting from the construction of either alternative alignment.

The Riverview Ranch Road Alignment has the potential to significantly impact special-status fish, wildlife and plant species and habitats, whereas the Snively Road Alignment does not. However, regardless of which alignment is selected biological and wetland studies must be undertaken as part of the necessary environmental clearance.

Cultural resources

The Riverview Ranch Road Alignment is as close as 800-feet from the Sacramento River for approximately one mile, parallel to the Sacramento River. Due to the relatively close location to the river, there exists the potential to impact Native American Indian resources. Local Native American Tribes lived along rivers and major creeks since they

were a source of water and food. This was clearly demonstrated when the Rio Alto Water District constructed a wastewater conveyance pipe along Rio Alto Drive where the artifacts from a historic Indian Village were discovered. Discovering a similar resource along the Snively Road Alignment is highly unlikely, however, due to the overall sensitive nature of the area to support Native American Indians, cultural resource studies will need to be undertaken regardless of which alignment is selected.

Energy

Potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction of either alternative alignment are highly unlikely. To maintain construction cost control and in turn realize a profit, road construction contractors and subcontractors would maintain their equipment to be as fuel efficient as possible and would carefully select material haul routes, and the distances to obtain materials, to conserve fuel.

The Riverview Ranch Road Alternative Alignment would be less energy efficient during construction and eventual operation with regard to fuel consumption than the Snively Road Alternative. This is due to the intersection of Riverview Ranch Road and Jellys Ferry Road being an approximate a six-mile increase in distance to I-5 compared to one mile for the Snively Road Alignment.

Geology and Soils

The area within which the alignments are located is not affected by *Alquist-Priolo Earthquake Fault Zones* as determined by the California Geologic Survey. The area is located in a low severity earthquake area and is considered to be at low risk for impacts associated with earthquakes. Consequently, there is also a low risk for geologic events commonly associated with earthquakes, including liquefaction, subsidence, lurch cracking, and ground shaking.

A geotechnical investigation will be required to be prepared for either alignment to address potential expansive soils which generally contain clays that expand when moisture is absorbed into the crystal structure. This results in a rise in the ground surface. Though expansive soils are not considered to pose a significant hazard within the area, the effects of potentially expansive soils on the roadway can be reduced through proper engineering design and standard corrective measures.

Greenhouse Gas Emissions

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) aims to reduce greenhouse gas (GHG) emissions from passenger vehicles and light duty trucks through the coordination of land use, housing, and transportation strategies. Under SB 375, the CARB sets regional targets for the reduction of GHGs for each Metropolitan Planning Organization (MPO) in the State, or Regional Transportation Planning Agency (RTPA) for regions without an MPO. The MPO/RTPA must include a Sustainable Communities Strategy (SCS) in the applicable 2019 Tehama County Regional Transportation Plan (RTP) that demonstrates how the region will meet the GHG emissions reduction targets. The Tehama County Transportation Commission (TCTC) is the state-designated RTPA for Tehama County. The RTPA included in the RTP goals, policies, and strategies aimed at reducing greenhouse gas emissions in Tehama County

Regardless of which alignment is selected, a GHG evaluation will need to be undertaken. There are currently no State or local thresholds for GHG emissions; however, §15064.4 of the CEQA Guidelines states that a lead agency, which would be Tehama County, has the discretion to determine whether to use a model or methodology to quantify GHG emissions, or to rely on a qualitative or performance-based standard. The GHG analysis should consider 1) the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting; 2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and 3) the extent to which the project complies with any regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. If there is substantial evidence that the potential effects of a particular project are still cumulatively considerable even with compliance with adopted regulations or requirements, an Environmental Impact Report (EIR) must be prepared.

GHG emissions and global climate change are, by nature, cumulative impacts. Unlike criteria pollutants, which are pollutants of regional and local concern, GHGs are global pollutants and are not limited to the area in which they are generated. Construction of either alternative alignment combined with future development utilizing the roadway would lead to cumulative GHG impacts to air quality. The Riverview Ranch Road Alternative due to the vehicle miles travelled would result in greater air quality emissions than the Snively Road Alignment, albeit of minimal significance due to the nature of GHG cumulative emissions.

Hazards & Hazardous Materials

To date, no Phase I or II Environmental Site Assessments (ESA) have been prepared to address the potential for hazardous materials existing, more than likely underground for either alternative alignment. After consultation with a Registered Environmental Property Assessor, a determination would be made whether to proceed with a Phase I ESA to address potential hazards and hazardous materials. A Phase 1 ESA includes database research and a pedestrian survey of the site to determine the likely presence of hazardous materials. Even though the database records may not have records of hazardous materials specifically located on a site, the Phase 1 ESA may identify areas and associated activities some of which generate wastes that need to be properly disposed. Once the Phase I ESA is prepared, if there are any recommendations regarding hazardous materials, which would include underground fuel tanks and vehicle/farm equipment maintenance areas, a determination is made whether to proceed with a Phase II ESA, if a site is considered contaminated, and/or to just address specific issues such underground fuel tanks. Regardless of which alternative alignment is selected, a Phase I ESA would be prepared.

Although highly unlikely, a potential release of hazardous materials could occur during construction work on either alignment. Any such releases would most likely be minor spillages of motor vehicle fuels and oils. Given the requirement for a *General Construction Stormwater Permit* from the SWQCB, a SWPPP would be prepared, which would stipulate how and where vehicles can be refueled and will include BMPs implemented during construction to avoid spills, immediately respond to any spills, and minimize the effects of such spills. The use and handling of chemicals during construction activities will occur

in accordance with applicable Federal, State, and Local laws, including the California Occupational Health and Safety Administration (Cal OSHA) Requirements.

Due to the operational, permitting, and reporting requirements imposed by the County, State and Federal governmental agencies and/or departments, it is highly unlikely that the release of hazardous materials at a level that would present a hazard to the environment or to human or animal life would occur.

Hydrology & Water Quality

Chapter 6.0 – Stormwater & Soil Erosion Management provides discussion related to hydrology and water quality environment issues. Under Section 402 of the Clean Water Act, the SWQCB) issues NPDES permits to regulate waste discharges to Waters of the US. Waters of the US include rivers, lakes, tributary streams, and wetlands. Waste discharges include discharges of stormwater and construction project discharges. Regardless of which alignment is selected, a construction project resulting in the disturbance of one or more acre requires a NPDES permit. A SWPPP will be required to be prepared prior to construction since the area of disturbance is greater than one acre.

Adherence to the BMPs advanced as required in the SWPPP and the permitting, operational, and reporting requirements imposed by the State and County ensure that the Project will not violate water quality or discharge standards, or otherwise substantially degrade water quality.

Review of the September 29, 2011 Flood Insurance Rate Maps (FIRM) for Tehama County, California shows that Panel 430 of 1775 Map Number 06103 C0430H contains an approximate 350-foot long portion of the Riverview Ranch Road Alignment located in the FEMA Zone A. This zone is identified as a "High Risk Area" reflecting the severity or type of flooding in the geographic area defined as "Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones." Whereas the potential impact could be mitigated by raising the roadway above the 100-year floodplain, this could result in potential direct impacts on fish and wildlife species. None of the Snively Road Alignment is located within the floodplain.

If the Riverview Ranch Road Alignment is selected, a detailed hydrological study would need to be undertaken to provide an analysis of existing conditions and determine how to construct the roadway so that it is not impacted by the 100-year floodplain.

Land use & Planning

The Tehama County General Plan Land Use Element of the Tehama County General Plan Update 2009 – 2029 identifies on Figure 2.0-2, Land Use Map the various land use classifications for the areas within which the two alternative alignments are conceptually located.

The Riverview Ranch Road Alignment is located within *Suburban, Rural Residential Large Lot, Rural Residential Small Lot* and *Habitat Resources* land use classifications. The Snively Road Alignment passes through *Suburban, Rural Residential Large Lot,* and *Habitat*

Resources land use classifications. No Agricultural land use classifications such as *Upland Agriculture* are impacted.

The Tehama County General Plan Transportation and Circulation Element of the Tehama County General Plan Update 2009 – 2029 identifies the need for a north/south "Proposed New Road" on Figure 3.0-1, Circulation Map between Lake California Drive and Jelly's Ferry Road and one running west/east between the Hooker Creek Interstate 5 (I-5) Interchange and Jelly' Ferry Road. Figure 3.0-2, Roadway Master Plan Proposed Safety and Circulation Enhancements also identifies these two routes as "Future Circulation Enhancements – Alternative Route (With Improvements)." (Refer to Appendix B, Tehama County Circulation Element – Figure 3.0-2).

Either alignment is consistent with the *Tehama County General Plan*. However, the Riverview Ranch Road Alignment could be considered to "physically divide an established community" which would be the gated Riverview Ranch Homeowners Association neighborhood. Given that the *General Plan* identifies this area for future *Rural Residential Small Lot* development and that the General Plan EIR considered the "physical" division of the neighborhood, the potential impact would be considered less than significant.

Mineral Resources

Neither alternative alignment has the potential to impact mineral resources since none exist in the area.

Noise

No noise evaluations were performed for either alignment. The existing and future Riverview Ranch Road residents along the Riverview Ranch Road Alternative Alignment will be directly impacted by construction and traffic related noise. Albeit, road construction related noise will be short-term, however, the eventual estimated 6,600 ADTs utilizing the alignment will impact the parcels fronting the roadway. This condition would be similar for the Snively Road Alignment; however, existing residences would not be impacted since none exist along the proposed route.

Potential noise impacts for both alternatives will be similar, however, a noise study will need to be undertaken to determine the level of noise impact and mitigation measures to reduce potential impacts for either alignment. Similar to the aesthetic environmental issue, future area development can undertake measures to screen the roadway through fencing and landscaping through site planning and design, including fencing and landscaping. The further a residence is sited from the roadway, the less the noise impact.

Population & Housing

Either alternative alignment will facilitate population growth in the area. However, it must be recognized that the population growth was planned growth for the area as discussed under the Land Use & Planning environmental issue. The Tehama County General Plan also identified the need for the secondary access road to serve the area.

For the Riverview Ranch Road Alignment, there are approximately 4,460 acres that could be developed, however, development would be similar to Sunset Hills Estates where currently 1,200-acres were developed resulting in 88 residential parcels. This yields a density of approximately one residential dwelling unit per 13.7 acres. Applying a similar

density to the 4,460-acres, approximately 327 residential parcels could potentially be developed. To generate this number of dwelling units, five different property owners would need to seek development entitlements. Based on 2.63 persons per household for the period between 2013 and 2017, development of the 327 residential dwelling units would generate approximately 860 persons. Approximately 4,475-acres could be served by the Snively Road Alignment. Using the same density of one residential dwelling unit per 13.7-acres, approximately the same number of residential parcels could be developed resulting in the same population increase as the Riverview Ranch Road Alignment. It does need to be recognized that the population growth rate in Tehama County between April 2010 and July 1, 2018 was 0.8 percent, which would be equivalent to a growth rate of 0.1 percent per year.

Public Services

There are no environmental issues associated with schools and parks for either alignment. There are public service issues that do relate to fire and law enforcement protection and medical services.

On September 17, 2019, CAL FIRE Battalion Chief and Tehama County Fire Department Fire Marshal John Berglund and Tehama County Sheriff's Office, Office of Emergency Services Deputy Director Sergeant Andy Houghby met with Project Design Team Members Mr. Diaz and Mr. Whisenhunt to discuss the proposed Lake California Secondary Collector Road Alternative Alignments. The following summarizes the comments made with respect to the provision of services by their respective agencies.

Fire Protection

Specific questions were raised by the Design Team Members regarding response times and which alignment provides better wildfire protection. At this stage in the process, Chief Berglund indicated he cannot support either alignment or provide comment since the alignments are conceptual in nature. Furthermore, the Board of Supervisors will need to authorize the Chief to provide comments or to respond to questions raised by the Project Team Members. Therefore, at this stage in the process, support for either alternative alignment by the Tehama County Fire Department is unknown.

Law Enforcement

Sergeant Houghby noted that the Snively Road Alignment response time for law enforcement personnel would be preferable. The Snively Road Alignment provides access to two I-5 interchanges, Hooker Creek Road and Sunset Hills Estates Drive, whereas the Riverview Ranch Road Alignment only provides access to the Jellys Ferry Road Interchange. Furthermore, the distance to the I-5 interchange is longer along Jellys Ferry Road (5.8-miles) and has quite a few curves thereby increasing response times. He raised concerns regarding the number of gates (three) that are located on the Riverview Ranch Road Alignment. However,

⁸ US Census Bureau, July 1, 2018. *Quick Facts Tehama County, California*. https://www.census.gov/quickfacts/tehamacountycalifornia

since this Alignment would be a public roadway the gates would more than likely be removed.

A portion of the Riverview Ranch Road Alignment is located in the FEMA Zone A, which as previously discussed as part of the *Hydrology & Water Quality* environmental issues, is identified as a "High Risk Area" reflecting the severity or type of flooding in the geographic area. Sergeant Houghby expressed concerns regarding the safe evacuation of the area since a portion of the roadway (approximately 350-feet) is located within the 100-year floodplain, whereas, none of the Snively Road Alignment is affected by the 100-year floodplain.

Regarding which alignment would be more problematic to patrol, Sergeant Houghby noted that they currently patrol along Jelly's Ferry Road so access to the residences along Riverview Ranch Road would not be an issue unless the gates were still in place. Regarding the Snively Road Alignment there would not be much to patrol, however, this alignment could be used to abandon vehicles, deposit trash and attract drug usage. He referred to the Citizen RIMS (Records Information Management System) website that allows the public to access crime data on the Sheriff's website.⁹

Information from the website indicates that, between the period of January 1, 2019 and September 17, 2019, in the Riverview Ranch Road area, there was one domestic related call east of the Riverview Ranch Road along Jellys Ferry Road and two suspicious person/vehicle related reports. There was one call to assist another agency. In the Hooker Creek/Snively Road area, generally east and north of the I-5 Interchange, there have been four theft related calls, one near the interchange, two along Auction Yard Road and one on Snively, south of the intersection with Hooker Creek Road. There has been one civil call and three disturbance calls (one being two calls from one location) in the residential subdivision east of Snively Road and eight suspicious person/vehicle related reports (two of the calls from one location) resulting in one arrest.

On September 23, 2019, Sergeant Houghby informed Mr. Diaz via email that the "Sheriff's Office would prefer the route to Snively Road as the secondary access/escape route for Lake California."

Another public service which is impacted by the alternative alignments is associated with the response time for medical service personnel to and from Lake California to I-5. The Snively Road Alignment response time would be less due to the shorter distance to and from I-5 to Lake California compared to the distance from Riverview Ranch Road to I-5 via Jellys Ferry Road.

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⁹ https://tcso.crimegraphics.com/2013/default.aspx

Recreation

Neither alternative alignment has the potential to impact existing or future recreation facilities in the area since none currently exist or are proposed in the area.

Transportation/Traffic

The Tehama County General Plan Transportation and Circulation Element of the Tehama County General Plan Update 2009 – 2029 identifies the need for a north/south "Proposed New Road" on Figure 3.0-1, Circulation Map between Lake California Drive and Jelly's Ferry Road and one running west/east between the Hooker Creek Interstate 5 (I-5) Interchange and Jellys Ferry Road. Figure 3.0-2, Roadway Master Plan Proposed Safety and Circulation Enhancements also identifies these two routes as "Future Circulation Enhancements — Alternative Route (With Improvements)." The Riverview Ranch Road Alignment would implement the north/south "Proposed New Road" on Figure 3.01 and the Snively Road Alignment would partially implement the west/east alignment running between the Hooker Creek/I-5 interchange and Jellys Ferry Road. Both alignments would be considered consistent with the General Plan.

Chapter 3.0 — Engineering Design Standards, provides an overview regarding traffic related issues, including LOS and roadway design. Regardless of which alternative alignment is selected, a traffic impact analysis will need to be prepared particularly to address impacts at the Jellys Ferry I-5 Interchange on and off-ramps for the Riverview Ranch Alignment and the I-5 on and off-ramps at the Hooker Creek Road and Sunset Hills Estate Drive Interchanges. The analysis will also need to more succinctly determine trip distribution to and from Lake California. This report assumed that two-thirds of the Lake California and northern portion of the general area would utilize Lake California Drive to access I-5 at the Main Street Interchange and that one-third of the traffic would proceed south to Jellys Ferry Road for the Riverview Ranch Road Alignment or to the south and west to Snively Road for the Snively Road Alignment.

Tribal Cultural Resources

Refer to the discussion of *Cultural Resources* in this Chapter.

Utility & Service Systems

As previously noted for *Objective 4 – Utilities*, it was determined by County staff that streetlights are not required as a component of the future roadway regardless of alignment selected. Furthermore, the extension of dry utilities (power, communication, and cable) along either alignment can be accomplished in the future as these will be overhead facilities. New, or the extension of utilities and service systems associated with water and wastewater are not provided by either alignment. The Riverview Ranch Road Alignment may require the relocation of power poles, but the Snively Road Alignment would provide none of the utilities and services systems. The 84-foot wide ROW will accommodate the installation of utilities and services at such time that they are necessary to service future development.

Drainage facilities as discussed in *Chapter 6.0 – Stormwater & Soil Erosion Management* will be provided to manage stormwater from the roadway. Treatment and storage areas will be created along the roadway length and located on one side of the roadway for either alternative. Inlets connected by a cross culvert will collect the stormwater from the roadside ditches and convey it to the stormwater management facilities.

Wildfire

As previously discussed under the *Public Services* environmental issues, the Tehama County Fire Department was not in a position to discuss support for either alternative or provide comment. However, it is recognized by everyone that Lake California needs a secondary access route and that either alignment would meet that need. Until comments are provided by the Fire Department, responses to the various environmental impacts associated with wildfires with respect to the various alignments can be generally discussed.

Neither alignment will substantially impair an adopted emergency response plan or emergency evacuation plan from a wildfire perspective. Regarding exacerbating wildfire risks due to slope, prevailing winds, and other factors, Chief Berglund did mention at the *July 9, 2019 LCPOA Members Public Outreach Workshop* that fighting fires from ridgetops was preferable than fighting fires from the bottom of slopes.

The Riverview Ranch Road Alternative Alignment has the potential to degrade the quality of the environment by potentially impacting biological and cultural resources, hydrology and water quality, noise and public services primarily due to response times for sheriff, fire and medical providers to Lake California from the I-5 and Jelly's Ferry Road interchange. This would also result in increased air quality and greenhouse gas emissions due to vehicle miles travelled.

The construction and operation of the roadway and vehicular traffic will directly impact existing residences along Riverview Ranch Road. Due to the close proximity to the Sacramento River of a section of the roadway, there is the potential to impact the habitat of fish and wildlife species, causing a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, and/or reduce the number or restrict the range of a rare or endangered plant or animal species.

In addition, also due to the close proximity of the roadway to the Sacramento River, there exists the potential to impact Native American Indian resources as was demonstrated when the Rio Alto Water District constructed a wastewater conveyance pipe along Rio Alto Drive where the artifacts from a historic Indian Village were discovered. Whereby potential impacts could be mitigated, project related costs could increase significantly. The location of approximately 350-feet of roadway within the 100-year floodplain potentially adversely impacts the evacuation of residences during an emergency should flooding occur. Whereas the potential impact could be mitigated by raising the roadway above the 100-year floodplain, this could result in potential impacts on fish, wildlife, and plant species.

The Snively Road Alternative Alignment has the potential to degrade the quality of the environment by potentially impacting cultural resources, hydrology and water quality, and to a limited degree biological resource, however, not to the degree as the Riverview Ranch Road Alignment. Furthermore, public services primarily due to response times for sheriff, fire and medical providers to Lake California from the I-5 and the Hooker Creek interchange would be significantly less. This would also result in comparatively less air quality and greenhouse gas emissions due to less vehicle miles travelled to and from Lake California. The noise associated with the construction and operation of the roadway would directly impact fewer existing residences. Impacts on fish and wildlife populations would be significantly less due to the distance from the Sacramento River. There would be no impacts associated with potential flooding due to the location of the roadway.

Both Alternative Alignments have the potential to contribute to cumulative GHG emissions and cumulative impacts on local air quality – particularly to an existing non-attainment condition within the Northern Sacramento Valley Air Basin for ozone and particulate matter. However, imposition of construction and operational related emission reduction measures, regulations and oversight provided by the County, the TCAPCD, applicable State and Federal agencies, and measures that would be an integral part of the proposed Project and the implementation of mitigation measures would reduce the cumulative air quality and GHG impacts.

8.0 MOVEMENT OF LIVESTOCK & WILDLIFE

The movement of livestock and wildlife across the proposed roadway could be considered an important issue, more so for the Snively Road than the Riverview Ranch Road Alignment. For the roadway length that abuts the existing smaller Riverview Ranch Road parcels, grazing is not evidenced between the proposed alignment and the Sacramento River for approximately one mile. Before and after this length of roadway, grazing could occur on both sides of the roadway. This movement of livestock is important for the following reasons:

- 1. The current use of the general area is primarily grazing. Cattle needs to be able to move from areas that provide shade and grazing to where they can obtain drinking water. They also need to be able to move to avoid danger from predators or fire.
- 2. Wildlife also needs to continue to be able to freely move from one side of the roadway to the other should there be a need to do so.
- 3. The required movement of livestock and wildlife needs to be accommodated in a manner to minimize danger to drivers and the animals.

The required movement of cattle and wildlife, as well as the effort to minimize the conflicts between vehicles and animals could be addressed in the following ways:

- 1. Installation of five-wire barbed fence on both sides of the road along the ROW. Gated access could be located to allow for the movement of livestock from one side of the roadway to the other. The gates would also provide access to livestock haulers to transport cattle to other areas primarily during the summer.
- 2. Drainage structures placed in the draws would be oversized to accommodate, not only the movement of livestock, but also wildlife. A typical undercrossing structure cross section is shown as *Figure 8-1*, *Typical Undercrossing Structure*.

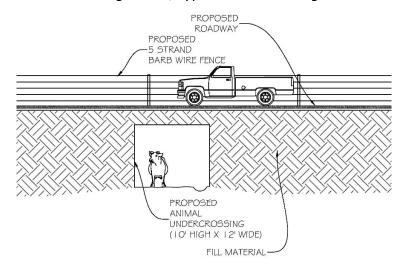


Figure 8-1, Typical Undercrossing Structure

9.0 OPINION OF ESTIMATED COSTS

The development of construction cost opinions requires the understanding and consideration of many factors or issues. These factors generally fall into one of the three following:

- 1. Bidding "Climate" This issue relates to a competitive bidding environment that can be affected by the following:
 - A. Project Size This relates to the monetary value of a project and the availability of bidders. If there are not enough bidders to create a competitive bidding environment, costs can be impacted greatly. Given that this Project could be a potential estimated \$10 to \$13 million plus Project, there are not many local contractors who can undertake construction of this Project in a single season.
 - B. Contract Time This affects project costs by limiting the bidding pool. If the contract time is such that it limits the number of contractors available to bid on a project and complete the work within the proposed contract time, it will place an upward pressure on the construction costs by limiting competition.
 - C. Procurement Timing The procurement timing may negatively impact bid prices if the bids are solicited during a time period when contractors have work back log. If the project is bid in the late fall or early winter, contractors are typically more aggressive with their bidding since they may not know what jobs may become available that are to begin in the early spring.
- 2. Site Constraints This issue relates to the ability of a contractor to be efficient in the performance of the work and to be able to complete project milestones without incurring overtime personnel costs.
 - A. Project Location Site access impacts project costs since the more difficult a site is to access the higher the cost.
 - B. Staging Area Location and ease of access to area(s) for material storage as well as parking for equipment and employees throughout a project's construction period is critical
 - C. Work "Window" Restrictions A project site that requires construction within wetlands will require "in-water" construction permits for the construction of any components of a project and particularly the construction of drainage structures within wetlands and also construction during the rainy season.
 - D. Access to Interior Portions of the Work This relates to the ability to access project components such as drainageways. The delivery and placement of box culvert sections, aggregated, concrete, and soil backfill is important.
- 3. Availability of Materials and Labor This issue addresses those elements that are more difficult for a contractor to control without incurring additional or unexpected expenses.

- A. Material Availability The availability of materials can place a significant upward pressure on the construction costs. This can impact the cost of materials as well as the schedule if material availability causes delays.
- B. Work Force Availability This relates directly to the number of bidders available to bid and complete a project in a timely manner. This can be impacted by the size of a project, the amount of work in the general area that needs to be completed, and/or the time available to complete the work. If a project is so large that it limits the contractors who can bid on it, this will result in upward pressures on the cost.
- C. Inflationary Risk if a contract is scheduled to be completed over a lengthy time period, or if the work includes large quantities of materials in particular asphalt concrete, or large quantities of diesel fuel; the control of the cost of these elements can be difficult for a contractor to address without increasing bid costs. The longer the construction period, the higher are the costs to address inflation.

The development of an approach to bid the required improvements in a manner to address the potential issues noted above will need to be addressed as part of the engineering design and construction funding phases.

Relatively detailed opinions of estimated construction costs of the Riverview Ranch Road and Snively Road Alternative Alignment Concept Designs are presented in *Tables 9-1 and 9-2*. The Cost Opinions include a contingency line item normally used to address the uncertainties in a project and potentially changing site conditions. The contingency is typically expressed as a percentage of the cost estimate for an overall project.

At the current phase of the proposed Project, the contingency amount is typically 30% and may be set as high as 50% based on Caltrans budgeting practices. This value is lowered as the ensuing phases refine the design and more is known regarding some of the issues and factors previously discussed. When a project is at the competitive bidding stage, a five to 10-percent contingency is typically recommended.

	TABLE 9-1							
RIVERVIEW RANCH ROAD ALTERNATIVE ALIGNMENT OPINION OF ESTIMATED CONSTRUCTION COSTS								
Item	Description	Quantity	Unit	Unit price	Total cost			
1	Mobilization / Demobilization	1	LS	\$500,000	\$500,000			
2	Clear and Grub including Tree Removal	70	AC	\$3,500	\$245,000			
3	Temporary Erosion Control	1	LS	\$50,000	\$50,000			
4	Temporary Traffic Control	1	LS	\$25,000	\$25,000			
5	Grading	850,000	CY	\$5	\$4,250,000			
6	Sawcut	100	LF	\$2	\$200			
7	Aggregate	73,500	TN	\$30	\$2,205,000			
8	Asphalt	20,400	TN	\$90	\$1,836,000			
9	Undercrossing Structures (12' x 12' Box Culvert)	2	EA	\$100,000	\$200,000			
10	Drainage Structures	2	EA	\$100,000	\$200,000			
	Stormwater Management Facility (Including							
11	Cross Culvert)	5	EA	\$15,000	\$75,000			
12	Landscaping	50	LS	\$200	\$10,000			
13	Fencing	40,800	LF	\$15	\$612,000			
14	Road Striping	45,900	LF	\$3	\$137,700			
15	Signage	10	EA	\$350	\$3,500			
Subtotal					\$10,349,400			
Contingency – 30 Percent					\$3,104,820			
Total					\$13,454,220			

Unit: LS – Lump Sum, AC – Acre, CY – Cubic Yard, TN – Ton, EA – Each, LF – Lineal Feet

	TABLE 9-2							
SNIVELY ROAD ALTERNATIVE ALIGNMENT OPINION OF ESTIMATED CONSTRUCTION COSTS								
Item	Description	Quantity	Unit	Unit price	Total cost			
1	Mobilization / Demobilization	1	LS	\$500,000	\$500,000			
2	Clear and Grub including Tree Removal	70	AC	\$3,500	\$175,000			
3	Temporary Erosion Control	1	LS	\$50,000	\$50,000			
4	Temporary Traffic Control	1	LS	\$10,000	\$10,000			
5	Grading	500,000	CY	\$5	\$2,500,000			
6	Sawcut	100	LF	\$2	\$200			
7	Aggregate	86,400	TN	\$30	\$2,592,000			
8	Asphalt	24,000	TN	\$90	\$2,160,000			
9	Undercrossing Structures (12'x12' Box Culvert)	0	EA	\$100,000	\$0			
10	Drainage Structures	3	EA	\$100,000	\$300,000			
11	Stormwater Management Facility (Including Cross Culvert)	6	EA	\$15,000	\$90,000			
12	Landscaping	50	LS	\$200	\$10,000			
13	Fencing	48,000	LF	\$15	\$720,000			
14	Road Striping	54,000	LF	\$3	\$162,000			
15	Signage	10	EA	\$350	\$3,500			
Subtotal					\$9,272,700			
Contingency – 30 Percent					\$2,781,810			
Total					\$12,054,510			

Unit: LS – Lump Sum, AC – Acre, CY – Cubic Yard, TN – Ton, EA – Each, LF – Lineal Feet

10.0 CONCEPT DESIGNS & EVALUATION MATRIX

The Riverview Ranch Road and Snively Road Concept Design Alignments were evaluated with respect to the effects they may have when compared to each other for 14 categories identified in *Table 10-1, Evaluation Matrix*. As an example, for the *County, State & Federal Permit Requirements* category, one alignment may result in greater permitting requirements than the other or, for the *Construction Cost Opinion* category, one alignment will have a much higher cost effect. The determination of the effect is based on the level or magnitude the effect may have on the physical, social, or economic conditions within the area directly or indirectly affected by the initial construction and then the operation, or function of the roadway. Some categories lend themselves to scientific or mathematical analysis, and therefore to the quantification of the effect. For other categories the effect is more qualitative or are entirely dependent on the immediate setting, whereby a hard-and-fast threshold is not generally feasible. This can be further complicated when the evaluation is subjective, often based on a person's perception or definition of what could be significant or not.

The 14 Categories identified for evaluation in no order of priority are:

- Tehama County Land Development and Engineering Design Standards Compliance
- Stormwater Management Erosion Transport & Sediment Control
- Utility Provider Coordination
- Potential Significant Environmental Impacts
- Traffic & Noise Effects
- Agricultural Operation Effects
- Fire & Law Enforcement Protection
- Fire, Law Enforcement & Medical Response Times
- County, State & Federal Permit Requirements
- Right-of-way, Easement Needs, Acquisition Cost Opinion
- Construction Cost Opinion
- Risk Associated Cost Opinion
- County Department's Input
- Property Owners & Residents Input

The above categories were evaluated based on this report and provided in *Table 10-1, Evaluation Matrix*.

The categories were evaluated and assigned a point score of 1 to 4 (whereby 1 has the minimal, if any effect and 4 is substantially significant) based on the following four levels of effect:

- A <u>minor effect</u> is one whereby the effect of the roadway for either construction and operation, or function will be minimal, if any. (Score of 1)
- An <u>average effect</u> is one whereby the roadway will have a general effect but can be more
 or less tolerated and where over time, the effect is eventually considered minor, or not
 at all. (Score of 2)

- A <u>significant effect</u> results in a potentially adverse change in any of the physical, social, or economic conditions within the area affected by the roadway for an initial period during construction and then operation, however the effect could be eventually tolerated.
 Measures could also be implemented that would assist to reduce the effect. (Score of 3)
- A <u>substantial significant effect</u> results in a major significant adverse change in any of the physical, social, or economic conditions within the area affected by the roadway essentially changing the "quality of life" in the area. The effect could be initially disruptive during construction and then ongoing due to the roadway operation. The effect would be difficult to minimize even after the implementation of measures to reduce it to an average or minor effect. (Score of 4)

TABLE 10-1 LAKE CALIFORNIA SECONDARY ACCESS ALTERNATIVE ALIGNMENTS EVALUATION MATRIX						
		Points				
ld.	Category	Riverview Ranch Rd.	Snively Road			
1.	Tehama County Land Development and Engineering Design Standards Compliance	2	2			
2.	Stormwater Management – Erosion Transport & Sediment Control	3	1			
3.	Utility Provider Coordination	3	1			
4.	Potential Significant Environmental Impacts	4	1			
5.	Traffic & Noise Effects	4	1			
6.	Agricultural Operation Effects	2	3			
7.	Fire & Law Enforcement Protection	3	2			
8.	Fire, Law Enforcement & Medical Response Times	3	1			
9.	County, State & Federal Permit Requirements	4	1			
10.	Right-of-way, Easement Needs, Acquisition Cost Opinion	4	2			
11.	Construction Cost Opinion	4	2			
12.	Risk Associated Cost Opinion	4	2			
13.	County Department's Input	0	0			
14.	Property Owners & Residents Input	4	2			
	Total	44	21			

11.0 PUBLIC OUTREACH

As previously noted, any successful public or private infrastructure project requires strong public outreach, education and communication during the general concept planning and concept design, and acquisition and construction funding phases. Efforts have been made to inform the LCPOA members, property owners directly and indirectly affected by the Alternative Alignments, and the general public regarding the proposed efforts being undertaken to prepare this report.

Efforts by the LCPOA to directly contact Mr. Michael Smith, representative for Wild Thyme Ranch, LLC. began in December 2017 via an email from Diaz Associates. A letter was provided along with aerial photographs and USGS topographic exhibits showing the location of the then Snively Road Alignment Location to which Mr. Smith never responded (refer to *Appendix D, Wild Thyme Ranch Secondary Access Road Letter*).

On June 26, 2019 certified letters were sent to 17 Riverview Ranch Road property owners affected by the Riverview Ranch Road Alignment. The letters were an invitation to the property owners to attend a July 8, 2019 Public Outreach Workshop regarding the Riverview Ranch Road Alignment. The primary purpose of the workshop was to present preliminary conceptual alignments of the two alternatives and to obtain property owner's input. Three letters were returned as "Not Deliverable as Addressed", one letter was returned as "Unclaimed", and the letter to the Wild Thyme Ranch was returned as "Unclaimed". All the letters were also noted as "As Unable to Forward."

The workshop was held at the Tehama County Administrative Office at 727 Oak Street in Red Bluff beginning at 5:30 PM. Seven property owners representing four families attended. A questionnaire was provided to obtain written input regarding the two alternative alignments. None were ever submitted. Telephone discussions were held with two other Riverview Ranch homeowners one of who no longer owned the parcel. Subsequently, on August 5, 2019, Mr. Craig Smith, President of the Riverview Ranch Road Homeowners Association provided an e-mail expressing that the majority of the members were "not in favor of access from Lake California to Riverview Ranch Road" (refer to *Appendix N, Public Workshops Information*.

On July 9, 2019, a Public Outreach Workshop was held for members of the LCPOA beginning at 5:30 PM at the Lake California Lake Club. Notifications were provided by the LCPOA in the July newsletter and posted on the July Calendar of Events. The Workshop was noticed as a "Town Hall Meeting." In addition to the six Board of Directors and the General Manager, 39 homeowners attended the meeting representing 32 residences. Four questionnaires were submitted. Responses identified the Snively Road Alignment as the preferable choice since it is closest to I-5 and the nearest major hospital; has two I-5 interchange access options; and, has fewer property owners (three) to deal with for land acquisition.

On August 15, 2019, a telephone conversation was held between Mr. Rod Rodriguez III of BR Enterprises and Mr. Diaz regarding the potential acquisition of a portion of his land for the Snively Road Alignment. On August 19, 2019, Mr. Rodriguez was provided via email what is referenced in this report as the following:

- Figure ES-1 Lake California Secondary Access Collector Road Alternative Alignments
- Appendix C September 12, 2016 Technical Memorandum Lake California Tract 1017 and Technical Memorandum Lake California Tract 1017 – Sunset Hills Estates Alternative 5
- Appendix D December 12, 2017 Diaz Associates Wild Thyme Ranch Secondary Access Road Letter
- Appendix E February 21, 2018 Tract 1017 / Lake California Property Owners Association Letter
- Appendix F March 20, 2018 Board of Supervisors Approval and Authorization of a Letter for the Chairman's Signature to Mr. Michael Smith, Wild Thyme Ranch, LLC
- Appendix G June 19, 2018 Board of Supervisors Wild Thyme Ranch Secondary Access Road 2nd Request Letter
- Appendix H September 21, 2018 Diaz Associates Memorandum to Mr. Bill Goodwin, Lake California Tract 1017 Secondary Access
- Appendix I September 25, 2018 Board of Supervisors Lake California Second Access Study Session

On August 26, 2019, Mr. J. Randall Memeo, an attorney representing BR Enterprises, submitted a letter to Mr. Diaz noting that his client "is not interested in providing an additional access point through the middle of its project (Sunset Hills) or relocating the current easement to the south (the Snively Road Alignment) and will vigorously defend any efforts brought in that regard." However, as previously discussed, after further consideration, Mr. Memeo identified in a November 8, 2019 letter that his client, BR Enterprises "acknowledge that access through the existing Ramelli easement with security fencing would eliminate my client's concerns. If the existing easement isn't wide enough, my client would be amenable to extending the width as needed." The Ramelli easement provides access to Snively Road (refer to Appendix O – August 29 and November 8, 2019 BR Enterprises Letters).

Whereas, Wild Thyme Ranch has expressed an unwillingness to make their land available for acquisition, the LCPOA desires to continue the dialogue with both parties to determine if there is the possibility of a solution including some form of relocation of the roadway to a mutually agreeable suitable location.

When the report is completed, it will be made available to the Riverview Ranch Road Homeowners Association, LCPOA Members, property owners affected by the Alternative Alignments, and any other interested persons or groups. The report will be presented to LCPOA Members at either a scheduled Board Meeting, or at a special "Town Hall Meeting." The eventual alignment to pursue will be determined after review and consideration of this report by the Tehama County Board of Supervisors. A public hearing is anticipated to be held to obtain input from the public, property owners directly and indirectly affected by the alignments, County Departments, public and private agencies and groups, and other interested persons.