

APPENDIX A  
*VIA Memo*



## TECHNICAL MEMORANDUM

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**To:** Maggie Ritter, District 3 Associate Environmental Planner  
**From:** Brian Grattidge, Dudek Project Manager  
Christine Fukasawa, Dudek  
**Subject:** **Visual Impact Assessment for the SR 99/Eaton Road Interchange Improvements Project**  
(Project #HSIPL-5037[035])  
**Date:** 12/15/18  
**cc:** Heather Anderson, P.E., GHD  
Tracy R. Bettencourt, MPA, AICP  
**Attachments:** VIA Checklist

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### Introduction

The purpose of this technical memorandum is to identify potential visual impacts related to implementation of the proposed State Route 99 (SR 99)/Eaton Road Interchange Improvements Project (proposed project) in the City of Chico, in Butte County.

### Setting

The proposed project is located in northwest Chico. The City of Chico (City) is an incorporated city in Butte County, California. Hicks Lane is a north/south collector extended from Eaton Road to Keefer Road. The two existing intersections of SR 99 northbound (NB) Ramps/Eaton Road and Eaton Road/Hicks Lane are closely spaced. A large drainage channel is located directly adjacent to the SR 99 NB on-ramp that is in the City right of way (ROW). The closest sensitive visual receptors are single-family homes along the north side of Eaton Road, west of Bridle Lane.

### Proposed Project

The proposed project would address safety concerns at two intersections: SR 99 NB Ramps/Eaton Road and Eaton Road/Hicks Lane. Two alternatives are being studied, the first is the *No-Build Alternative* which assumes existing lane geometrics and intersection control. The second alternative is the *Roundabout Alternative* which consists of a yield-control roundabout with modified lane geometrics. Other alternatives including a *Diverging Diamond Interchange Alternative* and a *Traffic Signal Alternative* were considered but were ultimately rejected.

### No-Build Alternative

Under the *No-Build Alternative*, the existing lane geometrics and intersection controls would remain in place. There would be no change to the current visual conditions of the proposed project area. No further discussion is necessary.

## Roundabout Alternative

As part of the *Roundabout Alternative* the City proposes to convert the two intersections to a five (5)-leg roundabout. Although the two intersections would be combined, the local circulation and access would remain unchanged. No structures other than the roadways are proposed and as the project is site is relatively flat, grading would be minimal. In addition, the parking lot located at the southeast corner may be reconfigured, reducing the overall number of parking stalls. The number of traffic signs in the proposed project area would be reduced and the new approaches would be re-striped and identify the new pedestrian/bicycle paths. Utility vaults would be adjusted to match the final pavement surface elevation and other existing utilities (overhead) would be protected in place. Replacement landscaping would be installed in areas affected by roadway construction.

## Impacts

There are no officially designated state scenic highways in Butte County. <sup>1</sup> Furthermore, SR 99 and Eaton Road are not identified in the 2011 City of Chico's General Plan, Community Design Element (amended in 2017) as being a scenic roadway and no scenic vistas are identified.<sup>2</sup> As such, the proposed project would not adversely impact a designated scenic highway or resource. The proposed project would be a transportation improvement to an already disturbed, ruderal area adjacent to a freeway on- and off-ramp, that is being used for similar purposes. The proposed project is not anticipated to have a significant effect on the visual character or quality of the area. As described in the attached Visual Impact Assessment (VIA) questionnaire, this brief memorandum is the appropriate level of review for visual impacts. The attached questionnaire (dated 7/26/2018) addresses the anticipated changes to the project area. The proposed improvements to construct a multi-lane roundabout, heights and locations of potential retaining walls, improved signage, and other amenities are similar to or an improvement compared to the current transportation-related uses in the project area. The proposed project would complement the visual character and quality desired by the community and adverse visual impacts are not anticipated.

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<sup>1</sup>[http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/), Accessed 12/18/18.

<sup>2</sup>[http://www.chico.ca.us/document\\_library/general\\_plan/documents/5.CommunityDesignElement.pdf](http://www.chico.ca.us/document_library/general_plan/documents/5.CommunityDesignElement.pdf), City of Chico's General Plan, Community Design Element, Accessed 12/18/18.

## Questionnaire to Determine Visual Impact Assessment (VIA) Level

Use the following questions and subsequent score as a guide to help determine the appropriate level of VIA documentation. This questionnaire assists the VIA preparer (i.e. Landscape Architect) in estimating the probable visual impacts of a proposed project on the environment and in understanding the degree and breadth of the possible visual issues. The goal is to develop a suitable document strategy that is thorough, concise and defensible.

Enter the project name and consider each of the ten questions below. Select the response that most closely applies to the proposed project and corresponding number on the right side of the table. Points are automatically computed at the bottom of the table and the total score should be matched to one of the five groups of scores at the end of the questionnaire that include recommended levels of VIA study and associated annotated outlines (i.e., minor, moderate, advanced/complex).

This scoring system should be used as a preliminary guide and should not be used as a substitute for objective analysis on the part of the preparer. Although the total score may recommend a certain level of VIA document, circumstances associated with any one of the ten question-areas may indicate the need to elevate the VIA to a greater level of detail. For projects done by others on the State Highway System, the District Landscape Architect should be consulted when scoping the VIA level and provide concurrence on the level of analysis used.

The Standard Environmental Reference, Environmental Handbook, Volume I: Chapter 27-Visual & Aesthetics Review lists preparer qualifications for conducting the visual impact assessment process. Landscape Architects receive formal training in the area of visual resource management and can appropriately determine which VIA level is appropriate.

### Preparer Qualifications:

"Scenic Resource Evaluations and VIAs are performed under the direction of licensed Landscape Architects. Landscape Architects receive formal training in the area of visual resource management with a curriculum that emphasizes environmental design, human factors, and context sensitive solutions. When recommending specific visual mitigation measures, Landscape Architects can appropriately weigh the benefits of these different measures and consider construction feasibility and maintainability."

## Calculate VIA Level Score

<b>PROJECT NAME:</b> Eaton Road Interchange Improvement	
<b>PROJECT IDENTIFICATION #:</b> EA # 03-1H590	
<b>PREPARER NAME:</b> Brian Grattidge	
<b>FOR PROJECTS ON STATE HIGHWAY SYSTEM ONLY, NAME OF CALTRANS DISTRICT LANDSCAPE ARCHITECT (DLA) PROVIDING VIA QUESTIONNAIRE SCORE CONCURRENCE- IF DIFFERENT THAN ABOVE:</b> For Projects on State Highway System Only, Enter DLA Name	
<b>CHANGE TO VISUAL ENVIRONMENT</b>	
<p><b>1. Will the project result in a noticeable change in the physical characteristics of the existing environment?</b> Consider all project components and construction impacts - both permanent and temporary, including landform changes, structures, noise barriers, vegetation removal, railing, signage, and contractor activities.</p>	Low Level of Change (1 point) ▼
<p><b>2. Will the project complement or contrast with the visual character desired by the community?</b> Evaluate the scale and extent of the project features compared to the surrounding scale of the community. Is the project likely to give an urban appearance to an existing rural or suburban community? Do you anticipate that the change will be viewed by the public as positive or negative? Research planning documents, or talk with local planners and community representatives to understand the type of visual environment local residents envision for their community.</p>	High Compatibility (1 point) ▼
<p><b>3. What level of local concern is there for the types of project features (e.g., bridge structures, large excavations, sound barriers, or median planting removal) and construction impacts that are proposed?</b> Certain project improvements can be of special interest to local citizens, causing a heightened level of public concern, and requiring a more focused visual analysis.</p>	Low Concern (1 point) ▼
<p><b>4. Will the project require redesign or realignment to minimize adverse change or will mitigation, such as landscape or architectural treatment, likely be necessary?</b> Consider the type of changes caused by the project, i.e., can undesirable views be screened or will desirable views be permanently obscured so a redesign should be considered?</p>	No Mitigation Likely (0 points) ▼
<p><b>5. Will this project, when seen collectively with other projects, result in an aggregate adverse change (cumulative impacts) in overall visual quality or character?</b> Identify any projects (both Caltrans and local) in the area that have been constructed in recent years and those currently planned for future construction. The window of time and the extent of area applicable to possible cumulative impacts should be based on a reasonable anticipation of the viewing public's perception.</p>	Cumulative Impacts Likely to Occur Within 6-10 Years (2 points) ▼
<b>VIEWER SENSITIVITY</b>	
<p><b>1. What is the potential that the project proposal will be controversial within the community, or opposed by any organized group?</b> This can be researched initially by talking with Caltrans and local agency management and staff familiar with the affected community's sentiments as evidenced by past projects and/or current information.</p>	Low Potential (1 point) ▼
<p><b>2. How sensitive are potential viewer-groups likely to be regarding visible changes proposed by the project?</b> Consider among other factors the number of viewers within the group, probable viewer expectations, activities, viewing duration, and orientation. The expected viewer sensitivity level may be scoped by applying professional judgment, and by soliciting information from other Caltrans staff, local agencies and community representatives familiar with the affected community's sentiments and demonstrated concerns.</p>	Low Sensitivity (1 point) ▼
<p><b>3. To what degree does the project's aesthetic approach appear to be consistent with applicable laws, ordinances, regulations, policies or standards?</b> Although the State is not always required to comply with local planning ordinances, these documents are critical in understanding the importance that communities place on aesthetic issues. The Caltrans Environmental Planning branch may have copies of the planning documents that pertain to the project. If not, this information can be obtained by contacting the local planning department. Also, many local and state planning documents can be found online at the <a href="#">California Land Use Planning Network</a>.</p>	High Compatibility (1 point) ▼
<p><b>4. Are permits going to be required by outside regulatory agencies (i.e., Federal, State, or local)?</b> Permit requirements can have an unintended consequence on the visual environment. Anticipated permits, as well as specific permit requirements - which are defined by the permitted, may be determined by talking with the project Environmental Planner and Project Engineer. Note: coordinate with the Caltrans representative responsible for obtaining the permit prior to communicating directly with any permitting agency.</p>	Maybe (2 points) ▼
<p><b>5. Will the project sponsor or public benefit from a more detailed visual analysis in order to help reach consensus on a course of action to address potential visual impacts?</b> Consider the proposed project features, possible visual impacts, and probable mitigation recommendations.</p>	No (1 point) ▼
<input type="button" value="Calculate Total"/>	
<p><a href="#">It is recommended that you print a copy of these calculations for the project file.</a></p>	
<b>PROJECT SCORE: 11</b>	

## Select An Outline Based Upon Project Score

The total score will indicate the recommended VIA level for the project. In addition to considering circumstances relating to any one of the ten questions-areas that would justify elevating the VIA level, also consider any other project factors that would have an effect on level selection.

**SCORE 6-9**

No noticeable visual changes to the environment are proposed and no further analysis is required. Print out a copy of this completed questionnaire for your project file or Preliminary Environmental Study (PES).

**SCORE 10-14**

Negligible visual changes to the environment are proposed. A brief [Memorandum](#) (see sample) addressing visual issues providing a rationale why a technical study is not required.

**SCORE 15-19**

Noticeable visual changes to the environment are proposed. An abbreviated VIA is appropriate in this case. The assessment would briefly describe project features, impacts and any avoidance and minimization measures. Visual simulations would be optional. Go to the [Directions](#) for using and accessing the Minor VIA Annotated Outline.

**SCORE 20-24**

Noticeable visual changes to the environment are proposed. A fully developed VIA is appropriate. This technical study will likely receive public review. Go to the [Directions](#) for using and accessing the Moderate VIA Annotated Outline.

**SCORE 25-30**

Noticeable visual changes to the environment are proposed. A fully developed VIA is appropriate that includes photo simulations. It is appropriate to alert the Project Development Team to the potential for highly adverse impacts and to consider project alternatives to avoid those impacts. Go to the [Directions](#) for using and accessing the Advanced/Complex VIA Annotated Outline.

APPENDIX B  
*Air Quality Data*





**SR-99 and Eaton Road Intersection Project  
 Butte County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.30	Acre	1.30	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	71
<b>Climate Zone</b>	3	<b>Operational Year</b>	2021		
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - SR-99/Eaton Road Intersection Project BCAQMD.

Land Use - Estimated area based on area of disturbance.

Construction Phase - Assumed phasing for traffic circle construction.

Off-road Equipment - Modified

Trips and VMT - Modified vehicle trips.

On-road Fugitive Dust - Assumed 99% roadways paved.

Grading - Assumed no import or export of soil.

Construction Off-road Equipment Mitigation - Assumed watering of exposed area twice daily and vehicle speeds of 15 mph.

## SR-99 and Eaton Road Intersection Project - Butte County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	4.00	100.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	10/4/2019	8/18/2020
tblConstructionPhase	PhaseEndDate	10/24/2019	9/22/2020
tblConstructionPhase	PhaseStartDate	10/1/2019	4/1/2020
tblConstructionPhase	PhaseStartDate	10/11/2019	8/19/2020
tblGrading	AcresOfGrading	37.50	1.50
tblLandUse	LandUseSquareFeet	56,628.00	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1192	1.2401	0.6829	1.3900e-003	0.4049	0.0579	0.4628	0.1438	0.0533	0.1971	0.0000	122.5776	122.5776	0.0358	0.0000	123.4725
Maximum	0.1192	1.2401	0.6829	1.3900e-003	0.4049	0.0579	0.4628	0.1438	0.0533	0.1971	0.0000	122.5776	122.5776	0.0358	0.0000	123.4725

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1192	1.2401	0.6829	1.3900e-003	0.1460	0.0579	0.2039	0.0621	0.0533	0.1154	0.0000	122.5774	122.5774	0.0358	0.0000	123.4724
Maximum	0.1192	1.2401	0.6829	1.3900e-003	0.1460	0.0579	0.2039	0.0621	0.0533	0.1154	0.0000	122.5774	122.5774	0.0358	0.0000	123.4724

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	63.94	0.00	55.94	56.83	0.00	41.46	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/1/2020	8/18/2020	5	100	
2	Paving	Paving	8/19/2020	9/22/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 1.3**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Grading	Graders	1	8.00	187	0.41
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	16.00	2.00	20.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	2.00	10.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

### 3.2 Grading - 2020

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2266	0.0000	0.2266	0.1242	0.0000	0.1242	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0987	1.0922	0.5060	1.0400e-003		0.0512	0.0512		0.0471	0.0471	0.0000	91.8477	91.8477	0.0297	0.0000	92.5904
<b>Total</b>	<b>0.0987</b>	<b>1.0922</b>	<b>0.5060</b>	<b>1.0400e-003</b>	<b>0.2266</b>	<b>0.0512</b>	<b>0.2778</b>	<b>0.1242</b>	<b>0.0471</b>	<b>0.1713</b>	<b>0.0000</b>	<b>91.8477</b>	<b>91.8477</b>	<b>0.0297</b>	<b>0.0000</b>	<b>92.5904</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.8600e-003	3.9000e-004	1.0000e-005	2.5400e-003	1.0000e-005	2.5500e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7763	0.7763	6.0000e-005	0.0000	0.7778
Vendor	5.4000e-004	0.0153	3.0600e-003	4.0000e-005	0.0134	1.0000e-004	0.0135	1.5200e-003	9.0000e-005	1.6100e-003	0.0000	3.6821	3.6821	3.1000e-004	0.0000	3.6899
Worker	4.6500e-003	4.1900e-003	0.0388	7.0000e-005	0.1262	6.0000e-005	0.1262	0.0138	6.0000e-005	0.0139	0.0000	6.6916	6.6916	3.2000e-004	0.0000	6.6996
<b>Total</b>	<b>5.2700e-003</b>	<b>0.0224</b>	<b>0.0423</b>	<b>1.2000e-004</b>	<b>0.1421</b>	<b>1.7000e-004</b>	<b>0.1423</b>	<b>0.0156</b>	<b>1.6000e-004</b>	<b>0.0158</b>	<b>0.0000</b>	<b>11.1500</b>	<b>11.1500</b>	<b>6.9000e-004</b>	<b>0.0000</b>	<b>11.1673</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1020	0.0000	0.1020	0.0559	0.0000	0.0559	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0987	1.0922	0.5060	1.0400e-003		0.0512	0.0512		0.0471	0.0471	0.0000	91.8476	91.8476	0.0297	0.0000	92.5903
<b>Total</b>	<b>0.0987</b>	<b>1.0922</b>	<b>0.5060</b>	<b>1.0400e-003</b>	<b>0.1020</b>	<b>0.0512</b>	<b>0.1531</b>	<b>0.0559</b>	<b>0.0471</b>	<b>0.1030</b>	<b>0.0000</b>	<b>91.8476</b>	<b>91.8476</b>	<b>0.0297</b>	<b>0.0000</b>	<b>92.5903</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.8600e-003	3.9000e-004	1.0000e-005	6.4000e-004	1.0000e-005	6.5000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	0.7763	0.7763	6.0000e-005	0.0000	0.7778
Vendor	5.4000e-004	0.0153	3.0600e-003	4.0000e-005	3.4300e-003	1.0000e-004	3.5300e-003	5.2000e-004	9.0000e-005	6.1000e-004	0.0000	3.6821	3.6821	3.1000e-004	0.0000	3.6899
Worker	4.6500e-003	4.1900e-003	0.0388	7.0000e-005	0.0310	6.0000e-005	0.0311	4.3000e-003	6.0000e-005	4.3600e-003	0.0000	6.6916	6.6916	3.2000e-004	0.0000	6.6996
<b>Total</b>	<b>5.2700e-003</b>	<b>0.0224</b>	<b>0.0423</b>	<b>1.2000e-004</b>	<b>0.0351</b>	<b>1.7000e-004</b>	<b>0.0353</b>	<b>4.9100e-003</b>	<b>1.6000e-004</b>	<b>5.0700e-003</b>	<b>0.0000</b>	<b>11.1500</b>	<b>11.1500</b>	<b>6.9000e-004</b>	<b>0.0000</b>	<b>11.1673</b>

SR-99 and Eaton Road Intersection Project - Butte County, Annual

**3.3 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.1188	0.1239	1.9000e-004		6.5500e-003	6.5500e-003		6.0400e-003	6.0400e-003	0.0000	16.5011	16.5011	5.2100e-003	0.0000	16.6314
Paving	2.1300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0140</b>	<b>0.1188</b>	<b>0.1239</b>	<b>1.9000e-004</b>		<b>6.5500e-003</b>	<b>6.5500e-003</b>		<b>6.0400e-003</b>	<b>6.0400e-003</b>	<b>0.0000</b>	<b>16.5011</b>	<b>16.5011</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>16.6314</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.7900e-003	2.4000e-004	1.0000e-005	1.2700e-003	1.0000e-005	1.2800e-003	1.4000e-004	1.0000e-005	1.5000e-004	0.0000	0.4852	0.4852	4.0000e-005	0.0000	0.4861
Vendor	1.3000e-004	3.8400e-003	7.7000e-004	1.0000e-005	3.3500e-003	2.0000e-005	3.3800e-003	3.8000e-004	2.0000e-005	4.0000e-004	0.0000	0.9205	0.9205	8.0000e-005	0.0000	0.9225
Worker	1.1600e-003	1.0500e-003	9.7000e-003	2.0000e-005	0.0315	2.0000e-005	0.0316	3.4500e-003	1.0000e-005	3.4600e-003	0.0000	1.6729	1.6729	8.0000e-005	0.0000	1.6749
<b>Total</b>	<b>1.3400e-003</b>	<b>6.6800e-003</b>	<b>0.0107</b>	<b>4.0000e-005</b>	<b>0.0362</b>	<b>5.0000e-005</b>	<b>0.0362</b>	<b>3.9700e-003</b>	<b>4.0000e-005</b>	<b>4.0100e-003</b>	<b>0.0000</b>	<b>3.0786</b>	<b>3.0786</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>3.0835</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.1188	0.1239	1.9000e-004		6.5500e-003	6.5500e-003		6.0400e-003	6.0400e-003	0.0000	16.5011	16.5011	5.2100e-003	0.0000	16.6314
Paving	2.1300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0140</b>	<b>0.1188</b>	<b>0.1239</b>	<b>1.9000e-004</b>		<b>6.5500e-003</b>	<b>6.5500e-003</b>		<b>6.0400e-003</b>	<b>6.0400e-003</b>	<b>0.0000</b>	<b>16.5011</b>	<b>16.5011</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>16.6314</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.7900e-003	2.4000e-004	1.0000e-005	3.3000e-004	1.0000e-005	3.3000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.4852	0.4852	4.0000e-005	0.0000	0.4861
Vendor	1.3000e-004	3.8400e-003	7.7000e-004	1.0000e-005	8.6000e-004	2.0000e-005	8.8000e-004	1.3000e-004	2.0000e-005	1.5000e-004	0.0000	0.9205	0.9205	8.0000e-005	0.0000	0.9225
Worker	1.1600e-003	1.0500e-003	9.7000e-003	2.0000e-005	7.7600e-003	2.0000e-005	7.7700e-003	1.0800e-003	1.0000e-005	1.0900e-003	0.0000	1.6729	1.6729	8.0000e-005	0.0000	1.6749
<b>Total</b>	<b>1.3400e-003</b>	<b>6.6800e-003</b>	<b>0.0107</b>	<b>4.0000e-005</b>	<b>8.9500e-003</b>	<b>5.0000e-005</b>	<b>8.9800e-003</b>	<b>1.2600e-003</b>	<b>4.0000e-005</b>	<b>1.3000e-003</b>	<b>0.0000</b>	<b>3.0786</b>	<b>3.0786</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>3.0835</b>



**SR-99 and Eaton Road Intersection Project  
 Butte County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.30	Acre	1.30	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	71
<b>Climate Zone</b>	3			<b>Operational Year</b>	2021
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - SR-99/Eaton Road Intersection Project BCAQMD.

Land Use - Estimated area based on area of disturbance.

Construction Phase - Assumed phasing for traffic circle construction.

Off-road Equipment - Modified

Trips and VMT - Modified vehicle trips.

On-road Fugitive Dust - Assumed 99% roadways paved.

Grading - Assumed no import or export of soil.

Construction Off-road Equipment Mitigation - Assumed watering of exposed area twice daily and vehicle speeds of 15 mph.

## SR-99 and Eaton Road Intersection Project - Butte County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	4.00	100.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	10/4/2019	8/18/2020
tblConstructionPhase	PhaseEndDate	10/24/2019	9/22/2020
tblConstructionPhase	PhaseStartDate	10/1/2019	4/1/2020
tblConstructionPhase	PhaseStartDate	10/11/2019	8/19/2020
tblGrading	AcresOfGrading	37.50	1.50
tblLandUse	LandUseSquareFeet	56,628.00	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00



### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/1/2020	8/18/2020	5	100	
2	Paving	Paving	8/19/2020	9/22/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 1.3**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0**

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Grading	Graders	1	8.00	187	0.41
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	16.00	2.00	20.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	2.00	10.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

### 3.2 Grading - 2020

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5325	0.0000	4.5325	2.4844	0.0000	2.4844			0.0000			0.0000
Off-Road	1.9730	21.8441	10.1192	0.0209		1.0230	1.0230		0.9412	0.9412		2,024.896 1	2,024.896 1	0.6549		2,041.268 4
<b>Total</b>	<b>1.9730</b>	<b>21.8441</b>	<b>10.1192</b>	<b>0.0209</b>	<b>4.5325</b>	<b>1.0230</b>	<b>5.5555</b>	<b>2.4844</b>	<b>0.9412</b>	<b>3.4256</b>		<b>2,024.896 1</b>	<b>2,024.896 1</b>	<b>0.6549</b>		<b>2,041.268 4</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5900e-003	0.0556	7.2800e-003	1.6000e-004	0.0623	2.2000e-004	0.0626	6.8300e-003	2.1000e-004	7.0400e-003		17.2863	17.2863	1.2100e-003		17.3167
Vendor	0.0106	0.2991	0.0576	7.8000e-004	0.3290	1.9300e-003	0.3310	0.0365	1.8500e-003	0.0383		82.0576	82.0576	6.4600e-003		82.2191
Worker	0.1081	0.0764	0.9237	1.6500e-003	3.1040	1.2100e-003	3.1052	0.3348	1.1100e-003	0.3359		163.8007	163.8007	8.0900e-003		164.0030
<b>Total</b>	<b>0.1204</b>	<b>0.4311</b>	<b>0.9885</b>	<b>2.5900e-003</b>	<b>3.4954</b>	<b>3.3600e-003</b>	<b>3.4988</b>	<b>0.3781</b>	<b>3.1700e-003</b>	<b>0.3813</b>		<b>263.1446</b>	<b>263.1446</b>	<b>0.0158</b>		<b>263.5387</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0396	0.0000	2.0396	1.1180	0.0000	1.1180			0.0000			0.0000
Off-Road	1.9730	21.8441	10.1192	0.0209		1.0230	1.0230		0.9412	0.9412	0.0000	2,024.896 1	2,024.896 1	0.6549		2,041.268 4
<b>Total</b>	<b>1.9730</b>	<b>21.8441</b>	<b>10.1192</b>	<b>0.0209</b>	<b>2.0396</b>	<b>1.0230</b>	<b>3.0626</b>	<b>1.1180</b>	<b>0.9412</b>	<b>2.0591</b>	<b>0.0000</b>	<b>2,024.896 1</b>	<b>2,024.896 1</b>	<b>0.6549</b>		<b>2,041.268 4</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5900e-003	0.0556	7.2800e-003	1.6000e-004	0.0153	2.2000e-004	0.0155	2.1300e-003	2.1000e-004	2.3400e-003		17.2863	17.2863	1.2100e-003		17.3167
Vendor	0.0106	0.2991	0.0576	7.8000e-004	0.0813	1.9300e-003	0.0832	0.0118	1.8500e-003	0.0136		82.0576	82.0576	6.4600e-003		82.2191
Worker	0.1081	0.0764	0.9237	1.6500e-003	0.7418	1.2100e-003	0.7430	0.0991	1.1100e-003	0.1002		163.8007	163.8007	8.0900e-003		164.0030
<b>Total</b>	<b>0.1204</b>	<b>0.4311</b>	<b>0.9885</b>	<b>2.5900e-003</b>	<b>0.8384</b>	<b>3.3600e-003</b>	<b>0.8417</b>	<b>0.1130</b>	<b>3.1700e-003</b>	<b>0.1161</b>		<b>263.1446</b>	<b>263.1446</b>	<b>0.0158</b>		<b>263.5387</b>

### 3.3 Paving - 2020

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9465	9.5061	9.9142	0.0152		0.5238	0.5238		0.4831	0.4831		1,455.1515	1,455.1515	0.4595		1,466.6398
Paving	0.1703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1168</b>	<b>9.5061</b>	<b>9.9142</b>	<b>0.0152</b>		<b>0.5238</b>	<b>0.5238</b>		<b>0.4831</b>	<b>0.4831</b>		<b>1,455.1515</b>	<b>1,455.1515</b>	<b>0.4595</b>		<b>1,466.6398</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.9700e-003	0.1391	0.0182	4.1000e-004	0.1251	5.4000e-004	0.1257	0.0138	5.2000e-004	0.0143		43.2158	43.2158	3.0400e-003		43.2917
Vendor	0.0106	0.2991	0.0576	7.8000e-004	0.3290	1.9300e-003	0.3310	0.0365	1.8500e-003	0.0383		82.0576	82.0576	6.4600e-003		82.2191
Worker	0.1081	0.0764	0.9237	1.6500e-003	3.1040	1.2100e-003	3.1052	0.3348	1.1100e-003	0.3359		163.8007	163.8007	8.0900e-003		164.0030
<b>Total</b>	<b>0.1227</b>	<b>0.5146</b>	<b>0.9994</b>	<b>2.8400e-003</b>	<b>3.5582</b>	<b>3.6800e-003</b>	<b>3.5619</b>	<b>0.3851</b>	<b>3.4800e-003</b>	<b>0.3886</b>		<b>289.0741</b>	<b>289.0741</b>	<b>0.0176</b>		<b>289.5137</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9465	9.5061	9.9142	0.0152		0.5238	0.5238		0.4831	0.4831	0.0000	1,455.1515	1,455.1515	0.4595		1,466.6398
Paving	0.1703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1168</b>	<b>9.5061</b>	<b>9.9142</b>	<b>0.0152</b>		<b>0.5238</b>	<b>0.5238</b>		<b>0.4831</b>	<b>0.4831</b>	<b>0.0000</b>	<b>1,455.1515</b>	<b>1,455.1515</b>	<b>0.4595</b>		<b>1,466.6398</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.9700e-003	0.1391	0.0182	4.1000e-004	0.0309	5.4000e-004	0.0315	4.4100e-003	5.2000e-004	4.9400e-003		43.2158	43.2158	3.0400e-003		43.2917
Vendor	0.0106	0.2991	0.0576	7.8000e-004	0.0813	1.9300e-003	0.0832	0.0118	1.8500e-003	0.0136		82.0576	82.0576	6.4600e-003		82.2191
Worker	0.1081	0.0764	0.9237	1.6500e-003	0.7418	1.2100e-003	0.7430	0.0991	1.1100e-003	0.1002		163.8007	163.8007	8.0900e-003		164.0030
<b>Total</b>	<b>0.1227</b>	<b>0.5146</b>	<b>0.9994</b>	<b>2.8400e-003</b>	<b>0.8541</b>	<b>3.6800e-003</b>	<b>0.8577</b>	<b>0.1152</b>	<b>3.4800e-003</b>	<b>0.1187</b>		<b>289.0741</b>	<b>289.0741</b>	<b>0.0176</b>		<b>289.5137</b>



**SR-99 and Eaton Road Intersection Project**  
**Butte County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.30	Acre	1.30	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	71
<b>Climate Zone</b>	3			<b>Operational Year</b>	2021
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - SR-99/Eaton Road Intersection Project BCAQMD.

Land Use - Estimated area based on area of disturbance.

Construction Phase - Assumed phasing for traffic circle construction.

Off-road Equipment - Modified

Trips and VMT - Modified vehicle trips.

On-road Fugitive Dust - Assumed 99% roadways paved.

Grading - Assumed no import or export of soil.

Construction Off-road Equipment Mitigation - Assumed watering of exposed area twice daily and vehicle speeds of 15 mph.

## SR-99 and Eaton Road Intersection Project - Butte County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	4.00	100.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	10/4/2019	8/18/2020
tblConstructionPhase	PhaseEndDate	10/24/2019	9/22/2020
tblConstructionPhase	PhaseStartDate	10/1/2019	4/1/2020
tblConstructionPhase	PhaseStartDate	10/11/2019	8/19/2020
tblGrading	AcresOfGrading	37.50	1.50
tblLandUse	LandUseSquareFeet	56,628.00	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00



### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/1/2020	8/18/2020	5	100	
2	Paving	Paving	8/19/2020	9/22/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.3

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Grading	Graders	1	8.00	187	0.41
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	16.00	2.00	20.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	2.00	10.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

### 3.2 Grading - 2020

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5325	0.0000	4.5325	2.4844	0.0000	2.4844			0.0000			0.0000
Off-Road	1.9730	21.8441	10.1192	0.0209		1.0230	1.0230		0.9412	0.9412		2,024.896 1	2,024.896 1	0.6549		2,041.268 4
<b>Total</b>	<b>1.9730</b>	<b>21.8441</b>	<b>10.1192</b>	<b>0.0209</b>	<b>4.5325</b>	<b>1.0230</b>	<b>5.5555</b>	<b>2.4844</b>	<b>0.9412</b>	<b>3.4256</b>		<b>2,024.896 1</b>	<b>2,024.896 1</b>	<b>0.6549</b>		<b>2,041.268 4</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6500e-003	0.0575	8.3700e-003	1.6000e-004	0.0623	2.2000e-004	0.0626	6.8300e-003	2.1000e-004	7.0400e-003		16.8789	16.8789	1.3700e-003		16.9133
Vendor	0.0111	0.3079	0.0664	7.6000e-004	0.3290	1.9700e-003	0.3310	0.0365	1.8800e-003	0.0384		79.9621	79.9621	7.2900e-003		80.1443
Worker	0.0985	0.0945	0.7777	1.4400e-003	3.1040	1.2100e-003	3.1052	0.3348	1.1100e-003	0.3359		142.7765	142.7765	6.9800e-003		142.9509
<b>Total</b>	<b>0.1112</b>	<b>0.4599</b>	<b>0.8526</b>	<b>2.3600e-003</b>	<b>3.4954</b>	<b>3.4000e-003</b>	<b>3.4988</b>	<b>0.3781</b>	<b>3.2000e-003</b>	<b>0.3813</b>		<b>239.6175</b>	<b>239.6175</b>	<b>0.0156</b>		<b>240.0084</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0396	0.0000	2.0396	1.1180	0.0000	1.1180			0.0000			0.0000
Off-Road	1.9730	21.8441	10.1192	0.0209		1.0230	1.0230		0.9412	0.9412	0.0000	2,024.896 1	2,024.896 1	0.6549		2,041.268 4
<b>Total</b>	<b>1.9730</b>	<b>21.8441</b>	<b>10.1192</b>	<b>0.0209</b>	<b>2.0396</b>	<b>1.0230</b>	<b>3.0626</b>	<b>1.1180</b>	<b>0.9412</b>	<b>2.0591</b>	<b>0.0000</b>	<b>2,024.896 1</b>	<b>2,024.896 1</b>	<b>0.6549</b>		<b>2,041.268 4</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6500e-003	0.0575	8.3700e-003	1.6000e-004	0.0153	2.2000e-004	0.0155	2.1300e-003	2.1000e-004	2.3400e-003		16.8789	16.8789	1.3700e-003		16.9133
Vendor	0.0111	0.3079	0.0664	7.6000e-004	0.0813	1.9700e-003	0.0833	0.0118	1.8800e-003	0.0136		79.9621	79.9621	7.2900e-003		80.1443
Worker	0.0985	0.0945	0.7777	1.4400e-003	0.7418	1.2100e-003	0.7430	0.0991	1.1100e-003	0.1002		142.7765	142.7765	6.9800e-003		142.9509
<b>Total</b>	<b>0.1112</b>	<b>0.4599</b>	<b>0.8526</b>	<b>2.3600e-003</b>	<b>0.8384</b>	<b>3.4000e-003</b>	<b>0.8418</b>	<b>0.1130</b>	<b>3.2000e-003</b>	<b>0.1162</b>		<b>239.6175</b>	<b>239.6175</b>	<b>0.0156</b>		<b>240.0084</b>

SR-99 and Eaton Road Intersection Project - Butte County, Winter

**3.3 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9465	9.5061	9.9142	0.0152		0.5238	0.5238		0.4831	0.4831		1,455.1515	1,455.1515	0.4595		1,466.6398
Paving	0.1703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1168</b>	<b>9.5061</b>	<b>9.9142</b>	<b>0.0152</b>		<b>0.5238</b>	<b>0.5238</b>		<b>0.4831</b>	<b>0.4831</b>		<b>1,455.1515</b>	<b>1,455.1515</b>	<b>0.4595</b>		<b>1,466.6398</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1300e-003	0.1438	0.0209	4.0000e-004	0.1251	5.6000e-004	0.1257	0.0138	5.4000e-004	0.0144		42.1973	42.1973	3.4400e-003		42.2832
Vendor	0.0111	0.3079	0.0664	7.6000e-004	0.3290	1.9700e-003	0.3310	0.0365	1.8800e-003	0.0384		79.9621	79.9621	7.2900e-003		80.1443
Worker	0.0985	0.0945	0.7777	1.4400e-003	3.1040	1.2100e-003	3.1052	0.3348	1.1100e-003	0.3359		142.7765	142.7765	6.9800e-003		142.9509
<b>Total</b>	<b>0.1136</b>	<b>0.5462</b>	<b>0.8651</b>	<b>2.6000e-003</b>	<b>3.5582</b>	<b>3.7400e-003</b>	<b>3.5619</b>	<b>0.3851</b>	<b>3.5300e-003</b>	<b>0.3886</b>		<b>264.9359</b>	<b>264.9359</b>	<b>0.0177</b>		<b>265.3783</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9465	9.5061	9.9142	0.0152		0.5238	0.5238		0.4831	0.4831	0.0000	1,455.1515	1,455.1515	0.4595		1,466.6398
Paving	0.1703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1168</b>	<b>9.5061</b>	<b>9.9142</b>	<b>0.0152</b>		<b>0.5238</b>	<b>0.5238</b>		<b>0.4831</b>	<b>0.4831</b>	<b>0.0000</b>	<b>1,455.1515</b>	<b>1,455.1515</b>	<b>0.4595</b>		<b>1,466.6398</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1300e-003	0.1438	0.0209	4.0000e-004	0.0309	5.6000e-004	0.0315	4.4100e-003	5.4000e-004	4.9500e-003		42.1973	42.1973	3.4400e-003		42.2832
Vendor	0.0111	0.3079	0.0664	7.6000e-004	0.0813	1.9700e-003	0.0833	0.0118	1.8800e-003	0.0136		79.9621	79.9621	7.2900e-003		80.1443
Worker	0.0985	0.0945	0.7777	1.4400e-003	0.7418	1.2100e-003	0.7430	0.0991	1.1100e-003	0.1002		142.7765	142.7765	6.9800e-003		142.9509
<b>Total</b>	<b>0.1136</b>	<b>0.5462</b>	<b>0.8651</b>	<b>2.6000e-003</b>	<b>0.8541</b>	<b>3.7400e-003</b>	<b>0.8578</b>	<b>0.1152</b>	<b>3.5300e-003</b>	<b>0.1188</b>		<b>264.9359</b>	<b>264.9359</b>	<b>0.0177</b>		<b>265.3783</b>



**SR-99 and Eaton Road Intersection Project  
 Butte County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.30	Acre	1.30	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	71
<b>Climate Zone</b>	3	<b>Operational Year</b>		2021	
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - SR-99/Eaton Road Intersection Project BCAQMD.

Land Use - Estimated area based on area of disturbance.

Construction Phase - Assumed phasing for traffic circle construction.

Off-road Equipment - Modified

Trips and VMT - Modified vehicle trips.

On-road Fugitive Dust - Assumed 99% roadways paved.

Grading - Assumed no import or export of soil.

Construction Off-road Equipment Mitigation - Assumed watering of exposed area twice daily and vehicle speeds of 15 mph.

## SR-99 and Eaton Road Intersection Project - Butte County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	4.00	100.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	10/4/2019	8/18/2020
tblConstructionPhase	PhaseEndDate	10/24/2019	9/22/2020
tblConstructionPhase	PhaseStartDate	10/1/2019	4/1/2020
tblConstructionPhase	PhaseStartDate	10/11/2019	8/19/2020
tblGrading	AcresOfGrading	37.50	1.50
tblLandUse	LandUseSquareFeet	56,628.00	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1192	1.2401	0.6829	1.3900e-003	0.4049	0.0579	0.4628	0.1438	0.0533	0.1971	0.0000	122.5776	122.5776	0.0358	0.0000	123.4725
<b>Maximum</b>	<b>0.1192</b>	<b>1.2401</b>	<b>0.6829</b>	<b>1.3900e-003</b>	<b>0.4049</b>	<b>0.0579</b>	<b>0.4628</b>	<b>0.1438</b>	<b>0.0533</b>	<b>0.1971</b>	<b>0.0000</b>	<b>122.5776</b>	<b>122.5776</b>	<b>0.0358</b>	<b>0.0000</b>	<b>123.4725</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1192	1.2401	0.6829	1.3900e-003	0.1460	0.0579	0.2039	0.0621	0.0533	0.1154	0.0000	122.5774	122.5774	0.0358	0.0000	123.4724
<b>Maximum</b>	<b>0.1192</b>	<b>1.2401</b>	<b>0.6829</b>	<b>1.3900e-003</b>	<b>0.1460</b>	<b>0.0579</b>	<b>0.2039</b>	<b>0.0621</b>	<b>0.0533</b>	<b>0.1154</b>	<b>0.0000</b>	<b>122.5774</b>	<b>122.5774</b>	<b>0.0358</b>	<b>0.0000</b>	<b>123.4724</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>63.94</b>	<b>0.00</b>	<b>55.94</b>	<b>56.83</b>	<b>0.00</b>	<b>41.46</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

### 3.0 Construction Detail

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/1/2020	8/18/2020	5	100	
2	Paving	Paving	8/19/2020	9/22/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 1.3**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Grading	Graders	1	8.00	187	0.41
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	16.00	2.00	20.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	2.00	10.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Grading - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2266	0.0000	0.2266	0.1242	0.0000	0.1242	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0987	1.0922	0.5060	1.0400e-003		0.0512	0.0512		0.0471	0.0471	0.0000	91.8477	91.8477	0.0297	0.0000	92.5904
<b>Total</b>	<b>0.0987</b>	<b>1.0922</b>	<b>0.5060</b>	<b>1.0400e-003</b>	<b>0.2266</b>	<b>0.0512</b>	<b>0.2778</b>	<b>0.1242</b>	<b>0.0471</b>	<b>0.1713</b>	<b>0.0000</b>	<b>91.8477</b>	<b>91.8477</b>	<b>0.0297</b>	<b>0.0000</b>	<b>92.5904</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.8600e-003	3.9000e-004	1.0000e-005	2.5400e-003	1.0000e-005	2.5500e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7763	0.7763	6.0000e-005	0.0000	0.7778
Vendor	5.4000e-004	0.0153	3.0600e-003	4.0000e-005	0.0134	1.0000e-004	0.0135	1.5200e-003	9.0000e-005	1.6100e-003	0.0000	3.6821	3.6821	3.1000e-004	0.0000	3.6899
Worker	4.6500e-003	4.1900e-003	0.0388	7.0000e-005	0.1262	6.0000e-005	0.1262	0.0138	6.0000e-005	0.0139	0.0000	6.6916	6.6916	3.2000e-004	0.0000	6.6996
<b>Total</b>	<b>5.2700e-003</b>	<b>0.0224</b>	<b>0.0423</b>	<b>1.2000e-004</b>	<b>0.1421</b>	<b>1.7000e-004</b>	<b>0.1423</b>	<b>0.0156</b>	<b>1.6000e-004</b>	<b>0.0158</b>	<b>0.0000</b>	<b>11.1500</b>	<b>11.1500</b>	<b>6.9000e-004</b>	<b>0.0000</b>	<b>11.1673</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1020	0.0000	0.1020	0.0559	0.0000	0.0559	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0987	1.0922	0.5060	1.0400e-003		0.0512	0.0512		0.0471	0.0471	0.0000	91.8476	91.8476	0.0297	0.0000	92.5903
<b>Total</b>	<b>0.0987</b>	<b>1.0922</b>	<b>0.5060</b>	<b>1.0400e-003</b>	<b>0.1020</b>	<b>0.0512</b>	<b>0.1531</b>	<b>0.0559</b>	<b>0.0471</b>	<b>0.1030</b>	<b>0.0000</b>	<b>91.8476</b>	<b>91.8476</b>	<b>0.0297</b>	<b>0.0000</b>	<b>92.5903</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.8600e-003	3.9000e-004	1.0000e-005	6.4000e-004	1.0000e-005	6.5000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	0.7763	0.7763	6.0000e-005	0.0000	0.7778
Vendor	5.4000e-004	0.0153	3.0600e-003	4.0000e-005	3.4300e-003	1.0000e-004	3.5300e-003	5.2000e-004	9.0000e-005	6.1000e-004	0.0000	3.6821	3.6821	3.1000e-004	0.0000	3.6899
Worker	4.6500e-003	4.1900e-003	0.0388	7.0000e-005	0.0310	6.0000e-005	0.0311	4.3000e-003	6.0000e-005	4.3600e-003	0.0000	6.6916	6.6916	3.2000e-004	0.0000	6.6996
<b>Total</b>	<b>5.2700e-003</b>	<b>0.0224</b>	<b>0.0423</b>	<b>1.2000e-004</b>	<b>0.0351</b>	<b>1.7000e-004</b>	<b>0.0353</b>	<b>4.9100e-003</b>	<b>1.6000e-004</b>	<b>5.0700e-003</b>	<b>0.0000</b>	<b>11.1500</b>	<b>11.1500</b>	<b>6.9000e-004</b>	<b>0.0000</b>	<b>11.1673</b>

SR-99 and Eaton Road Intersection Project - Butte County, Annual

**3.3 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.1188	0.1239	1.9000e-004		6.5500e-003	6.5500e-003		6.0400e-003	6.0400e-003	0.0000	16.5011	16.5011	5.2100e-003	0.0000	16.6314
Paving	2.1300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0140</b>	<b>0.1188</b>	<b>0.1239</b>	<b>1.9000e-004</b>		<b>6.5500e-003</b>	<b>6.5500e-003</b>		<b>6.0400e-003</b>	<b>6.0400e-003</b>	<b>0.0000</b>	<b>16.5011</b>	<b>16.5011</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>16.6314</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.7900e-003	2.4000e-004	1.0000e-005	1.2700e-003	1.0000e-005	1.2800e-003	1.4000e-004	1.0000e-005	1.5000e-004	0.0000	0.4852	0.4852	4.0000e-005	0.0000	0.4861
Vendor	1.3000e-004	3.8400e-003	7.7000e-004	1.0000e-005	3.3500e-003	2.0000e-005	3.3800e-003	3.8000e-004	2.0000e-005	4.0000e-004	0.0000	0.9205	0.9205	8.0000e-005	0.0000	0.9225
Worker	1.1600e-003	1.0500e-003	9.7000e-003	2.0000e-005	0.0315	2.0000e-005	0.0316	3.4500e-003	1.0000e-005	3.4600e-003	0.0000	1.6729	1.6729	8.0000e-005	0.0000	1.6749
<b>Total</b>	<b>1.3400e-003</b>	<b>6.6800e-003</b>	<b>0.0107</b>	<b>4.0000e-005</b>	<b>0.0362</b>	<b>5.0000e-005</b>	<b>0.0362</b>	<b>3.9700e-003</b>	<b>4.0000e-005</b>	<b>4.0100e-003</b>	<b>0.0000</b>	<b>3.0786</b>	<b>3.0786</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>3.0835</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.1188	0.1239	1.9000e-004		6.5500e-003	6.5500e-003		6.0400e-003	6.0400e-003	0.0000	16.5011	16.5011	5.2100e-003	0.0000	16.6314
Paving	2.1300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0140</b>	<b>0.1188</b>	<b>0.1239</b>	<b>1.9000e-004</b>		<b>6.5500e-003</b>	<b>6.5500e-003</b>		<b>6.0400e-003</b>	<b>6.0400e-003</b>	<b>0.0000</b>	<b>16.5011</b>	<b>16.5011</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>16.6314</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.7900e-003	2.4000e-004	1.0000e-005	3.3000e-004	1.0000e-005	3.3000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.4852	0.4852	4.0000e-005	0.0000	0.4861
Vendor	1.3000e-004	3.8400e-003	7.7000e-004	1.0000e-005	8.6000e-004	2.0000e-005	8.8000e-004	1.3000e-004	2.0000e-005	1.5000e-004	0.0000	0.9205	0.9205	8.0000e-005	0.0000	0.9225
Worker	1.1600e-003	1.0500e-003	9.7000e-003	2.0000e-005	7.7600e-003	2.0000e-005	7.7700e-003	1.0800e-003	1.0000e-005	1.0900e-003	0.0000	1.6729	1.6729	8.0000e-005	0.0000	1.6749
<b>Total</b>	<b>1.3400e-003</b>	<b>6.6800e-003</b>	<b>0.0107</b>	<b>4.0000e-005</b>	<b>8.9500e-003</b>	<b>5.0000e-005</b>	<b>8.9800e-003</b>	<b>1.2600e-003</b>	<b>4.0000e-005</b>	<b>1.3000e-003</b>	<b>0.0000</b>	<b>3.0786</b>	<b>3.0786</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>3.0835</b>



**SR-99 and Eaton Road Intersection Project  
 Butte County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.30	Acre	1.30	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	71
<b>Climate Zone</b>	3			<b>Operational Year</b>	2021
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - SR-99/Eaton Road Intersection Project BCAQMD.

Land Use - Estimated area based on area of disturbance.

Construction Phase - Assumed phasing for traffic circle construction.

Off-road Equipment - Modified

Trips and VMT - Modified vehicle trips.

On-road Fugitive Dust - Assumed 99% roadways paved.

Grading - Assumed no import or export of soil.

Construction Off-road Equipment Mitigation - Assumed watering of exposed area twice daily and vehicle speeds of 15 mph.

## SR-99 and Eaton Road Intersection Project - Butte County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	4.00	100.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	10/4/2019	8/18/2020
tblConstructionPhase	PhaseEndDate	10/24/2019	9/22/2020
tblConstructionPhase	PhaseStartDate	10/1/2019	4/1/2020
tblConstructionPhase	PhaseStartDate	10/11/2019	8/19/2020
tblGrading	AcresOfGrading	37.50	1.50
tblLandUse	LandUseSquareFeet	56,628.00	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00



### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/1/2020	8/18/2020	5	100	
2	Paving	Paving	8/19/2020	9/22/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 1.3**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0**

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Grading	Graders	1	8.00	187	0.41
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	16.00	2.00	20.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	2.00	10.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

### 3.2 Grading - 2020

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5325	0.0000	4.5325	2.4844	0.0000	2.4844			0.0000			0.0000
Off-Road	1.9730	21.8441	10.1192	0.0209		1.0230	1.0230		0.9412	0.9412		2,024.896 1	2,024.896 1	0.6549		2,041.268 4
<b>Total</b>	<b>1.9730</b>	<b>21.8441</b>	<b>10.1192</b>	<b>0.0209</b>	<b>4.5325</b>	<b>1.0230</b>	<b>5.5555</b>	<b>2.4844</b>	<b>0.9412</b>	<b>3.4256</b>		<b>2,024.896 1</b>	<b>2,024.896 1</b>	<b>0.6549</b>		<b>2,041.268 4</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5900e-003	0.0556	7.2800e-003	1.6000e-004	0.0623	2.2000e-004	0.0626	6.8300e-003	2.1000e-004	7.0400e-003		17.2863	17.2863	1.2100e-003		17.3167
Vendor	0.0106	0.2991	0.0576	7.8000e-004	0.3290	1.9300e-003	0.3310	0.0365	1.8500e-003	0.0383		82.0576	82.0576	6.4600e-003		82.2191
Worker	0.1081	0.0764	0.9237	1.6500e-003	3.1040	1.2100e-003	3.1052	0.3348	1.1100e-003	0.3359		163.8007	163.8007	8.0900e-003		164.0030
<b>Total</b>	<b>0.1204</b>	<b>0.4311</b>	<b>0.9885</b>	<b>2.5900e-003</b>	<b>3.4954</b>	<b>3.3600e-003</b>	<b>3.4988</b>	<b>0.3781</b>	<b>3.1700e-003</b>	<b>0.3813</b>		<b>263.1446</b>	<b>263.1446</b>	<b>0.0158</b>		<b>263.5387</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0396	0.0000	2.0396	1.1180	0.0000	1.1180			0.0000			0.0000
Off-Road	1.9730	21.8441	10.1192	0.0209		1.0230	1.0230		0.9412	0.9412	0.0000	2,024.896 1	2,024.896 1	0.6549		2,041.268 4
<b>Total</b>	<b>1.9730</b>	<b>21.8441</b>	<b>10.1192</b>	<b>0.0209</b>	<b>2.0396</b>	<b>1.0230</b>	<b>3.0626</b>	<b>1.1180</b>	<b>0.9412</b>	<b>2.0591</b>	<b>0.0000</b>	<b>2,024.896 1</b>	<b>2,024.896 1</b>	<b>0.6549</b>		<b>2,041.268 4</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5900e-003	0.0556	7.2800e-003	1.6000e-004	0.0153	2.2000e-004	0.0155	2.1300e-003	2.1000e-004	2.3400e-003		17.2863	17.2863	1.2100e-003		17.3167
Vendor	0.0106	0.2991	0.0576	7.8000e-004	0.0813	1.9300e-003	0.0832	0.0118	1.8500e-003	0.0136		82.0576	82.0576	6.4600e-003		82.2191
Worker	0.1081	0.0764	0.9237	1.6500e-003	0.7418	1.2100e-003	0.7430	0.0991	1.1100e-003	0.1002		163.8007	163.8007	8.0900e-003		164.0030
<b>Total</b>	<b>0.1204</b>	<b>0.4311</b>	<b>0.9885</b>	<b>2.5900e-003</b>	<b>0.8384</b>	<b>3.3600e-003</b>	<b>0.8417</b>	<b>0.1130</b>	<b>3.1700e-003</b>	<b>0.1161</b>		<b>263.1446</b>	<b>263.1446</b>	<b>0.0158</b>		<b>263.5387</b>

SR-99 and Eaton Road Intersection Project - Butte County, Summer

**3.3 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9465	9.5061	9.9142	0.0152		0.5238	0.5238		0.4831	0.4831		1,455.1515	1,455.1515	0.4595		1,466.6398
Paving	0.1703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1168</b>	<b>9.5061</b>	<b>9.9142</b>	<b>0.0152</b>		<b>0.5238</b>	<b>0.5238</b>		<b>0.4831</b>	<b>0.4831</b>		<b>1,455.1515</b>	<b>1,455.1515</b>	<b>0.4595</b>		<b>1,466.6398</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.9700e-003	0.1391	0.0182	4.1000e-004	0.1251	5.4000e-004	0.1257	0.0138	5.2000e-004	0.0143		43.2158	43.2158	3.0400e-003		43.2917
Vendor	0.0106	0.2991	0.0576	7.8000e-004	0.3290	1.9300e-003	0.3310	0.0365	1.8500e-003	0.0383		82.0576	82.0576	6.4600e-003		82.2191
Worker	0.1081	0.0764	0.9237	1.6500e-003	3.1040	1.2100e-003	3.1052	0.3348	1.1100e-003	0.3359		163.8007	163.8007	8.0900e-003		164.0030
<b>Total</b>	<b>0.1227</b>	<b>0.5146</b>	<b>0.9994</b>	<b>2.8400e-003</b>	<b>3.5582</b>	<b>3.6800e-003</b>	<b>3.5619</b>	<b>0.3851</b>	<b>3.4800e-003</b>	<b>0.3886</b>		<b>289.0741</b>	<b>289.0741</b>	<b>0.0176</b>		<b>289.5137</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9465	9.5061	9.9142	0.0152		0.5238	0.5238		0.4831	0.4831	0.0000	1,455.1515	1,455.1515	0.4595		1,466.6398
Paving	0.1703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1168</b>	<b>9.5061</b>	<b>9.9142</b>	<b>0.0152</b>		<b>0.5238</b>	<b>0.5238</b>		<b>0.4831</b>	<b>0.4831</b>	<b>0.0000</b>	<b>1,455.1515</b>	<b>1,455.1515</b>	<b>0.4595</b>		<b>1,466.6398</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.9700e-003	0.1391	0.0182	4.1000e-004	0.0309	5.4000e-004	0.0315	4.4100e-003	5.2000e-004	4.9400e-003		43.2158	43.2158	3.0400e-003		43.2917
Vendor	0.0106	0.2991	0.0576	7.8000e-004	0.0813	1.9300e-003	0.0832	0.0118	1.8500e-003	0.0136		82.0576	82.0576	6.4600e-003		82.2191
Worker	0.1081	0.0764	0.9237	1.6500e-003	0.7418	1.2100e-003	0.7430	0.0991	1.1100e-003	0.1002		163.8007	163.8007	8.0900e-003		164.0030
<b>Total</b>	<b>0.1227</b>	<b>0.5146</b>	<b>0.9994</b>	<b>2.8400e-003</b>	<b>0.8541</b>	<b>3.6800e-003</b>	<b>0.8577</b>	<b>0.1152</b>	<b>3.4800e-003</b>	<b>0.1187</b>		<b>289.0741</b>	<b>289.0741</b>	<b>0.0176</b>		<b>289.5137</b>



**SR-99 and Eaton Road Intersection Project**  
**Butte County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.30	Acre	1.30	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	71
<b>Climate Zone</b>	3			<b>Operational Year</b>	2021
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - SR-99/Eaton Road Intersection Project BCAQMD.

Land Use - Estimated area based on area of disturbance.

Construction Phase - Assumed phasing for traffic circle construction.

Off-road Equipment - Modified

Trips and VMT - Modified vehicle trips.

On-road Fugitive Dust - Assumed 99% roadways paved.

Grading - Assumed no import or export of soil.

Construction Off-road Equipment Mitigation - Assumed watering of exposed area twice daily and vehicle speeds of 15 mph.

## SR-99 and Eaton Road Intersection Project - Butte County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	4.00	100.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	10/4/2019	8/18/2020
tblConstructionPhase	PhaseEndDate	10/24/2019	9/22/2020
tblConstructionPhase	PhaseStartDate	10/1/2019	4/1/2020
tblConstructionPhase	PhaseStartDate	10/11/2019	8/19/2020
tblGrading	AcresOfGrading	37.50	1.50
tblLandUse	LandUseSquareFeet	56,628.00	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblOnRoadDust	WorkerPercentPave	100.00	99.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00



### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/1/2020	8/18/2020	5	100	
2	Paving	Paving	8/19/2020	9/22/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.3

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Grading	Graders	1	8.00	187	0.41
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	16.00	2.00	20.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	2.00	10.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

### 3.2 Grading - 2020

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5325	0.0000	4.5325	2.4844	0.0000	2.4844			0.0000			0.0000
Off-Road	1.9730	21.8441	10.1192	0.0209		1.0230	1.0230		0.9412	0.9412		2,024.896 1	2,024.896 1	0.6549		2,041.268 4
<b>Total</b>	<b>1.9730</b>	<b>21.8441</b>	<b>10.1192</b>	<b>0.0209</b>	<b>4.5325</b>	<b>1.0230</b>	<b>5.5555</b>	<b>2.4844</b>	<b>0.9412</b>	<b>3.4256</b>		<b>2,024.896 1</b>	<b>2,024.896 1</b>	<b>0.6549</b>		<b>2,041.268 4</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6500e-003	0.0575	8.3700e-003	1.6000e-004	0.0623	2.2000e-004	0.0626	6.8300e-003	2.1000e-004	7.0400e-003		16.8789	16.8789	1.3700e-003		16.9133
Vendor	0.0111	0.3079	0.0664	7.6000e-004	0.3290	1.9700e-003	0.3310	0.0365	1.8800e-003	0.0384		79.9621	79.9621	7.2900e-003		80.1443
Worker	0.0985	0.0945	0.7777	1.4400e-003	3.1040	1.2100e-003	3.1052	0.3348	1.1100e-003	0.3359		142.7765	142.7765	6.9800e-003		142.9509
<b>Total</b>	<b>0.1112</b>	<b>0.4599</b>	<b>0.8526</b>	<b>2.3600e-003</b>	<b>3.4954</b>	<b>3.4000e-003</b>	<b>3.4988</b>	<b>0.3781</b>	<b>3.2000e-003</b>	<b>0.3813</b>		<b>239.6175</b>	<b>239.6175</b>	<b>0.0156</b>		<b>240.0084</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0396	0.0000	2.0396	1.1180	0.0000	1.1180			0.0000			0.0000
Off-Road	1.9730	21.8441	10.1192	0.0209		1.0230	1.0230		0.9412	0.9412	0.0000	2,024.896 1	2,024.896 1	0.6549		2,041.268 4
<b>Total</b>	<b>1.9730</b>	<b>21.8441</b>	<b>10.1192</b>	<b>0.0209</b>	<b>2.0396</b>	<b>1.0230</b>	<b>3.0626</b>	<b>1.1180</b>	<b>0.9412</b>	<b>2.0591</b>	<b>0.0000</b>	<b>2,024.896 1</b>	<b>2,024.896 1</b>	<b>0.6549</b>		<b>2,041.268 4</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6500e-003	0.0575	8.3700e-003	1.6000e-004	0.0153	2.2000e-004	0.0155	2.1300e-003	2.1000e-004	2.3400e-003		16.8789	16.8789	1.3700e-003		16.9133
Vendor	0.0111	0.3079	0.0664	7.6000e-004	0.0813	1.9700e-003	0.0833	0.0118	1.8800e-003	0.0136		79.9621	79.9621	7.2900e-003		80.1443
Worker	0.0985	0.0945	0.7777	1.4400e-003	0.7418	1.2100e-003	0.7430	0.0991	1.1100e-003	0.1002		142.7765	142.7765	6.9800e-003		142.9509
<b>Total</b>	<b>0.1112</b>	<b>0.4599</b>	<b>0.8526</b>	<b>2.3600e-003</b>	<b>0.8384</b>	<b>3.4000e-003</b>	<b>0.8418</b>	<b>0.1130</b>	<b>3.2000e-003</b>	<b>0.1162</b>		<b>239.6175</b>	<b>239.6175</b>	<b>0.0156</b>		<b>240.0084</b>

SR-99 and Eaton Road Intersection Project - Butte County, Winter

**3.3 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9465	9.5061	9.9142	0.0152		0.5238	0.5238		0.4831	0.4831		1,455.1515	1,455.1515	0.4595		1,466.6398
Paving	0.1703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1168</b>	<b>9.5061</b>	<b>9.9142</b>	<b>0.0152</b>		<b>0.5238</b>	<b>0.5238</b>		<b>0.4831</b>	<b>0.4831</b>		<b>1,455.1515</b>	<b>1,455.1515</b>	<b>0.4595</b>		<b>1,466.6398</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1300e-003	0.1438	0.0209	4.0000e-004	0.1251	5.6000e-004	0.1257	0.0138	5.4000e-004	0.0144		42.1973	42.1973	3.4400e-003		42.2832
Vendor	0.0111	0.3079	0.0664	7.6000e-004	0.3290	1.9700e-003	0.3310	0.0365	1.8800e-003	0.0384		79.9621	79.9621	7.2900e-003		80.1443
Worker	0.0985	0.0945	0.7777	1.4400e-003	3.1040	1.2100e-003	3.1052	0.3348	1.1100e-003	0.3359		142.7765	142.7765	6.9800e-003		142.9509
<b>Total</b>	<b>0.1136</b>	<b>0.5462</b>	<b>0.8651</b>	<b>2.6000e-003</b>	<b>3.5582</b>	<b>3.7400e-003</b>	<b>3.5619</b>	<b>0.3851</b>	<b>3.5300e-003</b>	<b>0.3886</b>		<b>264.9359</b>	<b>264.9359</b>	<b>0.0177</b>		<b>265.3783</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9465	9.5061	9.9142	0.0152		0.5238	0.5238		0.4831	0.4831	0.0000	1,455.1515	1,455.1515	0.4595		1,466.6398
Paving	0.1703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1168</b>	<b>9.5061</b>	<b>9.9142</b>	<b>0.0152</b>		<b>0.5238</b>	<b>0.5238</b>		<b>0.4831</b>	<b>0.4831</b>	<b>0.0000</b>	<b>1,455.1515</b>	<b>1,455.1515</b>	<b>0.4595</b>		<b>1,466.6398</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1300e-003	0.1438	0.0209	4.0000e-004	0.0309	5.6000e-004	0.0315	4.4100e-003	5.4000e-004	4.9500e-003		42.1973	42.1973	3.4400e-003		42.2832
Vendor	0.0111	0.3079	0.0664	7.6000e-004	0.0813	1.9700e-003	0.0833	0.0118	1.8800e-003	0.0136		79.9621	79.9621	7.2900e-003		80.1443
Worker	0.0985	0.0945	0.7777	1.4400e-003	0.7418	1.2100e-003	0.7430	0.0991	1.1100e-003	0.1002		142.7765	142.7765	6.9800e-003		142.9509
<b>Total</b>	<b>0.1136</b>	<b>0.5462</b>	<b>0.8651</b>	<b>2.6000e-003</b>	<b>0.8541</b>	<b>3.7400e-003</b>	<b>0.8578</b>	<b>0.1152</b>	<b>3.5300e-003</b>	<b>0.1188</b>		<b>264.9359</b>	<b>264.9359</b>	<b>0.0177</b>		<b>265.3783</b>



APPENDIX C  
*NES-MI*



# Natural Environment Study

(Minimal Impacts)

State Route 99 / Eaton Road Interchange Improvements

City of Chico

Butte County, California

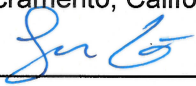
HSIPL-5037(035)

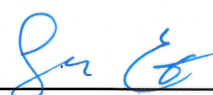
May 2019

STATE OF CALIFORNIA  
Department of Transportation  
District 3

Prepared By:  Date: May 9, 2019

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Approved By:  Date: 6/5/2019

Recommended for  
Concurrence By:  Date: 6/5/2019

Concurred By:  Date: 6/5/19



## Summary

The proposed project would convert Eaton Road/State Route (SR) 99 Northbound (NB) Ramps/Hicks Lane into one multilane roundabout intersection. Although the two intersections would be combined, the local circulation and access would remain unchanged. The primary purpose of the proposed project is to improve safety for all travel modes at the SR 99 NB ramp intersection and Hicks Lane intersection with Eaton Road. The secondary purpose of this project is to improve operations, reduce delay, and enhance mobility for all travel modes at the intersections. Within the past five years, a high concentration of broadside and rear-end collisions have been recorded at the project site, including a fatality in 2012 (see the SR 99/Eaton Road Intersection Control Evaluation (ICE) – Step I, June 2018). The frequent collisions may result from two characteristics of the intersections:

1. Insufficient spacing between the two intersections; and
2. Visual overload from too many regulatory signs at each approach.

In addition to the collision factors listed above, it appears that the inattention to speed by drivers approaching the intersection at Eaton Road from the SR-99 NB off-ramp has a direct influence on the number of rear end collisions recorded at the intersection of SR 99 NB Ramps/Eaton Road.

Moreover, observations by City staff indicate that the existing queue spill at the NB Off Ramp (which occurs during the peak hours), imposes additional safety concerns on the State Highway System (SR 99). The City of Chico and its consultant, Dudek, has prepared this Natural Environment Study – Minimal Impact (NES-MI) on behalf of Caltrans. The purpose of an NES is to describe the biological resources within the Biological Study Area (BSA), and the potential impacts of the project alternatives. It is appropriate to use the NES-MI when the project alternatives would have minimal impacts that can be addressed by minimization and avoidance measures.

The areas between the NB off-ramp and SR 99, and the NB on-ramp and SR 99 consist of non-native annual grassland interspersed with several ornamental and oak (*Quercus* sp.) tree species. These areas are regularly managed and mowed by Caltrans. The remainder of the site is considered developed/disturbed. Mature street trees occur along Eaton Road, Hicks Lane, and the eastern sides of the NB on- and off-ramps. There is an empty lot in the northern portion of the site that is partially paved and otherwise consists of non-native grasses, ruderal herbaceous plant species, and ornamental tree species.

There are no sensitive natural communities or habitats of special concern within the BSA. Only one special-status wildlife species has the potential to occur within the BSA, which is Swainson's hawk (*Buteo swainsoni*). Due to the developed/disturbed nature of the BSA, no special-status

## Natural Environment Survey (Minimal Impact)

plant species are expected to occur. Implementation of the avoidance and minimization measure listed in Section 4.3 would help to avoid and/or minimize potential construction-related or operational impacts to Swainson's hawk as a result of project activities.

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# 1. Introduction

## 1.1 Project Description

The proposed project is located in northwest Chico (see Figure 1). Chico is an incorporated city in Butte County, California. Specifically, the approximate center of the project is located at 39.4630 N, -121.5220 W, within Township 22 North, Range 1 East, and Section 9 of the Richardson Springs United States Geological Survey (USGS) 7.5 minute quadrangle.

SR 99 is a highway that spans the Central Valley, beginning at Wheeler Ridge near the Grapevine in Kern County and ending at Red Bluff in Tehama County. Eaton Road is an east/west arterial street extending from the western city limits to approximately 3.6 miles east of the project site. Hicks Lane is a north/south collector street extending from Eaton Road to Keefer Road.

As shown on Figure 2, the two existing intersections of SR 99 NB Ramps/Eaton Road and Eaton Road/Hicks Lane are closely spaced. There is a large flood control drainage channel directly adjacent to the SR 99 northbound on-ramp that is in the City right of way.

Land uses surrounding the interchange include residential and service commercial. A Comcast service center is located in the southeast quadrant of the interchange with a large parking lot fronting Eaton Road. Other service commercial uses are located south of Comcast, between the NB Off-Ramp and Silverbell Road. Pacific Supply, in the northeast quadrant, has its main access point on Hicks Lane directly north of Eaton Road. Single family residential development dominates the northeast quadrant, including a large vacant parcel adjacent to the Eaton Road / Hicks intersection, currently owned by the City. The land uses immediately west of SR 99 include office, service commercial, and residential uses.

The proposed project would convert Eaton Road/SR 99 NB Ramps/Hicks Lane into one multilane roundabout intersection (Figure 3). Although the two intersections would be combined, the local circulation and access would remain unchanged. Intersection geometrics and pedestrian crossings are consistent with the National Cooperative Highway Research Program (NCHRP) Report 672 entitled "Roundabouts: An Information Guide, 2nd Edition" (Guide).

A multilane roundabout with the lane geometry shown in Figure 3 would accommodate the Ultimate Design Year traffic forecast volumes. The roundabout is centered on the NB Ramps intersection and would require earthwork to conform to the existing and future overcrossing profile which will be raised in the future by Caltrans per their current corridor plan. Retaining walls would likely be required at the southeast corner parking lot and the northern drainage channel to minimize right of way impacts. The parking lot located at the southeast corner of the proposed intersection (Comcast Service Center) may be impacted by the roundabout footprint and, if so, would require a reconfiguration. The impacts may reduce the overall number of parking stalls.

The following provides further detail of the improvements at this intersection:

- a) The NB off-ramp would be reconstructed to provide standard super elevation transitions and an acceptable alignment into the roundabout and flared to provide a two lane entry into the roundabout that can accommodate the design vehicles.
- b) The westbound approach would initially be striped as a one lane approach with the ability to be re-striped to accommodate two lanes in the Ultimate Design Year if necessary. Truck blisters are shown for right-turn movements to and from Hicks Lane. The drainage channel in the northern corner would need to be modified to accommodate the larger intersection footprint.
- c) The NB off ramp would be realigned to accommodate the roundabout geometrics and grade changes.

### *Pedestrian and Bicycle Safety*

There would be a 10 foot shared-use path shown on the southern side of the two intersections buffered by at least 2 feet of landscaping from the roadway or by a barrier at the overcrossing. In addition, there would be a pedestrian and bicycle connection from the roundabout intersection to Silverbell Road in order to match the City's current master plan. Pedestrian crossings are shown a minimum of one car length from the circulatory roadway, and the pedestrian refuges at the splitter islands are at least 6 feet wide, which are consistent with National Cooperative Highway Research Program (NCHRP) Report 672 entitled "Roundabouts: An Information Guide, 2nd Edition" (Guide). The shared-use path conveys both pedestrian and bicycle traffic through the intersection. The path provides the opportunity for cyclists to exit the bicycle lane via a bicycle ramp and navigate the intersection on the shared-use path and through the crosswalks. As an alternative to taking the shared-use path, cyclists are also given an option to exit the bicycle lane and entering the roadway to ride with vehicle traffic through the roundabout. Crosswalks are split into two separate crossings through the provision of pedestrian refuges at the splitter islands. These two-stage crossings reduce the amount of sustained time a pedestrian is in potential conflict with motorized vehicles by limiting the length of each crossing and limiting each crossing to one direction of vehicle travel at a time.

### *Reduced Speed Potential*

Typically the roundabout geometric design requires the driver to reduce the speed in the intersection to 15-25 MPH. Conversely, drivers can travel through a signalized intersection at speeds higher than posted speed limits due to lack of geometric constraints. Due to reduced travel speeds through the intersection and expected reduction in crashes, the roundabout alternative is likely to eliminate most severe crash types.

### *Right of Way*

Additional right of way would be required at the south east quadrant of SR 99 and Eaton Road. The affected properties include the Comcast Service Center, the Production Credit Association,

and Precision Auto Repair. The acquisition would primarily affect landscaping and would not result in the removal of any buildings. The Comcast Service Center may have a net reduction in parking spaces.

#### *Utilities*

Adjustment of utility vaults to match the final pavement surface elevation would be required along Eaton Road. All other existing utilities would be protected in place, including the joint overhead line that crosses Eaton Road on the eastern end of the project.

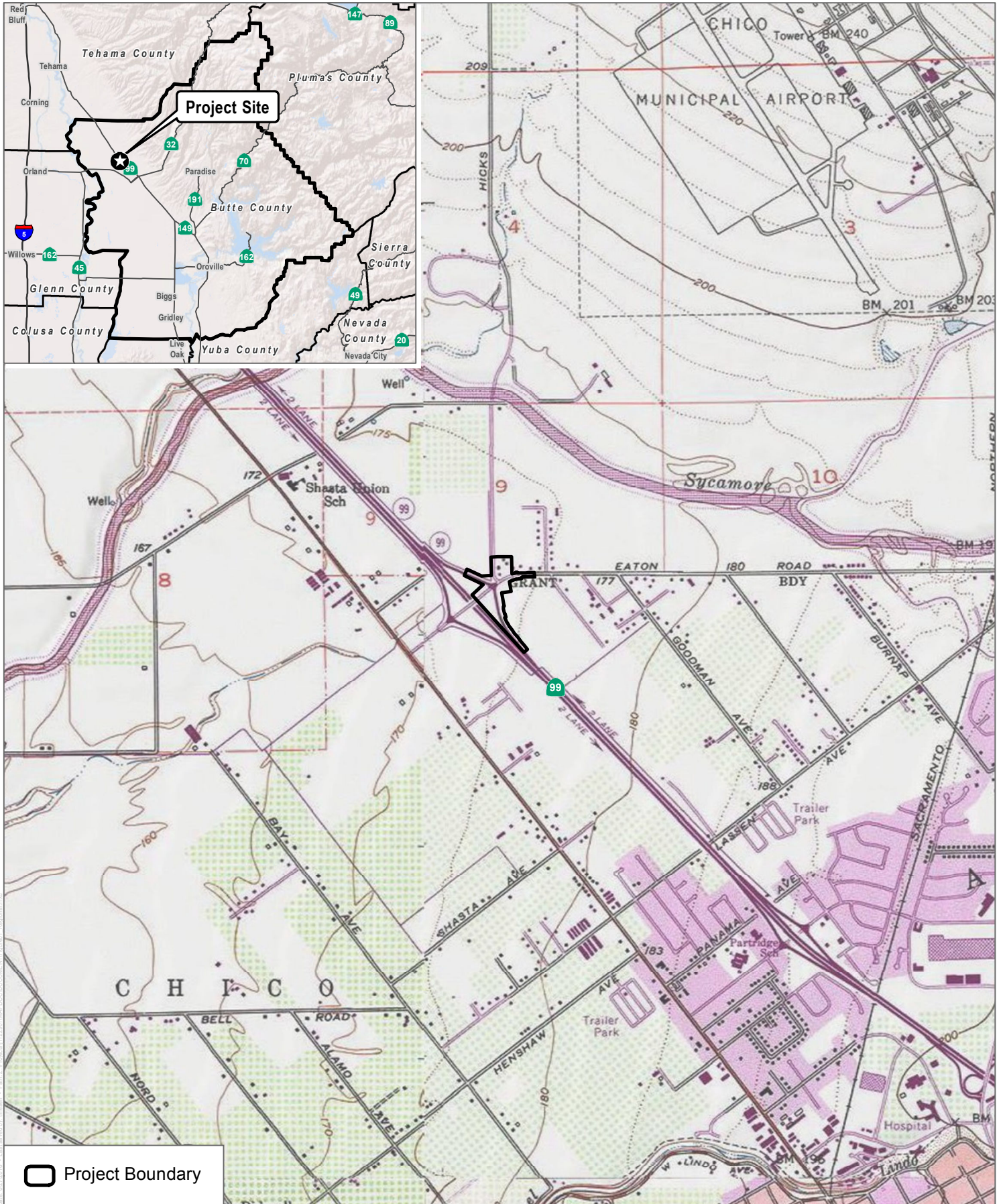
#### *Construction*

Construction is anticipated to begin in 2020. Construction would be phased in order to maintain local access to SR 99, and to the properties adjacent to Eaton Road and Hicks Lane. Staging would occur within the SR 99 right of way, west of the SR 99 NB Off-Ramp and/or the vacant parcel at Hicks Land and Eaton Road.

#### *Depth of Disturbance*

Excavation would be required throughout the project in order to construct landscaping and drainage facilities, which require trenching, placement of pipe, drainage structures, landscaping, irrigation, and backfill totaling 6 feet in depth. A maximum excavation depth of 25 feet would be required to install overhead signing along the Off Ramp.

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SOURCE: USGS 7.5 minute Richardson Springs & Nord Quadrangles

FIGURE 1

Regional Location

SR 99 & Eaton Road Interchange

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 Project Boundary

SOURCE: Bing Maps 2018, County of Butte 2018

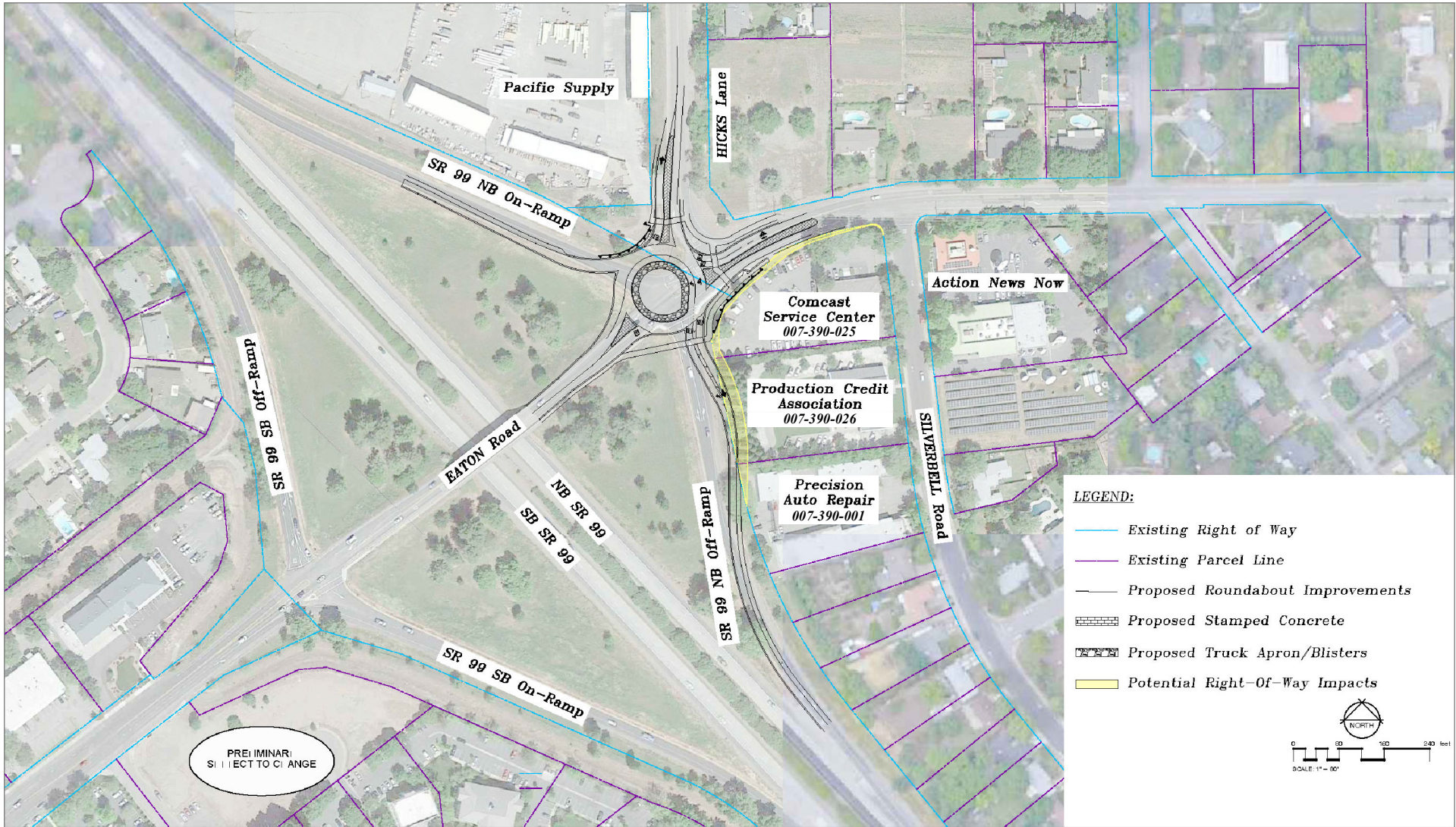
**FIGURE 2**

**Project Location**

SR 99 & Eaton Road Interchange

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SOURCE: OmniMeans GHD 2018

**FIGURE 3**  
**Project Footprint**  
 SR 99 & Eaton Road Interchange

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## 2. Study Methods

This section discusses the methods utilized to determine the potential for special-status species or their habitat to be present within or adjacent to the Biological Study Area (BSA). The BSA consists of the area of potential direct and indirect project impacts (Figure 3). A general assessment of biological resources present within and adjacent to the project area was performed by a Dudek biologist during a field visit conducted on October 5, 2018. The information provided in this report was gathered from the conditions observed during the site visit, as well as information obtained in the literature reviewed, as described below in Section 2.2.

### 2.1 Regulatory Requirements

The federal regulatory requirements and laws that may apply to the proposed project include:

- Federal Endangered Species Act
- Clean Water Act, Sections 404 and 401
- Migratory Bird Treaty Act

Applicable state laws and regulations include:

- California Endangered Species Act
- Native Plant Protection Act
- California Fish and Game Code

A brief description of each of the relevant laws and regulations is provided below.

**Federal Endangered Species Act.** Under the Federal Endangered Species Act (FESA), the Secretary of the Interior and the Secretary of Commerce, jointly have the authority to list a species as threatened or endangered (16 United States Code [USC] 1533[c]). FESA defines “endangered” species as those in danger of extinction throughout all or a significant portion of their range. A “threatened” species is any species that is likely to become an “endangered” species within the foreseeable future throughout all, or a significant portion of its range. Additional special-status species include “candidate” species and “species of concern.” “Candidate” species are those for which the U.S. Fish and Wildlife Service (USFWS) has on file enough information to propose listing as endangered or threatened. Species of concern” are those for which listing is possibly appropriate, but where the USFWS lacks sufficient information to support a listing proposal. A species that has been “delisted” is one whose population has met its recovery goal target and is no longer in jeopardy of extinction.

Section 7 of FESA requires formal consultation with the USFWS or National Marine Fisheries Service (NMFS) for only those species listed as endangered, threatened or proposed for threatened or endangered. Taking of a federally listed species is prohibited under Section 9 of FESA. Taking is defined by FESA [Section 3(19)] to mean “to harass, harm, pursue, hunt, shoot,

wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” An incidental take of a listed species requires consultation with the USFWS or NMFS.

Federally listed species may be addressed for a proposed project in one of two ways: (1) a nonfederal government entity may resolve potential adverse impacts to species protected under Section 10 of FESA, or (2) a federal lead agency may resolve potential adverse effects to listed species in accordance with Section 7 of FESA. Both require consultation with the USFWS or NMFS, which administers the Act and ultimately issues a final opinion determining whether a project is likely to adversely affect or jeopardize the continued existence of a federally listed species, or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3],[4]).

**Clean Water Act.** Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) regulates the disposal of dredged and fill materials into “waters of the United States”. Waters of the U.S. include intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, and wetlands adjacent to any water of the U.S. [CFR 33 Part 328]. In areas subject to tidal influence, Section 404 jurisdiction extends to the high tide line. Certain waters of the U.S. are considered “special aquatic sites” because they are generally recognized as having particular ecological value. Such sites include sanctuaries and refuges, mudflats, wetlands, vegetated shallows, coral reefs, and riffle and pool complexes. Special aquatic sites are defined by the U.S. Environmental Protection Agency and may be afforded additional consideration in the permit process for a project. The USACE also regulates navigable waters under Section 10 of the Rivers and Harbors Act. These are defined as “...those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce” [33 CFR Part 322.2].

In addition to the Section 404 permit, Section 401 of the Clean Water Act requires that a 404 permit applicant obtain a certificate from the appropriate state agency stating that the fill is consistent with the state’s water quality standards and criteria. In California, the authority to grant certification or waive the requirement for permits under Section 401 is delegated by the State Water Resources Control Board to one of nine Regional Water Quality Control Boards. Pursuant to the Porter-Cologne Act, each Regional Water Quality Control Board (RWQCB) must prepare and periodically update basin plans that set forth water quality standards for surface and groundwater, as well as actions to control point and non-point sources of pollution. Basin plans offer an opportunity to achieve wetlands protection through enforcement of water quality standards. No USACE 404 permit is valid under the Clean Water Act unless it is “certified” by the state. Therefore, a RWQCB may effectively veto or add conditions to any USACE permit.

**Migratory Bird Treaty Act.** The Migratory Bird Treaty Act (MBTA) of 1918 (16 United States Code 703-711) is an international treaty for the conservation and management of bird species that may migrate through more than one country. It is enforced in the United States by the USFWS, and makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered a “take” and is potentially punishable by fines and/or imprisonment. In 1972, the MBTA was amended to include protection for migratory birds of prey (raptors). All species and subspecies of the families listed above are protected under the provisions of the 1972 amendment.

**California Endangered Species Act and Native Plant Protection Act.** The California Endangered Species Act (CESA) and the Native Plant Protection Act authorizes the California Fish and Game Commission to designate endangered, threatened, and rare species and to regulate the taking of these species (§2050-2098, Fish & Game Code). CESA defines “endangered” species as those whose continued existence in California is jeopardized. State listed “threatened” species are those not presently threatened with extinction, however may become endangered if their environments change or deteriorate. Protection of special-status species is detailed in Sections 2050 and 2098 of the Fish and Game Code. The California Code of Regulations (Title 14, Section 670.5) lists animal species considered endangered and threatened by the State. Formal consultation must be initiated with the California Department of Fish and Wildlife (CDFW) for projects that may have an adverse effect on a state-listed species. If no state listed species will be affected by a proposed project, environmental documentation is provided to the CDFW at the discretion of the lead agency.

Section 2080 of the California Fish and Game Code prohibits the taking of state listed plant and animals. The CDFW also designates “fully protected” or “protected” species as those that may not be taken or possessed without a permit from the Fish and Game Commission and/or the CDFW. Species designated as fully protected or protected may or may not be listed as endangered or threatened.

CDFW’s Natural Heritage Division administers the State’s endangered species program. CDFW’s implementation of the CESA has created a program that is similar in structure to, but different in detail from, the USFWS program implementing the federal ESA.

The CDFW maintains a list of designated endangered, threatened, and rare plant and animal species. Listed species are either designated under the Native Plant Protection Act, or designated by the Fish and Game Commission. In addition to recognizing three levels of endangerment, the CDFW can afford interim protection to candidate species while they are reviewed by the Fish and Game Commission.

The CDFW also maintains a list of animal “Species of Special Concern,” most of which are species whose breeding populations in California may face extirpation. Although these species have no legal status, the CDFW recommends consideration of them during analysis of the impacts of proposed projects to protect declining populations and avoid the need to list them as endangered in the future.

Under provisions of Section 15380(d) of CEQA, the project lead agency and CDFW, in making a determination of significance, must treat non-listed plant and animal species as equivalent to listed species if such species satisfy the minimum biological criteria for listing. In general, the CDFW considers species on Lists 1A, 1B, or 2 of the *California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (Skinner and Pavlik 1994) as qualifying for consideration under this CEQA provision. Species on the Native Plant Society’s List 3 or 4 may, but generally do not, qualify for protection under this provision.

**Fish and Game Code Section 1601-1603.** Sections 1601-1603 of the Fish and Game Code require agencies to notify CDFW prior to any project that would divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake. In Title 14 of the California Code of Regulations, Section 1.72, CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.”

**Porter Cologne Water Quality Control Act.** Under the Porter-Cologne Water Quality Control Act (California Water Code, Div. 7, §13000 et seq.), discharges to wetlands and other “waters of the state” have been and remain subject to state regulation. Thus, “isolated” or “non-navigable” waters that may not be subject to USACE jurisdiction may be regulated by the applicable RWQCB.

## **2.2 Studies Required**

The BSA was defined as the SR 99 northbound on- and off-ramps at Eaton Road, the area between the ramps and SR 99, Eaton Road (including a 50-foot buffer on either side), Hicks Lane (including a 50-foot buffer on either side), the vacant lot on the northeast corner of Hicks Lane and Eaton Road, and the Comcast lot on the southeast corner of the northbound SR 99 off-ramp and Eaton Road (Figure 2).

### **Literature Search**

Prior to conducting a site visit, the following agency database queries were performed for the Richardson Springs USGS 7.5 minute quadrangle and the eight surrounding quadrangles (Richardson Springs NW, Campbell Mound, Cohasset, Nord, Paradise West, Ord Ferry, Chico, and Hamlin Canyon). Refer to Appendix A for the results of the database searches.

- California Natural Diversity Database (CNDDB)

- California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Plants
- USFWS Information, Planning, and Conservation (IPaC) Report.

Additional information was obtained from high-resolution aerial photographs, topographical maps, and previous environmental documents drafted for the vicinity of the project.

### **Field Reviews**

A site visit was performed by Dudek biologist Lisa Achter and consisted of walking throughout the BSA and scanning a 50-foot buffer around the BSA to record habitat types, document potentially suitable habitat for special-status wildlife and plant species, identify potential wetlands and waterways, and document all potential biological resources that may pose constraints to project construction.

### ***2.3 Personnel and Survey Dates***

Ms. Achter is a wildlife biologist with over 11 years' experience, specializing in conducting habitat assessments, general and focused biological surveys, trapping and relocation studies and various other studies for a number of special-status and common wildlife species in California. The site visit was performed on October 5, 2018. A follow-up visit of the site was performed by biologist, Allie Sennett, M.S. on April 23, 2019.

### ***2.4 Agency Coordination and Professional Contacts***

To date, no agency coordination has taken place.

## 3. Results: Environmental Setting

### 3.1 Biological Study Area

The BSA is located along SR 99 and includes the northbound on- and off-ramps at Eaton Road, the area between the ramps and SR 99, Eaton Road (including a 50-foot buffer on either side), Hicks Lane (including a 50-foot buffer on either side), the vacant lot on the northeast corner of Hicks Lane and Eaton Road, and the Comcast lot on the southeast corner of the northbound SR 99 off-ramp and Eaton Road. The BSA is considered mostly developed/disturbed habitat; however, the mature street trees, non-native grassland, and other roadside vegetation provide nesting and foraging habitat for multiple avian species.

#### 3.1.1 Physical Conditions

##### Climate

The BSA is located within the central valley of California, which is characterized by a Mediterranean climate with hot, dry summers, and cool, wet winters.

##### Soils

A custom Soil Resources Report was generated for the BSA (NRCS 2018), which provided information on known soil types within the proposed project area (Figure 4). The following soil types were identified within the project area:

**Almendra loam, 0 to 1 percent slopes.** Almendra loam occurs on alluvial fans and consists of well-drained, loamy alluvium derived from igneous, metamorphic and sedimentary rock (NRCS 2018).

**Conejo clay loam, 0 to 1 percent slopes.** Conejo clay loam occurs on alluvial fans and consists of well-drained, fine-loamy alluvium derived from igneous, metamorphic and sedimentary rock (NRCS 2018). The majority of the project area is classified as Conejo clay loam.

#### 3.1.2 Vegetation Communities

The following descriptions of habitat types within the project area reference habitat values relative to each habitat type. For the purposes of this evaluation, habitat values are based on the condition of land to provide essential habitat elements that are used by wildlife for all or a part of their life cycles. Key habitat elements contributing to habitat values include: the abundance and availability of food and water; corridors for migration and dispersal; and escape, nesting, and thermal cover.

**Annual Grassland.** The area between the on- and off-ramps and SR 99 consists of non-native annual grassland. There are several mature trees scattered throughout these areas, mostly valley oak (*Quercus lobata*), ornamental pines (*Pinus* sp.), and deciduous ornamental species such as Chinese pistache (*Pistacia chinensis*). These areas are regularly mowed (Figure 5).



**Developed/Disturbed.** The remainder of the project area is considered developed/disturbed habitat. Most areas are subject to regular maintenance as well as high levels of human disturbance (mowing, driving, walking, etc.). Landscaped areas along the south side of Eaton Road that consist of trees and shrubs provide wildlife habitat values such as nesting and foraging habitat for several common bird species (Figure 6). Swainson's hawks are known to nest in mature trees within 10 miles of the BSA, namely along the Sacramento River. Other resident and migratory raptor and passerine species such red-tailed hawk (*Buteo jamaicensis*), and American robin (*Turdus migratorius*) are also known to use developed habitat areas within the BSA for nesting, foraging, and cover (Figure 5).

There are two drainages within the BSA. One drains the surrounding uplands along the eastern side of the NB-99 off-ramp and terminates into a sewer drain at the corner of the northbound SR 99 off-ramp and Eaton Road. This drainage is isolated and lacks a defined bed and bank. The other is an earthen flood control drainage that runs along the western side of Hicks Lane, then becomes concrete-lined and curves along the northern side of Eaton Road and continues north (Figure 5). This drainage contains gentle earthen slopes with no defined bed and bank and sparse vegetation. Where present, vegetation in the drainage is dominated by non-native grasses and forbs, such as (*Avena barbata*), pineapple weed (*Matricaria discoidea*), and foxtail barley (*Hordeum murinum*). The drainage, which runs north to south, only contains surface water during run-off events. The start of the drainage occurs approximately 0.2 mile north of the BSA.

### **3.2 Regional Species and Habitats of Concern**

For the purposes of this report, special-status species include taxa with a low or greater potential to occur within the project area, including those that are: (1) listed as threatened or endangered under either the California or Federal Endangered Species Acts; (2) candidates for either state or federal listing; (3) species afforded protection under the Fish and Game Code of California; (4) federal and CDFW "Species of Special Concern"; (5) CDFW "Species of Special Concern" highest and second priority lists; (6) and CNPS Rank 1-2 plants.

The CNDDDB, the CNPS electronic database, and the official USFWS species list were reviewed as part of this NES-MI to determine the occurrence or potential occurrence of special-status plant or wildlife species, and natural communities of special concern on or within the Richardson Springs USGS quadrangle and eight surrounding quadrangles. The CNDDDB is based on actual recorded occurrences and does not constitute an exhaustive inventory of every resource.

Table 1 includes lists of these special-status plant and wildlife species with both scientific and common names, legal status, description of habitat preference, and the recorded or potential occurrence within the project site. All but one of the special-status wildlife and plant species are not expected to occur in the project vicinity due to a lack of suitable habitat within the project area, or the project area is outside of the species known range. All species with potential to occur are

included in the table below and in Appendix A for reference, but only Swainson's hawk is discussed further below.

### 3.2.1 Special-Status Plants

No special-status plant species are expected to occur within the BSA or the 50-foot buffer. The BSA is disturbed and most areas are regularly managed by mowing. Several of the special-status plant species are associated with vernal pools, wetlands, or marshes, which do not occur within the BSA. The remaining species occur in woodlands, forests, or chaparral habitats and require specific soil types such as clay or alkaline soils that are not present within the BSA. No special-status plants or their habitats were observed during the biological survey.

### 3.2.2 Special-Status Wildlife

Swainson's hawk is the only special-status wildlife species that has some potential to occur within or adjacent to the BSA. Mature trees within and adjacent to the project area provide suitable nesting habitat for Swainson's hawk, and/or nesting and foraging habitat for several common avian species such as red-tailed hawk and American robin. Birds-of-prey are protected against take or possession, and the destruction of nests or eggs is prohibited pursuant to Section 3503.5 of the California Fish and Game Code. All native bird nests in California are protected by the federal Migratory Bird Treaty Act. Swainson's hawk is discussed further below.

No other special-status wildlife species are expected to occur within or adjacent to the project area due to the disturbed nature of, and/or the lack of suitable habitat for these species within and adjacent to the project area.

**Swainson's Hawk.** Swainson's hawk (*Buteo swainsoni*) is listed as a threatened species under CESA and is also fully protected against take pursuant to Section 3503.5 of the Fish and Game Code of California. Swainson's hawk is a relatively large raptor that typically nests in large trees in riparian corridors as well as isolated trees remaining in or adjacent to agricultural fields in the Central Valley.

Swainson's hawk forages in open grassland habitats and has adjusted to foraging in certain types of agricultural lands, including alfalfa, tomato and irrigated pastureland (Babcock 1993). The value of foraging habitat can be affected by a variety of characteristics, including density and availability of prey, proximity to disturbing features, and distance to nesting territories. Published information indicates these raptors typically forage within a 5-mile radius of nest sites but may range up to 18 miles from a nest site in search of suitable foraging habitat and available prey. Formal studies have shown that Swainson's hawks will spend the majority of foraging time in close proximity to the nest site when high quality foraging habitat (measured by the abundance and availability of prey) is present (Babcock 1993).

The occurrence of the Swainson’s hawk in and around the project area is well-documented, and there are dozens of occurrence records for this species within Butte County reported by the California Natural Diversity Database (CNDDDB 2018). Although the mature trees within and adjacent to the project area provide suitable nesting habitat for this species, no raptors or raptor nests were observed in or adjacent to the BSA during the biological survey.

**Table 1**  
**Special-Status Species with Known or Potential Occurrence in the Vicinity of the Proposed State Route 99/Eaton Road Interchange Improvements Project, Chico, Butte County, California.**

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
<i>Invertebrates</i>				
conservancy fairy shrimp	<i>Branchinecta conservatio</i>	Endangered/None	The conservancy fairy shrimp is adapted to seasonally inundated features and occur primarily in vernal pools, seasonal wetlands that fill with water during fall and winter rains and dry up in spring and summer. Typically the majority of pools in any vernal pool complex are not inhabited by the species at any one time. Different pools within or between complexes may provide habitat for the fairy shrimp in alternative years, as climatic conditions vary.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphis</i>	Threatened/None	<p>The valley elderberry longhorn beetle is completely dependent on its host plant, elderberry (<i>Sambucus</i> spp.), which occurs in riparian and other woodland communities in California's Central Valley and the associated foothills. Female beetles lay their eggs in crevices on the stems or on the leaves of living elderberry plants. When the eggs hatch, larvae bore into the stems. The larval stages last for one to two years. The fifth instar larvae create emergence holes in the stems and then plug the holes and remain in the stems through pupation. Adults emerge through the emergence holes from late March through June. The short-lived adult beetles forage on leaves and flowers of elderberry shrubs.</p>	<p><b>Not expected to occur.</b> No elderberry shrubs are present within or adjacent to the project site.</p>

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	Threatened/None	Vernal pool fairy shrimp is adapted to seasonally inundated features and occur primarily in vernal pools, seasonal wetlands that fill with water during fall and winter rains and dry up in spring and summer. Typically the majority of pools in any vernal pool complex are not inhabited by the species at any one time. Different pools within or between complexes may provide habitat for the fairy shrimp in alternative years, as climatic conditions vary.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	Endangered/None	Vernal pool tadpole shrimp is associated with low-alkalinity seasonal pools in unplowed grasslands. The vernal pool tadpole shrimp is found only in ephemeral freshwater habitats, including alkaline pools, clay flats, vernal lakes, vernal pools, vernal swales, and other seasonal wetlands in California. Suitable vernal pools and seasonal swales are generally underlain by hardpan or sandstone. This species inhabits freshwater habitats containing clear to highly turbid water, with water temperatures ranging from 50 to 84 degrees Fahrenheit and pH ranging from 6.2 to 8.5.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
<i>Fish</i>				
Central Valley steelhead	<i>Oncorhynchus mykiss irideus</i> (NMFS)	Threatened/None	Central Valley steelhead spawn downstream of dams on every major tributary within the Sacramento and San Joaquin River systems. Regardless of life history strategy, for the first year or two of life rainbow trout and steelhead are found in cool, clear, fast-flowing permanent streams and rivers where riffles predominate over pools, there is ample cover from riparian vegetation or undercut banks, and invertebrate life is diverse and abundant.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Chinook salmon	<i>Oncorhynchus tshawytscha</i> (Central Valley Spring Run)	Threatened/Threatened	Adult Central Valley spring-run Chinook salmon leave the ocean to begin their upstream migration in late January and early February, and enter the Sacramento River between March and September, primarily in May and June. Spring-run Chinook salmon generally enter rivers as sexually immature fish and must hold in freshwater for up to several months before spawning. While maturing, adults hold in deep pools with cold water. Spawning normally occurs between mid-August and early October, peaking in September.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
<b><i>Amphibians and Reptiles</i></b>				
foothill yellow-legged frog	<i>Rana boylei</i>	None/Candidate Threatened, SSC	Frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Sometimes found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
giant gartersnake	<i>Thamnophis gigas</i>	Threatened/Threatened	Giant gartersnake is found in isolated populations restricted to the Central Valley of California. It is found in freshwater marsh and wetlands, irrigation ditches, low gradient streams and rice fields containing emergent vegetation. Adjacent upland habitat is necessary for cover and aestivation.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
<b><i>Birds</i></b>				
bald eagle	<i>Haliaeetus leucocephalus</i>	Delisted/Endangered, FP	Lives near large bodies of open water such as lakes, marshes, estuaries, seacoasts and rivers, where fish are abundant. Usually nests within one mile of water in tall trees with open branchwork bordering lakes or large rivers. In Central California, bald eagles prefer foothill pines for nesting.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
bank swallow	<i>Riparia riparia</i>	None/Threatened	Restricted to riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine-textured or sandy soils, into which it digs nesting holes. Feeds predominantly over open riparian areas, but also over brushland, grassland, wetlands, water, and cropland.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
California black rail	<i>Laterallus jamaicensis coturniculus</i>	None/Threatened, FP	California black rail occurs near freshwater marshes along the margins of ponds, lakes, and water impoundments; also herb dominated wetlands on sloped ground associated with springs, canal leaks, seepage from impoundments and agricultural irrigation. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Least Bell's vireo	<i>Vireo bellii pusillus</i>	Endangered/Endangered	Least Bell's vireo primarily occupies riverine riparian habitats along water, including dry portions of intermittent streams that typically provide dense cover within 1 to 2 meters (3.3 to 6.6 feet) off the ground, often adjacent to a complex, stratified canopy.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.



Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
Swainson's hawk	<i>Buteo swainsoni</i>	None/Threatened	Swainson's hawk spends the breeding season in the Central Valley of California and is commonly found in agricultural areas or open grasslands containing solitary trees for nesting. Diet consists of small mammals and reptiles.	<b>Low potential to occur.</b> There are suitable nest trees within and adjacent to the project site; however, the nearest documented occurrence is approximately 7 miles south of the site. Other documented occurrences in the vicinity of the project site are along the Sacramento River. There is suitable foraging habitat to the west of SR 99.
tricolored blackbird	<i>Agelaius tricolor</i>	None/Candidate Endangered, SSC	Tricolored blackbird is a colonial species found almost exclusively in California. It utilizes wetlands, marshes and agricultural grain fields for foraging and nesting. The tricolored blackbird population has declined significantly in the past 6 years due to habitat loss and harvest of grain fields before young have fledged.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	Threatened/Endangered	Western yellow-billed cuckoo inhabits woodlands, thickets, orchards, streamside groves. Breeds mostly in dense deciduous stands, including forest edges, tall thickets, dense second growth, overgrown orchards, scrubby oak woods. Often in willow groves around marshes. In the west, mostly in streamside trees, including cottonwood-willow groves in arid country. Forages by scaling through shrubs and trees, gleaning insects from foliage and branches.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
<b>Plants</b>				
adobe-lily	<i>Fritillaria pluriflora</i>	None/None, CRPR 1B.2	Perennial bulbiferous herb found in chaparral, cismontane woodland, valley and foothill grassland (often adobe). Elevation 1,800-2,100 feet. Blooms Feb-Apr.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Ahart's buckwheat	<i>Eriogonum umbellatum</i> var. <i>ahartii</i>	None/None, CRPR 1B.2	Perennial herb found in cismontane woodland, chaparral (serpentinite, slopes, openings). Elevation 1,200-6,000 feet. Blooms Jun-Sep.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Ahart's paronychia	<i>Paronychia ahartii</i>	None/None, CRPR 1B.1	Annual herb found in cismontane woodland, valley and foothill grassland, vernal pools. Elevation 90-1,500 feet. Blooms Feb-Jun.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
Boggs Lake hedge-hyssop	<i>Gratiola heterosepala</i>	None/Endangered, CRPR 1B.2	Annual herb found in marshes and swamps (lake margins), vernal pools (clay). Elevation 30-7,125 feet. Blooms Apr-Aug.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Brazilian watermeal	<i>Wolffia brasiliensis</i>	None/None, CRPR 2B.3	Perennial herb (aquatic) found in marshes and swamps (assorted shallow freshwater). Elevation 60-300 feet. Blooms Apr, Dec.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
brownish beaked-rush	<i>Rhynchospora capitellata</i>	None/None, CRPR 2B.2	Perennial herb found in lower montane coniferous forest, meadows and seeps, marshes and swamps, upper montane coniferous forest (mesic). Elevation 135-6,000 feet. Blooms Jul-Aug.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Butte County checkerbloom	<i>Sidalcea robusta</i>	None/None, CRPR 1B.2	Perennial rhizomatous herb found in chaparral, cismontane woodland. Elevation 270-4,800 feet. Blooms Apr-Jun.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Butte County meadowfoam	<i>Limnanthes floccosa ssp. californica</i>	Endangered/Endangered, CRPR 1B.1	Annual herb found in valley and foothill grassland (mesic), vernal pools. Elevation 130-2,700 feet. Blooms Mar-May.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
California beaked-rush	<i>Rhynchospora californica</i>	None/None, CRPR 1B.1	Perennial rhizomatous herb found in bogs and fens, lower montane coniferous forest, meadows and seeps (seeps), marshes and swamps (freshwater). Elevation 135-3,000 feet. Blooms May-Jul.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
California satintail	<i>Imperata brevifolia</i>	None/None, CRPR 2B.1	Perennial rhizomatous herb found in chaparral, coastal scrub, Mojave desert scrub, meadows and seeps (often alkali), riparian scrub (mesic). Elevation 0-3,600 feet. Blooms Sep-May.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	None/None, CRPR 1B.1	Annual herb found in marshes and swamps (coastal salt), playas, vernal pools. Elevation 0-3,600 feet. Blooms Feb-Jun.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
dissected-leaved toothwort	<i>Cardamine pachystigma</i> var. <i>dissectifolia</i>	None/None, CRPR 1B.2	Perennial rhizomatous herb found in chaparral, lower montane coniferous forest (usually serpentinite, rocky). Elevation 750-6,300 feet. Blooms Feb-May.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
dwarf downingia	<i>Downingia pusilla</i>	None/None, CRPR 2B.2	Annual herb found in valley and foothill grassland (mesic), vernal pools. Elevation 0-1,300 feet. Blooms Mar-May.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
Ferris' milk-vetch	<i>Astragalus tener</i> <i>var. ferrisiae</i>	None/None, CRPR 1B.1	Annual herb found in meadows and seeps (vernally mesic), valley and foothill grassland (subalkaline flats). Elevation 0-225 feet. Blooms Apr-May.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
flagella-like atractylocarpus	<i>Campylopodiella stenocarpa</i>	None/None, CRPR 2B.2	Moss found in cismontane woodland. Elevation 300-1,500 feet.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Greene's tuctoria	<i>Tuctoria greenei</i>	Endangered/Rare, CRPR 1B.1	Annual herb found in vernal pools. Elevation 900-4,000 feet. Blooms May-July.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
hairy Orcutt grass	<i>Orcuttia pilosa</i>	Endangered/Endangered, CRPR 1B.1	Annual herb found in vernal pools. Elevation 120-600 feet. Blooms May-Sep.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Hall's rupertia	<i>Rupertia hallii</i>	None/None, CRPR 1B.2	Perennial herb found in cismontane woodland, lower montane coniferous forest (often roadsides, sometimes openings). Elevation 1,600-6,750 feet. Blooms Jun-Aug.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
Hoover's spurge	<i>Euphorbia hooveri</i>	Threatened/None, CRPR 1B.2	Annual herb found in vernal pools. Elevation 75-750 feet. Blooms Jul-Sep.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Mildred's clarkia	<i>Clarkia mildrediae</i> ssp. <i>mildrediae</i>	None/None, CRPR 1B.3	Annual herb found in cismontane woodland, lower montane coniferous forest (sandy, usually granitic). Elevation 735-5,100 feet. Blooms May-Aug.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
pink creamsacs	<i>Castilleja rubicundula</i> var. <i>rubicundula</i>	None/None, CRPR 1B.2	Annual herb (hemiparasitic) found in chaparral (openings), cismontane woodland, meadows and seeps, valley and foothill grassland (serpentine). Elevation 60-2,700 feet. Blooms Apr-Jun.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Red Bluff dwarf rush	<i>Juncus leiospermus</i> var. <i>leiospermus</i>	None/None, CRPR 1B.1	Annual herb found in vernal mesic chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools. Elevation 100-3,750 feet. Blooms Mar-Jun.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	None/None, CRPR 1B.2	Perennial rhizomatous emergent herb found in marshes and swamps. Elevation 0-1,950 feet. Blooms May-Oct.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
silky cryptantha	<i>Cryptantha crinita</i>	None/None, CRPR 1B.2	Annual herb found in gravelly streambeds within cismontane woodland, lower montane coniferous forest, riparian forest, riparian woodland, valley and foothill grassland. Elevation 180-3,600 feet. Blooms Apr-May.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
slender-leaved pondweed	<i>Stuckenia filiformis</i> ssp. <i>alpina</i>	None/None, CRPR 2B.2	Perennial rhizomatous herb (aquatic) found in marshes and swamps (assorted shallow freshwater). Elevation 900-6,400 feet. Blooms May-Jul.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
slender Orcutt grass	<i>Orcuttia tenuis</i>	Threatened/Endangered, CRPR 1B.1	Annual herb found in vernal pools (often gravelly). Elevation 100-5,280 feet. Blooms May-Sep.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
veiny monardella	<i>Monardella venosa</i>	None/None, CRPR 1B.1	Annual herb found in cismontane woodland, valley and foothill grassland (heavy clay). Elevation 180-1,200 feet. Blooms May, Jul.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.
white-stemmed clarkia	<i>Clarkia gracilis</i> ssp. <i>albicaulis</i>	None/None, CRPR 1B.2	Annual herb found in chaparral, cismontane woodland (sometimes serpentinite). Elevation 735-3,300 feet. Blooms May-Jul.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

Natural Environment Survey (Minimal Impact)

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Site
woolly rose-mallow	<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	None/None, CRPR 1B.2	Perennial rhizomatous herb (emergent) found in marshes and swamps (freshwater). Often in riprap on sides of levees. Elevation 0-360 feet. Blooms Jun-Sep.	<b>Not expected to occur.</b> Suitable habitat for this species is not present within or adjacent to the project site.

SSC: Species of Special Concern (CDFW)

FP: Fully Protected (CDFW)

CRPR: California Rare Plant Rank (CNPS)

CRPR 1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere

CRPR 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere

CRPR 2A: Plants Presumed Extirpated in California, But More Common Elsewhere

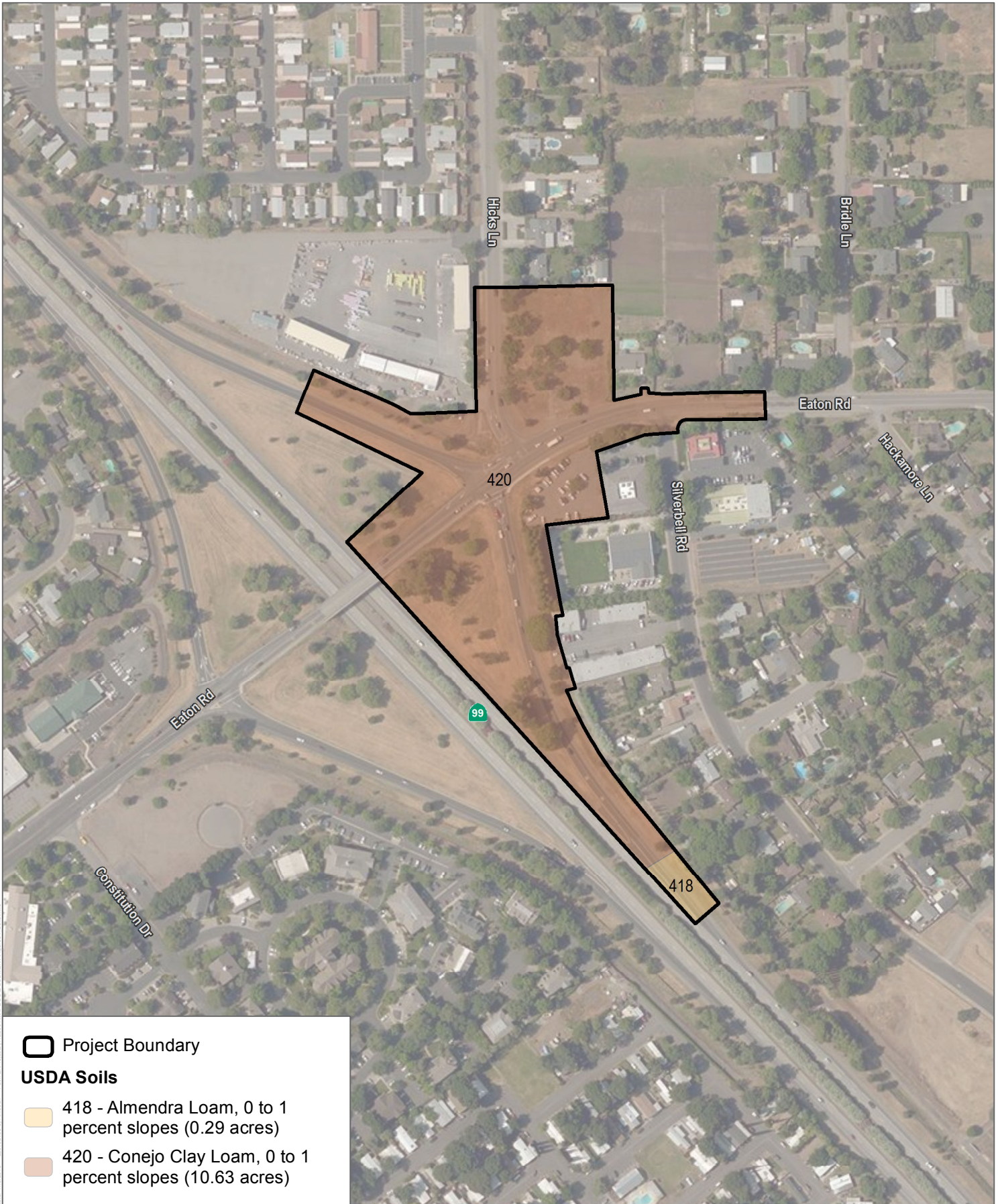
CRPR 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

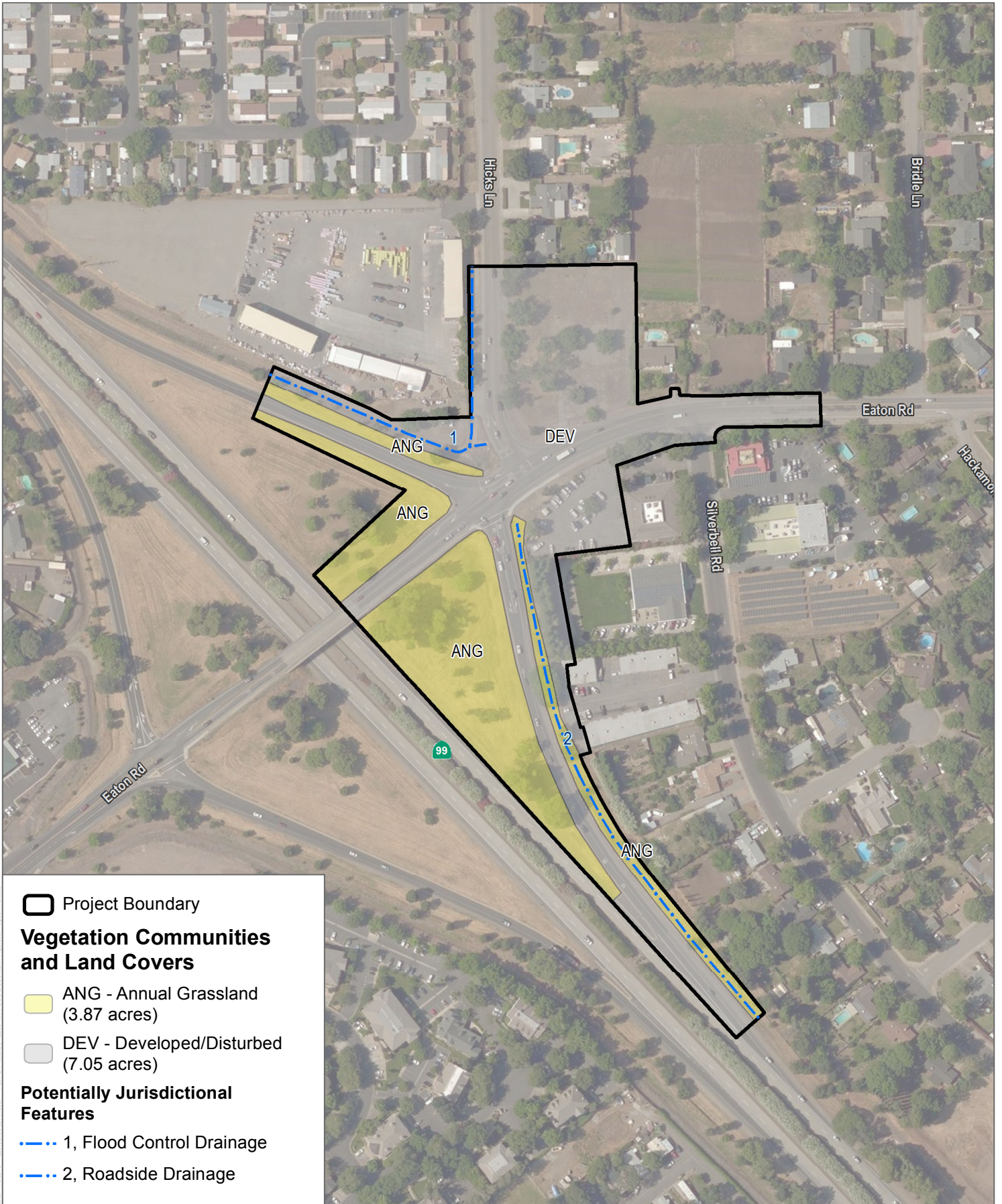




SOURCE: Bing Maps 2018, County of Butte 2018, USDA 2009

**FIGURE 4**  
Soils

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SOURCE: Bing Maps 2018, County of Butte 2018

**FIGURE 5**  
Vegetation Communities and Land Covers  
SR 99 & Eaton Road Interchange

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Photo 1: Comcast facility on SW corner of intersection.



Photo 2: Concrete lined portion of flood control channel.



Photo 3: Looking east along Eaton Road at intersection.



Photo 4: Looking east along Eaton Road.



Photo 5: Looking north along Hicks Road.



Photo 6: Looking north along SR 99 onramp.



Photo 7: Looking north along the SR 99 offramp towards Eaton Road.



Photo 8: Looking south along Hicks Road at flood control drainage.



Photo 9: Looking south at intersection from Hicks Road.



Photo 10: Looking west from Hicks Road at intersection.



Photo 11: Storm drain at SW corner of Eaton Road and SR 99 offramp.



Photo 12: Vacant lot in NE corner of intersection.

### **3.2.3 Habitat Connectivity**

Wildlife corridors are landscape features, usually linear in shape, that facilitate the movement of animals (or plants) over time between two or more patches of otherwise disjunct habitat. Corridors can be small and even man made (e.g., highway underpasses, culverts, bridges), narrow linear habitat areas (e.g., riparian strips, hedgerows), or wider landscape-level extensions of habitat that ultimately connect even larger core habitat areas. Depending on the size and extent, wildlife corridors can be used during animal migration, foraging events, and juvenile dispersal, and ultimately serve to facilitate genetic exchange between core populations, provide avenues for plant seed dispersal, enable increased biodiversity and maintenance of ecosystem integrity within habitat patches, and help offset the negative impacts of habitat fragmentation (Hilty et al. 2006).

The project area does not serve as a wildlife corridor because it does not act as a link between two or more patches of otherwise disjunct habitat, and the site and surrounding area is urbanized and developed.

## **4. Results: Biological Resources, Discussion of Impacts and Mitigation**

### ***4.1 Habitats and Sensitive Natural Communities***

The project area occurs in a developed environment. Vegetation that occurs within the BSA consists of ornamental plantings and disturbed non-native grassland habitat and ruderal vegetation that is regularly managed by mowing or influenced by human use. Although this vegetation has little value to most wildlife species, it provides nesting and foraging habitat for common and special-status avian species.

#### **Project Impacts**

A formal wetland delineation was not conducted during the biological survey. The drainage that runs parallel to the eastern side of the SR 99 NB off-ramp at Eaton Road, which lacks a defined bed and bank, drains surrounding upland habitat and terminates into a storm drain; therefore, it is unlikely that this feature is considered jurisdictional by ACOE, RWQCB or CDFW. The flood control drainage that runs along the west side of Hicks Lane is also unlikely to qualify as jurisdictional because it: 1) lacks a defined bed and bank, 2) does not support riparian plant species, fish or other aquatic wildlife, 3) is generally dominated by weedy species, 4) only contains surface water during run-off events, and 5) does not flow into a natural waterway.

#### **Avoidance and Minimization Efforts/Compensatory Mitigation**

No avoidance and minimization efforts or compensatory mitigation is proposed.

### ***4.2 Special-Status Plant Species***

As described in Section 3.2, there is no potential for special-status plants to occur within or adjacent to the BSA. The developed and disturbed nature of the site precludes the presence of special-status plants due to the absence of suitable soils and/or habitat.

#### **Survey Results**

No special-status plant species were noted within the BSA during the biological survey, and suitable habitat for special-status plants was not observed. Impacts to special-status plant species are not anticipated to occur as a result of the project.

#### **Avoidance and Minimization Efforts/Compensatory Mitigation**

Impacts to special-status plant species are not anticipated to occur; therefore, no avoidance and minimization measures or compensatory mitigation is proposed.



### **4.3 Special-Status Wildlife Species**

Swainson's hawk is the only special-status wildlife species that has potential to occur within or adjacent to the project area. A discussion of native migratory birds and Swainson's hawk is provided below.

#### **4.3.1 Discussion of Swainson's Hawk**

As described in Section 3.2, there is potential for Swainson's hawk to utilize mature trees within and adjacent to the project area for nesting.

#### **Survey Results**

No raptors or raptor nests were observed in the mature trees within and adjacent to the BSA during the biological survey; however, focused protocol-level surveys were not performed as part of the general biological survey. Due to the presence of several mature trees within the BSA and in the vicinity of the BSA, the presence of suitable foraging habitat within 5 miles of the project area, and information obtained from the CDFW CNDDDB that shows multiple occurrence records for this species along the Sacramento River west of the project area, there is a probability that Swainson's hawk could nest in the vicinity of the project area; however, this probability is low due to the fact that the nearest occurrence record is approximately 7 miles south of the site, other occurrence records are over ten miles west of the project area along the Sacramento River, and there is higher quality habitat to the west and north of the project area.

#### **Project Impacts**

Impacts to Swainson's hawk could occur due to implementation of the project in the form of nest abandonment or take of individual eggs or chicks due to noise, tree removal and increased levels of human disturbance and equipment in the vicinity of the project area. These impacts would be considered significant under CEQA.

#### **Avoidance and Minimization Efforts/Compensatory Mitigation**

The following mitigation measure will be implemented to ensure no impacts to Swainson's hawk or other native birds protected by the MBTA occur due to project construction:

Avoidance and Minimization Measure BIO-1: If work activities are to be conducted during the nesting bird season (February 1 – September 30), a nesting bird survey will be completed by a qualified biologist no earlier than 2 weeks before construction to determine if any native birds are nesting within or in the vicinity of the project area (including a 200-foot buffer for raptors and a ½ mile buffer for Swainson's hawk). The survey will include a thorough search of all trees, power poles, cavities, buildings, and vegetation for active nests in the proposed disturbance area, while also noting any incidental avian sightings. Surveys shall not be conducted during periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather that individually or collectively reduces the likelihood of detection. If any passerine or large stick nests are discovered, it will be determined whether they are actively being used or not.

If any active nests are observed during surveys, a suitable avoidance buffer from the nests will be determined by the qualified biologist based on species, location, and extent and type of planned construction activity. These nests will be avoided until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist. Should an active Swainson's hawk nest occur in the vicinity of the project area, consultation with CDFW might be required to determine an appropriate buffer to avoid impacts to the nest.

#### **4.3.2 Discussion of Migratory Birds**

Native migratory birds have the potential to utilize trees, shrubs, and man-made structures such as buildings and bridges for nesting and foraging. The typical season for nesting birds extends from February 1 through September 30.

##### **Survey Results**

A number of birds were observed within the BSA during the site survey, including California scrub jay (*Aphelocoma californica*), house sparrow (*Passer domesticus*), and bushtit (*Psaltriparus minimus*).

##### **Project Impacts**

The project could potentially impact nesting birds in the form of take of eggs or chicks, destruction of active nests due to vegetation removal, or abandonment of nests due to increased noise in the vicinity of the project area during construction.

##### ***Avoidance and Minimization Efforts/Compensatory Mitigation***

As recommended in Section 4.3.1 above, if construction is to occur during the nesting bird season (February 1 through September 30), pre-construction nesting bird surveys shall be performed within and the project area, including a 200-foot buffer for raptors and a ½ mile buffer for Swainson's hawk. If active nests are identified within the project area, avoidance buffers shall be established depending on bird species and planned construction.

## **5. Conclusions & Regulatory Determination**

### ***5.1 Federal Endangered Species Act Consultation Summary***

No species listed under the federal ESA will be impacted by the project; therefore, no consultation with the USFWS is required.

### ***5.2 Essential Fish Habitat Consultation Summary***

No essential fish habitat will be impacted by the project.

### ***5.3 Wetlands and Other Waters Coordination Summary***

There are no potentially jurisdictional wetlands or other waters of the U.S. in the BSA (see Section 4.1 for discussion).

## 6. References

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- CNPS (California Native Plant Society). 2018. Inventory of Rare and Endangered Plants (online edition, v8-02). Sacramento, California: California Native Plant Society. Accessed October 2018. <http://www.rareplants.cnps.org/advanced.html>.
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- Natural Resources Conservation Service (NRCS). Web Soil Survey. Accessed October 2018. <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>
- USFWS (U.S. Fish and Wildlife Service). 2018. Information, Planning and Conservation (IPaC). Accessed October 2018. <https://ecos.fws.gov/ipac/>.

# **Appendix A**

## *Database Search Results*

Natural Environment Survey (Minimal Impact)

11229



## Plant List

## Inventory of Rare and Endangered Plants

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

### Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2A, 2B], Found in Quads 3912188, 3912187, 3912186, 3912178, 3912177, 3912176, 3912168 3912167 and 3912166;

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

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<a href="#">Astragalus tener var. ferrisiae</a>	Ferris' milk-vetch	Fabaceae	annual herb	Apr-May	1B.1	S1	G2T1
<a href="#">Balsamorhiza macrolepis</a>	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
<a href="#">Campylopodia stenocarpa</a>	flagella-like atractylocarpus	Dicranaceae	moss		2B.2	S1?	G5
<a href="#">Cardamine pachystigma var. dissectifolia</a>	dissected-leaved toothwort	Brassicaceae	perennial rhizomatous herb	Feb-May	1B.2	S2	G3G5T2Q
<a href="#">Castilleja rubicundula var. rubicundula</a>	pink creamsacs	Orobanchaceae	annual herb (hemiparasitic)	Apr-Jun	1B.2	S2	G5T2
<a href="#">Clarkia gracilis ssp. albicaulis</a>	white-stemmed clarkia	Onagraceae	annual herb	May-Jul	1B.2	S3	G5T3
<a href="#">Clarkia mildrediae ssp. mildrediae</a>	Mildred's clarkia	Onagraceae	annual herb	May-Aug	1B.3	S2S3	G3T2T3
<a href="#">Cryptantha crinita</a>	silky cryptantha	Boraginaceae	annual herb	Apr-May	1B.2	S2	G2
<a href="#">Downingia pusilla</a>	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2	S2	GU
<a href="#">Eriogonum umbellatum var. ahartii</a>	Ahart's buckwheat	Polygonaceae	perennial herb	Jun-Sep	1B.2	S3	G5T3
<a href="#">Euphorbia hooveri</a>	Hoover's spurge	Euphorbiaceae	annual herb	Jul-Sep (Oct)	1B.2	S1	G1
<a href="#">Fritillaria pluriflora</a>	adobe-lily	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2S3	G2G3
<a href="#">Gratiola heterosepala</a>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	1B.2	S2	G2
<a href="#">Hibiscus lasiocarpus var. occidentalis</a>	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	1B.2	S3	G5T3

<a href="#"><u>Imperata brevifolia</u></a>	California satintail	Poaceae	perennial rhizomatous herb	Sep-May	2B.1	S3	G4
<a href="#"><u>Juncus leiospermus var. leiospermus</u></a>	Red Bluff dwarf rush	Juncaceae	annual herb	Mar-Jun	1B.1	S2	G2T2
<a href="#"><u>Lasthenia glabrata ssp. coulteri</u></a>	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2
<a href="#"><u>Limnanthes floccosa ssp. californica</u></a>	Butte County meadowfoam	Limnanthaceae	annual herb	Mar-May	1B.1	S1	G4T1
<a href="#"><u>Monardella venosa</u></a>	veiny monardella	Lamiaceae	annual herb	May,Jul	1B.1	S1	G1
<a href="#"><u>Orcuttia pilosa</u></a>	hairy Orcutt grass	Poaceae	annual herb	May-Sep	1B.1	S1	G1
<a href="#"><u>Orcuttia tenuis</u></a>	slender Orcutt grass	Poaceae	annual herb	May-Sep (Oct)	1B.1	S2	G2
<a href="#"><u>Paronychia ahartii</u></a>	Ahart's paronychia	Caryophyllaceae	annual herb	Feb-Jun	1B.1	S3	G3
<a href="#"><u>Rhynchospora californica</u></a>	California beaked-rush	Cyperaceae	perennial rhizomatous herb	May-Jul	1B.1	S1	G1
<a href="#"><u>Rhynchospora capitellata</u></a>	brownish beaked-rush	Cyperaceae	perennial herb	Jul-Aug	2B.2	S1	G5
<a href="#"><u>Rupertia hallii</u></a>	Hall's rupertia	Fabaceae	perennial herb	Jun-Aug (Sep)	1B.2	S2S3	G2G3
<a href="#"><u>Sagittaria sanfordii</u></a>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct (Nov)	1B.2	S3	G3
<a href="#"><u>Sidalcea robusta</u></a>	Butte County checkerbloom	Malvaceae	perennial rhizomatous herb	Apr,Jun	1B.2	S2	G2
<a href="#"><u>Stuckenia filiformis ssp. alpina</u></a>	slender-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	May-Jul	2B.2	S3	G5T5
<a href="#"><u>Tuctoria greenei</u></a>	Greene's tuctoria	Poaceae	annual herb	May-Jul (Sep)	1B.1	S1	G1
<a href="#"><u>Wolffia brasiliensis</u></a>	Brazilian watermeal	Araceae	perennial herb (aquatic)	Apr,Dec	2B.3	S1	G5

### Suggested Citation

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 11 October 2018].

#### Search the Inventory

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[About the Rare Plant Program](#)

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#### Contributors

[The Calflora Database](#)

[The California Lichen Society](#)

[California Natural Diversity Database](#)

[The Jepson Flora Project](#)

[The Consortium of California Herbaria](#)

[CalPhotos](#)

#### Questions and Comments



**IPaC** Information for Planning and Consultation **U.S. Fish & Wildlife Service**

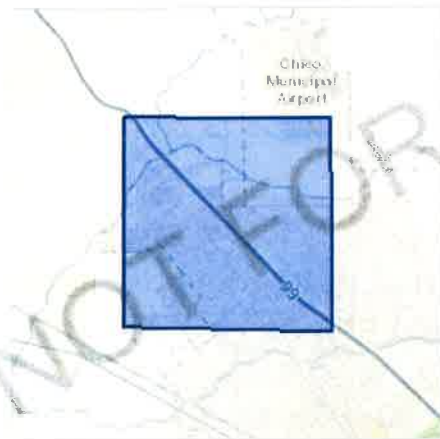
## IPaC resource list

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

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

### Location

Butte County, California



### Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600 

📅 (916) 414-6713 

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

# Endangered species

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

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

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

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

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

## Listed species

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

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

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

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

## Birds

NAME

STATUS

Yellow-billed Cuckoo *Coccyzus americanus*

Threatened

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

<https://ecos.fws.gov/ecp/species/3911>

## Reptiles

NAME

STATUS

Giant Garter Snake *Thamnophis gigas*

Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4482>

## Amphibians

NAME

STATUS

California Red-legged Frog *Rana draytonii*

Threatened

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

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

## Fishes

NAME

STATUS

Delta Smelt *Hypomesus transpacificus*

Threatened

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

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

## Insects

NAME

STATUS

Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus*

Threatened

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

<https://ecos.fws.gov/ecp/species/7850>

## Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/8246">https://ecos.fws.gov/ecp/species/8246</a>	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/498">https://ecos.fws.gov/ecp/species/498</a>	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/2246">https://ecos.fws.gov/ecp/species/2246</a>	Endangered

## Flowering Plants

NAME	STATUS
Butte County Meadowfoam <i>Limnanthes floccosa</i> ssp. <i>californica</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/4223">https://ecos.fws.gov/ecp/species/4223</a>	Endangered
Greene's Tuctoria <i>Tuctoria greenei</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/1573">https://ecos.fws.gov/ecp/species/1573</a>	Endangered
Hoover's Spurge <i>Chamaesyce hooveri</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/3019">https://ecos.fws.gov/ecp/species/3019</a>	Threatened
Slender Orcutt Grass <i>Orcuttia tenuis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/1063">https://ecos.fws.gov/ecp/species/1063</a>	Threatened

## Critical habitats

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

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

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

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

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

MIGRATORY BIRD INFORMATION IS NOT AVAILABLE AT THIS TIME

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## Facilities

### Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

## Wetlands in the National Wetlands Inventory

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

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

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

[PEM1A](#)

[PEM1Kx](#)

[PEM1C](#)

FRESHWATER FORESTED/SHRUB WETLAND

[PSS1A](#)

## FRESHWATER POND

[PABKx](#)[PUBKx](#)

## RIVERINE

[R4SBAx](#)[R4SBC](#)[R4SBCx](#)[R2UBHx](#)[R4SBA](#)[R5UBFx](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

**Data limitations**

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

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

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

**Data exclusions**

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

**Data precautions**

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





# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



**Query Criteria:** Quad (Richardson Springs (3912177) OR Richardson Springs NW (3912188) OR Campbell Mound (3912187) OR Cohasset (3912186) OR Nord (3912178) OR Paradise West (3912176) OR Ord Ferry (3912168) OR Chico (3912167) OR Hamlin Canyon (3912166)) AND Taxonomic Group (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes) AND (Federal Listing Status (Endangered OR Threatened OR Candidate) OR State Listing Status (Endangered OR Threatened OR Candidate Endangered OR Candidate Threatened))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Agelaius tricolor</i> tricolored blackbird	G2G3 S1S2	None Candidate Endangered	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	260 260	951 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	G2 S2	Endangered None	IUCN_EN-Endangered	190 235	43 S:8	0	3	0	0	0	5	1	7	8	0	0
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	G3 S3	Threatened None	IUCN_VU-Vulnerable	190 290	766 S:17	1	2	2	1	0	11	4	13	17	0	0
<i>Buteo swainsoni</i> Swainson's hawk	G5 S3	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	100 195	2465 S:10	1	4	0	0	0	5	9	1	10	0	0
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	G5T2T3 S1	Threatened Endangered	BLM_S-Sensitive NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	100 135	155 S:8	0	0	0	0	0	8	5	3	8	0	0
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	G3T2 S2	Threatened None		95 280	271 S:14	2	1	0	0	0	11	6	8	14	0	0
<i>Euphorbia hooveri</i> Hoover's spurge	G1 S1	Threatened None	Rare Plant Rank - 1B.2	175 420	29 S:8	1	3	3	0	0	1	5	3	8	0	0



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	G2 S2	None Endangered	Rare Plant Rank - 1B.2 BLM_S-Sensitive	210 210	99 S:1	0	1	0	0	0	0	1	0	1	0	0
<i>Haliaeetus leucocephalus</i> bald eagle	G5 S3	Delisted Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	500 500	327 S:2	1	1	0	0	0	0	0	2	2	0	0
<i>Laterallus jamaicensis coturniculus</i> California black rail	G3G4T1 S1	None Threatened	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_NT-Near Threatened NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	410 570	303 S:3	0	1	0	0	0	2	2	1	3	0	0
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	G4 S3S4	Endangered None	IUCN_EN-Endangered	175 280	324 S:21	2	4	0	0	0	15	10	11	21	0	0
<i>Limnanthes floccosa ssp. californica</i> Butte County meadowfoam	G4T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	180 445	21 S:13	2	7	1	2	0	1	0	13	13	0	0
<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead - Central Valley DPS	G5T2Q S2	Threatened None	AFS_TH-Threatened		31 S:5	0	1	0	1	0	3	0	5	5	0	0
<i>Oncorhynchus tshawytscha pop. 6</i> chinook salmon - Central Valley spring-run ESU	G5 S1	Threatened Threatened	AFS_TH-Threatened	700 800	13 S:2	0	0	1	1	0	0	1	1	2	0	0
<i>Orcuttia pilosa</i> hairy Orcutt grass	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1	210 380	34 S:5	2	1	1	1	0	0	3	2	5	0	0
<i>Orcuttia tenuis</i> slender Orcutt grass	G2 S2	Threatened Endangered	Rare Plant Rank - 1B.1 SB_UCBBG-UC Berkeley Botanical Garden	220 245	100 S:3	0	1	1	0	0	1	1	2	3	0	0



**Summary Table Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Rana boylei</i> foothill yellow-legged frog	G3 S3	None Candidate Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive	137 3,125	2268 S:17	1	3	2	0	1	10	6	11	16	0	1
<i>Riparia riparia</i> bank swallow	G5 S2	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	100 140	297 S:15	0	3	0	1	0	11	6	9	15	0	0
<i>Thamnophis gigas</i> giant gartersnake	G2 S2	Threatened Threatened	IUCN_VU-Vulnerable	115 130	366 S:3	0	0	0	0	0	3	2	1	3	0	0
<i>Tuctoria greenei</i> Greene's tuctoria	G1 S1	Endangered Rare	Rare Plant Rank - 1B.1	180 255	48 S:9	0	5	0	1	1	2	4	5	8	0	1
<i>Vireo bellii pusillus</i> least Bell's vireo	G5T2 S2	Endangered Endangered	IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List	200 200	483 S:1	0	0	0	0	0	1	1	0	1	0	0



**Summary Table Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Rana boylei</i> foothill yellow-legged frog	G3 S3	None Candidate Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive	137 3,125	2268 S:17	1	3	2	0	1	10	6	11	16	0	1
<i>Riparia riparia</i> bank swallow	G5 S2	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	100 140	297 S:15	0	3	0	1	0	11	6	9	15	0	0
<i>Thamnophis gigas</i> giant gartersnake	G2 S2	Threatened Threatened	IUCN_VU-Vulnerable	115 130	366 S:3	0	0	0	0	0	3	2	1	3	0	0
<i>Tuctoria greenei</i> Greene's tuctoria	G1 S1	Endangered Rare	Rare Plant Rank - 1B.1	180 255	48 S:9	0	5	0	1	1	2	4	5	8	0	1
<i>Vireo bellii pusillus</i> least Bell's vireo	G5T2 S2	Endangered Endangered	IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List	200 200	483 S:1	0	0	0	0	0	1	1	0	1	0	0

APPENDIX D  
*ASR*



# Archaeological Survey Report

State Route 99 / Eaton Road Interchange Improvements

City of Chico

Contact: Tracy Bettencourt, MPA, AICP

411 Main Street, 2<sup>nd</sup> Floor

Chico, California 95928

Federal Aid Project Number HSIPL-5037(035)

**August 2019**

STATE OF CALIFORNIA  
Department of Transportation

Prepared by: Adam Giacinto Date: 8/16/2019  
Adam Giacinto, MA, RPA, Archaeological Principal Investigator  
(530) 863-4652  
Dudek

Recommended for Approval by: \_\_\_\_\_ Date: \_\_\_\_\_  
William Larson  
PWS: PI-Prehistoric Archaeology  
California Department of Transportation, District 3

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
David Giongco, Local Assistance Engineer  
California Department of Transportation, District 3  
(Marysville/Sacramento)







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## SUMMARY OF FINDINGS

### **Proposed Undertaking:**

The City of Chico's (the City) proposed State Route 99 / Eaton Road Interchange Improvements (Project #: HSIPL-5037(035)) is a local project overseen by the California Department of Transportation (Caltrans) District 3 and requires compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA), as well as California Environmental Quality Act (CEQA) requirements. The City, in cooperation with the Federal Highway Administration (FHWA), proposes to convert Eaton Road/SR 99 NB Ramps/Hicks Lane into one multilane roundabout intersection (Figure 3). Although the two intersections would be combined, the local circulation and access would remain unchanged.

**Purpose and Scope of the Survey:** This Archaeological Survey Report (ASR) presents the results of a California Historical Resources Information System records search, Native American coordination, and pedestrian survey conducted by Dudek in support of the proposed State Route 99 / Eaton Road Interchange Improvements (Project #: HSIPL-5037(035)). The intent of this report is to comply with Section 106 of the National Historic Preservation Act and the California Environmental Quality Act requirements, initiating cultural resources clearance for the Project as it relates to applicable legislation and regulation. This ASR was prepared in accordance with the Caltrans Programmatic Agreement (PA) and most recent edition of *Standard Environmental Reference, Volume 2, Cultural Resources* (2015) requirements. The California Department of Transportation (Caltrans), acting as the lead agency under the delegated authority of the Federal Highway Administration, is providing the Project oversight as federal funds are involved. The studies conducted for this Project are consistent with the Caltrans responsibilities under the January 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act as it Pertains to the Administration of the Federal-Aid Highway Program in California* for compliance with Section 106 of the NHPA of 1966, as amended.

**Investigation Constraints:** Investigation constraints included reduced visibility resulting from the presence of infrastructure, such as paved Eaton Road and State Route 99.

**Number and Types of Identified Archaeological Resources:** No previously recorded resources were identified within APE as a result of the California Historical Information System (CHRIS) records search conducted at the North East Information Center (NEIC). The NAHC Sacred Lands File search indicated negative results for the project area. Intensive-level pedestrian survey did not

identify resources within the APE. The APE has been substantially disturbed, and soils do not appear to have the potential to support the presence of intact buried archaeological deposits.

**Policy Statement:** It is Caltrans' policy to avoid cultural resources whenever possible. Further investigations may be needed if the sites cannot be avoided by the Project. If buried cultural materials are encountered during construction, Caltrans policy states that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the Project changes to include areas not previously surveyed.

# 1 INTRODUCTION

## 1.1 Project Overview

**Location of the Survey:** The State Route 99 / Eaton Road Interchange Improvements Project (proposed project) is located in northwest portion of the City of Chico (Figure 1 & Figure 2). The project study area limits extend to two intersections directly east of State Route 99, the off ramp of State Route 99 to Eaton Road and the intersection of Eaton Road and Hicks Lane. The general topography of the study area is characterized by relatively flat terrain at roughly 170 feet above sea level. The project area falls within Townships 22 North, Range 1 East, Section 9 and an unsectioned portion of the Richardson Springs, California 1:24,000 U.S. Geological Survey 7.5-Minute Quadrangle Map.

**Maps:** All maps are located in the Maps section of this report. Figure 1 is a Project vicinity map depicting the general vicinity and topography of the Project. Figure 2 is an aerial map identifying the location of the Project area. Figure 3 identifies the Area of Potential Effects (APE).

**Project Personnel:** All Dudek Project personnel meet the Caltrans Professionally Qualified Staff (PQS) Standards. This report was authored by Dudek Archaeological Principal Investigator Adam Giacinto, M.A., RPA, who received his M.A. in Anthropology from San Diego State University in 2011, with fieldwork performed by Nick Hanten, BA Archaeology, and with contributions by Kate Kaiser, MS Historic Preservation and William Burns, MSc, RPA.

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## 2 PROJECT LOCATION AND DESCRIPTION

### 2.1 Project Location

The proposed project is located in northwest Chico (see Figure 1). Chico is an incorporated city in Butte County, California. Specifically, the approximate center of the project is located at Lat. 39.4630 N, Long -121.5220 W, within Township 22 North, Range 1 East, and Section 9 of the Richardson Springs United States Geological Survey (USGS) 7.5 minute quadrangle.

SR-99 is a highway that spans the Central Valley, beginning at Wheeler Ridge near the Grapevine in Kern County and ending at Red Bluff in Tehama County. Eaton Road is an east/west arterial street extending from the western city limits to approximately 3.6 miles east of the project site. Hicks Lane is a north/south collector street extending from Eaton Road to Keefer Road. As shown on Figure 2, the two existing intersections of SR-99 NB Ramps/Eaton Road and Eaton Road/Hicks Lane are closely spaced. There is a large flood control channel directly adjacent to the SR 99 northbound on-ramp that is in the City right of way.

Land uses surrounding the interchange include residential and service commercial. Several commercial businesses are located in the southeast quadrant of the SR 99/ Eaton Road interchange. The Comcast service center, with a large parking lot, fronts Eaton Road. Single-family residential development dominates the northeast quadrant, as well as Pacific Supply between SR 99 and Hicks Lane, and a large vacant parcel northeast of Eaton Road and Hicks Lane, currently owned by the City. The land uses immediately west of SR-99 include commercial and residential uses.

### 2.2 Scope of Project

This Archaeological Survey Report (ASR) presents the results of a CHRIS records search and Native American Heritage Commission Sacred Lands File Search conducted by Dudek in support of the proposed Project. The intent of this report is to comply with Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA) requirements, initiating cultural resources clearance for the Project as it relates to applicable legislation and regulation. This ASR was prepared in accordance with the Caltrans Programmatic Agreement (PA) and most recent edition of *Standard Environmental Reference, Volume 2, Cultural Resources* (2015) requirements.

The proposed project would convert Eaton Road/SR 99 NB Ramps/Hicks Lane into one multilane roundabout intersection (Figure 2). Although the two intersections would be combined, the local circulation and access would remain unchanged. Intersection geometrics and pedestrian crossings are

consistent with the National Cooperative Highway Research Program (NCHRP) Report 672 entitled “Roundabouts: An Information Guide, 2nd Edition” (Guide).

A multilane roundabout with the lane geometry would accommodate the Ultimate Design Year traffic forecast volumes. The roundabout is centered on the NB Ramps intersection.

The following provides further detail of the improvements at this intersection:

- a) The NB off-ramp would be reconstructed to provide standard super elevation transitions and an acceptable alignment into the roundabout and flared to provide a two lane entry into the roundabout that can accommodate the design vehicles.
- b) The westbound approach would initially be striped as a one lane approach with the ability to be re-striped to accommodate two lanes in the Ultimate Design Year if necessary. Truck blisters are shown for right-turn movements to and from Hicks Lane. The drainage channel in the northern corner would need to be modified to accommodate the larger intersection footprint.
- c) The NB off ramp would be realigned to accommodate the roundabout geometrics and grade changes.

#### *Pedestrian and Bicycle Safety*

There would be a 10-foot shared-use path shown on the southern side of the roundabout intersection buffered by at least 2 feet of landscaping from the roadway or by a barrier at the overcrossing. In addition, there would be a pedestrian and bicycle connection from the roundabout intersection to Silverbell Road in order to match the City’s current master plan. Pedestrian crossings are shown a minimum of one car length from the circulatory roadway, and the pedestrian refuges at the splitter islands are at least 6 feet wide, which are consistent with National Cooperative Highway Research Program (NCHRP) Report 672 entitled “Roundabouts: An Information Guide, 2nd Edition” (Guide). The shared-use path conveys both pedestrian and bicycle traffic through the intersection. The path provides the opportunity for cyclists to exit the bicycle lane via a bicycle ramp and navigate the intersection on the shared-use path and through the crosswalks. As an alternative to taking the shared-use path, cyclists are also given an option to exit the bicycle lane and enter the roadway to ride with vehicle traffic through the roundabout. Crosswalks are split into two separate crossings through the provision of pedestrian refuges at the splitter islands. These two-stage crossings reduce the amount of sustained time a pedestrian is in potential conflict with motorized vehicles by limiting the length of each crossing and limiting each crossing to one direction of vehicle travel at a time.

### *Reduced Speed Potential*

Typically, the roundabout geometric design requires the driver to reduce the speed in the intersection to 15-25 MPH. Conversely, drivers can travel through a signalized intersection at speeds higher than posted speed limits due to lack of geometric constraints. Due to reduced travel speeds through the intersection and expected reduction in crashes, the roundabout alternative is likely to eliminate most severe crash types.

### *Right of Way*

Additional right of way would be required on the east side of the NB SR 99 off ramp. The affected properties include the Comcast Service Center, the Production Credit Association, and Precision Auto Repair. The acquisition would primarily affect landscaping and would not result in the removal of any buildings. Temporary construction easements on these three properties would also be necessary.

### *Utilities*

Adjustment of utility vaults to match the final pavement surface elevation would be required along Eaton Road. All other existing utilities would be protected in place, including the joint overhead line that crosses Eaton Road on the eastern end of the project.

### *Construction*

Construction is anticipated to begin in 2020. Construction would be phased in order to maintain local access to State Route 99 and to the properties adjacent to Eaton Road and Hicks Lane. Staging would occur within the SR 99 right of way, west of the SR 99 NB Off-Ramp and/or the vacant parcel at Hicks Land and Eaton Road.

### *Depth of Disturbance*

Excavation would be required throughout the project in order to construct landscaping and drainage facilities, which require trenching, placement of pipe, drainage structures, landscaping, irrigation, and backfill totaling 6 feet in depth. A maximum excavation depth of 25 feet would be required to install overhead signing along the Off Ramp.

## 2.3 Area of Potential Effects

The APE is the geographic area or areas within which an undertaking may directly or indirectly cause impacts to historic resources. Determination of the APE is influenced by the project's setting, the scale and nature of the undertaking, and the different kinds of effects that may result from the undertaking (36 Code of Federal Regulations [CFR] 800.16[d]).

The project APE was developed by Dudek in consultation with GHD and the City (Figure 3). The APE was approved by Caltrans District 3 on \_\_\_\_\_, 2019. The project includes both a direct and indirect to APE in consideration of potential project-related effects to archaeological resources. The direct APE is where ground disturbance is expected to occur, representing the project footprint. The extent of the direct APE includes the section of Eaton Road right-of-way from east of the Eaton Road overpass to 180 feet west of the intersection of Bridle Lane and Eaton Road, the entire SR-99 Northbound (NB) off ramp and approximately 500 feet of the SR-99 NB on-ramp, as well as the entirety of parcel APN 007-240-078, and a portion of APN 0047-390-025. The vertical APE, as represented by the maximum depth of disturbance discussed above, will be 25 feet below the surface. The indirect APE consists of five adjacent, mixed-use parcels: APN 007-240-062, 007-240-034, 007-390-026, 007-390-001, and the remainder of 007-390-025.

## 3 SOURCES CONSULTED

### 3.1 Records Search

On November 19, 2018, Northeast Information Center (NEIC) staff conducted a CHRIS records search. The complete results of the CHRIS records searches are provided in Confidential Appendix A. The search included any previously recorded cultural resources (including archaeological and historic built environment resources) and investigations within the project APE, and a 0.5-mile radius buffer. In addition to official maps and records, the following sources of information were consulted as part of the records search:

- National Register of Historic Places
- California State Historic Property Data Files
- California State Historical Landmarks
- California Points of Historical Interest
- Office of Historic Preservation Archaeological Determinations of Eligibility
- Caltrans State and Local Bridge Surveys
- Historical Maps (1901-1967)

#### 3.1.1 Previous Cultural Resources Studies within 0.5-Mile of the APE

The records search results identified five previous cultural resources studies (005745 [2003], 005745 [2005], 005980, 006212, 007491) have included portions of the project APE, and an additional 17 previous cultural resources studies within the 0.5-mile radius that do not overlap the project site (Table 1). These previous studies include a countywide archaeological overview, archaeological survey reports, record searches, cultural resources technical reports, historic properties reports, and determinations of eligibility reports for historic buildings. Studies that intersect the project site consist of five archaeological survey reports and are discussed below.

**Table 1**  
**Previously Conducted Cultural Resources Studies Within 0.5 Miles of Project APE**

NEIC Report No.	Title of Study	Author(s) and Date
Studies Within the Project APE		
0005745	Class I Archaeological Survey: NW Chico Study Area, c. 632-acres in Northwest Chico, Butte County, California	Jensen, Peter M. (2003)

ARCHAEOLOGICAL SURVEY REPORT FOR THE STATE ROUTE 99 / EATON ROAD  
INTERCHANGE IMPORVEMENTS, CITY OF CHICO

**Table 1**  
**Previously Conducted Cultural Resources Studies Within 0.5 Miles of Project APE**

NEIC Report No.	Title of Study	Author(s) and Date
005745	Archaeological Inventory Survey: Northwest Chico Specific Plan Development Area, Parcels 1, 2, 3 and 8, 190-Acres West of the Esplanade and South of Nord Highway, Chico, Butte County, California	Jensen, Peter M. (2005)
005980	Archaeological Reconnaissance of Four Properties: MIAC Subdivision, Thomas Fanning, Jerome Hanley, Robert Quirk, Butte County, California	Manning, James P. (1979)
006212	Archaeological Survey for a Road Widening Project Along Eaton Road, Extending from Hicks Lane to Cohasset Highway, Butte County, California	Manning, James P. (1979)
007491	Archaeological Survey Report for the Chico Urban Area Nitrate Compliance Plan Environmental Impact Report Project, Chico, California	Westwood, Lisa and Russell Bevill (2000)
<b>Studies Outside of the Project Site</b>		
000839	The Archaeology and Prehistory of Plumas and Butte Counties, California: An Introduction and Interpretive Model	Kowta, Makoto (1988)
004990	Negative Archaeological Survey Report for the Eaton Ranch Development Project, Butte County, California	Westwood, Lisa (2003)
005966	Archaeological Reconnaissance of the Wirt Property, c. 250 acres, Butte County, California, Letter Report to Earl Nelson, Director, Environmental Review Department	Manning, James P. (1978)
005986	Archaeological Reconnaissance of the Clark Imhoff Property, Butte County, California	Henton, Gregory H. (1979)
006138	Archaeological Reconnaissance for properties located in the Northwest Chico Rezone Project, Chico, Butte County, California	Markley, Richard E. (1977)
006303	Class I Archaeological Survey: North Esplanade Annexation Area, 200 acres Between the Esplanade and SR 99 from Eaton Road North to their Intersection, Butte County, California	Jensen, Peter (2004)
006749	An Archaeological Evaluation of the Sycamore Bike Path Project Chico, Butte County, California	Harrington, Lori (2005)
006889	An Archaeological Evaluation of the Byrne Property Chico, Butte County, California	Harrington, Lori (2006)
007772	Archaeological Reconnaissance of Dean Grissom's property (AP # 44-41-03), Butte County, California	Henton, Gregory H. (1979)
007784	Archaeological Inventory Survey of the Proposed Kimbell Subdivision of 10 Acres, Adjacent to Highway 99 and Sycamore Drive, North Chico, Butte County, California.	Jensen, Peter M. (1991)
009915	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate SC15402 (Almond Tree Mini Storage), 3124 Esplanade, Chico, Butte County, California	Bonner, Wayne H. (2008)
010046	Cultural Resources Constraints Study for the Replacement of 10 Poles on the Butte-Sycamore Creek 60kV Transmission Line	Kersey, Kim (2008)
010368	Determination of Eligibility and Effect for the 3057 Esplanade Project Area, City of Chico, Butte County, California	Neuenschwander, Neal (2009)
010706	Final Cultural Resources Technical Report: Levee Geotechnical Evaluation Program, Mud and Sycamore Creeks Left Bank Levee, Chico, California	Pecora, Meredith (2009)

**Table 1**  
**Previously Conducted Cultural Resources Studies Within 0.5 Miles of Project APE**

NEIC Report No.	Title of Study	Author(s) and Date
010945	Cultural Resources Investigation for AT&T CN0890-C "Chico Bank Building" 3042 Esplanade, Chico, Butte County, California 95973	Losee, Carolyn (2010)

***005745 (2003)***

This report details the results of a Class I archaeological records search, overview and field inspection of approximately 632 acres of land located within an area of Chico known as the Northwest (NW) Chico Development Area. The City of Chico is preparing a long-term development plan and an environmental impact report, and this report constitutes the record search field survey and archaeological report required for the scope of the project. Reconnaissance field survey failed to relocate the only identified previously recorded site in the area, due to poor location information, and did not identify any new archaeological sites. Archaeological monitoring was recommended for subsurface disturbances.

***005745 (2005)***

Following the completion of Jensen’s 2003 *Class I Archaeological Survey: NW Chico Study Area, c. 632-acres in Northwest Chico, Butte County, California* report, Jensen made an Archaeological Inventory survey again in 2005. This report details the results of an archaeological inventory survey for proposed residential and related development of an additional 190 acres of land in the Northwest Chico Specific Plan development area and owned by four separate entities/individuals. This report detailed an extensive prehistoric and historic context, record search, and pedestrian level survey of the additional 190 acres, including four historical-aged ranch properties. Prehistoric artifacts and features were noted within the project area in the mapped location of a previously identified “village site” noted in the 1950s. This report recommended backhoe trenching and excavation of shovel test pits within the area of concern and a Phase I report assessing the likely significance of cultural material per CEQA. Historical-aged built environment features were observed throughout the proposed project area; however, Jensen’s archaeological survey report recommended that all of them be found not significant per CEQA for non-conforming additions and other modifications. Prior to demolition, Jensen also recommended that a qualified historian record the built environment features. None of these identified resources are in the vicinity of the project APE.

**005980**

This 1979 report consisted of a record search for archaeological site records held at CSU-Chico and a pedestrian reconnaissance survey of four properties. No archaeological or historical sites were uncovered during the course of survey. No details about the survey or about the project that prompted the survey were included in the report.

**006212**

This 1984 letter-format report was completed in preparation for Butte County Department of Public Works for a road-widening project along Eaton Road from the intersection of Eaton Road and Hicks Lane to Eaton Road and Cohasset Highway. The report consisted of an archaeological site record search at CSU-Chico, and a systematic pedestrian survey of the unpaved surfaces adjacent to Eaton Road. No archaeological sites were discovered during survey and the author recommended that archaeological clearance be granted for the proposed project.

**007491**

This archaeological survey report was completed for a proposed septic system replacement, as part of an Environmental Impact Report (EIR) in compliance the CEQA standards. The authors conducted a record search, constructed a prehistoric and historic context, and conducted a pedestrian survey of the APE. The results of the survey were the relocation of a historical-aged cemetery, several prehistoric midden sites along Sycamore, Big and Little Creeks, a previously unrecorded village site near Richardson Springs, and remnants of the Chico's old "Chinatown" located at Flume Street between east 5<sup>th</sup> and 6<sup>th</sup> streets and Cherry Street between west 7<sup>th</sup> and 8<sup>th</sup> street. Though none were found during survey, the report also states that there is a high likelihood of Euro-American heritage items to be recovered from the APE as well in the original Chico downtown area. The report recommended an archaeological monitor to satisfy CEQS requirements and minimize damage to sites.

### 3.1.2 Previously Recorded Cultural Resources with 0.5-Mile of the APE

No cultural resources were identified within the project site as a result of the records search. One previously recorded resources were identified within 0.5 miles of the project APE (P-04-002770, CA-BUT-2770H). This resource is the abandoned and cleared alignment of the Northern Electric railroad between Oroville and Chico, consisting of an elevated railroad grade and poured concrete retaining and wing walls and a creek crossing. No prehistoric archaeological resources were identified within the project site or the surrounding records search area. These findings are recorded in Table 2.



**Table 2**  
**Previously Recorded Cultural Resources Within 0.5-Mile of the Project APE**

Designation	Resource Description	Recording Events	NRHP Eligibility	Intersects APE?
P-04-002770 CA-BUT-2770H	Historic: Sacramento Northern Railroad/Northern Electric Railroad	2005 (Jessica Herrick & Dominic Franzella, JRP Historical Consulting); 2006 (Sean Jensen & Robert McCann, Genesis Society)	6Y: Determined ineligible for NR by consensus through Section 106 process – Not evaluated for CR or Local Listing..	No

### 3.1.3 Historic Aerial Photography and Historic Map Review

Historic aerial photographs were available from Nationwide Environmental Title Research (NETR) for the years 1941, 1947, 1969, 1998, 2005, 2009, 2010, 2012, and 2014. Additional photographs were available from the Aerial Photograph Collection at the University of California Santa Barbara Map and Imagery Laboratory for the years 1952, 1962, 1970, 1972, and 1998. Historic topographic maps were available NETR for the years 1912, 1944, 1947, 1952, 1959, 1963, 1966, 1971, 1977, 2012, and 2015. The results of the historic aerial photograph and historic topographic map review were used in the preparation of the historic context for this report (Cartwright 1962, 1972; NETR 2018a, 2018b; Robinson 1952; USGS 1998; Western 1970).

The earliest aerial photograph of the project area is from 1941 and shows a faint and likely unpaved Eaton Road, the Esplanade road and Sycamore Creek to orient to the project site. The region is dominated by agricultural crop fields south of Eaton Road, while the north side of Eaton Road does not appear to have as much development, likely due to proximity to the creek’s floodplain. Eaton Road terminates at the Esplanade in these early aerial photographs. Four residences and outbuilding grouping are located near the intersection of Eaton Road that the Esplanade. Between the 1941 and 1947 aerial photographs, the Chico municipal airport is laid out and development there begins. There are no changes between 1941 and 1962 other than that the area north of Eaton Road was developed into agricultural fields and trees are planted along both Eaton Road and the Esplanade near the Eaton Road intersection. Between 1962 and 1969 aerial photographs, California Highway 99 (SR-99) is constructed and on and off-ramps are constructed to both east and southwest-bound Eaton Road, as well as a bridge over SR-99. Construction of the highway destroyed the trees lining Eaton Road. None of the residential parcels seem to have been destroyed or affected by the construction of SR-99. Between 1962 and 1969, a small residential subdivision appears on the north side of Eaton Road near the SR-99 ramps as well. Between 1970 and 1972 aerial photographs, more residences and residential subdivision appear along the Esplanade and along Eaton Road, replacing previous agricultural fields. Between 1972 and 1998 aerial photographs, the most noticeable changes are completed. The area north and south of Eaton Road is almost completely developed into residential subdivisions.

Sometime between 1972 and 1998 West Eaton Road, west of SR-99 is constructed. Sycamore Creek, north of Eaton Road now appears to be the rural-urban boundary for the City of Chico, and south of Eaton Road development is continuous. Between 2005 and 2009, one of the last remaining residential buildings that was visible in the 1941 aerial is demolished. It remains an empty lot through the 2010, 2012, and 2014 aerial photographs. (Cartwright 1962, 1972; NETR 2019a; Robinson 1952; USGS 1998; Western 1970).

Historic topographical maps for the area confirm the Esplanade, Eaton Road and Godman Avenue's presence as early as 1912. Of note near Nord Highway and the Esplanade intersection is a small callout for the Webster School. In the 1944 topographical map, the name of Webster changed to Shasta Union School. Between the 1959 and 1963 topographical maps, SR-99 appears, however, SR-99 is not listed on the 1966 topographical map. SR-99 reappears on the 1970 topographical map, and this map also shows a sharp increase in building markings along Eaton road just east of SR-99 as well. In the 1985 topographical map, the name of "Godman" street has changed to "Goodman" and some areas south of Eaton Road is still marked as agricultural lands, but by the 2012 topographical map, these markings disappear and the region appears to be completely residential (NETR 2019b).

### 3.2 Summary of Native American Coordination

Dudek contacted the California NAHC to request a review of the Sacred Lands File on October 23, 2018. The NAHC responded on October 24, 2018, and stated that sacred Native American search had negative results. The NAHC also provided a list of seven Native American tribes that may have additional knowledge of cultural resources in the vicinity of the APE. A copy of the NAHC Sacred Lands File search results letter is provided in Appendix B.

One of tribes identified by NAHC was the Mechoopda Indian Tribe of Chico Rancheria. The City of Chico has a Memorandum of Understanding with the Tribe regarding consultation. The City contacted the Tribe on March 25, 2019, and did not receive a response regarding cultural resources that may be affected by the project. Letters to all seven tribes identified by the NAHC were sent on June 23, 2019. Copies of these letters are included in Appendix B. No responses were received. Follow-up phone calls were made on August 15 – 16, 2019. No information was received from tribal representatives regarding the potential presence of tribal cultural resources.

## 4 BACKGROUND

### 4.1 Environment

The project alignment is located on paved Eaton Road in an urban environment, located in the central Valley of California. Though completely developed today, the area was historically an agricultural environment, and then prior, an annual grassland environment. The north extend of the project APE is approximately 2000 feet southwest of Sycamore Creek, which was developed into an earthen flood control channel. Disturbances include residential and commercial development, road paving, utility installation, and landscaping. The Project vegetation includes annual grassland and landscaping near the SR-99 ramps, and planted trees, shrubs, lawn grass, and disturbed area community plants. The geologic units within the alignment and surrounding vicinity were identified as Almendra loam and Conejo clay loam both with 0 to 1% slope (NRCS 2018).

### 4.2 Cultural Context

Various attempts to parse information provided through recorded archaeological assemblages from throughout California for the past 12,000 years have led to the development of several cultural chronologies. Some of these are based on geologic time, most are interpreted through temporal trends derived from archaeological assemblages, and others are interpretive reconstructions. Each of these chronologies describes essentially similar trends in assemblage composition in more or less detail. California's archaeological assemblage composition is generally accepted as falling within the following overarching patterns: Paleoindian (pre-5500 BC), Archaic (8000 BC–AD 500), Late Prehistoric (AD 500–1750), and Ethnohistoric (post-AD 1769).

Occupation of the area is likely to have occurred 9,000–11,000 years ago; however, only a handful of Paleoindian Period lithic bifacial points have been recorded. Fluted points from this area have generally been recorded as isolated finds, or recovered from contexts of mixed provenience. The primary examples of the Paleoindian pattern, to which such fluted and stemmed points are generally assigned, have been recorded east of the Sierra Nevada. The typical assemblage includes large stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of groundstone tools. Some of the most pertinent of such sites were studied by Davis (1978) on China Lake Naval Air Weapons Station, near Ridgecrest, California. These sites contained fluted and unfluted stemmed points and large numbers of formal flaked tools (e.g., shaped scrapers, blades). Other typical Paleoindian sites include the Komodo site (MNO-679), a multi-component fluted point site, and MNO-680, a single-component Great Basin stemmed point site

(Basgall et al. 2002). At MNO-679 and MNO-680, groundstone tools were rare, whereas finely made projectile points were common.

Although the limited available data relating to the earliest occupation in the region have provided for a relatively broad and consistent interpretation of the Paleoindian Period, subsequent prehistoric temporal sequences are much more geographically defined and variable due to the greater amount of available data. Regional syntheses were developed primarily by Heizer and Elsasser (1953) and Elston et al. (1977). The Martis and the Kings Beach Complexes are most applicable to the current project area; however, this may be further broken down to include the more locally relevant Mesilla, Bidwell, Sweetwater, and Oroville Complexes.

The Martis complex has been identified to extend from Lassen County to Alpine County (Elsasser 1960). The date range, 4000 BC to approximately AD 500, has been substantiated by obsidian hydration and radiocarbon dates provided by Elsasser and Gortner (1991). Subsistence during the Martis Complex was based on a hunting and seed-collecting economy, with highly mobile populations that exploited both upper and lower regions based on the relative seasonal abundance of resources. Projectile points are variable during this period, and were most commonly heavy with low formality, providing some resemblance to those identified in the Great Basin regions. Temporally representative tools include finger-held drills or punches, retouched volcanic flake scrapers, spokeshave-notched tools, and large biface blades and cores. During this period, there is a more intensive exploitation of local materials, rather than non-local cherts and obsidian, for the manufacture of formed flaked tools.

Similar to the Martis Complex, the Kings Beach Complex was characterized by populations that migrated between upper areas in the warmer months and lower elevations during the fall and winter. Subsistence during this period shifted toward a focus on fishing and gathering. A reduction in size and weight of projectile points corresponded with adoption of bow and arrow technology. Typical point forms within this region included desert side-notched, Cottonwood, and Rosegate series (CRM 2011). Obsidian and chert replaced volcanic materials such as basalt as the preferred materials for the manufacture of lithic tools. As both high-quality cherts and obsidian are not local, the greater presence of such exotic materials suggests that there was an increase in trade with neighboring tribes during this period.

The Kings Beach Complex additionally included a greater reliance on exploitation of acorns. This trend is exemplified by the increased presence of bedrock mortars and pestles formed from local cobbles. It should be noted that although bedrock mortars were predominantly used for crushing and grinding acorns, they were also employed for the processing of a variety of other foods, including deer meat, camas roots, and seeds (CRM 2011). Although the creation of mortars indicated a relatively high investment of time and energy, such bedrock milling features are as frequently found at sites with

limited-to-no subsurface cultural deposits as at intensive use occupation areas with well-developed midden soils.

By comparing Lake Oroville area site assemblages to those associated with Martis Valley and Kings Beach sites, a chronology for this area was developed spanning the past 3,000 years. These periods included the Mesilla, Bidwell, Sweetwater, and Oroville Complexes, as well as the ethnographic Maidu era (Moratto 1984; Pacific Legacy 2016).

The Mesilla Complex included limited, periodic occupation of the foothills by people who used spear-throwing technology and processed food using stone mortar bowls and millings. Shell beads, charmstones, and bone pins predominantly emerge during the Mesilla Complex within the Sacramento Valley between 1000 BC and AD 1 (Moratto 1984; Pacific Legacy 2016). This period transitioned to the Bidwell Complex (AD 1–800), during which inhabitants favored permanent or semi-permanent villages, hunted deer and smaller game with slate and basalt projectile points, fished, ground acorns on millings, and collected freshwater mussels. This period also introduced the use and manufacture of steatite cooking vessels (Moratto 1984).

During the subsequent Sweetwater Complex (AD 800–1500), additional shell ornament types, steatite vessels and pipes, and points characteristic of bow-and-arrow technology became common (Pacific Legacy 2016). The following Oroville Complex (AD 1500–1833) represented a transition to the practices of the inhabitants of this area that were encountered during the Ethnohistoric Period.

#### 4.2.1 Ethnohistoric (post-AD 1750)

Central California indigenous populations derived their linguistic roots from a common Penutian stock. The degree of internal variation among these three decedent language groups (Yokutian, Maidu, and Wintuan) is similar to Indo-European, suggesting a time depth of approximately 6,500 years (Golla 2007). The Konkow spoke one of four closely related Maidu languages, including Konkow, Chico Maidu, Mountain Maidu, and Nisenan. Shared Hokan phonological and morphological substratal components identified within all Maidu languages indicate past interactions between these two language populations (Hokan time depth is approximately 8,000 years). Maidu language structure suggests that all four Maidu languages were descended from the same proto-Maidu speaking population to the north. The most likely scenario is that these populations spread southward in the last 1,200 years (Golla 2007).

The region surrounding the project area would have been in Konkow (also known as the Northeastern Maidu) tribal territory during the ethnohistoric period. They inhabited a portion of the Sacramento Valley as well as the Sierra Foothills east of Chico (Riddell 1978). Konkow habitation areas were most commonly situated along river canyons in the foothills and along drainages in the Valley floor (Riddell

1978). Structures consisted of three types and were used at particular times of the year. Oak branch shade structures without walls were used during the warmer months for more than half a year. During the wet winters, the Konkow would built conical bark structures or a semicircular earthen hut, constructed by digging a shallow pit in the ground and using that earth to make a part of the roof (Kroeber 1925). The Konkow would move in a yearly cycle between resource areas, travelling from their winter habitations on river ridges to the valley floor in spring to gather seeds and grasses, then to hunting grounds in the mountains during the summer (Kroeber 1925).

The Konkow subsistence strategy was centered on fishing, hunting, and collecting vegetative resources. This group was highly mobile, with larger central habitation areas and surrounding satellite sites used during hunting excursions and for pre-processing of collected plant resources such as acorns. Common food items included deer, rabbits, birds, bear, rodents, other mammals of small and moderate size, as well as various insects. A ceremony among the Konkow involved the hunting of a bear at the end of hibernation season. During the ceremony, hunters would tell the bear to stand up and let them kill the bear since its life had been paid for. To kill the bear, one hunter would shoot it and then run, as other hidden hunters would shoot additional arrows into the bear until it collapsed (Dixon 1905).

The dead were typically dressed in their finest clothing and would be buried in a flexed position facing west (Riddell 1978). Tribal groups included extended and unmarried relatives. Groups of Konkow did have defined chiefs who were chosen by the local shaman. The position was not hereditary and these individuals were chosen based on maturity, ability, wealth, and generosity (Dixon 1905). Conflict did occur over resources and hunting areas within the tribe taking the form of feuds between villages or blood feuds (Riddell 1978).

### 4.3 The Historic Period (post-AD 1542)

European activity in the region began as early as AD 1542, when Juan Rodríguez Cabrillo landed in San Diego Bay. Sebastián Vizcaíno returned in 1602, and it is possible that there were subsequent contacts that went unrecorded. These brief encounters made the local native people aware of the existence of other cultures that were technologically more complex than their own. Epidemic diseases may also have been introduced into the region at an early date, either by direct contacts with the infrequent European visitors or through waves of diffusion emanating from native peoples farther to the east or south. Father Juan Crespi, a member of the 1769 Spanish Portolà expedition, authored the first written account of interaction between Europeans and the indigenous population in the region that makes up Orange County today. It is possible, but yet unproven, that the precipitous demographic decline of native peoples had already begun prior to the arrival of Gaspar de Portolá and Junípero Serra in 1769.

Spanish colonial settlement was initiated in 1769, when multiple expeditions arrived in San Diego by land and sea, and then continued northward through the coastal plain toward Monterey. A military presidio and a mission were soon firmly established at San Diego, despite violent resistance to them from a coalition of native communities in 1776. Mission San Juan Capistrano was established this same year, on November 1st. Private ranchos subsequently established by Spanish and Mexican soldiers, as well as other non-natives, appropriated much of the remaining coastal or near-coastal locations (Pourade 1960–1967).

Mexico's separation from the Spanish empire in 1821 and the secularization of the California missions in the 1830s caused further disruptions to native populations. Some former mission neophytes were absorbed into the work forces on the ranchos, while others drifted toward the urban centers at San Diego and Los Angeles or moved to the eastern portions of the county where they were able to join still largely autonomous native communities. United States conquest and annexation, together with the gold rush in Northern California, brought many additional outsiders into the region. Development during the following decades was fitful, undergoing cycles of boom and bust. With rising populations in the nineteenth century throughout the Southern California region, there were increased demands for important commodities such as salt.

#### 4.3.1 Historic Context of the Project Area

In 1843, Edward A. Farwell and William Dickey visited the present-day Chico area on a hunting expedition. Farwell and Dickey came from Sacramento (at the time known as Sutter's Fort) and were interested in obtaining land grants. Dickey chose the land on the north side of the Sacramento River creek and Farwell chose the land to the south. Dickey named his land Arroyo Chico (small creek). Around the same time, General John Bidwell visited the area for the first time and purchased land from Dickey and Farwell. Bidwell acquired the lands previously owned by Dickey and Farwell (original grantees of Rancho Arroyo Chico) in the Sacramento Valley. General Bidwell built the first house in the Chico area in 1849, which was destroyed by fire. Until 1860, all of the improvements south of Chico Creek were confined to Bidwell's premises. In 1860, county surveyor J.S. Henning, who had been commissioned by Bidwell, laid out the town-plat of Chico. Shortly after, several individuals moved to town and began development. With completion of the Oregon and California Railroad in 1870, Butte County became a leader in pine production (Hoover et al. 1966; Reid 2008; Wells 1882).

In 1872, the City of Chico was incorporated. A parcel on Main Street that would house the City Hall building, at the time referred to as the station house, was donated by General Bidwell. In 1874, in hopes of growing his town and securing the county seat for Chico, General Bidwell donated a park to the City. Although Chico failed in its efforts to win the county seat, the tree-lined park, which was

intended as the site of a county courthouse, became the center of present-day downtown (CHA 1983; Wells 1882).

During the 1870s, lumber had become the main industry of the area. Starting in 1871, two sawmills were established on Big Chico Creek, but by the turn of the 20th century, financial issues pushed the sawmill owners to sell the land they acquired in the 1870s. Chico also enjoyed a reputation for fine architectural millwork, and at the turn of the twentieth century was home to large industrial plant for the Diamond Match Company (CHA 1983; DC 2017; Schwimmer 2011).

Industrialization and the railroads influenced development in Chico, but agriculture still played a significant role in the economic system for the City throughout the 19th and 20th centuries. Farmers in Chico were producing a variety of crops, including wheat, barley, almonds, figs, and a variety of fruits. In addition to agricultural production, agricultural support services such as canning, drying, and packing became a significant contributor to the growth and development of the area in the 20th century. Success was seen throughout the early years of the 20th century, but the industry was taken to a new level with the establishment of CalPak/Del Monte Plant #64 in Chico in 1919. By the 1920s, Chico had taken steps to make itself a modern city with the creation of paved streets, increased suburban development, public parks, and the planning of State Highway 99 (SR-99). At the same time, there was a noticeable shift from agrarian community to modern urban city as the population grew (DC 2017; Holmes 2013; Moon 2003).

In 1935, the City acquired land located immediately north of town to create a municipal airport. However, these plans were sidelined by World War II, when the War Department decided to lease the airport land. The decision was significant to residential and commercial development patterns of Chico, since it brought new people to the area for employment and training. The base continued in its operation until 1945, after which many of the people employed and/or trained at the base chose to make Chico their permanent home. To support this population boom, houses needed to be constructed quickly and cost effectively, so popular styles like the Ranch house became a feasible option (Booth et al. 2005; DC 2017; Moon 2003; NETR 2019a).

Development and increased suburbanization continued in Chico in the late 1940s and 1950s, and by the 1960s, brought on growth of residential subdivisions, the establishment of shopping centers, and the construction of light industrial factories. Aerial photographs of the project area show this effect taking place slightly later than the City of Chico, in the late 1960s and early 1970s. Between 1962 and 1963, SR-99 was developed, cutting through northwest from the City of Chico into the Eaton Road project area. Eventually, in the 1970s and 1980s, the urban sprawl of Chico reached Sycamore Creek and the project area developed from a mostly agricultural area to a suburban residential and light industrial area (Cartwright 1962, 1970; SFE 1961; Western 1970).



## 5 FIELD METHODS

### 5.1 Methods

Dudek Archaeologist Nick Hanten conducted a pedestrian survey of the project site on January 18, 2019. All fieldwork was performed using standard archaeological procedures and techniques that meet the Secretary of the Interior's standards and guidelines for cultural resources inventory and evaluation (48 FR 44720–44726). The Project APE was subject to a 100% survey. Survey crew was equipped with a Global Positioning System (GPS) receiver with sub-meter accuracy. Field recording and photo documentation of features and the APE was completed. A series of overview photographs was taken to document the current conditions. Location-specific photographs were taken using an Apple iPad equipped with 8-megapixel resolution and georeferenced PDF maps of the Project site. Accuracy of this device ranged between 2 meters and 5 meters. Evidence for buried cultural deposits was opportunistically sought through inspection of natural or artificial erosion exposures and the spoils from rodent burrows. Ground surface conditions were highly disturbed from road construction. No cultural resources were observed. All field notes, photographs, and records related to the current study are on file at Dudek's Auburn, California office.

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## 6 STUDY FINDINGS AND CONCLUSIONS

### 6.1 Findings

Intensive-level pedestrian survey did not identify any archaeological resources within the APE. The entire APE is located along existing paved roadways and within extensively graded and disturbed sidewalks and shows considerable disturbance. Related disturbances include, but are not limited to landscaping and previous mechanical grading for onramps, roads, and adjacent development. Soils with potential to support the presence of buried archeological resources were not observed. Given the disturbed nature of the APE, there is little potential for intact archaeological resources to be present.

### 6.2 Conclusions

This archaeological survey report was completed to satisfy the requirements of CEQA and Section 106 of the NHPA. The study of the project APE suggests that there is a low potential for the inadvertent impact to previously unidentified cultural resources or deposits. The NEIC records search and NAHC Sacred Lands File search did not identify any resources within the APE. Pedestrian survey of the APE did not identify any cultural resources. Based on these results, no known archaeological resources will be impacted by the project as currently designed. The highly disturbed and developed nature of the APE suggests no buried archaeological deposits would exist undisturbed and intact. Based on review of this information, the project site has a relatively low potential for unanticipated buried cultural resources. No additional archaeological work, including monitoring, appears to be required.

No archaeological monitoring is recommended to be necessary based on the highly disturbed condition of the Project site. However, it is always possible that intact archaeological deposits are present at subsurface levels. Management recommendations to reduce potential impacts to unanticipated archaeological resources and human remains during construction activities are provided below.

### 6.3 Unidentified Cultural Materials

If previously unidentified cultural materials are unearthed, it is Caltrans' policy that a qualified archaeologist assess the significance of the find. It should be further noted, additional archaeological survey will be needed if Project limits are extended beyond the present survey limits.

## 6.4 Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground disturbances; State of California Health and Safety Code Section 7050.5 covers these findings. This code section states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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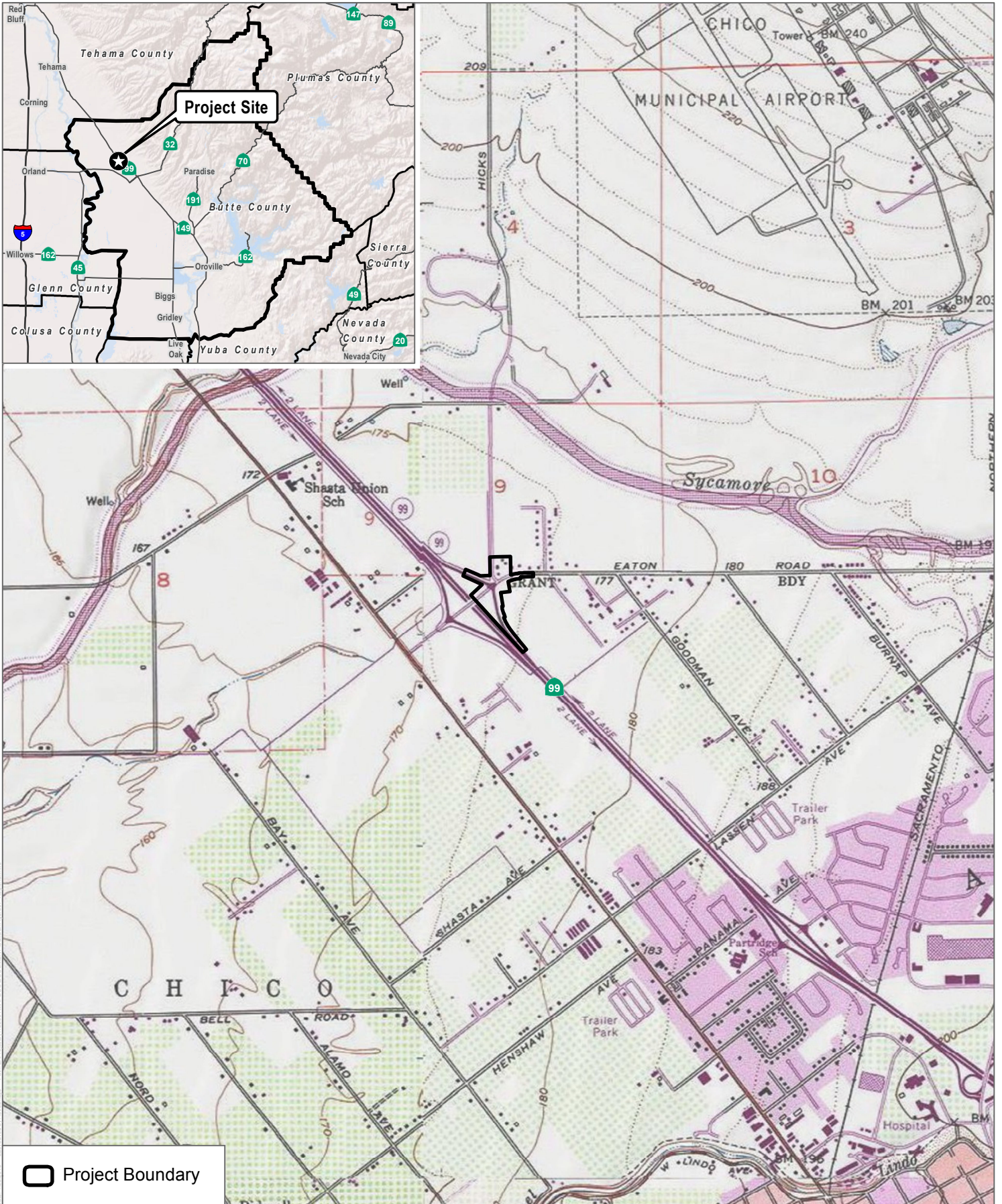
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## 8 MAPS

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SOURCE: USGS 7.5 minute Richardson Springs & Nord Quadrangles

FIGURE 1

Regional Location

SR 99 & Eaton Road Interchange

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SOURCE: Bing Maps 2018, County of Butte 2018

**FIGURE 2**

**Project Location**

SR 99 & Eaton Road Interchange

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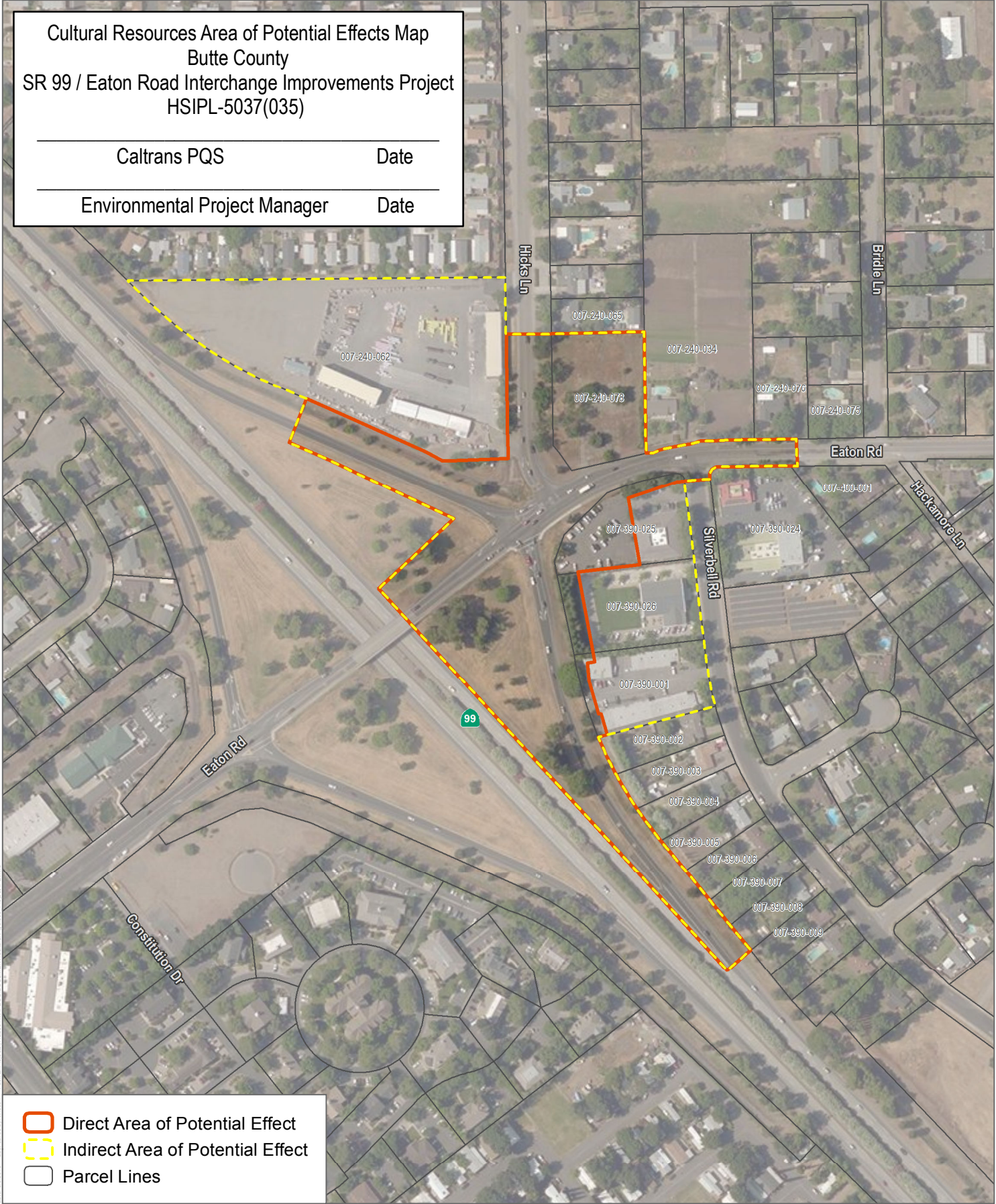
Cultural Resources Area of Potential Effects Map  
 Butte County  
 SR 99 / Eaton Road Interchange Improvements Project  
 HSIPL-5037(035)

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Caltrans PQS \_\_\_\_\_ Date \_\_\_\_\_

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Environmental Project Manager \_\_\_\_\_ Date \_\_\_\_\_



SOURCE: Bing Maps 2018

**FIGURE 3**  
 Area of Potential Effect  
 SR 99 & Eaton Road Interchange

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# APPENDIX A

*CONFIDENTIAL NEIC Records Search Results*



# APPENDIX B

*Native American Heritage Commission  
Sacred Lands File Search*



# APPENDIX B

*Native American Heritage Commission  
Sacred Lands File Search*

## **Sacred Lands File & Native American Contacts List Request**

### **NATIVE AMERICAN HERITAGE COMMISSION**

1550 Harbor Blvd., Suite 100

West Sacramento, CA 95691

(916) 373-3710

(916) 373-5471 – Fax

nahc@nahc.ca.gov

*Information Below is Required for a Sacred Lands File Search*

**Project:** SR 99 Eaton Rd Project (11229) SLF Search Request

**County:** Butte

**USGS Quadrangle Name:** Saint Helena, CA

**Township:** 22 North **Range:** 1 East **Section(s):** 9

**Company/Firm/Agency:** Dudek

**Contact Person:** Adam Giacinto, M.A., RPA

**Street Address:** 853 Lincoln Way

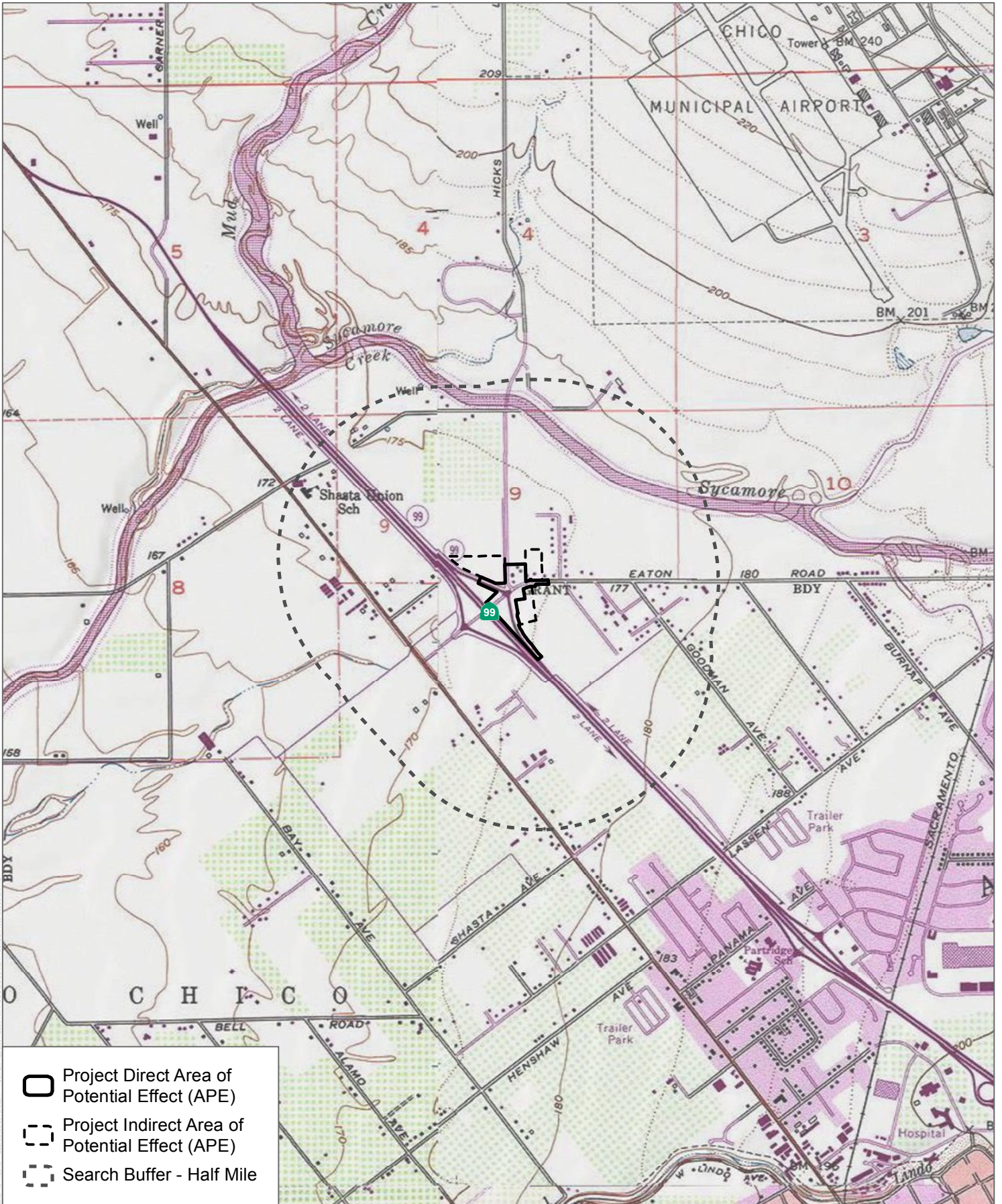
**City:** Auburn **Zip:** 95603

**Phone:** 530.863.4653 **Fax:** 530.887.1250

**Email:** agiacinto@dudek.com

**Project Description:** The project is assessing current cultural resources constraints for a proposed project. The City of Chico is the CEQA lead agency. Dudek is requesting a Sacred Lands File search as part of the cultural resources Inventory process. Please provide contacts for appropriate traditionally geographically affiliated Native American representatives and/or organizations from whom this information may be also requested.

(See attached Project Location Map)



SOURCE: USGS 7.5 m/Minute Series Richardson Quadrangle  
Township 22N / Range 1E / Section 09

**DUDEK**



0 1,000 2,000 Feet

**FIGURE 1**

Records Search

SR 99 & Eaton Road Interchange

**NATIVE AMERICAN HERITAGE COMMISSION**

Cultural and Environmental Department  
1550 Harbor Blvd., Suite 100  
West Sacramento, CA 95691  
(916) 373-3710



October 24, 2018

Adam Giacinto  
Dudek

Sent by E-mail: [agiacinto@dudek.com](mailto:agiacinto@dudek.com)

RE: Proposed SR 99 Eaton Road (11229) Project, City of Chico; Richardson USGS  
Quadrangle, Butte County, California


Dear Mr. Giacinto:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: [gayle.totton@nahc.ca.gov](mailto:gayle.totton@nahc.ca.gov).

Sincerely,

  
Gayle Totton, M.A., Ph.D.  
Associate Governmental Program Analyst  
(916) 373-3714

**CONFIDENTIALITY NOTICE:** This communication with its contents may contain confidential and/or legally privileged information. It is solely for the use of the intended recipient(s). Unauthorized interception, review, use or disclosure is prohibited and may violate applicable laws including the Electronic Communications Privacy Act. If you are not the intended recipient, please contact the sender and destroy all copies of the communication.



**Native American Heritage Commission  
Native American Contact List  
Butte County  
10/24/2018**

**Berry Creek Rancheria of Maidu  
Indians**

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Fax: (530) 534-1151  
jedwards@berrycreekrancheria.co  
m

**Estom Yumeka Maidu Tribe of  
the Enterprise Rancheria**

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Fax: (530) 532-1768  
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**Greenville Rancheria of Maidu  
Indians**

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**KonKow Valley Band of Maidu**

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**Mechoopda Indian Tribe**

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**Tsi Akim Maidu**

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Phone: (530) 383 - 7234  
tsi-akim-maidu@att.net

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed SR 99 Eaton Road (11229) Project, Butte County.



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**PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION**

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411 Main Street, 2<sup>nd</sup> Floor Phone: (530) 879-6900  
P.O. Box 3420 Fax: (530) 895-4899  
Chico, CA 95927-3420 [www.ci.chico.ca.us](http://www.ci.chico.ca.us)

June 14, 2019

Berry Creek Rancheria of Maidu Indians  
Attn: James Edwards, Chairperson  
5 Tyme Way  
Oroville, CA 95966

**RE: Notification of Forthcoming California Environmental Quality Act (CEQA)  
review of the State Route 99 (SR 99) / Eaton Road Interchange  
Improvements Project**

Dear Chairperson Edwards:

The City of Chico is contacting the Berry Creek Rancheria of Maidu Indians regarding the State Route 99 (SR 99) /Eaton Road Interchange Improvements Project in the City of Chico. A search of the Sacred Land File at the Native American Heritage Commission and a search of the files at the Northeastern Information Center did not identify Native American cultural resources in the project area. The purpose of letter is to inquire if you or your tribal community may have any knowledge of cultural resources or places that may be impacted by the proposed project.

**Project Title:** State Route 99 / Eaton Road Interchange Improvements Project

**Project Location:** The project is located on the east side of SR 99 at the intersection of Eaton Road at the northbound SR 99 off- and on-ramps and the Eaton Road/Hicks Lane intersection (see attached project layout map).

**Brief Description:** The proposed project would convert SR 99 North Bound (NB) ramps at Eaton Road and Hicks Lane into one multilane five-leg roundabout intersection. Although the two intersections would be combined, the local circulation and access would remain unchanged. The primary purpose of the proposed project is to improve safety for all travel modes at the SR 99 NB ramp intersection and Hicks Lane intersection with Eaton Road. The secondary purpose of this project is to improve operations, reduce delay, and enhance mobility for all travel modes at the intersections. The project is anticipated to begin construction in spring 2020. Construction would be phased in order to maintain local access to SR 99 and to the properties adjacent to Eaton Road and Hicks Lane.

The project requires compliance with CEQA and a Draft Initial Study/Proposed Negative Declaration level of environmental documentation is being prepared by the City of

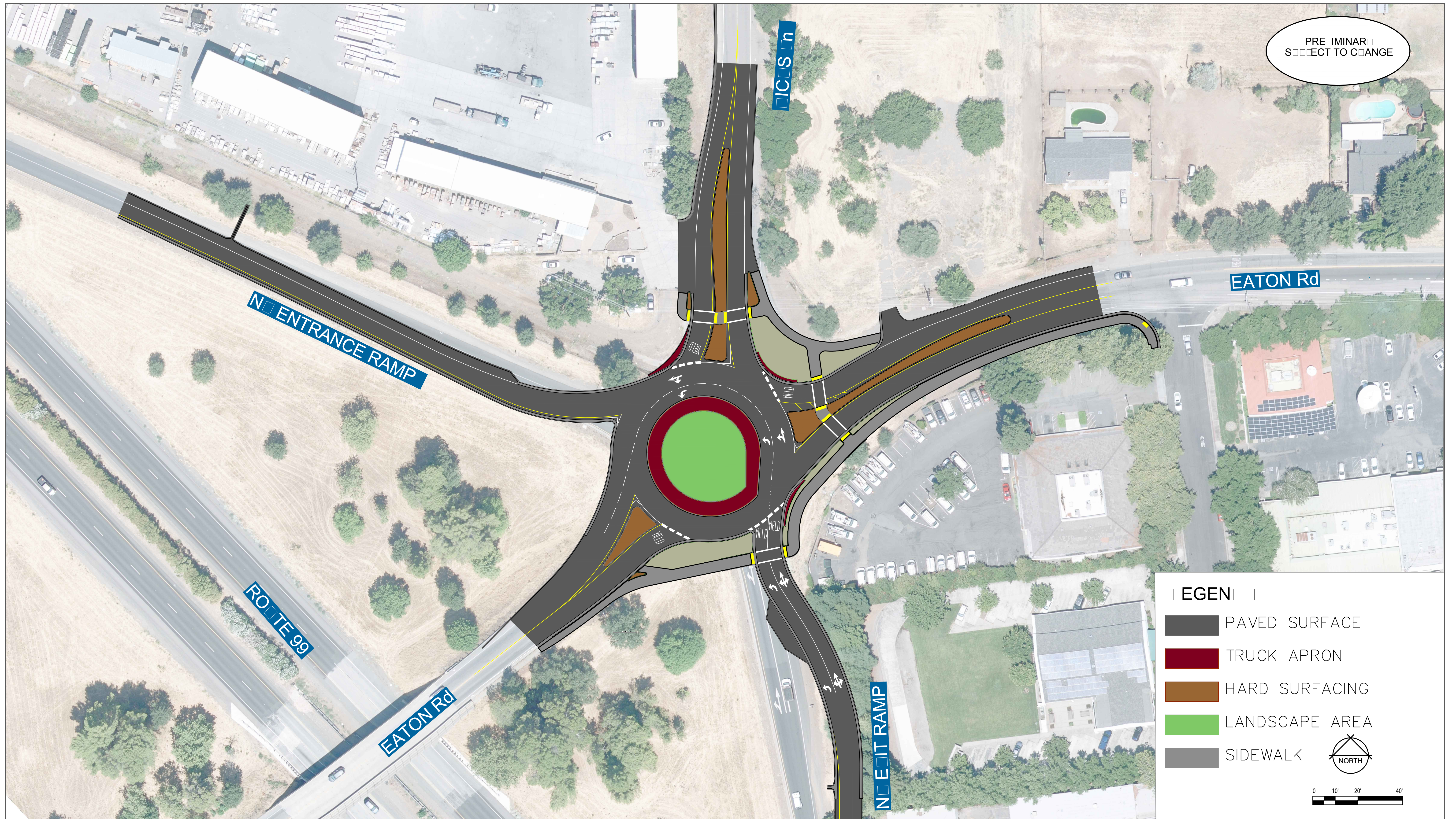
Chico. In addition, compliance with Section 106 of the National Historic Preservation Act will be required to secure federal funding for the proposed interchange improvements.

If you have any information or concerns pertaining to the project or potential cultural resources that may be impacted, please contact me at (530) 879-6803 or via email at [tracy.bettencourt@chicoca.gov](mailto:tracy.bettencourt@chicoca.gov) regarding your Tribe's interest in this matter. I am happy to provide additional information regarding the project if needed.

Sincerely,

Tracy Bettencourt  
Regulatory and Grants Manager

*Attachment: Project Site Plan*



# SR99/EATON ROAD INTERCHANGE PROJECT

Chico, California



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**PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION**

---

411 Main Street, 2<sup>nd</sup> Floor Phone: (530) 879-6900  
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Chico, CA 95927-3420 [www.ci.chico.ca.us](http://www.ci.chico.ca.us)

June 14, 2019

Estom Yumeka Maidu Tribe of the Enterprise Rancheria  
Attn: Glenda Nelson, Chairperson  
2133 Monte Vista Avenue  
Oroville, CA 95966

**RE: Notification of Forthcoming California Environmental Quality Act (CEQA)  
review of the State Route 99 (SR 99) / Eaton Road Interchange  
Improvements Project**

Dear Chairperson Nelson:

The City of Chico is contacting the Estom Yumeka Maidu Tribe of the Enterprise Rancheria regarding the State Route 99 (SR 99) /Eaton Road Interchange Improvements Project in the City of Chico. A search of the Sacred Land File at the Native American Heritage Commission and a search of the files at the Northeastern Information Center did not identify Native American cultural resources in the project area. The purpose of letter is to inquire if you or your tribal community may have any knowledge of cultural resources or places that may be impacted by the proposed project.

**Project Title:** State Route 99 / Eaton Road Interchange Improvements Project

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Sincerely,

Tracy Bettencourt  
Regulatory and Grants Manager

*Attachment: Project Site Plan*



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ENGINEERING DIVISION**

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Chico, CA 95927-3420 [www.ci.chico.ca.us](http://www.ci.chico.ca.us)

June 14, 2019

Greenville Rancheria of Maidu Indians  
Attn: Kyle Self, Chairperson  
P.O. Box 279  
Greenville, CA 95947

**RE: Notification of Forthcoming California Environmental Quality Act (CEQA)  
review of the State Route 99 (SR 99) / Eaton Road Interchange  
Improvements Project**

Dear Chairperson Self:

The City of Chico is contacting the Greenville Rancheria of Maidu Indians regarding the State Route 99 (SR 99) /Eaton Road Interchange Improvements Project in the City of Chico. A search of the Sacred Land File at the Native American Heritage Commission and a search of the files at the Northeastern Information Center did not identify Native American cultural resources in the project area. The purpose of letter is to inquire if you or your tribal community may have any knowledge of cultural resources or places that may be impacted by the proposed project.

**Project Title:** State Route 99 / Eaton Road Interchange Improvements Project

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Sincerely,

Tracy Bettencourt  
Regulatory and Grants Manager

*Attachment: Project Site Plan*





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Chico, CA 95927-3420            [www.ci.chico.ca.us](http://www.ci.chico.ca.us)

June 14, 2019

KonKow Valley Band of Maidu  
Attn: Wallace Clark-Wilson, Chairperson  
2086 N. Villa St.  
Palermo, CA 95968

**RE: Notification of Forthcoming California Environmental Quality Act (CEQA)  
review of the State Route 99 (SR 99) / Eaton Road Interchange  
Improvements Project**

Dear Chairperson Clark-Wilson:

The City of Chico is contacting the KonKow Valley Band of Maidu regarding the State Route 99 (SR 99) /Eaton Road Interchange Improvements Project in the City of Chico. A search of the Sacred Land File at the Native American Heritage Commission and a search of the files at the Northeastern Information Center did not identify Native American cultural resources in the project area. The purpose of letter is to inquire if you or your tribal community may have any knowledge of cultural resources or places that may be impacted by the proposed project.

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Sincerely,

Tracy Bettencourt  
Regulatory and Grants Manager

*Attachment: Project Site Plan*



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ENGINEERING DIVISION**

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Chico, CA 95927-3420            [www.ci.chico.ca.us](http://www.ci.chico.ca.us)

June 14, 2019

Mechoopda Indian Tribe  
Attn: Dennis Ramirez, Chairperson  
125 Mission Ranch Blvd  
Chico, CA 95926

**RE: Notification of Forthcoming California Environmental Quality Act (CEQA)  
review of the State Route 99 (SR 99) / Eaton Road Interchange  
Improvements Project**

Dear Chairperson Ramirez:

The City of Chico is contacting the Mechoopda Indian Tribe regarding the State Route 99 (SR 99) /Eaton Road Interchange Improvements Project in the City of Chico. A search of the Sacred Land File at the Native American Heritage Commission and a search of the files at the Northeastern Information Center did not identify Native American cultural resources in the project area. The purpose of letter is to inquire if you or your tribal community may have any knowledge of cultural resources or places that may be impacted by the proposed project.

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Sincerely,

Tracy Bettencourt  
Regulatory and Grants Manager

*Attachment: Project Site Plan*



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ENGINEERING DIVISION**

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Chico, CA 95927-3420 [www.ci.chico.ca.us](http://www.ci.chico.ca.us)

June 14, 2019

Mooretown Rancheria of Maidu Indians  
Attn: Gary Archuleta, Chairperson  
#1 Alverda Drive  
Oroville, CA 95966

**RE: Notification of Forthcoming California Environmental Quality Act (CEQA)  
review of the State Route 99 (SR 99) / Eaton Road Interchange  
Improvements Project**

Dear Chairperson Archuleta:

The City of Chico is contacting the Mooretown Rancheria of Maidu Indians regarding the State Route 99 (SR 99) /Eaton Road Interchange Improvements Project in the City of Chico. A search of the Sacred Land File at the Native American Heritage Commission and a search of the files at the Northeastern Information Center did not identify Native American cultural resources in the project area. The purpose of letter is to inquire if you or your tribal community may have any knowledge of cultural resources or places that may be impacted by the proposed project.

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Sincerely,

Tracy Bettencourt  
Regulatory and Grants Manager

*Attachment: Project Site Plan*



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ENGINEERING DIVISION**

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411 Main Street, 2<sup>nd</sup> Floor    Phone: (530) 879-6900  
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Chico, CA 95927-3420            [www.ci.chico.ca.us](http://www.ci.chico.ca.us)

June 14, 2019

Tsi Akim Maidu  
Attn: Grayson Coney, Cultural Director  
P.O. Box 510  
Browns Valley, CA 95918

**RE: Notification of Forthcoming California Environmental Quality Act (CEQA)  
review of the State Route 99 (SR 99) / Eaton Road Interchange  
Improvements Project**

Dear Mr. Coney:

The City of Chico is contacting the Tsi Akim Maidu regarding the State Route 99 (SR 99) /Eaton Road Interchange Improvements Project in the City of Chico. A search of the Sacred Land File at the Native American Heritage Commission and a search of the files at the Northeastern Information Center did not identify Native American cultural resources in the project area. The purpose of letter is to inquire if you or your tribal community may have any knowledge of cultural resources or places that may be impacted by the proposed project.

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Sincerely,

Tracy Bettencourt  
Regulatory and Grants Manager

*Attachment: Project Site Plan*



APPENDIX E  
*ISA*





## Draft Phase I Environmental Site Assessment (ESA) and Aerially Deposited Lead (ADL) Assessment

SR99/Eaton Road Interchange

Chico, CA

February 22, 2019



Sacramento, CA

8795 Folsom Blvd., Suite 250

Sacramento, CA 95826



## GHD Inc.

943 Reserve Drive, Suite 100

Roseville, CA 95678



Collaboration. Commitment. Confidence.<sup>SM</sup>

**Draft Phase I Environmental Site Assessment (ESA) and  
Aerially Deposited Lead (ADL) Assessment  
SR99/Eaton Road Interchange  
Chico, CA**

February 22, 2019

Mr. Ronald G. Boyle  
Senior Manager  
GHD Inc.  
943 Reserve Drive, Suite 100  
Roseville, CA 95678

Prepared by:

---

Bobby Carpenter  
Staff Geologist

---

Gregory L. Fasiano P.G.  
Principal

NCE  
Sacramento Office  
8795 Folsom Blvd., Suite 250  
Sacramento, CA 95826

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- G. Environmental Lien & AUL Search Results
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## EXECUTIVE SUMMARY

### **Introduction**

At the request of GHD Inc., NCE conducted a Phase I Environmental Site Assessment (ESA) and an Aerially Deposited Lead (ADL) Assessment in support of the State Route 99 (SR99)/Eaton Road Interchange Improvement Project (Project) located in the City of Chico, Butte County, California (Plates 1 and 2). The Project includes a five leg round-a-bout that will eliminate a three way stop at the intersections of SR99 on/off-ramps at Eaton Road and Hicks Lane to improve traffic operations, reduce local congestion and improve traffic safety.

Project properties include portions of the SR99 north-bound On/off-ramps, Caltrans right-of-way (ROW) along SR99 and Butte County Assessor's Parcel Numbers (APNs) 007240-078 and 007-390-025 as well as portions of Eaton Road and Hicks Lane, referred to hereafter as the "Site" (Plates 1 & 2).

### **Purpose**

The primary purpose of this Phase I ESA is to identify, to the extent feasible, Recognized Environmental Conditions (RECs) resulting from the improper use, manufacture, storage, and/or disposal of hazardous or toxic substances on the Site, as well as to assess the concentrations of ADL in surface soils along the roadway shoulders. It is also intended to satisfy the level of effort often referred to as "All Appropriate Inquiry" (AAI) in the Comprehensive, Environmental Response, Compensation and Liability Act (CERCLA), 42 USC § 9601, with the objective of allowing a potential real estate transaction involving the Site to qualify for the landowner liability protections afforded by CERCLA. The qualifications of the Environmental Professional completing this ESA and responsible for preparation of this report meet those standards included in the AAI Final Rule.

### **Site Features**

The Site is comprised of roadway sections of the northbound SR99 On/off-Ramps, Eaton Road and Hicks Lane and their respective shoulders. The Site also includes a Vacant Lot north of Eaton Road (APN: 007-240-078) owned by the City of Chico, a portion of the Comcast parking lot south of Eaton Road (a portion of APN: 007-390-025) and a portion of the Public Supply entrance west of Hicks Lane (Plate 2).

### **Historical Summary**

The earliest record reviewed showing the Site area consists of the 1891 topographic map showing Mud Creek, Eaton Road and the Esplanade. The majority of the land in the area at that time consisted as undeveloped range land. The 1912 topographic map shows minor development within the area consisting of Eaton Road and several undefined structures, some on the Site. Residential development in the surrounding areas began in the mid-20<sup>th</sup> century and has continued until the present. SR99 and the on/off-ramps within the Site were constructed in the 1960s which increased the residential and commercial development in the area.

Prior to 1937, and up to, 2012 the northern portion of the Site was the location of multiple structures presumed to be used for agricultural and/or light industrial purposes. The exact nature of these structures and the property is unknown. In the early 1970s the property northwest of the Site that is the current Pacific Supply was graded and developed. The entrance to this facility, which is a portion of the Site, is an asphalt/concrete paved bridge



**EXECUTIVE SUMMARY**

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that spans approximately 10-15 feet over a small drainage. In the late 1980s to early 1990s, the parking lot that is currently the Comcast parking lot (portion of APN: 007-390-025) within the Site was constructed (Plate 2). The parking lot remains active today and has primarily been used for personal vehicle and light commercial/industrial parking.

**Previous Environmental Investigations**

Prior to this investigation, there were no previous investigations performed on the Site that were available to NCE.

**Phase I ESA Findings**

This Phase I ESA and ADL Assessment have not revealed potential RECs in connection with the Site.

The exact nature of the historic uses on the Vacant Lot north of Eaton Road was not determined during this ESA. Based on the aerial photographs, the area appeared to be used for agricultural/light industrial purposes. Historically the area had structures and occasionally had multiple tractor trailers and other large vehicles parked on it until approximately the mid-2010s, when the lot became vacant and no longer appeared in use. This parcel is currently owned by the City of Chico.

Because of the proposed Project and the age of the roadways within the Site and their associated traffic volumes, NCE conducted an ADL survey along the unpaved portions of the roadway shoulders of Hicks Lane, Eaton Road and the SR99 On/off-Ramps. Of the soil samples analyzed, no samples had reported total lead concentrations above 320 milligrams per kilogram (mg/kg), though three surface samples had reported total lead concentrations above 80 mg/kg (ER-7-S[Surface], ER-9-S and ER-21-S). Consistent with the guidance provided in the agreement between the DTSC and Caltrans, titled Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (DTSC/Caltrans Agreement), soils with total lead concentrations greater than 80 mg/kg were analyzed for extractable lead concentrations. Extractable lead was not above the threshold in the DTSC/Caltrans Agreement of 5 milligrams per liter (mg/L).

**Phase I ESA Recommendations**

The following recommendations are based on the findings of the Phase I ESA and ADL assessment performed at the Site:

It is NCE's understanding that the property referred to as the Vacant Lot will be used as a laydown area for the construction equipment that will be used during the proposed Project and that no sub-surface work or digging is expected in the area. If no sub-surface work or soil removal is expected in this area, NCE has no recommendations for this portion of the Site.

According to the DTSC/Caltrans Agreement, soils with a concentration of extractable lead not exceeding 5 mg/L, as determined by the California WET, and total lead not exceeding 320 mg/kg may be placed on-site without cover. Though concentrations of total and soluble lead were below the DTSC/Caltrans Agreement guidance values, it is recommended that the soils at the three locations with elevated lead concentrations (ER-7-S, ER-9-S and ER-21-S) not be placed in areas routinely used by the public (e.g. rest stops or bus stops). Furthermore, if these soils are to be removed from the Site, they should be stockpiled on sheets of polyethylene or geomembrane and profiled in accordance with the destination facility and/or regulations.

## 1.0 INTRODUCTION

### 1.0 INTRODUCTION

#### 1.1 General

At the request of GHD, NCE conducted a Phase I Environmental Site Assessment (ESA) and an aerially deposited lead (ADL) assessment in support of the State Route 99 (SR99)/ Eaton Road Interchange Improvement Project (Project) located in the City of Chico, Butte County, California (Plates 1 and 2). The Project includes a five leg round-a-bout that will eliminate a three way stop at the intersections of SR99 on/off-ramps, Eaton Road and Hicks Lane to improve traffic operations, reduce local congestion and improve traffic safety.

Project properties include portions of the SR99 north-bound On/off-Ramps, Caltrans right-of-way (ROW) along SR99 and Butte County Assessor's Parcel Numbers (APNs) 007240-078 and 007-390-025 as well as portions of Eaton Road and Hicks Lane, referred to hereafter as the "Site" (Plates 1 & 2).

#### 1.2 Purpose and Scope

##### 1.2.1 Purpose

The primary purpose of this Phase I ESA is to identify, to the extent feasible, Recognized Environmental Conditions (RECs) resulting from the improper use, manufacture, storage, and/or disposal of hazardous or toxic substances on the Site, as well as to assess the concentration of ADL in surface soils along roadway shoulders. It is also intended to satisfy the level of effort often referred to as "All Appropriate Inquiry" (AAI) in the Comprehensive, Environmental Response, Compensation and Liability Act (CERCLA), 42 USC § 9601, with the objective of allowing a potential real estate transaction involving the Site to qualify for the landowner liability protections afforded by CERCLA. The qualifications of the Environmental Professional completing this ESA and responsible for preparation of this report meet those standards included in the AAI Final Rule.

ASTM E 1527-13 uses the term "RECs" to assess environmental risks associated with a property. The term is defined as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term is not intended to include de minimis conditions, a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Identification of RECs will fall into three categories: existing REC (as defined above), Historical REC (HREC), or Controlled REC (CREC).

- HREC - An HREC is defined as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations (AULs), institutional controls, or engineering controls)."
- CREC - A CREC is defined as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by

## **1.0 INTRODUCTION**

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the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, AULs, institutional controls, or engineering controls)."

### **1.2.2 Scope**

In general, the scope of the Phase I ESA consisted of reviewing readily available information and environmental data relating to the Site; interviewing readily available persons knowledgeable about the Site; reviewing readily available maps, aerial photographs and records maintained by federal, state, and local regulatory agencies; and conducting a Site reconnaissance (i.e., a visit to the Site and accessing the building).

The specific scope of the Phase I ESA and ADL assessment for the Site included the following:

- Review of readily available environmental databases maintained by federal, state, and local agencies within the ASTM 1527-13 approximate minimum search distances as described within the Regulatory Review Section 5.0 of this report. A copy of the Computerized Environmental Report (CER), provided by Environmental Data Resources, Inc. (EDR) of Shelton, Connecticut is attached as Appendix A.
- Review readily available historical documents, such as topographic maps, Certified Sanborn Fire Insurance maps, aerial photographs, tax map reports, and building permit reports to look at previous facilities and activities on and in the vicinity of the Site. Copies of the historical aerial photographs, historic topographic maps, Sanborn Fire Insurance Maps, property tax map report, building permit report and the Environmental Lien Report are included in Appendices B through G, respectively.
- Site reconnaissance to visually observe on-site conditions for evidence of environmental impacts such as soil staining, stressed vegetation, ponded liquids, mounded soils, excavations, discarded drums, monitoring wells, etc.; and potential environmental concerns such as underground storage tanks (USTs), aboveground storage tanks (ASTs), polychlorinated biphenyl (PCB)-containing materials, or other hazardous materials or wastes present at the Site location with respect to surrounding property uses and natural surface features.
- Review published radon occurrence maps to determine whether the Site is located in an area with a propensity for elevated radon concentrations.
- As part of this Phase I ESA, NCE performed an aerially deposited lead (ADL) assessment on exposed soils along the roadway segments within the Site. Information pertaining to the procedures, findings and recommendations can be found in Sections 8.0 and 9.0 of this document.
- Preparation of this report summarizing the findings of the investigation.

The following table presents a summary of the individuals contacted or to whom requests for documentation were made as part of this assessment:

**1.0 INTRODUCTION**

<b>Name</b>	<b>Affiliation</b>	<b>Telephone No.</b>	<b>Relationship to the Site</b>
Mr. Ron G. Boyle	GHD Inc. Senior Manager	(916) 782-8688	Client Representative
Ms. Heather Anderson	GHD Inc. Project Manager	(916)-782-8688	Client Representative

**1.3 Data Gaps**

According to §3.3.21 of ASTM Standard E 1527-013, a data gap is a lack of or inability to obtain information required by the ASTM Standard despite good faith efforts to gather such information. Data gaps may result from incompleteness in any of the activities required by the ASTM Standard. The following data gaps summarized in the table below were identified during the Phase I ESA:

<b>Data Gap</b>	<b>Explanation</b>	<b>Significance of Gap</b>
Interviews were not conducted with state and/or local government officials.	The database search along with the other data reviewed in preparation of this Phase I was deemed sufficient to make conclusions regarding the presence or potential presence of RECs.	The state and/or local government officials may have information regarding RECs and/or potential RECs in connection with the Site. Based on the documents reviewed and Site reconnaissance it is not likely that details from interviews state/government officials would significantly alter the conclusions of this ESA.
Interviews were not conducted with the current or past owners, operators, and occupants of the Site.	Locations of current and historical off-site petroleum product storage were identified through review of historical documents and the Regional Water Quality Control Board's (RWQCB) GeoTracker website.	The previous owners, operators, and occupants may have information regarding RECs and/or potential RECs in connection with the Site. Based on the documents reviewed and Site reconnaissance it is not likely that details from interviews with past or current owners, operators or occupants would significantly alter the conclusions of this ESA.
Pre-Survey Questionnaire was not returned	The pre-survey questionnaire was not returned to NCE.	It is unlikely that additional information, provided within the questionnaire associated with the Site, would alter the outcome of the analysis.
The exact use of the Vacant lot (APN: 007-240-078) to the north of Eaton Road is unknown.	Aerial photographs (Appendix B) show multiple structures and large vehicle parking on the Vacant lot between the years of 1937 and the mid-2010s.	It is unknown if the former activities on the Vacant Lot have the potential to impact the Site.

2.0 SITE SALIENT ASSIGNMENT INFORMATION

NCE Project No.:	1011.03.55
Project Name:	SR99/Eaton Road Interchange
APNs (Plate 2):	007-240-078 and portions of 007-390-025
City, County, State and Zip:	City of Chico, Butte County, California
Primary Use:	Vehicular Transportation
Age of Improvements:	<ul style="list-style-type: none"><li>• Comcast Parking lot (1988)</li><li>• Pacific Supply Entrance (1973)</li><li>• SR99 On/off-Ramps and Hicks Lane (1969)</li><li>• Eaton Road (~1912)</li></ul>
Site Area:	Approximately 11.12 acres.
Reported Number of Tenants:	None
Number of Buildings:	None

### 3.0 SITE DESCRIPTION

#### 3.1 Site Location & Setting

The Site is irregular in shape and is located about 2 miles southwest of the Chico Municipal Airport at the intersection of SR99 and Eaton Road in Chico, California (Plate 1). The approximate center of the Site is located at latitude (north) 39.46° 46' 30.64" longitude (west) -121° 52' 19.94". The Site includes an approximate 0.25 miles of Eaton Road, east of SR99, approximately 400 feet of Hicks Lane, north of Eaton Road, portions of the SR99 north-bound On/off-Ramps, portions of the Comcast parking lot (APN: 007-390-025), and a vacant lot (APN: 007-240-078) northeast of the intersection of Hicks Lane and Eaton Road (Plate 2 & Photo Log 1). The Site also includes portions of the roadway shoulders east and west of the off/on-ramps as well as north and south of Eaton Road (Plate 2).

The climate associated with the Chico area is characterized as Mediterranean with hot, dry summers and mild to cool, wet winters. The average precipitation is 26.61 inches (US Climate Data, 2016). Photographs taken by NCE during the November 2018 site visit are shown in Photo Logs that are attached.

#### 3.2 Additional Site Features

The Site includes a portion of the paved entrance to the Pacific Supply west of Hicks Lane (Photo Log 1). This portion of the Site extends approximately 65 feet off of Hicks Lane into Pacific Supply and has no structures. Where the SR99 on/off-ramps intersect Eaton Road is a four-way stop and other Site features include sidewalks, street lights, road signage, telephone poles and chain-link fencing (Photo Log 1 & Photo Log 2).

#### 3.3 Utilities

Summarized in the table below is the utility information related to the Site.

Utility	Provider
Water:	NA
Sanitary Sewer / Storm Drain:	City of Chico
Electric:	PG&E
Gas/Oil:	NA

#### 3.4 Surrounding Land Use

The Butte County Zoning Designation for the parcel that includes the Comcast parking lot is general commercial, while the remainder of the Site is either incorporated in the City of Chico, or Caltrans ROW. Surrounding land zoning consists of a mixture of general commercial to the southeast, medium density residential to the northeast, office commercial to the southwest and low density residential and residential commercial to the northwest.

The following is a description of surrounding physical land uses in the immediate vicinity of the Site as also shown in the aerial photographs in Appendix B and on Plate 2. Northwest of the Site is the Pacific Supply, a building materials supply company, and to the north and east of that appears to be single family residential homes. South and east of the Site is the Comcast facility, Golden State Farm Credit and the Eaton Road Commercial Park which includes an auto repair shop (Precision Automotive). West of the Site is SR99 and its south-bound on/off-ramps and further west is a mixture of high density residential and single family homes.

### 3.5 Physical Site Setting

#### 3.5.1 Shapes and Sizes of the Parcels

The shapes and sizes of the Site parcels are as follows (Plate 2):

Parcel Number	Shape	Approximate Size
<b>Site (total)</b>	Irregular	11.12
<b>007-240-078</b>	Rectangular	1.62
<b>007-390-025</b>	Triangular	1.2

\*Acreage totals were based off of information provided by the Butte County Assessor's Office Parcel Viewer.

#### 3.5.2 Topography

According to the Richardson Springs, 1969, 7.5-minute Topographic Quadrangle (Chico CA) the Site topography is moderate with an elevation of approximately 175 feet above mean sea level (amsl) and a gradual slope to the west (Appendix C).

#### 3.5.3 Surface Waters and Wetlands

##### Surface Waters

Sycamore/Mud Creek is located approximately 0.5 miles north of the Site and is a westward flowing creek originating on the western side of the Sierra Nevada. Sycamore/Mud Creek flows west across northern Chico and terminates into the Sacramento River to the southwest. There are no surface water bodies at the Site.

Surface water at the Site is generally constrained by the raised and paved surfaces. Currently there are no paved surfaces on roadway shoulders, and the median area created by SR99 On/off-Ramps. Surface water on the paved surfaces within the Site tends to sheet flow directly into low areas within the roadway shoulders and the SR99 medians, or into drop inlets on the edge of roadways.

##### Wetlands

Review of the USFWS National Wetlands Inventory does not indicate the presence of wetlands at the Site. During the Site visit there was no visible surface water or areas that could be considered wetlands (USFWS, 2018).

#### 3.5.4 Soils, Geology, Groundwater and Seismicity

##### Geology

The Site lies within the Sacramento Valley, a large, relatively flat, elongated, north-northwest-trending, asymmetric trough, bounded to the east by the Sierra Nevada and the west by the Northern Coast Ranges. Predominant physiographic features in this area of the valley include the river channels and floodplains of the southward-flowing Sacramento River and the various tributaries draining the western slope of the Sierra Nevada including Butte Creek and Chico Creek.

Review of the United States Geological Surveys (USGSs) Geologic Map of the Chico Quadrangle, California indicates that the soils at the site are predominantly Holocene age

### 3.0 SITE DESCRIPTION

basin deposits or alluvium which are characterized by sands and silts. These soils are likely underlain at depth by the Tuscan Formation characterized by lahars, volcanoclastic sediments, and tuff (USGS, 1992).

#### Hydrogeology

Nearby groundwater monitoring data obtained from the California Department of Water Resources (DWR, 2018) for a residential well ( 397818N1218718W001) located approximately 0.5 miles north of the Site indicates that from 2001 to 2018, groundwater levels varied between about 25.7 and 58.3 feet bgs. Based on this and the most recent well data, we anticipate that groundwater would be encountered at a depth of approximately 50 feet below the ground surface at the Site. Based on the topography of the Site and the proximity to the foothills of the Sierra Nevada and the Sacramento River to the west, it is estimated that groundwater flows generally in a westward direction.

#### Seismicity

The Chico Monocline fault is an undifferentiated quaternary reverse fault that lies approximately four miles to the east of the Site. This fault is oriented north-south with the most recent deformation displayed less than 1.6 million years ago (USGS, 2017).

### 3.6 Current Site Use

Current Site use is indicated below:

#### **Vacant Lot APN: 007-240-078**

Currently vacant and contains remnants of asphalt pavement at the southern portion. Gated Entrances off both Eaton Road and Hicks Lane provide access into the property. At the time of the field investigation, both gates were locked preventing access (Photo Log 1).

#### **Comcast Parking Lot, a portion of APN: 007-390-025**

This parking lot is an asphalt paved surface with central and perimeter parking for approximately 50 vehicles. The parking lot is lighted and parking spaces are delineated by white lines. This parking lot is presumably used for the Comcast office building located on the same APN, but outside of the Site boundary (Photo Log 1).

#### **Pacific Supply Entrance**

Currently used as a vehicle entrance into the Pacific Supply facility. This portion of the Site is an asphalt/concrete paved bridge spanning 10-15 feet across a drainage ditch. This entrance is not used for a commercial vehicle entrance (Photo Log 1).

#### **Eaton Road, SR99 Northbound On/off-ramps, Hicks Lane**

The segments of these roadways within the Site are active asphalt/concrete paved thoroughfares supporting vehicle transportation. Each of these roadway segments within the Site has unpaved shoulder areas. The Area to the east and west of the SR99 On/off-ramps is Caltrans ROW, a low lying grassy median.

### 3.7 Environmental Permits

NCE did not receive information pertaining to any environmental permits or liens pertaining to the Site.



## 4.0 HISTORICAL USE

### 4.1 Historical Records Reviewed

The historical records review included researching and examining the following records:

- Historical topographic maps;
- Historical fire insurance maps (Sanborn Maps);
- Historical aerial photographs;
- Previous reports;
- City Directories

Provided below is a summary of NCE’s review of this information.

#### 4.1.1 Historical Topographic Maps

NCE reviewed historical topographic maps for the Site vicinity for the years 1891, 1893, 1895, 1912, 1944, 1951, 1952, 1969 and 2012. These maps are presented in Appendix C. The following summarizes this review:

Year	Site Area	Surrounding Properties
1891	The Site appears to be vacant and structurally undeveloped.	An unnamed creek oriented north-south is adjacent to the east of the Site. An unnamed roadway oriented northwest-southeast is located approximately 0.5 miles west of the Site (presumably Esplanade). The unnamed roadway is bisected by another roadway oriented east-west and this intersection is labeled the Four Corners.
1893	Same with no revisions.	Same with no revisions.
1895	Same with no revisions.	Same with no revisions.
1912	Eaton Road bisects the northern portion of the Site east to west. There is an undefined structure within the Site on the north side of Eaton Road.	Much more detailed 7.5 minute map showing more contour lines and structures in the outlying areas. Webster School is located northwest of the Site at the intersection previously labeled Four Corners. Sycamore/Mud Creek is north of the Site and flows east to west.
1944	Same with no revisions	Webster School is now Shasta Union School. The Sacramento Northern Railroad is east of the Site and oriented north-south. The Army Flying School is approximately 1 mile to the north of the Site.
1951	It appears that a small creek/stream is bisecting Eaton Road in the western portion of the Site.	Further residential development has occurred along Esplanade. The Army Flying School is now the Chico Municipal Airport.

Year	Site Area	Surrounding Properties
1952	Same with no revisions	Same with no revisions
1969	SR99 has been built approximately 0.25 miles east of Esplanade. The northbound Highway 99 Eaton road off/on-ramps are now located within the Site.	Esplanade still exists west of the Site. Further residential development along Eaton Road and the surrounding areas continues.
2012	Same although no structures are depicted on the Site or surrounding areas.	Same with no revisions

Review of the historical topographical maps did not revealed potential REC's as a result of historic uses of the Site.

#### 4.1.2 Historical Fire Insurance Maps (Sanborn Maps)

Sanborn Maps constitute a source of prior site uses for many cities and towns in the United States. The maps were originally created to assist insurance underwriters in understanding the potential fire risk of structures requiring insurance; however, they are also useful in determining the previous uses of a site. Sanborn Maps often contain information relating to uses of individual structures, location of certain petroleum and chemical storage tanks, and the storage of other potentially toxic substances. Sanborn Maps begin their coverage in 1867 and continue through the 1990s.

NCE requested EDR to conduct a search for available Sanborn Maps. Searching an information source such as Sanborn Maps constitutes part of the due-diligence necessary for an ESA. Sanborn Maps covering the Site were not found.

#### 4.1.3 Aerial Photographs

Aerial photographs frequently provide visual documentation of Site conditions at the time of the photographs. Activities such as dumping or industrial use can often be discerned through the review of aerial photographs. NCE reviewed historical aerial photographs for the years 1937, 1941, 1947, 1952, 1961, 1969, 1973, 1975, 1988, 1998, 2006, 2009, 2012, 2016 and 2018 for the Site and surrounding areas. These photographs were provided by EDR and Google Earth and are presented in Appendix B. Provided in the following table are summaries of the aerial photographs reviewed for the Site and surrounding property:

<b>Site Location</b>			
<b>Year</b>	<b>Site Area</b>	<b>Adjoining Properties</b>	<b>Source(s)</b>
1937	Eaton Road bisects the Site east-west. South of Eaton Road the Site is agricultural land with no structures. North of Eaton road are multiple structures and what appear to be several smaller out buildings.	There are multiple residences north of Eaton road and west of the Site. Eaton Road ends at an unlabeled road oriented northwest-southeast. It is presumed that the unlabeled road is Esplanade. Multiple residences including out buildings are along Esplanade. Property surrounding the residences appears to be agricultural lands.	EDR
1941	Poor quality photograph, although the Site appears unchanged since the 1937 aerial photograph.	The adjoining properties appear unchanged since the 1937 aerial photograph.	EDR
1947	The Site appears unchanged since the 1937 aerial photograph.	The adjoining properties appear unchanged since the 1937 aerial photograph.	EDR
1952	The Site appears unchanged since the 1947 aerial photograph	The adjoining properties appear unchanged since the 1947 aerial photograph.	EDR
1961	It appears that an additional structure has been constructed east of the previous group of structures on the Site. The portion of the Site south of Eaton Road remains agricultural land.	Residential development has occurred along Eaton Road as well as Esplanade to the west. Properties along Esplanade to the south have multiple smaller structures dispersed around the main structures. One property appears to have multiple tractor trailers located on it.	EDR
1969	The structures on the northern portion of the Site remain similar to previous aerial photographs. SR99 has been constructed and the northbound on/off-ramps are now within the Site. Eaton road continues west through the Site. It appears that Hicks Lane has been constructed.	SR99 is located in between the Site and Esplanade. The property along Esplanade with the tractor trailer parking appears to have expanded northwest towards SR99. Residential development northeast of the Site appears to increase. An additional residence adjacent to Eaton Road, north of the Site has been built.	EDR
1973	The Site appears unchanged since the 1969 aerial photograph, with the exception of the entrance into the Pacific Supply. The entrance appears to be off of Hicks Lane just north of Eaton Road.	There appears to be development and construction in the area currently occupied by the Pacific Supply company. Land east of the Site is being developed and appears to be residential. The property along Esplanade with the tractor trailers has expanded all of the way to SR99. It appears that this property is a storage facility.	EDR

4.0 HISTORICAL USE

CHICO, CA

Site Location			
Year	Site Area	Adjoining Properties	Source(s)
1975	The Site appears unchanged since the 1973 aerial photograph.	Properties to the east of the Site appear to continue to develop into residential areas.	EDR
1988	It appears that what is the current Comcast parking lot has been constructed within the Site, south of Eaton Road and east of the SR99 off-ramp.	Properties surrounding the Site appear to have developed significantly. Southeast of the Site is residential housing. South of the Site along the SR99 off-ramp are multiple larger commercial buildings.	EDR
1998	Several parked cars are visible within what is now the Comcast parking lot.	Development continues on properties surrounding the Site. High density residential structures appear on the west side of SR99.	EDR
2002	The lot north of Eaton Road has multiple large trailers parked on the property. There are also several smaller vehicles parked throughout the property.	Property adjacent to the northeast appears to be agricultural land recently cultivated. Cultivated land covers a relatively small area within a residential area.	Google Earth Pro
2006	With the exception of a slight volume change in vehicles parked on the Vacant Lot, the Site appears unchanged since the 1998 aerial photograph.	Further residential development occurs on the west side of SR99.	EDR
2009	Most or all of the structures that were located in the northern portion of the Site, north of Eaton Road are now gone. Remnants of the paved surfaces within the area can be seen.	The surrounding properties appear relatively unchanged since the 2006 aerial photograph.	EDR & Google Earth Pro
2012	The Site appears unchanged since the 2009 aerial photograph.	The surrounding properties appear relatively unchanged since the 2009 aerial photograph.	Google Earth Pro
2016	The lot north of Eaton Road appears vacant with the exception of a perimeter fence and relic paved surfaces within.	The surrounding properties appear relatively unchanged since the 2012 aerial photograph.	EDR
2018	The Site appears unchanged since the 2106 aerial photograph	The surrounding properties appear relatively unchanged since the 2016 aerial photograph.	Google Earth Pro

A review of historical aerial photographs has not revealed any RECs in connection with the Site. What is now the Vacant Lot north of Eaton Road had at one time multiple structures and what appeared to be light industrial/agricultural use on it. It is unknown the exact nature of these structures.

## 4.0 HISTORICAL USE

### 4.1.4 Environmental Lien and AUL Search

NCE requested an Environmental Lien and AUL search performed on the Vacant Lot north of Eaton Road (Appendix G). The search did not find any environmental liens or AULs reported for the Vacant Lot.

### 4.1.5 Regulatory Actions & Previous Reports

#### Site

No regulatory actions or previous reports were identified associated with the Site during the records review process.

#### 156 Eaton Road, Chico, CA 95926 (PDQ Market and Deli)

In 1995 this property was reported to have a leaking underground storage tank (LUST) with the contaminant of concern being gasoline and the potential media of concern being soil. This case was closed in 1996 under the oversight of the Butte County and the Central Valley Regional Water Quality Control Board.

### 4.2 Interviews

Interviews were not conducted with past or present owners of properties on or around the Site. No standing structures exist within the Site.

### 4.3 Findings of the Records Review

#### 4.3.1 Historical Summary

The historical summary provided below for the Site is based on information obtained from historical topographic maps, aerial photography and historical city directories.

The earliest record reviewed showing the Site area consists of the 1891 topographic map showing Mud Creek, Eaton Road and Esplanade. The majority of the land in the area at that time consisted as undeveloped range land. The 1912 topographic map shows minor development within the area consisting of Eaton Road and several undefined structures, some on the Site. The structures located on the Site north of Eaton Road can be seen in the aerial photographs until approximately 2009 when they appeared to be removed and in the late 1990s and early 2000s, the lot appeared to have light industrial activities consisting of trailer and material parking.

Historical aerial photography indicates that residential development in the surrounding areas began in the mid-20<sup>th</sup> century and has continued until the present. SR99 and the on/off-ramps within the Site were constructed in the 1960s which increased the residential and commercial development in the area. In the Late 1980s to early 1990s, the parking lot that is currently the Comcast parking lot within the Site was constructed. The parking lot remains active today.

There were no Site listings in the EDR-City Directory Image Report.

#### 4.3.2 Environmental Concerns

The historic land use review did not reveal RECs in connection with the current land uses at the Site. Because of the age of the Site and the associated traffic volume, there is potential that soils surrounding the Site and adjacent areas contain ADL. An agreement between

#### 4.0 HISTORICAL USE

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California EPA DTSC and Caltrans provides direction for the assessment of and the handling ADL impacted soils within a Caltrans ROW (DTSC, 2015/16). Because it is likely that surface soils within the Site may be disturbed as part of the proposed Project, using the DTSC/Caltrans agreement as guidance, an ADL investigation was performed as part of this ESA and the details are presented in Sections 8.0 and 9.0.

It does not appear that other historical uses of the Site will impact the proposed Project. Areas of the Site that appeared to have light industrial and agricultural uses were within the Vacant Lot north of Eaton Road. It is our understanding that the proposed Project does not require any intrusive work on this property and will likely only use this area for equipment parking and material laydown area.

## 5.0 REGULATORY REVIEW

As part of this Phase I ESA, NCE conducted a records search using electronic database services provided by EDR. The CER is a listing of facilities identified on select federal and state standard source environmental databases within the approximately minimum search distance specified by ASTM Standard practice for Environmental Site Assessments E1527-13 and AAI (ASTM, 2013) (Appendix A).

NCE reviewed each environmental database in the CER. Shown in the attached Table 1 is a list of the databases searched by EDR.

### 5.1 Databases

Review of the databases provided by EDR in the CER (Appendix A) shows that there are approximately 43 records on facilities within a one mile radius of the Site. It is noted here that facilities may be listed in multiple databases accounting for multiple records on the same facility. The following subsections detail the records on facilities located within 0.25 miles of the target property (Site). Details of the facilities located outside of the 0.25 mile radius can be found in the CER (Appendix A).

#### 5.1.1 RCRA-SQG

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

#### ***Analysis/Comment:***

A review of the RCRA-SQG list, as provided by EDR, has revealed that there are two RCRA-SQG sites within approximately 0.25 miles of the target property:

1. Comcast of Southern California INC.; 427 Eaton Rd. Chico, Ca. Located adjacent to the Site at a higher relative elevation. This facility is an internet and cable service provider classified as a small quantity generator/handler, generating more than 100 and less than 1000kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time. Hazardous wastes known to be stored at this facility are aqueous solutions with <10% total organic residues, unspecified aqueous solutions, waste oil and mixed oil, unspecified oil-containing waste, latex waste and ignitable hazardous wastes. This facility is currently active and this database shows that no violations have been found prior to this ESA. Based on the regulatory status of this facility, the potential for environmental concerns from this facility to have impacted the Site appears low.
2. Anderson Automotive; 420 Todd Ct. Located approximately 0.245 miles north (cross-gradient) of the target property and at a relative lower elevation. This facility is classified as a small quantity generator/handler, generating more than 100 and less than 1000kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time.

Hazardous waste stored at this facility is not listed on this database. This facility is currently active at the time of this ESA, and this database shows that no violations have been found. Based on the regulatory status, relative lower elevation and the cross gradient location of this facility, the potential for environmental concerns from this facility to have impacted the Site appears low.

### 5.1.2 ENVIROSTOR

Envirostor: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used assess potential impacts to public health and the environment at contaminated sites.

#### ***Analysis/Comment:***

A review of the ENVIROSTOR list, as provided by EDR, has revealed that there is one ENVIROSTOR site within approximately 0.250 of the target property.

1. Chico Plating Works; 172 Commercial Ave. Located approximately 0.238 miles south of the Site and cross gradient. This facility does not appear to be currently active under this name. The facility was a metal plating company that used heavy metals in combination with acid solutions to create finish coatings on metal materials. This facility was reported in 2011 as having potential contaminants of concern (PCOC): metals sludge, acid solution with a PH<2, Trichloroethylene (TCE), Chromium III, Chromium VI, copper, cyanide, nickel and zinc. Potential media affected by these contaminants is reported as other, soils and a well. Based on the distance of this facility from the Site and the cross gradient location, the potential for environmental impacts from this facility to impact the Site appears low.

### 5.1.3 Leaking Underground Storage Tanks (LUST)

The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data comes from the State Water Resources Control Board Leaking Underground Storage Tank Information System. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

#### ***Analysis/Comment:***

A review of the LUST list, as provided by EDR has revealed that there is one LUST site within approximately 0.250 miles of the target property:

1. PDQ Market & Deli; 156 Eaton Road, also the 76 Fueling Station. Located approximately 0.247 miles southwest of the Site at a lower relative elevation and presumably down gradient. A LUST case was opened for this facility in 1995 with the contaminant of concern being gasoline and the media of concern being soil. This LUST case was



## 5.0 REGULATORY REVIEW

subsequently closed in 1996 under the oversight of Butte County as well as the RWQCB. Based on the regulatory status of this facility, its relative downgradient location and the distance from the Site, the potential for environmental concerns from this facility to impact the Site appear low.

### 5.1.4 State and Tribal Registered Storage Tank List (UST)

UST: The UST database contains registered USTs. USTs are regulated under Subtitle I of the RCRA. The data comes from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

#### ***Analysis/Comment***

A review of the UST list, as provided by EDR, has revealed that there is one (1) UST site within approximately 0.250 miles of the target property.

1. PDQ Market & Deli; 156 Eaton Road, also the 76 Fueling Station. See also item No 1. Under Section 5.1.3. This facility is an active fueling station that has three 10,000 gallon USTs reported within this database. This database does not report any adverse regulatory issues with the three USTs. Based on the regulatory status of this facility, its relative downgradient location and the distance from the Site, the potential for environmental concerns from this facility to impact the Site appear low.

### 5.1.5 California Environmental Reporting System CERS HAZ WASTE

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

#### ***Analysis/Comment***

A review of the CERS HAZ WASTE list, as provided by EDR, has revealed that there are six (6) CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

1. Precision Automotive; 3415 Silverbell Road #10. Located approximately 0.045 miles southeast of the Site as part of the Eaton Road Commercial Park. This facility is an active auto repair shop. This facility has been cited for the failure to submit specific documents concerning on-site hazardous wastes in 2015 as well as a failure to review and electronically certify complete and accurate business plans. Each of the citations reported in this database were brought back into compliance per the Butte County Environmental Health. There are currently no outstanding violations for this facility reported in this database. Based on the regulatory status of this facility and its relative cross gradient location, the potential for environmental concerns from this facility to impact the Site appear low.
2. Chico Plating Works; 172 Commercial Avenue. Located approximately 0.238 miles south of the Site. This facility does not appear to be active as a metal plating facility. This database reports the facility name as Nor Cal Food Equipment Inc. at the same address. Nor Cal Food Equipment Inc. is a restaurant supply business and was reported within this database in 2014 for a failure to properly label wastes as well as failure to maintain specific information on the wastes. This facility was brought within compliance in 2014. Based on the regulatory status of this facility, its relative cross gradient location and the

distance from the Site, the potential for environmental concerns from this facility to impact the Site appear low.

3. Signs and Graphic Design; 158 Commercial Drive. Located approximately 0.247 miles south of the Site. This facility is an active sign and graphic design company listed in this database in 2014 for the failure to obtain/maintain an active EPA ID and for the failure to properly label hazardous waste accumulation containers properly. This facility was brought within compliance for the EPA ID in 2014 and it is not reported if the facility was brought within compliance for the improper labeling. Based on the facilities relative downgradient location and the distance from the Site, the potential for environmental concerns from this facility to impact the Site appear low.
4. PDQ Market & Deli; 156 Eaton Road, also the 76 Fueling Station. See also item No 1. Under Section 5.1.3 and item No 2. Under Section 5.1.4.
5. Clark Pest Control; 180 Eaton Road. Located approximately 0.149 southwest of the Site and at a lower relative elevation. This facility is an active pest control business and was reported in this database in 2015 for the failure to properly store hazardous waste, complete and submit inventory, and failure to properly handle used oil filters. Each of the violations were brought into compliance in 2015. Based on the facilities regulatory status and relative downgradient location, the potential for environmental concerns from this facility to impact the Site appear low.
6. Dan Gamels RV Service; 3268 Esplanade #A. Located approximately 0.247 miles west southwest of the Site. This facility is no longer active and in its place is a security systems dealer. The RV service is listed in this database in 2014 for the failure to properly label hazardous waste, failure to maintain and complete waste manifests and failure to properly close hazardous waste containers. These violations were brought into compliance in 2014. Based on the facilities relative down gradient location and the distance from the Site, the potential for environmental concerns from this facility to impact the Site appear low.

#### 5.1.6 Statewide Environmental Evaluation and Planning System (SWEEPS UST)

The Statewide Environmental Evaluation and Planning System underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

##### ***Analysis/Comment:***

A review of the SWEEPS UST list, as provided by EDR revealed that there are two (2) SWEEPS UST site within approximately 0.25 miles of the target property.

1. Sandrowski Landscaping; 3256 Silverbell Road. Located approximately 0.138 miles southeast of the Site. This facility is reported to have an active 1,000 gallon UST for gasoline. Based on the facilities relative cross gradient location and the regulatory status, the potential for environmental concerns from this facility to impact the Site appear low.
2. PDQ Market & Deli; 156 Eaton Road, also the 76 Fueling Station. See also item No 1. Under Section 5.1.3 and item No 2. Under Section 5.1.4.

## 5.0 REGULATORY REVIEW

### 5.1.7 HIST UST

Historical UST Registered Database.

#### ***Analysis/Comment:***

A review of the HIST UST list, as provided by EDR, has revealed that there are two (2) HIST UST sites within approximately 0.25 miles of the target property.

1. Sandrowski Landscaping; 3256 Silverbell Road. See also item No. 1 under 5.1.6 SWEEPS UST.
2. PDQ Market & Deli; 156 Eaton Road, also the 76 Fueling Station. See also item No 1. Under Section 5.1.3 and item No 2. Under Section 5.1.4.

### 5.1.8 CA FID UST

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

#### ***Analysis/Comment:***

A review of the CA FID UST list, as provided by EDR, has revealed that there are two (2) CA FID UST site within approximately 0.25 miles of the target property.

1. Sandrowski Landscaping; 3256 Silverbell Road. See also item No. 1 under 5.1.6 SWEEPS UST.
2. PDQ Market & Deli; 156 Eaton Road, also the 76 Fueling Station. See also item No 1. Under Section 5.1.3 and item No 2. Under Section 5.1.4.

### 5.1.9 CERS TANKS

CERS TANKS; List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

#### ***Analysis/Comment:***

A review of the CERS TANKS list, as provided by EDR, has revealed that there is one (1) CA FID UST site within approximately 0.25 miles of the target property.

1. PDQ Market & Deli; 156 Eaton Road, also the 76 Fueling Station. See also item No 1. Under Section 5.1.3 and item No 2. Under Section 5.1.4.

### 5.1.10 FINDS

Finds: the Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System; Aerometric Information Retrieval System; Federal Insecticide Fungicide Rodenticide Act; and Toxic Substance Control Act; CERCLIS; DOCKET; Federal Underground Injection Control; Federal Reporting Data System; Surface Impoundments; Chemicals in Commerce Information System; RCRA; TRIS. The source of this database is the US EPA

***Analysis/Comment:***

A review of the FINDS list, as provided by EDR, has revealed that there is one (1) FINDS site within approximately 0.25 miles of the target property.

1. Comcast of Southern California Inc.; 427 Eaton Road. See also item No. 1 under Section 5.1.1 RCRA-SQG.

**5.1.11 CUPA**

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities. This database does not provide enough information on the facilities listed below for NCE to make an environmental assessment.

***Analysis/Comment:***

A review of the CUPA list, as provided by EDR, has revealed that there are thirteen (13) CUPA sites within approximately 0.25 miles of the target property.

1. Pacific Supply; 3505 Hicks Lane. Located approximately 0.004 miles north northwest of the Site.
2. KHSL; 3460 Silverbell Road. Located approximately 0.022 miles east southeast of the Site.
3. Precision Automotive; 3415 Silverbell Road. Located approximately 0.045 miles southeast of the Site.
4. RAF Custom; 3415 Silverbell Road. Located approximately 0.045 miles southeast of the Site.
5. Rahmat Afraibi MD; 95 Declaration Drive. Located approximately 0.052 miles south of the Site.
6. Sandrowski Landscaping; 3256 Silverbell Road. Located approximately 0.138 miles southeast of the Site.
7. Chico Plating Works; 172 Commercial Avenue. Located approximately 0.238 miles south of the Site.
8. B & J Enterprises; 168 Commercial Avenue. Located approximately 0.240 miles south of the Site.
9. Anderson Automotive; 420 Todd Court. Located approximately 0.245 miles north of the Site.
10. Signs and Graphic Design; 158 Commercial Drive. Located approximately 0.247 miles south of the Site.

## 5.0 REGULATORY REVIEW

11. Clarks Pest Control; 180 Eaton Road. Located approximately 0.149 miles southwest of the Site.
12. PDQ Market & Deli; 156 Eaton Road. Located approximately 0.247 miles southwest of the Site.
13. Dan Gamels RV Service; 3268 Esplanade #A. Located approximately 0.247 miles west southwest of the Site.

### 5.1.12 HAZNET

The Haznet database provides information extracted from copies of hazardous waste manifests received each year by the California Department of Toxic Substances Control (DTSC). The annual volume of manifests is typically 700,000 to 1,000,000 annually, representing approximately 350,000 to 500,000 shipments. Data from non-California manifests and continuation sheets are not included at the present time. Data from the manifests are submitted without correction, and therefore may contain some invalid values for data elements such as generator ID, TSD ID, waste category, or disposal method. This database begins with calendar year 1993.

#### ***Analysis/Comment:***

A Review of the HAZNET list, as provided by EDR, has revealed that there is one (1) HAZNET site within approximately 0.25 miles of the Site.

1. Comcast of Southern California Inc.; 427 Eaton Road. See also item No. 1 under Section 5.1.1 RCRA-SQG.

### 5.1.13 Historic Cortese

Sites for the Historic Cortese are designated by the State Water Resource Control Board LUST. The Integrated Waste Boards SWF/LS, and the Department of Toxic Substances Control (DTSC). This listing is no longer updated by the state agency.

#### ***Analysis/Comment:***

A review of the Historic Cortese list, as provided by EDR, has revealed that there is one (1) Hist Cortese site within approximately 0.25 miles of the target property.

2. PDQ Market & Deli; 156 Eaton Road, also the 76 Fueling Station. See also item No 1. Under Section 5.1.3 and item No 2. Under Section 5.1.4

## 5.2 Orphan Sites

Review of the Orphan's Summary list provided in the EDR Report revealed one (1) named orphan site. "Orphan Sites" are those facilities that could not be mapped or "geocoded" due to inadequate address information. This facility is specifically the intersection of SR99 and Eaton Road and is recorded in this database in 1998 as, "the location where illegal drug lab equipment and materials were found in a vehicle or other mode of transport." Based on the nature and age of this report, it is unlikely that it has potential environmental impacts to the Site.

## 6.0 SITE RECONNAISSANCE

As noted in Section 1.2.2, "Scope", a reconnaissance of the Site and surrounding vicinity was conducted by NCE on November 27, 2018.

The weather conditions at the time of the site visit were cloudy skies, with light to moderate intermittent rain. Photographs taken as part of the site visit are provided in the attached Photo Logs. The Vacant lot north of Eaton Road had a perimeter fence that prevented entrance into the property. NCE did walk the perimeter of the Vacant lot to observe from outside of the perimeter fence.

### 6.1 Chemical Storage and Usage

No chemical storage tanks were observed on the Site.

### 6.2 Bulk Storage Tanks

No above ground storage tanks were observed on the Site.

### 6.3 Site Waste and Wastewater

#### **Solid Waste**

NCE did not observe evidence of improper solid waste disposal at the Site.

#### **Sanitary Sewage**

NCE did not observe evidence of sanitary sewer systems associated with the Site.

#### **Hazardous Waste**

No indications of hazardous waste were observed at the Site.

### 6.4 Stained Soil, Stained Pavement, or Stressed Vegetation

No stained soils or stressed vegetation were observed.

### 6.5 Liquid Discharges

NCE did not visually observe any liquid discharges during the Site visit.

### 6.6 Pools of Liquid

NCE did not observe any standing surface water or pools containing liquids likely to be hazardous substances or petroleum products during the Site visit.

### 6.7 Pits, Ponds, or Lagoons

NCE did not observe during the site visit any man-made or natural depressions in the ground surface that were likely to hold liquid or sludge containing hazardous substances or petroleum products.

## 6.0 SITE RECONNAISSANCE

### 6.8 Wells

No features indicative of the presence of groundwater wells were observed at the Site.

### 6.9 On-Site Fill

With the exception of the earth work necessary to construct the SR99 On/off-Ramps and to elevate Eaton Road, NCE did not identify any on-site fill.

### 6.10 Drums and Containers for Storing Waste

No drums or containers for storing waste were observed at the Site.

### 6.11 Floor Drains and Sumps

With the exception of the drop inlets along Eaton Road, NCE did not identify any floor drains or sumps within the Site.

### 6.12 Odors

NCE did not identify noxious or foul odors suspected to represent an environmental concern in connection with the Site.

### 6.13 Air Emissions

NCE did not observe processes or equipment emitting noticeable vapors or fumes from the Site.

### 6.14 Polychlorinated Biphenyls (PCBs)

PCBs can be present in coolants or lubricating oils used in older electrical transformers, hydraulic systems, and other similar equipment. The 1976 Toxic Substances Control Act (TSCA) extended regulatory control over the use of PCBs to the EPA. In November 1979, the EPA generally prohibited the domestic manufacture of PCBs in electromagnets, transformers, and heat-transfer and hydraulic equipment. If present, features such as transformers, are inspected for obvious leaks and physical evidence such as stains or cracks indicating possible current or past leaks. There were no pole mounted transformers observed within the Site.

### 6.15 Asbestos-Containing Material (ACM)

Many building materials such as structural steel fireproofing, acoustic finishes, ceiling texture, ceiling tile, suspended ceiling panels, textured and elastomeric paints, window putty, flexible duct connectors, rubbery pipe insulation tape, building wiring insulation, pipe, boiler, and vessel insulation, interior plaster, and duct insulation commonly contained asbestos until the late 1970s. Other types of ACM were commonly used until the middle to late 1980s such as drywall joint compound, exterior stucco, sheet vinyl flooring, vinyl flooring products, flooring and other mastics (adhesives), roof tiles and coatings, asbestos-cement products and flues.

Under the Toxic Substance Control Act (TSCA), EPA banned the use of asbestos in many products in 1993. However, several categories of building products were not subject to the ban. Thus, existing and even new buildings may lawfully contain ACM. In addition, materials that contain greater than one percent asbestos fibers are considered regulated ACM and must be handled according to EPA and Occupational Safety and Health Administration (OSHA) regulations.

## 6.0 SITE RECONNAISSANCE

ACM were not identified by NCE during the site visit and was not part of the ESA scope of work.

### 6.16 Lead-in-Drinking Water (LIW)

The major source of LIW is leaching of lead from household plumbing materials or water service lines used to bring water from the main to the home or building. Lead can leach into drinking water through contact with the plumbing, solder, fixtures and faucets (brass) and fittings. NCE did not observe any plumbed facilities within the Site at the time of the Site visit.

### 6.17 Radon

Radon is a naturally occurring radioactive gas. It is released during the natural decay of uranium, radium and thorium in soil, rock and groundwater beneath homes and buildings. As uranium naturally breaks down, it releases radon gas, which is a colorless, odorless, radioactive gas. Radon enters homes through direct floors, cracks in concrete walls and floors, floor drains, and sumps. When radon becomes trapped in buildings and concentrations accumulate and increase indoors, exposure to radon can become a concern. Its occurrence in the state of California is influenced primarily by geology.

Based on statistical information maintained within EPA, dated 1993, radon concentrations in Butte County have a low rating with an average of less than 2 picocuries per liter (pCi/L). These concentrations are less than the 2.0 pCi/L action level established by EPA. Based on this information, it is unlikely that radon represents an environmental concern to the Site.

### 6.18 Lead-Based Paint (LBP)

There were no painted structures observed within the Site.



7.0 INTERVIEWS

7.0 INTERVIEWS

7.1 Present Owners

At the time of this Phase I ESA, NCE was unable to contact the owners of the properties that the Site encompasses. Interviews were not conducted with past or present owners of properties on or around the Site.

7.2 User

7.2.1 Title Records

No chains-of title were provided for the Site.

7.2.2 Environmental Clean-Up Liens and Activity and Use Limitations (AULs)

NCE requested and Environmental Lien and AUL search performed on the Vacant Lot north of Eaton Road (Appendix G). The search did not find any environmental liens or AULs for the Vacant Lot.

7.2.3 Relationship of Purchase Price to Fair Market Value Due to Contamination in Connection with the Site

NCE has no information regarding the relationship of the purchase price to the fair market value of the Site.

7.2.4 Common Knowledge or Reasonably Ascertainable Information

NCE has no information regarding any commonly known or reasonably ascertainable information within the local community that is material to the environmental conditions of the Site.

7.2.5 Purpose for Conducting the Phase I Environmental Site Assessment

The primary purpose of this Phase I ESA was to identify, to the extent feasible, RECs resulting from the improper use, manufacture, storage, and/or disposal of hazardous or toxic substances on the Site.

7.3 Key Site Manager

7.3.1 Historic Site Use

Review of the aerial photographs (Appendix A) indicates that since the late 1960s, the Site has existed primarily as roadway segments and their respective shoulder areas. Areas that are not roadway segments within the Site include the Vacant Lot to the north, the Comcast parking lot and the Pacific Supply Entrance. The Vacant Lot has accommodated multiple structures presumably agricultural and/or light industrial until about 2009, when many or most of the buildings were removed. In 2012 the lot appeared vacant, and has remained as such since. The Comcast parking lot within the Site and south of Eaton Road was constructed in the late 1980s and has remained a parking lot since. It appears that this parking lot has primarily been used as commuter vehicle and light industrial parking with no extended periods of heavy industrial parking observed. The entrance to the Pacific Supply was built in the late 1960s to early 1970s. The entrance is an asphalt/concrete paved bridge that spans approximately 10-15 feet over a drainage ditch.

## 7.0 INTERVIEWS

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### 7.3.2 Proceedings Involving the Site

NCE has no knowledge of pending, threatened, or past litigation, administrative proceedings, or notices from governmental agencies regarding violations of environmental laws regarding hazardous substances or petroleum products.

### 7.4 Occupants

There are currently no permanent residents that reside on the Site. It is presumed that the Comcast and Pacific Supply facilities has one or more employees at the facilities during open business hours, though no interviews were conducted Comcast or Pacific Supply employees.

### 7.5 Past Owners

NCE did not interview the past owners of the Site.

## 8.0 ADL ASSESSMENT

### Sampling Procedures

On November 27, 2018 a total of 42 samples were collected from exposed soils at 21 locations along the SR99 On/off-ramps and along Eaton Road. The locations were intended to be representative of areas of exposed soil that may potentially be disturbed during Project construction (Plate 2). NCE collected two samples from each location at 0- to 0.5-foot (surface) and from 1.0- to 1.5-foot bgs for a total of 42 samples. The surface samples were analyzed for total lead while the deeper samples were put on hold until an assessment of the surface samples could be done.

The samples were collected using hand-auger equipment, and the equipment was decontaminated using an Alconox detergent in DI water between sample locations to minimize the potential for cross-contamination. The samples were placed in glass containers and assigned a unique number. The containers were then placed in an iced cooler for shipment to BC Laboratories in Bakersfield, California. The samples were analyzed for total lead using US EPA Method 6020. Chain-of-custody (COC) forms are included in Appendix H.

### Analytical Results

The results are summarized in the attached Table 2 and shown on Plate 2. Analytical laboratory reports are included in Appendix H.

Analytical results of the surface soil samples collected at the Site ranged from 6.7 mg/kg (ER-19-S) to 290 mg/kg (ER-9-S) of total lead in soil. In an agreement between the California EPA DTSC and Caltrans titled Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils, soils with total lead concentrations below 320 mg/kg and extractable lead concentrations below 5 mg/L have no burial or special handling requirements within a Caltrans ROW.

As a general rule, soil samples with a total lead concentration 10 times greater than the soluble threshold limit concentration (STLC) (for extractable lead is 5 mg/L) should be analyzed by the California waste extraction test (WET) to assess the leads leachability in soil. A waste extraction test (WET) for lead only by EPA Method 6010B was performed on three surface soil samples with the highest total lead concentrations (ER-7-S, ER-9-S and ER-21-S) to assess the extractable lead concentrations in the soils at the Site. The results of the WET analysis on the three soil samples were all below the STLC of 5 mg/L for lead (Table 2).

To assess the vertical extent of the total lead concentrations, NCE had the deeper samples (1.0-to-1.5 feet bgs) at the three locations with the highest total lead concentrations analyzed for total lead (ER-7-1, ER-9-1 and ER-21-1). The results of the total lead analysis for the deeper samples were below 80 mg/kg for each of the locations (Table 2).

## 9.0 FINDINGS OF THE PHASE I ESA & RECOMMENDATIONS

### **Phase I ESA Findings**

This Phase I ESA and ADL Assessment have not revealed potential RECs in connection with the Site.

The exact nature of the historic uses on the Vacant Lot north of Eaton Road was not determined during this ESA. Based on the aerial photographs, the area appeared to be used for agricultural/light industrial purposes. Historically the area had structures and occasionally had multiple tractor trailers and other large vehicles parked on it until approximately the mid-2010s, when the lot became vacant and no longer appeared in use. This parcel is currently owned by the City of Chico.

Because of the proposed Project and the age of the roadways within the Site and their associated traffic volumes, NCE conducted an ADL survey along the unpaved portions of the roadway shoulders of Hicks Lane, Eaton Road and the SR99 On/off-Ramps. Of the soil samples analyzed, no samples had reported total lead concentrations above 320 milligrams per kilogram (mg/kg), though three surface samples had reported total lead concentrations above 80 mg/kg (ER-7-S, ER-9-S and ER-21-S). Consistent with the guidance provided in the agreement between the DTSC and Caltrans, titled Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (DTSC/Caltrans Agreement), soils with total lead concentrations greater than 80 mg/kg were analyzed for extractable lead concentrations. Extractable lead was not above the threshold in the DTSC/Caltrans Agreement of 5 milligrams per liter (mg/L).

### **Phase I ESA Recommendations**

The following recommendations are based on the findings of the Phase I ESA and ADL assessment performed at the Site:

It is NCEs understanding that the property referred to as the Vacant Lot will be used as a laydown area for the construction equipment that will be used during the proposed Project and that no sub-surface work or digging is expected in the area. If no sub-surface work or soil removal is expected in this area, NCE has no recommendations for this portion of the Site.

According to the DTSC/Caltrans Agreement, soils with a concentration of extractable lead not exceeding 5 mg/L, as determined by the California WET, and total lead not exceeding 320 mg/kg may be placed on-site without cover. Though concentrations of total and soluble lead were below the DTSC/Caltrans Agreement guidance values, it is recommended that the soils at the three locations with elevated lead concentrations (ER-7-S, ER-9-S and ER-21-S) not be placed in areas routinely used by the public (e.g. rest stops or bus stops). Furthermore, if these soils are to be removed from the Site, they should be stockpiled on sheets of polyethylene or geomembrane and profiled in accordance with the destination facility and/or regulations.

## 10.0 LIMITATIONS

Information presented in this report does not confirm the presence or absence of subsurface contamination at the property, but indicates whether the possibility of such contamination exists. Our professional opinions expressed herein are based on limited data; no other warranty is given or implied by this report. A more extensive assessment, that would include a surface and/or subsurface investigation and chemical analyses of additional soil and/or groundwater samples, would provide more definitive information concerning site-specific conditions. This report is complete and accurate to the extent that cited reports and agency information are complete and accurate.

This report has been prepared in compliance with the ASTM standard entitled "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" E1527-13 as well as the Environmental Protection Agency's (EPA) All Appropriate Inquiries (AAI) rule.

The observations described in this report were made under the conditions stated herein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services within the constraints imposed by the client. The work described in this report was carried out in accordance with the Terms and Conditions of the contract.

In preparing this report, NCE has relied on certain information provided by federal, state, and local officials and other parties referenced therein, and on information contained in the files of governmental agencies, that were readily available to NCE at the time of this assessment. Although there may have been some degree of overlap in the information provided by these various sources, NCE did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment. Observations were made of the Site as indicated in this report. Where access to portions of the Site was unavailable or limited, NCE renders no opinion as to the presence of direct or indirect evidence relating to petroleum substances, hazardous substances, or both, in that portion of the Site. In addition, NCE renders no opinion as to the presence of indirect evidence relating to hazardous material or oil, where direct observation of the ground surface is obstructed by objects or materials.

NCE does not represent that the Site referred to herein contains no petroleum or hazardous or toxic substances or other conditions beyond those observed by NCE during the Site walkthrough.

NCE has produced this document under an agreement between NCE and GHD Inc. All terms and conditions of that agreement are included within this document by reference. Any reliance upon this document, or upon NCE's performance of services in preparing this document, is conditioned upon the relying party's acceptance and acknowledgement of the limitations, qualifications, terms, conditions and indemnities set forth in that agreement, and property ownership/management disclosure limitations, if any. It is not to be relied upon by any party other than GHD Inc. nor used for any purpose other than that specifically stated in our Agreement or within this Report's Introduction section without NCE's advance and express written consent.

**10.0 LIMITATIONS**

---

**Environmental Professional Declaration:**

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in § 312.10 of the Standards and Practices for All Appropriate Inquiries (AAI) Final Rule (EPA, 2005).

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. We have developed and performed the all appropriate inquiries in conformance with the standard and practices set forth in 40 CFR Part 312.

11.0 REFERENCES

11.0 REFERENCES

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**DISTRIBUTION**

**Draft Phase I Environmental Site Assessment (ESA) and ADL Assessment  
SR99/Eaton Road Interchange  
Chico, CA**

Date

Copy 1:

Copy 2:

Copy 3: NCE Project File

**Quality Control Reviewer**

Michael Leacox, P.G., C.E.G.  
Principal



## TABLES

Table 1: Database List from EDR

Databases Reviewed	Approximate Minimum Search Distance (AMSD) (Miles)	Number of Facilities Within AMSD
<b>Federal Databases</b>		
NPL	1.000	0
Proposed NPL	1.000	0
NPL LIENS	0.001	0
Delisted NPL	1.000	0
FEDERAL FACILITY	0.500	0
SEMS	0.500	0
SEMS-ARCHIVE	0.500	0
CORRACTS	1.000	0
RCRA-TSDF	0.500	0
RCRA – LOG	0.250	0
RCRA – SOG	0.250	2
RCRA – CESQG	0.250	0
LUCIS	0.500	0
US ENG CONTROLS	0.500	0
US INST CONTROL	0.500	0
ERNS	0.001	0
<b>State and Tribal Databases</b>		
RESPONSE	1.000	0
ENVIROSTOR	1.000	2
SWF/LF	0.500	0
LUST	0.500	2
INDIAN LUST	0.500	0
CPS-SLIC	0.500	0
FEMA UST	0.250	0
UST	0.250	1
AST	0.250	0
INDIAN UST	0.250	0
VCP	0.500	0
INDIAN VCP	0.500	0
BROWNFIELDS	0.500	0
US BROWNFIELDS	0.500	0
WMUDS/SWAT	0.500	1
SWRCY	0.500	0
HAULERS	0.001	0
INDIAN ODI	0.500	0
DEBRIS REGION 9	0.500	0
ODI	0.500	0
IHS OPEN DUMPS	0.500	0
US HIST CDL	0.001	0
HIST CAL-SITES	1.000	0
SCH	0.250	0
CDL	0.001	0
TOXIC PITS	1.000	0
US CDL	0.001	0

Table 1: Database List from EDR

CERS HAZ WASTE	0.250	6
<b>Local Registered Storage Tanks</b>		
SWEEPS UST	0.250	2
HIST UST	0.250	3
CA FID UST	0.250	2
CERS TANKS	0.250	1
<b>Local Land Records</b>		
LIENS	0.001	0
LIENS 2	0.001	0
DEED	0.500	0
<b>Records of Emergency Release Reports</b>		
HMIRS	0.001	0
CHMIRS	0.001	0
LDS	0.001	0
MCS	0.001	0
SPILLS 90	0.001	0
<b>Other Ascertainable Records</b>		
RCRA NONGEN/ NLR	0.250	0
FUDS	1.000	0
DOD	1.000	0
SCRD DRYCLEANERS	0.500	0
US FIN ASSUR	0.001	0
EPA WATCH LIST	0.001	0
2020 COR ACTION	0.250	0
TSCA	0.001	0
TRIS	0.001	0
SSTS	0.001	0
ROD	1.000	0
RMP	0.001	0
RAATS	0.001	0
PRP	0.001	0
PADS	0.001	0
ICIS	0.001	0
FTTS	0.001	0
MLTS	0.001	0
COAL ASH DOE	0.001	0
COAL ASH EPA	0.500	0
PCB TRANSFORMER	0.001	0
RADINFO	0.001	0
HIST FTTS	0.001	0
DOT OPS	0.001	0
CONSENT	1.000	0
INDIAN RESERV	0.001	0
FUSRAP	1.000	0
UMTRA	0.500	0
LEAD SMELTERS	0.001	0
US AIRS	0.001	0
US MINES	0.250	0
ABANDONED MINES	0.001	0

Table 1: Database List from EDR

FINDS	0.001	1
DOCKET HWC	0.001	0
UXO	1.000	0
CA BOND EXP. PLAN	1.000	0
CORTESE	0.500	0
CUPA LISTINGS	0.250	13
DRYCLEANERS	0.250	0
EMI	0.001	0
ENF	0.001	0
FINANCIAL ASSURANCE	0.001	0
HAZNET	0.001	1
ICE	0.001	0
HIST CORTESE	0.500	4
HWP	1.000	0
HWT	0.250	0
MINES	0.001	0
MWMP	0.250	0
NPDES	0.001	0
PEST LIC	0.001	0
PROC	0.500	0
NOTIFY 65	1.000	0
UIC	0.001	0
WASTEWATER PITS	0.500	0
WDS	0.001	0
WIP	0.250	0
WELL STIM PROJ	0.001	0
CIWQS	0.001	0
CERS	0.001	0
ECHO	0.001	1
UIC GEO	0.001	0
SAMPLING POINT	0.001	0
PROJECT	0.001	0
PROD WATER PONDS	0.001	0
OTHER OIL GAS	0.001	0
NON-CASE INFO	0.001	0
WDR	0.001	0
MILITARY PRIV SITES	0.001	0
<b>EDR Exclusive Records</b>		
EDR MGP	1.000	0
EDR HIST AUTO	0.125	1
EDR HIST CLEANER	0.125	0
<b>Exclusive Recovered Govt. Archives</b>		
RGA LF	0.001	0
RGA LUST	0.001	0
<b>Notes:</b> Sites may be listed in more than one database.		

**Table 2 – Summary of Soil Analytical Results for Lead**

Sample	Pb Total Lead (mg/kg) <sup>1</sup>	Pb WET <sup>3</sup> Soluble Lead (mg/L) <sup>2</sup>
ER-1-S	16	
ER-2-S	25	
ER-3-S	26	
ER-4-S	18	
ER-5-S	13	
ER-6-S	15	
ER-7-S	110	1.8
ER-7-1.0	33	
ER-8-S	56	
ER-9-S	290	ND
ER-9-1.0	17	
ER-10-S	11	
ER-11-S	42	
ER-12-S	27	
ER-13-S	14	
ER-14-S	26	
ER-15-S	21	
ER-16-S	21	
ER-17-S	29	
ER-18-S	7.9	
ER-19-S	6.7	
ER-20-S	57	
ER-21-S	120	1.3
ER-21-1.0	23	

<sup>1</sup>mg/kg: milligrams/kilograms (mg/kg)

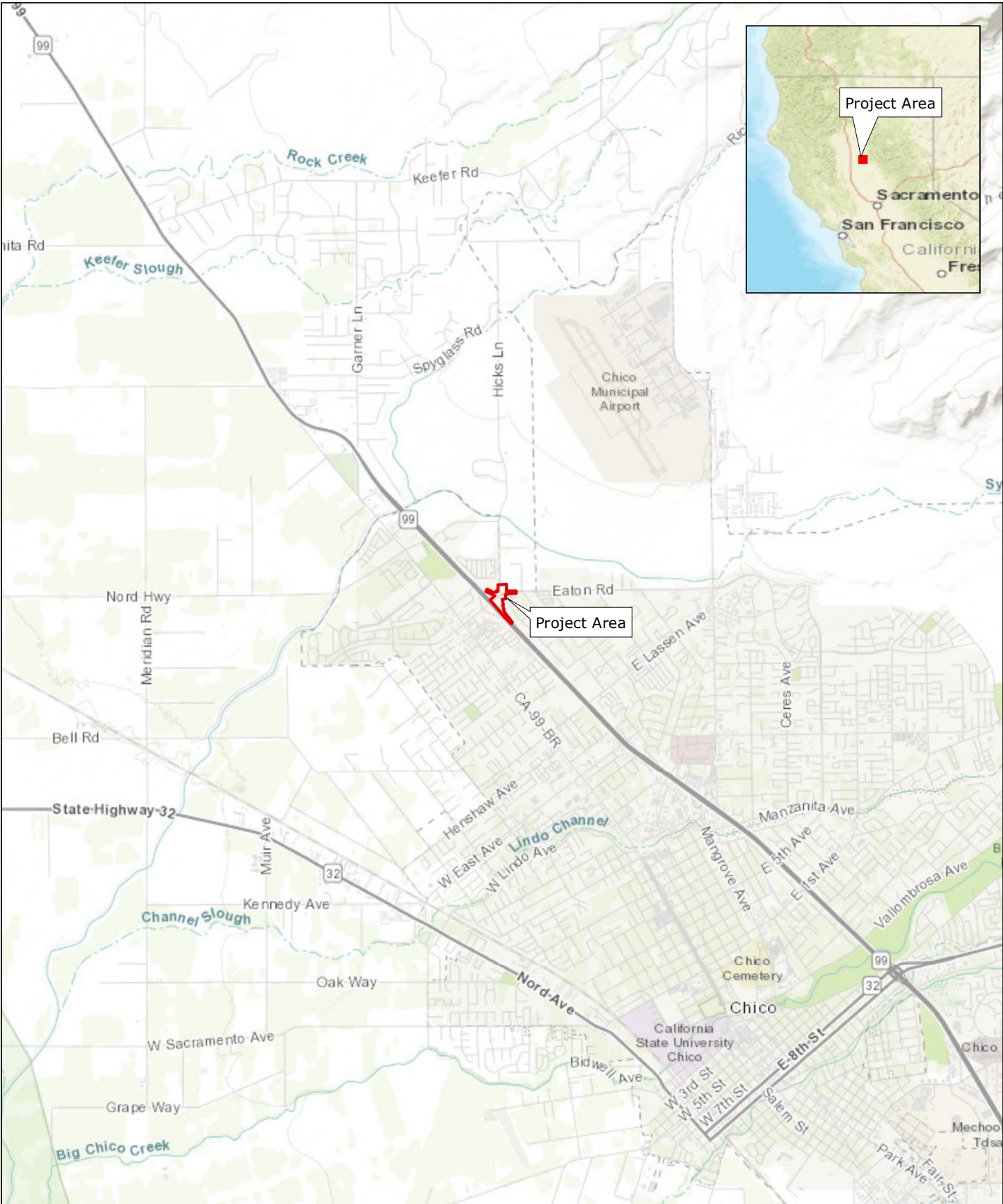
<sup>2</sup> mg/L: milligrams/Liter (mg/L)

<sup>3</sup>WET: California Waste Extraction Test


ER-7-S = Surface soil sample

ER-7-1.0 = Sample collected at 1.0-1.5 feet below ground surface

## PLATES



Document Path: P:\Active Projects\IGHD, Inc. - 10111.03.55\GIS\Maps\Fig 1 Eaton Road.mxd

 Project Area



**Project Vicinity**  
Eaton Road Round-a-Bout ISA

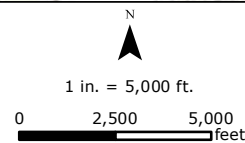


PLATE  
**1**

SOURCE ESRI World Topographic and Street Basemaps	JOB NUMBER 1011.03.55	DRAWN kando	DATE 11/30/2018	REVISED	APPROVED
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PHOTO LOGS



Photo 1. View facing into the Vacant Lot (APN: 007-240-078) from Hicks Lane. (November 2019).



Photo 2. View facing the Pacific Supply Entrance from Hicks Lane. (November 2019).



Photo 3. View facing west at the intersection of SR99 and Eaton Road. (November 2019).



Photo 4. View facing into the Comcast parking lot from Eaton Road. (November 2019).



8795 Folsom Blvd., Suite 250  
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Site Photographs  
 Phase I ESA and ADL Assessment  
 SR99/Eaton Road Interchange  
 Chico, CA

Photo Log

1

DRAWN	PROJECT NUMBER	APPROVED	DATE	REVISED DATE
BC	1011.03.55		2/20/19	



Photo 5. View of SR99 northbound off-ramp to Eaton Road. (November 2019).



Photo 6. View of SR99 northbound on-ramp from Eaton Road. (November 2019).



Photo 7. View of Vacant Lot (APN: 004-240-078) and pavement remnants. (November 2019).



Photo 8. View facing north of Hicks Lane with Pacific Supply on the left. (November 2019).



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Photo Log

2

DRAWN	PROJECT NUMBER	APPROVED	DATE	REVISED DATE
BC	1011.03.55		2/20/19	

**APPENDIX A**

**EDR RADIUS MAP™ WITH GEOCHECK® (COMPUTERIZED ENVIRONMENTAL  
REPORT)**

**Eaton Road Round-A-Bout**

Intersection of Eaton Rd. and SR-99 Off/On-Ramp  
Chico, CA 95973

Inquiry Number: 5502622.2s  
December 05, 2018

**The EDR Radius Map™ Report with GeoCheck®**



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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***Thank you for your business.***  
 Please contact EDR at 1-800-352-0050  
 with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

INTERSECTION OF EATON RD. AND SR-99 OFF/ON-RAMP  
CHICO, CA 95973

#### COORDINATES

Latitude (North): 39.7753720 - 39° 46' 31.33"  
Longitude (West): 121.8718860 - 121° 52' 18.78"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 596613.9  
UTM Y (Meters): 4403225.0  
Elevation: 175 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5603350 RICHARDSON SPRINGS, CA  
Version Date: 2012  
  
Northwest Map: 5603332 NORD, CA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140726, 20140725  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
 INTERSECTION OF EATON RD. AND SR-99 OFF/ON-RAMP  
 CHICO, CA 95973

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">A1</a>	COMCAST OF SOUTHERN	427 EATON RD	FINDS, ECHO	Higher	2, 0.000,
<a href="#">A2</a>	COMCAST OF SOUTHERN	427 EATON RD	HAZNET	Higher	2, 0.000,
<a href="#">A3</a>	COMCAST OF SOUTHERN	427 EATON RD	RCRA-SQG	Higher	2, 0.000,
<a href="#">4</a>	PACIFIC SUPPLY	3505 HICKS LN	CUPA Listings	Higher	19, 0.004, NNW
<a href="#">A5</a>	KHSL	3460 SILVERBELL RD	CUPA Listings	Higher	116, 0.022, ESE
<a href="#">B6</a>	PRECISION AUTOMOTIVE	3415 SILVERBELL RD #	CERS HAZ WASTE, CUPA Listings, CERS	Higher	238, 0.045, SE
<a href="#">B7</a>	RAF CUSTOM	3415 SILVERBELL RD	CUPA Listings, HAZNET	Higher	238, 0.045, SE
<a href="#">8</a>	RAHMAT AFRAIBI MD	95 DECLARATION DR #	CUPA Listings	Higher	276, 0.052, South
<a href="#">B9</a>	SERPENTINE MINE	136 BALBOA COURT	WMUDS/SWAT	Higher	345, 0.065, SE
<a href="#">10</a>	ECO SHELL INC	60 INDEPENDENCE CIR	EDR Hist Auto	Higher	603, 0.114, SSW
<a href="#">C11</a>	SANDROWSKI LANDSCAPI	3256 SILVERBELL RD	HIST UST	Higher	731, 0.138, SE
<a href="#">C12</a>	SANDROWSKI LANDSCAPI	3256 SILVERBELL RD	SWEEPS UST, CA FID UST, CUPA Listings	Higher	731, 0.138, SE
<a href="#">D13</a>	CLARK PEST CONTROL	180 EATON RD	CERS HAZ WASTE, CUPA Listings, CERS	Lower	789, 0.149, SW
<a href="#">D14</a>	PDQ MARKET & DELI IN	156 EATON RD	CERS HAZ WASTE, CERS TANKS, CERS	Lower	1023, 0.194, SW
<a href="#">E15</a>	CHICO PLATING WORKS	172 COMMERCIAL AVENU	ENVIROSTOR, CERS HAZ WASTE, CUPA Listings	Higher	1255, 0.238, South
<a href="#">E16</a>	B & J ENTERPRISES	168 COMMERCIAL AVE	CUPA Listings	Higher	1268, 0.240, South
<a href="#">17</a>	ANDERSON AUTOMOTIVE	420 TODD CT	RCRA-SQG, FINDS, ECHO, CUPA Listings, HAZNET	Higher	1293, 0.245, North
<a href="#">E18</a>	SIGNS & GRAPHIC DESI	158 COMMERCIAL DR	CERS HAZ WASTE, CUPA Listings	Higher	1302, 0.247, South
<a href="#">F19</a>	PDQ MARKET AND DELI	156 EATON RD	HIST UST, CA FID UST	Lower	1303, 0.247, SW
<a href="#">F20</a>	PDQ MARKET & DELI IN	156 EATON RD	UST, SWEEPS UST	Lower	1303, 0.247, SW
<a href="#">F21</a>	PDQ MARKET & DELI	156 EATON RD	LUST, HIST UST, CUPA Listings, EMI, HIST CORTESE,...	Lower	1303, 0.247, SW
<a href="#">22</a>	DAN GAMELS RV SERVIC	3268 ESPLANADE # A	CERS HAZ WASTE, CUPA Listings	Lower	1305, 0.247, WSW
<a href="#">23</a>	COFFEY, GLENN L. & N	3156 ESPLANDE 215	HIST CORTESE	Higher	1383, 0.262, SSW
<a href="#">24</a>	BARTRAM VERN (ORCHAR	3105 ESPLANADE ST	LUST, HIST CORTESE, CERS	Higher	1929, 0.365, South
<a href="#">25</a>	FIELD, SHIRLEY L.	3122 GODMAN	HIST CORTESE	Higher	2203, 0.417, ESE
<a href="#">26</a>	SHASTA ELEMENTARY SC	193 LEORA COURT	ENVIROSTOR, SCH	Higher	2902, 0.550, WNW



# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls

# EXECUTIVE SUMMARY

## ***Federal ERNS list***

ERNS..... Emergency Response Notification System

## ***State- and tribal - equivalent NPL***

RESPONSE..... State Response Sites

## ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF..... Solid Waste Information System

## ***State and tribal leaking storage tank lists***

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

CPS-SLIC..... Statewide SLIC Cases

## ***State and tribal registered storage tank lists***

FEMA UST..... Underground Storage Tank Listing

AST..... Aboveground Petroleum Storage Tank Facilities

INDIAN UST..... Underground Storage Tanks on Indian Land

## ***State and tribal voluntary cleanup sites***

VCP..... Voluntary Cleanup Program Properties

INDIAN VCP..... Voluntary Cleanup Priority Listing

## ***State and tribal Brownfields sites***

BROWNFIELDS..... Considered Brownfields Sites Listing

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

### ***Local Lists of Landfill / Solid Waste Disposal Sites***

SWRCY..... Recycler Database

HAULERS..... Registered Waste Tire Haulers Listing

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

### ***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL..... Delisted National Clandestine Laboratory Register

HIST Cal-Sites..... Historical Calsites Database

SCH..... School Property Evaluation Program

CDL..... Clandestine Drug Labs

## EXECUTIVE SUMMARY

Toxic Pits..... Toxic Pits Cleanup Act Sites  
US CDL..... National Clandestine Laboratory Register

### **Local Land Records**

LIENS..... Environmental Liens Listing  
LIENS 2..... CERCLA Lien Information  
DEED..... Deed Restriction Listing

### **Records of Emergency Release Reports**

HMIRS..... Hazardous Materials Information Reporting System  
CHMIRS..... California Hazardous Material Incident Report System  
LDS..... Land Disposal Sites Listing  
MCS..... Military Cleanup Sites Listing  
SPILLS 90..... SPILLS 90 data from FirstSearch

### **Other Ascertainable Records**

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated  
FUDS..... Formerly Used Defense Sites  
DOD..... Department of Defense Sites  
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing  
US FIN ASSUR..... Financial Assurance Information  
EPA WATCH LIST..... EPA WATCH LIST  
2020 COR ACTION..... 2020 Corrective Action Program List  
TSCA..... Toxic Substances Control Act  
TRIS..... Toxic Chemical Release Inventory System  
SSTS..... Section 7 Tracking Systems  
ROD..... Records Of Decision  
RMP..... Risk Management Plans  
RAATS..... RCRA Administrative Action Tracking System  
PRP..... Potentially Responsible Parties  
PADS..... PCB Activity Database System  
ICIS..... Integrated Compliance Information System  
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)  
MLTS..... Material Licensing Tracking System  
COAL ASH DOE..... Steam-Electric Plant Operation Data  
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List  
PCB TRANSFORMER..... PCB Transformer Registration Database  
RADINFO..... Radiation Information Database  
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing  
DOT OPS..... Incident and Accident Data  
CONSENT..... Superfund (CERCLA) Consent Decrees  
INDIAN RESERV..... Indian Reservations  
FUSRAP..... Formerly Utilized Sites Remedial Action Program  
UMTRA..... Uranium Mill Tailings Sites  
LEAD SMELTERS..... Lead Smelter Sites  
US AIRS..... Aerometric Information Retrieval System Facility Subsystem  
US MINES..... Mines Master Index File  
ABANDONED MINES..... Abandoned Mines  
DOCKET HWC..... Hazardous Waste Compliance Docket Listing  
UXO..... Unexploded Ordnance Sites  
FUELS PROGRAM..... EPA Fuels Program Registered Listing

## EXECUTIVE SUMMARY

CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
DRYCLEANERS.....	Cleaner Facilities
EML.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
ICE.....	ICE
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
UIC.....	UIC Listing
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
CERS.....	CERS
WIP.....	Well Investigation Program Case List
CIWQS.....	California Integrated Water Quality System
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
UIC GEO.....	UIC GEO (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
PROJECT.....	PROJECT (GEOTRACKER)

### EDR HIGH RISK HISTORICAL RECORDS

#### *EDR Exclusive Records*

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner.....	EDR Exclusive Historical Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### *Exclusive Recovered Govt. Archives*

RGA LF.....	Recovered Government Archive Solid Waste Facilities List
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

# EXECUTIVE SUMMARY

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal RCRA generators list***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
COMCAST OF SOUTHERN EPA ID:: CAR000231514	427 EATON RD	0 - 1/8 (0.000 mi.)	A3	10
<b>ANDERSON AUTOMOTIVE</b> EPA ID:: CAD983600370	<b>420 TODD CT</b>	<b>N 1/8 - 1/4 (0.245 mi.)</b>	<b>17</b>	<b>74</b>

### ***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/30/2018 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHICO PLATING WORKS</b> Facility Id: 4340004 Status: Refer: EPA	<b>172 COMMERCIAL AVENU</b>	<b>S 1/8 - 1/4 (0.238 mi.)</b>	<b>E15</b>	<b>71</b>
<b>SHASTA ELEMENTARY SC</b> Facility Id: 60002096 Status: Certified	<b>193 LEORA COURT</b>	<b>WNW 1/2 - 1 (0.550 mi.)</b>	<b>26</b>	<b>92</b>

## EXECUTIVE SUMMARY

### ***State and tribal leaking storage tank lists***

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>BARTRAM VERN (ORCHAR)</b> Database: LUST, Date of Government Version: 09/10/2018 Database: LUST REG 5, Date of Government Version: 07/01/2008 Status: Completed - Case Closed Status: Case Closed Global Id: T0600700055	<b>3105 ESPLANADE ST</b>	<b>S 1/4 - 1/2 (0.365 mi.)</b>	<b>24</b>	<b>90</b>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>PDQ MARKET &amp; DELI</b> Database: LUST, Date of Government Version: 09/10/2018 Database: LUST REG 5, Date of Government Version: 07/01/2008 Status: Completed - Case Closed Status: Case Closed Global Id: T0600700128	<b>156 EATON RD</b>	<b>SW 1/8 - 1/4 (0.247 mi.)</b>	<b>F21</b>	<b>81</b>

### ***State and tribal registered storage tank lists***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>PDQ MARKET &amp; DELI IN</b> Database: UST, Date of Government Version: 09/10/2018	<b>156 EATON RD</b>	<b>SW 1/8 - 1/4 (0.247 mi.)</b>	<b>F20</b>	<b>80</b>

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT: The Waste Management Unit Database System is used for program tracking and inventory of waste management units. The source is the State Water Resources Control Board.

A review of the WMUDS/SWAT list, as provided by EDR, and dated 04/01/2000 has revealed that there is

## EXECUTIVE SUMMARY

1 WMUDS/SWAT site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SERPENTINE MINE	136 BALBOA COURT	SE 0 - 1/8 (0.065 mi.)	B9	23

### **Local Lists of Hazardous waste / Contaminated Sites**

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 10/22/2018 has revealed that there are 6 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>PRECISION AUTOMOTIVE</i>	<i>3415 SILVERBELL RD #</i>	<i>SE 0 - 1/8 (0.045 mi.)</i>	<i>B6</i>	<i>12</i>
<i>CHICO PLATING WORKS</i>	<i>172 COMMERCIAL AVENU</i>	<i>S 1/8 - 1/4 (0.238 mi.)</i>	<i>E15</i>	<i>71</i>
<i>SIGNS &amp; GRAPHIC DESI</i>	<i>158 COMMERCIAL DR</i>	<i>S 1/8 - 1/4 (0.247 mi.)</i>	<i>E18</i>	<i>77</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>CLARK PEST CONTROL</i>	<i>180 EATON RD</i>	<i>SW 1/8 - 1/4 (0.149 mi.)</i>	<i>D13</i>	<i>26</i>
<i>PDQ MARKET &amp; DELI IN</i>	<i>156 EATON RD</i>	<i>SW 1/8 - 1/4 (0.194 mi.)</i>	<i>D14</i>	<i>32</i>
<i>DAN GAMELS RV SERVIC</i>	<i>3268 ESPLANADE # A</i>	<i>WSW 1/8 - 1/4 (0.247 mi.)</i>	<i>22</i>	<i>86</i>

### **Local Lists of Registered Storage Tanks**

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>SANDROWSKI LANDSCAPI</i> Status: A Tank Status: A Comp Number: 54238	<i>3256 SILVERBELL RD</i>	<i>SE 1/8 - 1/4 (0.138 mi.)</i>	<i>C12</i>	<i>25</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>PDQ MARKET &amp; DELI IN</i> Status: A Tank Status: A Comp Number: 19463	<i>156 EATON RD</i>	<i>SW 1/8 - 1/4 (0.247 mi.)</i>	<i>F20</i>	<i>80</i>

## EXECUTIVE SUMMARY

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SANDROWSKI LANDSCAPI Facility Id: 00000054238	3256 SILVERBELL RD	SE 1/8 - 1/4 (0.138 mi.)	C11	24

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>PDQ MARKET AND DELI</b>	<b>156 EATON RD</b>	<b>SW 1/8 - 1/4 (0.247 mi.)</b>	<b>F19</b>	<b>79</b>
<b>PDQ MARKET &amp; DELI</b> Facility Id: 00000019463	<b>156 EATON RD</b>	<b>SW 1/8 - 1/4 (0.247 mi.)</b>	<b>F21</b>	<b>81</b>

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 2 CA FID UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>SANDROWSKI LANDSCAPI</b> Facility Id: 04000563 Status: A	<b>3256 SILVERBELL RD</b>	<b>SE 1/8 - 1/4 (0.138 mi.)</b>	<b>C12</b>	<b>25</b>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>PDQ MARKET AND DELI</b> Facility Id: 04000284 Status: A	<b>156 EATON RD</b>	<b>SW 1/8 - 1/4 (0.247 mi.)</b>	<b>F19</b>	<b>79</b>

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 10/22/2018 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>PDQ MARKET &amp; DELI IN</b>	<b>156 EATON RD</b>	<b>SW 1/8 - 1/4 (0.194 mi.)</b>	<b>D14</b>	<b>32</b>

### **Other Ascertainable Records**

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal



## EXECUTIVE SUMMARY

Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 08/07/2018 has revealed that there is 1 FINDS site within approximately 0.001 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>COMCAST OF SOUTHERN</b> Registry ID:: 110054822439	<b>427 EATON RD</b>	<b>0 - 1/8 (0.000 mi.)</b>	<b>A1</b>	<b>8</b>

ECHO: ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

A review of the ECHO list, as provided by EDR, and dated 09/02/2018 has revealed that there is 1 ECHO site within approximately 0.001 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>COMCAST OF SOUTHERN</b> Registry ID: 110054822439	<b>427 EATON RD</b>	<b>0 - 1/8 (0.000 mi.)</b>	<b>A1</b>	<b>8</b>

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 13 CUPA Listings sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>PACIFIC SUPPLY</b> Database: CUPA BUTTE, Date of Government Version: 04/21/2017 Facility ID: FA0002926	<b>3505 HICKS LN</b>	<b>NNW 0 - 1/8 (0.004 mi.)</b>	<b>4</b>	<b>12</b>
<b>KHSL</b> Database: CUPA BUTTE, Date of Government Version: 04/21/2017 Facility ID: FA0003534	<b>3460 SILVERBELL RD</b>	<b>ESE 0 - 1/8 (0.022 mi.)</b>	<b>A5</b>	<b>12</b>
<b>PRECISION AUTOMOTIVE</b> Database: CUPA BUTTE, Date of Government Version: 04/21/2017 Facility ID: FA0003293	<b>3415 SILVERBELL RD #</b>	<b>SE 0 - 1/8 (0.045 mi.)</b>	<b>B6</b>	<b>12</b>
<b>RAF CUSTOM</b> Database: CUPA BUTTE, Date of Government Version: 04/21/2017 Facility ID: FA0003593 Facility ID: FA0003950	<b>3415 SILVERBELL RD</b>	<b>SE 0 - 1/8 (0.045 mi.)</b>	<b>B7</b>	<b>21</b>
<b>RAHMAT AFRAIBI MD</b> Database: CUPA BUTTE, Date of Government Version: 04/21/2017 Facility ID: FA0003848	<b>95 DECLARATION DR #</b>	<b>S 0 - 1/8 (0.052 mi.)</b>	<b>8</b>	<b>22</b>
<b>SANDROWSKI LANDSCAPI</b> Database: CUPA BUTTE, Date of Government Version: 04/21/2017 Facility ID: FA0003557	<b>3256 SILVERBELL RD</b>	<b>SE 1/8 - 1/4 (0.138 mi.)</b>	<b>C12</b>	<b>25</b>
<b>CHICO PLATING WORKS</b> Database: CUPA BUTTE, Date of Government Version: 04/21/2017	<b>172 COMMERCIAL AVENU</b>	<b>S 1/8 - 1/4 (0.238 mi.)</b>	<b>E15</b>	<b>71</b>

## EXECUTIVE SUMMARY

Facility ID: FA0003377				
<b>B &amp; J ENTERPRISES</b>	<b>168 COMMERCIAL AVE</b>	<b>S 1/8 - 1/4 (0.240 mi.)</b>	<b>E16</b>	<b>74</b>
Database: CUPA BUTTE, Date of Government Version: 04/21/2017				
Facility ID: FA0003221				
<b>ANDERSON AUTOMOTIVE</b>	<b>420 TODD CT</b>	<b>N 1/8 - 1/4 (0.245 mi.)</b>	<b>17</b>	<b>74</b>
Database: CUPA BUTTE, Date of Government Version: 04/21/2017				
Facility ID: FA0003332				
<b>SIGNS &amp; GRAPHIC DESI</b>	<b>158 COMMERCIAL DR</b>	<b>S 1/8 - 1/4 (0.247 mi.)</b>	<b>E18</b>	<b>77</b>
Database: CUPA BUTTE, Date of Government Version: 04/21/2017				
Facility ID: FA0003971				

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CLARK PEST CONTROL</b>	<b>180 EATON RD</b>	<b>SW 1/8 - 1/4 (0.149 mi.)</b>	<b>D13</b>	<b>26</b>
Database: CUPA BUTTE, Date of Government Version: 04/21/2017				
Facility ID: FA0002896				
<b>PDQ MARKET &amp; DELI</b>	<b>156 EATON RD</b>	<b>SW 1/8 - 1/4 (0.247 mi.)</b>	<b>F21</b>	<b>81</b>
Database: CUPA BUTTE, Date of Government Version: 04/21/2017				
Facility ID: FA0000667				
<b>DAN GAMELS RV SERVIC</b>	<b>3268 ESPLANADE # A</b>	<b>WSW 1/8 - 1/4 (0.247 mi.)</b>	<b>22</b>	<b>86</b>
Database: CUPA BUTTE, Date of Government Version: 04/21/2017				
Facility ID: FA0004241				
Facility ID: FA0003130				

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency. This database begins with calendar year 1993.

A review of the HAZNET list, as provided by EDR, and dated 12/31/2017 has revealed that there is 1 HAZNET site within approximately 0.001 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
COMCAST OF SOUTHERN GEPaid: CAR000231514	427 EATON RD	0 - 1/8 (0.000 mi.)	A2	8

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 4 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
COFFEY, GLENN L. & N Reg Id: 6A189011N88	3156 ESPLANDE 215	SSW 1/4 - 1/2 (0.262 mi.)	23	89
<b>BARTRAM VERN (ORCHAR</b>	<b>3105 ESPLANADE ST</b>	<b>S 1/4 - 1/2 (0.365 mi.)</b>	<b>24</b>	<b>90</b>

## EXECUTIVE SUMMARY

Reg Id: 040059	3122 GODMAN	ESE 1/4 - 1/2 (0.417 mi.)	25	92
FIELD, SHIRLEY L.				
Reg Id: 6A189012N84				

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>PDQ MARKET &amp; DELI</b>	<b>156 EATON RD</b>	<b>SW 1/8 - 1/4 (0.247 mi.)</b>	<b>F21</b>	<b>81</b>
Reg Id: 040133				

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ECO SHELL INC	60 INDEPENDENCE CIR	SSW 0 - 1/8 (0.114 mi.)	10	24

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name

Database(s)

CDL

# OVERVIEW MAP - 5502622.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites



Indian Reservations BIA

Areas of Concern

Power transmission lines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

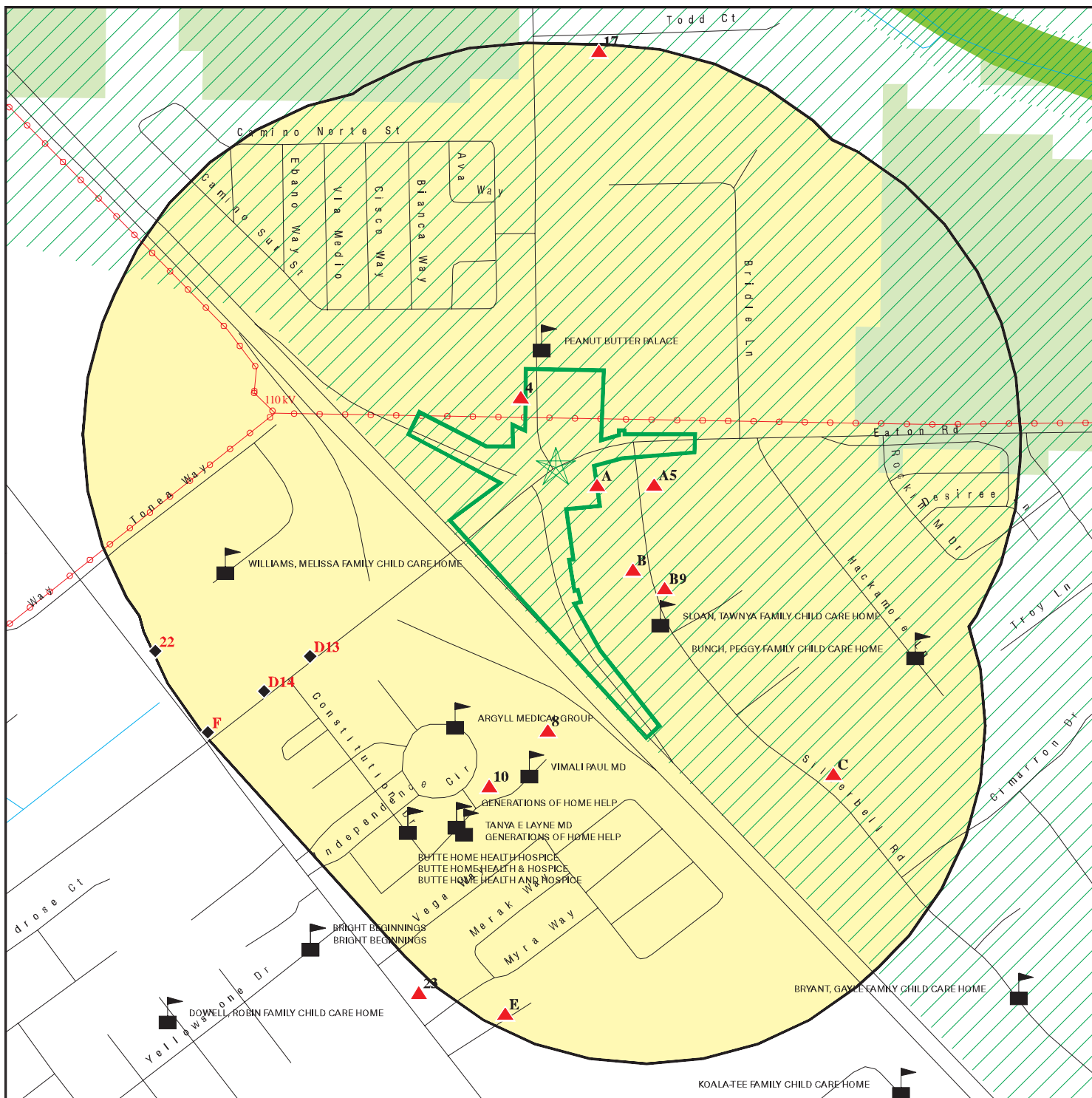


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Eaton Road Round-A-Bout  
 ADDRESS: Intersection of Eaton Rd. and SR-99 Off/On-Ramp  
 Chico CA 95973  
 LAT/LONG: 39.775372 / 121.871886

CLIENT: Nichols Consulting Eng.,Chtd.  
 CONTACT: Bobby Carpenter  
 INQUIRY #: 5502622.2s  
 DATE: December 05, 2018 11:02 am

# DETAIL MAP - 5502622.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Eaton Road Round-A-Bout  
 ADDRESS: Intersection of Eaton Rd. and SR-99 Off/On-Ramp  
 Chico CA 95973  
 LAT/LONG: 39.775372 / 121.871886

CLIENT: Nichols Consulting Eng.,Chtd.  
 CONTACT: Bobby Carpenter  
 INQUIRY #: 5502622.2s  
 DATE: December 05, 2018 11:06 am

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	1	NR	NR	NR	2
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	0.001		0	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL RESPONSE</i></b>								
RESPONSE	1.000		0	0	0	0	NR	0
<b><i>State- and tribal - equivalent CERCLIS ENVIROSTOR</i></b>								
ENVIROSTOR	1.000		0	1	0	1	NR	2
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	0.500		0	1	1	NR	NR	2

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
<b><i>State and tribal registered storage tank lists</i></b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	1	NR	NR	NR	1
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b><i>State and tribal voluntary cleanup sites</i></b>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b><i>State and tribal Brownfields sites</i></b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b><i>Local Brownfield lists</i></b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Landfill / Solid Waste Disposal Sites</i></b>								
WMUDS/SWAT	0.500		1	0	0	NR	NR	1
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Hazardous waste / Contaminated Sites</i></b>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		1	5	NR	NR	NR	6
US CDL	0.001		0	NR	NR	NR	NR	0
<b><i>Local Lists of Registered Storage Tanks</i></b>								
SWEEPS UST	0.250		0	2	NR	NR	NR	2
HIST UST	0.250		0	3	NR	NR	NR	3
CA FID UST	0.250		0	2	NR	NR	NR	2
CERS TANKS	0.250		0	1	NR	NR	NR	1
<b><i>Local Land Records</i></b>								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0



## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DEED	0.500		0	0	0	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		1	NR	NR	NR	NR	1
ECHO	0.001		1	NR	NR	NR	NR	1
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		5	8	NR	NR	NR	13
DRYCLEANERS	0.250		0	0	NR	NR	NR	0



MAP FINDINGS

Map ID Direction Distance Elevation		Database(s)	EDR ID Number EPA ID Number
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<b>A1</b>	<b>COMCAST OF SOUTHERN CALIFORNIA INC</b> <b>427 EATON RD</b> <b>CHICO, CA 95973</b>	<b>FINDS</b>	<b>1015781310</b>
<b>&lt; 1/8</b> <b>0.000 mi.</b> <b>2 ft.</b>	<b>Site 1 of 4 in cluster A</b>	<b>ECHO</b>	<b>N/A</b>

**Relative:** FINDS:  
**Higher**

**Actual:** Registry ID: 110054822439  
**176 ft.**

Environmental Interest/Information System  
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:  
Envid: 1015781310  
Registry ID: 110054822439  
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110054822439>

<b>A2</b>	<b>COMCAST OF SOUTHERN CALIFORNIA INC</b> <b>427 EATON RD</b> <b>CHICO, CA 95973</b>	<b>HAZNET</b>	<b>S117311876</b>
<b>&lt; 1/8</b> <b>0.000 mi.</b> <b>2 ft.</b>	<b>Site 2 of 4 in cluster A</b>		<b>N/A</b>

**Relative:** HAZNET:  
**Higher**

**Actual:** envid: S117311876  
**176 ft.** Year: 2016  
GEPaid: CAR000231514  
Contact: DEBRA EMERY  
Telephone: 9254240286  
Mailing Name: Not reported  
Mailing Address: 3055 COMCAST PL  
Mailing City, St, Zip: LIVERMORE, CA 945517594  
Gen County: Butte  
TSD EPA ID: ARD069748192  
TSD County: 99  
Waste Category: Off-specification, aged or surplus organics  
Disposal Method: Incineration--Thermal Destruction Other Than Use As A Fuel  
Tons: 0.012  
Cat Decode: Not reported  
Method Decode: Not reported  
Facility County: Butte

envid: S117311876  
Year: 2016  
GEPaid: CAR000231514  
Contact: DEBRA EMERY  
Telephone: 9254240286  
Mailing Name: Not reported  
Mailing Address: 3055 COMCAST PL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**COMCAST OF SOUTHERN CALIFORNIA INC (Continued)**

**S117311876**

Mailing City,St,Zip: LIVERMORE, CA 945517594  
Gen County: Butte  
TSD EPA ID: TXD982290140  
TSD County: 99  
Waste Category: Laboratory waste chemicals  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery  
(H010-H129) Or (H131-H135)  
Tons: 0.0005  
Cat Decode: Not reported  
Method Decode: Not reported  
Facility County: Butte

envid: S117311876  
Year: 2016  
GEPaid: CAR000231514  
Contact: DEBRA EMERY  
Telephone: 9254240286  
Mailing Name: Not reported  
Mailing Address: 3055 COMCAST PL  
Mailing City,St,Zip: LIVERMORE, CA 945517594  
Gen County: Butte  
TSD EPA ID: UTD981552177  
TSD County: 99  
Waste Category: Laboratory waste chemicals  
Disposal Method: Incineration--Thermal Destruction Other Than Use As A Fuel  
Tons: 0.011  
Cat Decode: Not reported  
Method Decode: Not reported  
Facility County: Butte

envid: S117311876  
Year: 2013  
GEPaid: CAR000231514  
Contact: MICHAEL MINERVA  
Telephone: 9254240195  
Mailing Name: Not reported  
Mailing Address: 3055 COMCAST PL  
Mailing City,St,Zip: LIVERMORE, CA 945510000  
Gen County: Butte  
TSD EPA ID: TXD982290140  
TSD County: 99  
Waste Category: Not reported  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery  
(H010-H129) Or (H131-H135)  
Tons: 0.003  
Cat Decode: Not reported  
Method Decode: Not reported  
Facility County: Not reported

envid: S117311876  
Year: 2013  
GEPaid: CAR000231514  
Contact: MICHAEL MINERVA  
Telephone: 9254240195  
Mailing Name: Not reported  
Mailing Address: 3055 COMCAST PL  
Mailing City,St,Zip: LIVERMORE, CA 945510000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

COMCAST OF SOUTHERN CALIFORNIA INC (Continued)

S117311876

Gen County: Butte  
TSD EPA ID: UTD991301748  
TSD County: 99  
Waste Category: Not reported  
Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)  
Tons: 0.65  
Cat Decode: Not reported  
Method Decode: Not reported  
Facility County: Not reported

[Click this hyperlink](#) while viewing on your computer to access additional CA\_HAZNET: detail in the EDR Site Report.

A3

COMCAST OF SOUTHERN CALIFORNIA INC  
427 EATON RD  
CHICO, CA 95973

RCRA-SQG

1015740440  
CAR000231514

< 1/8  
0.000 mi.  
2 ft.

Site 3 of 4 in cluster A

Relative:  
Higher  
Actual:  
176 ft.

RCRA-SQG:  
Date form received by agency: 11/01/2012  
Facility name: COMCAST OF SOUTHERN CALIFORNIA INC  
Facility address: 427 EATON RD  
CHICO, CA 95973  
EPA ID: CAR000231514  
Mailing address: 3055 COMCAST PL  
LIVERMORE, CA 94551  
Contact: MICHAEL MINERVA  
Contact address: 3055 COMCAST PL  
LIVERMORE, CA 94551  
Contact country: US  
Contact telephone: 925-424-0195  
Contact email: MICHAEL\_MINERVA@CABLE.COMCAST.COM  
EPA Region: 09  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: CHARLES R AND MARYANN PRIDDY  
Owner/operator address: 307 MISSION SERRA TERRACE  
CHICO, CA 95926  
Owner/operator country: US  
Owner/operator telephone: 530-570-0050  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 03/14/1986  
Owner/Op end date: Not reported  
Owner/operator name: COMCAST OF SOUTHERN CALIFORNIA INC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**COMCAST OF SOUTHERN CALIFORNIA INC (Continued)**

**1015740440**

Owner/operator address: Not reported  
Not reported  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 11/01/1986  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: 134  
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 135  
. Waste name: Unspecified aqueous solution

. Waste code: 221  
. Waste name: Waste oil and mixed oil

. Waste code: 223  
. Waste name: Unspecified oil-containing waste

. Waste code: 291  
. Waste name: Latex waste

. Waste code: D001  
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

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<b>4</b> <b>NNW</b> <b>&lt; 1/8</b> <b>0.004 mi.</b> <b>19 ft.</b>	<b>PACIFIC SUPPLY</b> <b>3505 HICKS LN</b> <b>CHICO, CA 95973</b>	<b>CUPA Listings</b>	<b>S110818417</b> <b>N/A</b>
<b>Relative:</b> <b>Higher</b> <b>Actual:</b> <b>175 ft.</b>	<b>CUPA BUTTE:</b> Program/Element: Billing Status: CERS ID:	B4 - RANGE 2 - 50,000 - 500,000 POUNDS ACTIVE, BILLABLE 10119763	

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<b>A5</b> <b>ESE</b> <b>&lt; 1/8</b> <b>0.022 mi.</b> <b>116 ft.</b>	<b>KHSL</b> <b>3460 SILVERBELL RD</b> <b>CHICO, CA 95973</b>	<b>CUPA Listings</b>	<b>S118584451</b> <b>N/A</b>
<b>Relative:</b> <b>Higher</b> <b>Actual:</b> <b>177 ft.</b>	<b>CUPA BUTTE:</b> Program/Element: Billing Status: CERS ID:	B1 - RANGE 0 - 55 - 550 GALLONS INACTIVE, NON-BILLABLE Not reported	

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<b>B6</b> <b>SE</b> <b>&lt; 1/8</b> <b>0.045 mi.</b> <b>238 ft.</b>	<b>PRECISION AUTOMOTIVE</b> <b>3415 SILVERBELL RD # 10</b> <b>CHICO, CA 95973</b>	<b>CERS HAZ WASTE</b> <b>CUPA Listings</b> <b>CERS</b>	<b>S110818527</b> <b>N/A</b>
<b>Relative:</b> <b>Higher</b> <b>Actual:</b> <b>177 ft.</b>	<b>CERS HAZ WASTE:</b> Site ID: CERS ID: CERS Description:	144691 10277251 Hazardous Waste Generator	
	<b>Violations:</b> Site ID: Site Name: Violation Date: Citation:  Violation Description:  Violation Notes: Violation Division: Violation Program: Violation Source:	144691 PRECISION AUTOMOTIVE 03-27-2015 HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1) Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities. Returned to compliance on 03/27/2015. Butte County Environmental Health HMRRP CERS	
	Site ID: Site Name: Violation Date: Citation:  Violation Description:  Violation Notes: Violation Division: Violation Program:	144691 PRECISION AUTOMOTIVE 03-27-2015 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f) Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date. Not reported Butte County Environmental Health HW	

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PRECISION AUTOMOTIVE (Continued)**

**S110818527**

Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015  
Citation: 19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.  
Violation Notes: Returned to compliance on 03/27/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit a site map with all required content.  
Violation Notes: Returned to compliance on 03/27/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 12-21-2017  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.  
Violation Notes: Returned to compliance on 01/03/2018.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.  
Violation Notes: Returned to compliance on 03/27/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015  
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)  
Violation Description: Failure to complete and/or electronically submit a business plan when



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PRECISION AUTOMOTIVE (Continued)**

**S110818527**

storing/handling a hazardous material at or above reportable quantities.  
Violation Notes: Returned to compliance on 03/27/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.

Violation Notes: Returned to compliance on 03/27/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-27-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-27-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 12-21-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Enforcement Action:  
Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Site Address: 3415 SILVERBELL RD # 10  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 03-27-2015  
Enf Action Type: Notice of Violation (Unified Program)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PRECISION AUTOMOTIVE (Continued)**

**S110818527**

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Site Address: 3415 SILVERBELL RD # 10  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 03-27-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Site Address: 3415 SILVERBELL RD # 10  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 12-21-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

**Affiliation:**

Affiliation Type Desc: CUPA District  
Entity Name: Butte County Environmental Health  
Entity Title: Not reported  
Affiliation Address: 202 Mira Loma Drive  
Affiliation City: Oroville  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95965  
Affiliation Phone: (530) 538-7281

Affiliation Type Desc: Legal Owner  
Entity Name: RICK RUZ  
Entity Title: Not reported  
Affiliation Address: 3415 SILVERBELL RD # 10  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 895-1130

Affiliation Type Desc: Parent Corporation  
Entity Name: Precision Automotive  
Entity Title: Not reported  
Affiliation Address: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PRECISION AUTOMOTIVE (Continued)**

**S110818527**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	RICK RUZ
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(530) 895-1130
Affiliation Type Desc:	Environmental Contact
Entity Name:	RICK RUZ
Entity Title:	Not reported
Affiliation Address:	3415 SILVERBELL RD # 10
Affiliation City:	Chico
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95973
Affiliation Phone:	(530) 895-1130
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	3415 SILVERBELL RD # 10
Affiliation City:	CHICO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95973
Affiliation Phone:	Not reported
Affiliation Type Desc:	Document Preparer
Entity Name:	Rick Ruz
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	RICK RUZ
Entity Title:	Owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PRECISION AUTOMOTIVE (Continued)**

**S110818527**

**CUPA BUTTE:**

Program/Element: B1 - RANGE 0 - 55 - 550 GALLONS  
Billing Status: ACTIVE, BILLABLE  
CERS ID: 10277251

Program/Element: HAZ WASTE GEN 100 TO 1,000 kg/mo  
Billing Status: ACTIVE, BILLABLE  
CERS ID: 10277251

**CERS TANKS:**

Site ID: 144691  
CERS ID: 10277251  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 03/27/2015.

Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Not reported  
Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015  
Citation: 19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.

Violation Notes: Returned to compliance on 03/27/2015.

Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PRECISION AUTOMOTIVE (Continued)**

**S110818527**

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit a site map with all required content.  
Violation Notes: Returned to compliance on 03/27/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 12-21-2017  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.  
Violation Notes: Returned to compliance on 01/03/2018.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.  
Violation Notes: Returned to compliance on 03/27/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015  
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)  
Violation Description: Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.  
Violation Notes: Returned to compliance on 03/27/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Violation Date: 03-27-2015  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.  
Violation Notes: Returned to compliance on 03/27/2015.  
Violation Division: Butte County Environmental Health

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PRECISION AUTOMOTIVE (Continued)**

**S110818527**

Violation Program: HMRRP  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-27-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-27-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 12-21-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Enforcement Action:  
Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Site Address: 3415 SILVERBELL RD # 10  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 03-27-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Site Address: 3415 SILVERBELL RD # 10  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 03-27-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PRECISION AUTOMOTIVE (Continued)**

**S110818527**

Enf Action Source: CERS  
  
Site ID: 144691  
Site Name: PRECISION AUTOMOTIVE  
Site Address: 3415 SILVERBELL RD # 10  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 12-21-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: CUPA District  
Entity Name: Butte County Environmental Health  
Entity Title: Not reported  
Affiliation Address: 202 Mira Loma Drive  
Affiliation City: Oroville  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95965  
Affiliation Phone: (530) 538-7281

Affiliation Type Desc: Legal Owner  
Entity Name: RICK RUZ  
Entity Title: Not reported  
Affiliation Address: 3415 SILVERBELL RD # 10  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 895-1130

Affiliation Type Desc: Parent Corporation  
Entity Name: Precision Automotive  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: RICK RUZ  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (530) 895-1130

Affiliation Type Desc: Environmental Contact

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PRECISION AUTOMOTIVE (Continued)**

**S110818527**

Entity Name: RICK RUZ  
Entity Title: Not reported  
Affiliation Address: 3415 SILVERBELL RD # 10  
Affiliation City: Chico  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: (530) 895-1130

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 3415 SILVERBELL RD # 10  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: Not reported

Affiliation Type Desc: Document Preparer  
Entity Name: Rick Ruz  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: RICK RUZ  
Entity Title: Owner  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**B7**  
**SE**  
**< 1/8**  
**0.045 mi.**  
**238 ft.**

**RAF CUSTOM**  
**3415 SILVERBELL RD**  
**CHICO, CA 95973**  
**Site 2 of 3 in cluster B**

**CUPA Listings S118237074**  
**HAZNET N/A**

**Relative:**  
**Higher**  
**Actual:**  
**177 ft.**

CUPA BUTTE:  
Program/Element: B1 - RANGE 0 - 55 - 550 GALLONS  
Billing Status: INACTIVE, NON-BILLABLE  
CERS ID: 10277800  
  
Program/Element: HAZ WASTE GEN < THAN 100 kg/mo  
Billing Status: INACTIVE, NON-BILLABLE  
CERS ID: Not reported

HAZNET:  
envid: S118237074



Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**RAF CUSTOM (Continued)**

**S118237074**

Year: 2015  
 GEPAID: CAL912605522  
 Contact: RICK RUZ  
 Telephone: 5308910910  
 Mailing Name: Not reported  
 Mailing Address: 3415 SILVERBELL RD.  
 Mailing City,St,Zip: CHICO, CA 959730000  
 Gen County: Butte  
 TSD EPA ID: CAD097030993  
 TSD County: Los Angeles  
 Waste Category: Other organic solids  
 Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
 Tons: 0.125  
 Cat Decode: Not reported  
 Method Decode: Not reported  
 Facility County: Butte

envid: S118237074  
 Year: 2014  
 GEPAID: CAL912605522  
 Contact: RICK RUZ  
 Telephone: 5308910910  
 Mailing Name: Not reported  
 Mailing Address: 3415 SILVERBELL RD.  
 Mailing City,St,Zip: CHICO, CA 959730000  
 Gen County: Butte  
 TSD EPA ID: CAD097030993  
 TSD County: Los Angeles  
 Waste Category: Other organic solids  
 Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
 Tons: 0.2  
 Cat Decode: Not reported  
 Method Decode: Not reported  
 Facility County: Butte

**8**  
**South**  
**< 1/8**  
**0.052 mi.**  
**276 ft.**

**RAHMAT AFRAIBI MD**  
**95 DECLARATION DR # 1**  
**CHICO, CA 95973**

**CUPA Listings S118584556**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**176 ft.**

CUPA BUTTE:  
 Program/Element: HAZ WASTE GEN < THAN 100 kg/mo  
 Billing Status: INACTIVE, NON-BILLABLE  
 CERS ID: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**B9**  
**SE**  
 < 1/8  
 0.065 mi.  
 345 ft.

**SERPENTINE MINE**  
**136 BALBOA COURT**  
**CHICO ,CA, CA 95826**  
**Site 3 of 3 in cluster B**

**WMUDS/SWAT**    **S103442090**  
 N/A

**Relative:**  
**Higher**  
**Actual:**  
**177 ft.**

WMUDS/SWAT:  
 Edit Date: Not reported  
 Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.  
 Primary Waste: EROSHN  
 Primary Waste Type: Inert/Influent or Solid Wastes that do not contain soluble pollutants or organic wastes and have little adverse impact on water quality. Such wastes could cause turbidity and siltation. Uncontaminated soils, rubble and concrete are examples of this category.  
 Secondary Waste: Not reported  
 Secondary Waste Type: Not reported  
 Base Meridian: Not reported  
 NPID: Not reported  
 Tonnage: 0  
 Regional Board ID: Not reported  
 Municipal Solid Waste: False  
 Superorder: False  
 Open To Public: False  
 Waste List: False  
 Agency Type: Private  
 Agency Name: ROCKO TRAVERTINE QUARRY INC  
 Agency Department: Not reported  
 Agency Address: 2451 MCKEE ROAD  
 Agency City,St,Zip: MERCED ,CA 95340  
 Agency Contact: DAVID PAUL  
 Agency Telephone: 2097234403  
 Land Owner Name: Not reported  
 Land Owner Address: Not reported  
 Land Owner City,St,Zip: Not reported  
 Land Owner Contact: Not reported  
 Land Owner Phone: Not reported  
 Region: 5R  
 Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.  
 Facility Description: Not reported  
 Facility Telephone: 9169999999  
 SWAT Facility Name: Not reported  
 Primary SIC: 1442  
 Secondary SIC: Not reported  
 Comments: Not reported  
 Last Facility Editors: Not reported  
 Waste Discharge System: True  
 Solid Waste Assessment Test Program: False  
 Toxic Pits Cleanup Act Program: False  
 Resource Conservation Recovery Act: False

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SERPENTINE MINE (Continued)**

**S103442090**

Department of Defence:	False
Solid Waste Assessment Test Program:	Not reported
Threat to Water Quality:	Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would include nuisance from a waste treatment facility.
Sub Chapter 15:	True
Regional Board Project Officer:	GDD
Number of WMUDS at Facility:	1
Section Range:	Not reported
RCRA Facility:	No
Waste Discharge Requirements:	H
Self-Monitoring Rept. Frequency:	Semiannual Submittal
Waste Discharge System ID:	5A322030001
Solid Waste Information ID:	Not reported

**10  
 SSW  
 < 1/8  
 0.114 mi.  
 603 ft.**

**ECO SHELL INC  
 60 INDEPENDENCE CIR  
 CHICO, CA 95973**

**EDR Hist Auto 1020649419  
 N/A**

**Relative:  
 Higher  
 Actual:  
 175 ft.**

EDR Hist Auto

Year:	Name:	Type:
2000	ECO SHELL INC	Gasoline Service Stations
2001	ECO SHELL INC	Gasoline Service Stations
2002	ECO SHELL INC	Gasoline Service Stations
2003	ECO SHELL INC	Gasoline Service Stations
2004	ECO SHELL INC	Gasoline Service Stations
2005	ECO SHELL INC	Gasoline Service Stations, NEC
2006	ECO SHELL INC	Gasoline Service Stations, NEC
2007	ECO SHELL INC	Gasoline Service Stations, NEC
2008	ECO SHELL INC	Gasoline Service Stations, NEC
2009	ECO SHELL INC	Gasoline Service Stations, NEC
2010	ECO SHELL INC	Gasoline Service Stations, NEC

**C11  
 SE  
 1/8-1/4  
 0.138 mi.  
 731 ft.**

**SANDROWSKI LANDSCAPING INC  
 3256 SILVERBELL RD  
 CHICO, CA 95926**

**HIST UST U001616615  
 N/A**

**Site 1 of 2 in cluster C**

**Relative:  
 Higher  
 Actual:  
 179 ft.**

HIST UST:

File Number:	000222AD
URL:	<a href="http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000222AD.pdf">http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000222AD.pdf</a>
Region:	STATE
Facility ID:	00000054238
Facility Type:	Other
Other Type:	CONTRACTOR
Contact Name:	TED SANDROWSKI
Telephone:	9163452374
Owner Name:	SANDROWSKI LANDSCAPING INC
Owner Address:	3256 SILVERBELL RD.
Owner City,St,Zip:	CHICO, CA 95926

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SANDROWSKI LANDSCAPING INC (Continued)**

**U001616615**

Total Tanks: 0001  
Tank Num: 001  
Container Num: 1  
Year Installed: 1985  
Tank Capacity: 00001000  
Tank Used for: PRODUCT  
Type of Fuel: REGULAR  
Container Construction Thickness: Not reported  
Leak Detection: None

[Click here for Geo Tracker PDF:](#)

**C12  
SE  
1/8-1/4  
0.138 mi.  
731 ft.**

**SANDROWSKI LANDSCAPING  
3256 SILVERBELL RD  
CHICO, CA 95973**

**SWEEPS UST S101628800  
CA FID UST N/A  
CUPA Listings**

**Site 2 of 2 in cluster C**

**Relative:  
Higher**

**SWEEPS UST:**

**Actual:  
179 ft.**

Status: Active  
Comp Number: 54238  
Number: 9  
Board Of Equalization: 44-001819  
Referral Date: 07-01-85  
Action Date: 02-08-94  
Created Date: 07-31-88  
Owner Tank Id: 1  
SWRCB Tank Id: 04-000-054238-000001  
Tank Status: A  
Capacity: 1000  
Active Date: 07-01-85  
Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: 1

**CA FID UST:**

Facility ID: 04000563  
Regulated By: UTNKA  
Regulated ID: 00054238  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 9163452374  
Mail To: Not reported  
Mailing Address: RR 1 BOX  
Mailing Address 2: Not reported  
Mailing City,St,Zip: CHICO 95926  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SANDROWSKI LANDSCAPING (Continued)**

**S101628800**

CUPA BUTTE:  
 Program/Element: B1 - RANGE 0 - 55 - 550 GALLONS  
 Billing Status: INACTIVE, NON-BILLABLE  
 CERS ID: 10277740

Program/Element: HAZ WASTE GEN < THAN 100 kg/mo  
 Billing Status: INACTIVE, NON-BILLABLE  
 CERS ID: 10277740

**D13  
 SW  
 1/8-1/4  
 0.149 mi.  
 789 ft.**

**CLARK PEST CONTROL  
 180 EATON RD  
 CHICO, CA 95973**

**CERS HAZ WASTE  
 CUPA Listings  
 CERS**

**S109932972  
 N/A**

**Site 1 of 2 in cluster D**

**Relative:  
 Lower  
 Actual:  
 172 ft.**

CERS HAZ WASTE:  
 Site ID: 20185  
 CERS ID: 10276666  
 CERS Description: Hazardous Waste Generator

**Violations:**

Site ID: 20185  
 Site Name: CLARK PEST CONTROL  
 Violation Date: 10-22-2015  
 Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
 Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 10/22/2015.  
 Violation Division: Butte County Environmental Health  
 Violation Program: HMRRP  
 Violation Source: CERS

Site ID: 20185  
 Site Name: CLARK PEST CONTROL  
 Violation Date: 10-22-2015  
 Citation: 22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130  
 Violation Description: Failure to properly handle, manage, label, and recycle used oil and fuel filters.

Violation Notes: Returned to compliance on 10/22/2015.  
 Violation Division: Butte County Environmental Health  
 Violation Program: HW  
 Violation Source: CERS

Site ID: 20185  
 Site Name: CLARK PEST CONTROL  
 Violation Date: 10-22-2015  
 Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173  
 Violation Description: Failure to properly close hazardous waste containers when not in active use.

Violation Notes: Returned to compliance on 10/22/2015.  
 Violation Division: Butte County Environmental Health  
 Violation Program: HW  
 Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLARK PEST CONTROL (Continued)**

**S109932972**

Site ID: 20185  
Site Name: CLARK PEST CONTROL  
Violation Date: 10-22-2015  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.  
Violation Notes: Returned to compliance on 10/22/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-22-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-22-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Enforcement Action:

Site ID: 20185  
Site Name: CLARK PEST CONTROL  
Site Address: 180 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 10-22-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 20185  
Site Name: CLARK PEST CONTROL  
Site Address: 180 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 10-22-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLARK PEST CONTROL (Continued)**

**S109932972**

Enf Action Source: CERS

Coordinates:  
Site ID: 20185  
Facility Name: CLARK PEST CONTROL  
Env Int Type Code: HWG  
Program ID: 10276666  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 39.773720  
Longitude: -121.875540

Affiliation:  
Affiliation Type Desc: Operator  
Entity Name: Richard Keene  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (530) 345-2424

Affiliation Type Desc: Legal Owner  
Entity Name: Joe Clark  
Entity Title: Not reported  
Affiliation Address: 555 North Guild Ave  
Affiliation City: LODI  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95240  
Affiliation Phone: (209) 368-7152

Affiliation Type Desc: Parent Corporation  
Entity Name: CLARK PEST CONTROL  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 180 EAST EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Butte County Environmental Health  
Entity Title: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLARK PEST CONTROL (Continued)**

**S109932972**

Affiliation Address: 202 Mira Loma Drive  
Affiliation City: Oroville  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95965  
Affiliation Phone: (530) 538-7281

Affiliation Type Desc: Environmental Contact  
Entity Name: Richard Keene  
Entity Title: Not reported  
Affiliation Address: 180 Eaton Rd  
Affiliation City: Chico  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-2424

**CUPA BUTTE:**

Program/Element: HAZ WASTE GEN < THAN 100 kg/mo  
Billing Status: ACTIVE, BILLABLE  
CERS ID: 10276666

Program/Element: B2 - RANGE 0- 500 - 5,000 POUNDS  
Billing Status: ACTIVE, BILLABLE  
CERS ID: 10276666

**CERS TANKS:**

Site ID: 20185  
CERS ID: 10276666  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 20185  
Site Name: CLARK PEST CONTROL  
Violation Date: 10-22-2015  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.  
Violation Notes: Returned to compliance on 10/22/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 20185  
Site Name: CLARK PEST CONTROL  
Violation Date: 10-22-2015  
Citation: 22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130  
Violation Description: Failure to properly handle, manage, label, and recycle used oil and fuel filters.  
Violation Notes: Returned to compliance on 10/22/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLARK PEST CONTROL (Continued)**

**S109932972**

Site ID: 20185  
Site Name: CLARK PEST CONTROL  
Violation Date: 10-22-2015  
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173  
Violation Description: Failure to properly close hazardous waste containers when not in active use.  
Violation Notes: Returned to compliance on 10/22/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 20185  
Site Name: CLARK PEST CONTROL  
Violation Date: 10-22-2015  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.  
Violation Notes: Returned to compliance on 10/22/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-22-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-22-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Enforcement Action:  
Site ID: 20185  
Site Name: CLARK PEST CONTROL  
Site Address: 180 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 10-22-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLARK PEST CONTROL (Continued)**

**S109932972**

Site ID: 20185  
Site Name: CLARK PEST CONTROL  
Site Address: 180 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 10-22-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

Coordinates:

Site ID: 20185  
Facility Name: CLARK PEST CONTROL  
Env Int Type Code: HWG  
Program ID: 10276666  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 39.773720  
Longitude: -121.875540

Affiliation:

Affiliation Type Desc: Operator  
Entity Name: Richard Keene  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (530) 345-2424

Affiliation Type Desc: Legal Owner  
Entity Name: Joe Clark  
Entity Title: Not reported  
Affiliation Address: 555 North Guild Ave  
Affiliation City: LODI  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95240  
Affiliation Phone: (209) 368-7152

Affiliation Type Desc: Parent Corporation  
Entity Name: CLARK PEST CONTROL  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CLARK PEST CONTROL (Continued)**

**S109932972**

Entity Title: Not reported  
 Affiliation Address: 180 EAST EATON RD  
 Affiliation City: CHICO  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: 95973  
 Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
 Entity Name: Butte County Environmental Health  
 Entity Title: Not reported  
 Affiliation Address: 202 Mira Loma Drive  
 Affiliation City: Oroville  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: 95965  
 Affiliation Phone: (530) 538-7281

Affiliation Type Desc: Environmental Contact  
 Entity Name: Richard Keene  
 Entity Title: Not reported  
 Affiliation Address: 180 Eaton Rd  
 Affiliation City: Chico  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: 95973  
 Affiliation Phone: (530) 345-2424

**D14**  
**SW**  
**1/8-1/4**  
**0.194 mi.**  
**1023 ft.**

**PDQ MARKET & DELI INC**  
**156 EATON RD**  
**CHICO, CA 95973**  
**Site 2 of 2 in cluster D**

**CERS HAZ WASTE** **S123102870**  
**CERS TANKS** **N/A**  
**CERS**

**Relative:**  
**Lower**  
**Actual:**  
**172 ft.**

**CERS HAZ WASTE:**  
 Site ID: 55888  
 CERS ID: 10276369  
 CERS Description: Hazardous Waste Generator

**Violations:**  
 Site ID: 55888  
 Site Name: PDQ MARKET & DELI INC  
 Violation Date: 06-12-2014  
 Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)  
 Violation Description: Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.  
 Violation Notes: Returned to compliance on 06/12/2014.  
 Violation Division: Butte County Environmental Health  
 Violation Program: UST  
 Violation Source: CERS

Site ID: 55888  
 Site Name: PDQ MARKET & DELI INC  
 Violation Date: 06-08-2016  
 Citation: HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Section(s) 25284.2  
Violation Description: Failure to test the spill bucket annually.  
Violation Notes: Returned to compliance on 06/08/2016.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to submit, obtain approval, or maintain a complete/accurate response plan.  
Violation Notes: Returned to compliance on 05/07/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 23 CCR 16 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2711(a)(8)  
Violation Description: Failure to submit, obtain approval, or maintain a complete/accurate plot plan.  
Violation Notes: Returned to compliance on 05/14/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.  
Violation Notes: Returned to compliance on 08/24/2017. last annual submittal was in 2015 - annually review and certify CERS submittal - corrected at the time of inspection.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-08-2016  
Citation: 23 CCR 16 2715(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(i)  
Violation Description: Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).  
Violation Notes: Returned to compliance on 06/08/2016.  
Violation Division: Butte County Environmental Health

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: 23 CCR 16 2715(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)  
Violation Description: Failure to notify the CUPA of the designated operator (DO) identification and/or change of the DO within 30 days.  
Violation Notes: Returned to compliance on 08/24/2017. Designated Operator statement submitted to CUPA and in CERS expired - update the DO statement, as needed - corrected at the time of inspection.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-08-2016  
Citation: HSC 6.7 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e)  
Violation Description: Failure to maintain secondary containment (e.g. failure of secondary containment testing).  
Violation Notes: Not reported  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34  
Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.  
Violation Notes: Returned to compliance on 08/24/2017. Chief Financial Officer (CFO) letter expired - renew CFO letter annually - corrected at the time of inspection.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-22-2018  
Citation: 23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)  
Violation Description: Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

PDQ MARKET & DELI INC (Continued)

S123102870

Violation Notes: occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(f)(2). Returned to compliance on 09/13/2018. Last employee training was conducted in May, 2017 - employee training should be conducted, copy of the training roster submitted to CUPA.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 23 CCR 16 2715(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(b)

Violation Description: Failure to submit statement of UST compliance and/or Designated Operator current certification.

Violation Notes: Returned to compliance on 05/14/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.7 29291(b) - California Health and Safety Code, Chapter 6.7, Section(s) 29291(b)

Violation Description: Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance into the secondary containment.

Violation Notes: Returned to compliance on 08/24/2017. Annular sensors in regular tank and diesel tank failed - replace or repair - corrected at the time of inspection: electrical connections restored - passes the test.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)

Violation Description: Failure to operate the UST system to prevent unauthorized releases including leaks, spills, and/or overfills.

Violation Notes: Returned to compliance on 08/24/2017. Spill bucket on diesel tank failed the test - repair or replace the spill bucket and re-test - corrected at the time of inspection: cap replaced - passed the test.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12

Violation Description: Failure to obtain an Identification Number prior to treating, storing,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Violation Notes: disposing of, transporting or offering for transportation any hazardous waste.  
Returned to compliance on 08/24/2017. EPA ID number inactive - activate - corrected at the time of inspection: application submitted to DTSC

Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 05/05/2014.

Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: 40 CFR 1 262.34(d)(5)(ii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(ii)

Violation Description: Failure to post the following information next to the telephone: (A) The name and telephone number of the emergency coordinator; (B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and (C) The telephone number of the fire department, unless the facility has a direct alarm.

Violation Notes: Returned to compliance on 08/24/2017. no emergency information with location of emergency equipment posted - post emergency information with location of emergency equipment - corrected at the time of inspection.

Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)

Violation Description: Failure to prepare, maintain, and submit accurate CUPA UST Operating Permit Application for Facility information and/or Tank information.

Violation Notes: Returned to compliance on 05/14/2014.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 19 CCR 4 2729.5 - California Code of Regulations, Title 19, Chapter 4,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Section(s) 2729.5  
Violation Description: Failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required. Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA thresholds) by March 1.

Violation Notes: Returned to compliance on 05/14/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-11-2015  
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)

Violation Description: Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.

Violation Notes: Returned to compliance on 06/11/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-08-2016  
Citation: 23 CCR 16 2712(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)

Violation Description: Failure to maintain records of repairs, lining, and upgrades on site, or off site if approved by the CUPA, for the life of the UST.

Violation Notes: Returned to compliance on 06/08/2016.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173

Violation Description: Failure to properly close hazardous waste containers when not in active use.

Violation Notes: Returned to compliance on 05/05/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-22-2018  
Citation: 23 CCR 16 2715(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)

Violation Description: Failure to submit the UPA. of the designated operator (DO) identification and/or change of the DO within 30 days.

Violation Notes: Returned to compliance on 08/22/2018. Designated Operator (DO) certification expired in July, 2018; updated DO statement observed in



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

the file at the facility, but no notification to CUPA has been provided and no updates in CERS have been made to reflect the change - DO statement needs to be maintained, changes submitted to CUPA and in CERS - corrected at the time of inspection.

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-22-2018  
Citation: HSC 6.7 25291(b) - California Health and Safety Code, Chapter 6.7, Section(s) 25291(b)

Violation Description: Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance into the secondary containment.

Violation Notes: Returned to compliance on 08/22/2018. Annular sensor in Regular Gasoline tank failed - annular sensor needs to be replaced and re-tested - corrected at the time of inspection; passed the test.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Evaluation:  
Eval General Type: Other/Unknown  
Eval Date: 01-24-2014  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-11-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-24-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct an inspection, make copies of relevant documents, if needed, take pictures, if needed - no copies made, no pictures taken at the time of inspection.

Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-02-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-22-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct the inspection, make copies of documents, take pictures, collect samples, if needed - no copies made, no pictures, samples taken at the time of inspection.

Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-24-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct an inspection, make copies of relevant documents, if needed, take pictures, if needed - no copies made, no pictures taken at the time of inspection.

Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 05-02-2014  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-12-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-02-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-08-2016  
Violations Found: Yes

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-24-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct an inspection, make copies of relevant documents, if needed, take pictures, if needed - no copies made, no pictures taken at the time of inspection.

Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

**Enforcement Action:**

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-09-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-09-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-14-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-14-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-14-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 06-08-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 06-11-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Enf Action Date: 06-16-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 08-22-2018  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 08-24-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 08-24-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 08-24-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Enf Action Program: UST  
Enf Action Source: CERS

Coordinates:  
Site ID: 55888  
Facility Name: PDQ MARKET & DELI INC  
Env Int Type Code: HWG  
Program ID: 10276369  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 39.772880  
Longitude: -121.876850

Affiliation:  
Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Owner  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: Parent Corporation  
Entity Name: PDQ MARKET & DELI  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Operator  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: UST Property Owner Name  
Entity Name: TAE JIN KIM

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: CUPA District  
Entity Name: Butte County Environmental Health  
Entity Title: Not reported  
Affiliation Address: 202 Mira Loma Drive  
Affiliation City: Oroville  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95965  
Affiliation Phone: (530) 538-7281

Affiliation Type Desc: Document Preparer  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: Identification Signer  
Entity Name: TAE JIN KIM  
Entity Title: Owner  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Affiliation Type Desc: Operator  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: UST Permit Applicant  
Entity Name: TAE JIN KIM  
Entity Title: Owner  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (530) 345-9966

**CERS TANKS:**

Site ID: 55888  
CERS ID: 10276369  
CERS Description: Underground Storage Tank

**Violations:**

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-12-2014  
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)  
Violation Description: Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.  
Violation Notes: Returned to compliance on 06/12/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-08-2016  
Citation: HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2  
Violation Description: Failure to test the spill bucket annually.  
Violation Notes: Returned to compliance on 06/08/2016.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to submit, obtain approval, or maintain a complete/accurate



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

response plan.  
Violation Notes: Returned to compliance on 05/07/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 23 CCR 16 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2711(a)(8)  
Violation Description: Failure to submit, obtain approval, or maintain a complete/accurate plot plan.  
Violation Notes: Returned to compliance on 05/14/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.  
Violation Notes: Returned to compliance on 08/24/2017. last annual submittal was in 2015 - annually review and certify CERS submittal - corrected at the time of inspection.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-08-2016  
Citation: 23 CCR 16 2715(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(i)  
Violation Description: Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).  
Violation Notes: Returned to compliance on 06/08/2016.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: 23 CCR 16 2715(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)  
Violation Description: Failure to notify the CUPA of the designated operator (DO) identification and/or change of the DO within 30 days.  
Violation Notes: Returned to compliance on 08/24/2017. Designated Operator statement submitted to CUPA and in CERS expired - update the DO statement, as needed - corrected at the time of inspection.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-08-2016  
Citation: HSC 6.7 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e)  
Violation Description: Failure to maintain secondary containment (e.g. failure of secondary containment testing).  
Violation Notes: Not reported  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34  
Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.  
Violation Notes: Returned to compliance on 08/24/2017. Chief Financial Officer (CFO) letter expired - renew CFO letter annually - corrected at the time of inspection.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-22-2018  
Citation: 23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)  
Violation Description: Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(f)(2).  
Violation Notes: Returned to compliance on 09/13/2018. Last employee training was conducted in May, 2017 - employee training should be conducted, copy of the training roster submitted to CUPA.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Citation: 23 CCR 16 2715(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(b)  
Violation Description: Failure to submit statement of UST compliance and/or Designated Operator current certification.  
Violation Notes: Returned to compliance on 05/14/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.7 29291(b) - California Health and Safety Code, Chapter 6.7, Section(s) 29291(b)  
Violation Description: Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance into the secondary containment.  
Violation Notes: Returned to compliance on 08/24/2017. Annular sensors in regular tank and diesel tank failed - replace or repair - corrected at the time of inspection: electrical connections restored - passes the test.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)  
Violation Description: Failure to operate the UST system to prevent unauthorized releases including leaks, spills, and/or overfills.  
Violation Notes: Returned to compliance on 08/24/2017. Spill bucket on diesel tank failed the test - repair or replace the spill bucket and re-test - corrected at the time of inspection: cap replaced - passed the test.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12  
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.  
Violation Notes: Returned to compliance on 08/24/2017. EPA ID number inactive - activate - corrected at the time of inspection: application submitted to DTSC  
Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

PDQ MARKET & DELI INC (Continued)

S123102870

Violation Description: Chapter 12, Section(s) 66262.34(f)  
Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 05/05/2014.

Violation Division: Butte County Environmental Health

Violation Program: HW

Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: 40 CFR 1 262.34(d)(5)(ii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(ii)

Violation Description: Failure to post the following information next to the telephone: (A) The name and telephone number of the emergency coordinator; (B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and (C) The telephone number of the fire department, unless the facility has a direct alarm.

Violation Notes: Returned to compliance on 08/24/2017. no emergency information with location of emergency equipment posted - post emergency information with location of emergency equipment - corrected at the time of inspection.

Violation Division: Butte County Environmental Health

Violation Program: HW

Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)

Violation Description: Failure to prepare, maintain, and submit accurate CUPA UST Operating Permit Application for Facility information and/or Tank information.

Violation Notes: Returned to compliance on 05/14/2014.

Violation Division: Butte County Environmental Health

Violation Program: UST

Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 19 CCR 4 2729.5 - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.5

Violation Description: Failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required. Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA thresholds) by March 1.

Violation Notes: Returned to compliance on 05/14/2014.

Violation Division: Butte County Environmental Health

Violation Program: HMRRP

Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Violation Date: 06-11-2015  
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)  
Violation Description: Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.  
Violation Notes: Returned to compliance on 06/11/2015.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-08-2016  
Citation: 23 CCR 16 2712(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)  
Violation Description: Failure to maintain records of repairs, lining, and upgrades on site, or off site if approved by the CUPA, for the life of the UST.  
Violation Notes: Returned to compliance on 06/08/2016.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173  
Violation Description: Failure to properly close hazardous waste containers when not in active use.  
Violation Notes: Returned to compliance on 05/05/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-22-2018  
Citation: 23 CCR 16 2715(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)  
Violation Description: Failure to submit the UPA. of the designated operator (DO) identification and/or change of the DO within 30 days.  
Violation Notes: Returned to compliance on 08/22/2018. Designated Operator (DO) certification expired in July, 2018; updated DO statement observed in the file at the facility, but no notification to CUPA has been provided and no updates in CERS have been made to reflect the change - DO statement needs to be maintained, changes submitted to CUPA and in CERS - corrected at the time of inspection.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-22-2018  
Citation: HSC 6.7 25291(b) - California Health and Safety Code, Chapter 6.7, Section(s) 25291(b)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Violation Description: Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance into the secondary containment.  
Violation Notes: Returned to compliance on 08/22/2018. Annular sensor in Regular Gasoline tank failed - annular sensor needs to be replaced and re-tested - corrected at the time of inspection; passed the test.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Evaluation:

Eval General Type: Other/Unknown  
Eval Date: 01-24-2014  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-11-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-24-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct an inspection, make copies of relevant documents, if needed, take pictures, if needed - no copies made, no pictures taken at the time of inspection.

Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-02-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-22-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct the inspection, make copies of documents, take pictures, collect samples, if needed - no copies made, no pictures, samples taken at the time of inspection.

Eval Division: Butte County Environmental Health

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-24-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct an inspection, make copies of relevant documents, if needed, take pictures, if needed - no copies made, no pictures taken at the time of inspection.

Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 05-02-2014  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-12-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-02-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-08-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-24-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct an inspection, make copies of relevant documents, if needed, take pictures, if needed - no copies made, no pictures taken at the time of inspection.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Enforcement Action:  
Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-09-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-09-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-14-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-14-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-14-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 06-08-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 06-11-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 06-16-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Enf Action Date: 08-22-2018  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 08-24-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 08-24-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 08-24-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Coordinates:  
Site ID: 55888  
Facility Name: PDQ MARKET & DELI INC  
Env Int Type Code: HWG  
Program ID: 10276369  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 39.772880  
Longitude: -121.876850

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Affiliation:

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Owner  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: Parent Corporation  
Entity Name: PDQ MARKET & DELI  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Operator  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: UST Property Owner Name  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: CUPA District  
Entity Name: Butte County Environmental Health  
Entity Title: Not reported  
Affiliation Address: 202 Mira Loma Drive  
Affiliation City: Oroville  
Affiliation State: CA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Affiliation Country: Not reported  
Affiliation Zip: 95965  
Affiliation Phone: (530) 538-7281

Affiliation Type Desc: Document Preparer  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: Identification Signer  
Entity Name: TAE JIN KIM  
Entity Title: Owner  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: Operator  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: UST Permit Applicant  
Entity Name: TAE JIN KIM  
Entity Title: Owner

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (530) 345-9966

**CERS TANKS:**

Site ID: 55888  
CERS ID: 10276369  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-12-2014  
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)  
Violation Description: Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.  
Violation Notes: Returned to compliance on 06/12/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-08-2016  
Citation: HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2  
Violation Description: Failure to test the spill bucket annually.  
Violation Notes: Returned to compliance on 06/08/2016.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to submit, obtain approval, or maintain a complete/accurate response plan.  
Violation Notes: Returned to compliance on 05/07/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 23 CCR 16 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2711(a)(8)  
Violation Description: Failure to submit, obtain approval, or maintain a complete/accurate plot plan.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Violation Notes: Returned to compliance on 05/14/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.  
Violation Notes: Returned to compliance on 08/24/2017. last annual submittal was in 2015 - annually review and certify CERS submittal - corrected at the time of inspection.  
Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-08-2016  
Citation: 23 CCR 16 2715(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(i)  
Violation Description: Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).  
Violation Notes: Returned to compliance on 06/08/2016.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: 23 CCR 16 2715(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)  
Violation Description: Failure to notify the CUPA of the designated operator (DO) identification and/or change of the DO within 30 days.  
Violation Notes: Returned to compliance on 08/24/2017. Designated Operator statement submitted to CUPA and in CERS expired - update the DO statement, as needed - corrected at the time of inspection.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-08-2016  
Citation: HSC 6.7 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e)  
Violation Description: Failure to maintain secondary containment (e.g. failure of secondary containment testing).  
Violation Notes: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34  
Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.  
Violation Notes: Returned to compliance on 08/24/2017. Chief Financial Officer (CFO) letter expired - renew CFO letter annually - corrected at the time of inspection.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-22-2018  
Citation: 23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)  
Violation Description: Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(f)(2).  
Violation Notes: Returned to compliance on 09/13/2018. Last employee training was conducted in May, 2017 - employee training should be conducted, copy of the training roaster submitted to CUPA.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 23 CCR 16 2715(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(b)  
Violation Description: Failure to submit statement of UST compliance and/or Designated Operator current certification.  
Violation Notes: Returned to compliance on 05/14/2014.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.7 29291(b) - California Health and Safety Code, Chapter 6.7,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Violation Description: Section(s) 29291(b)  
Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance into the secondary containment.

Violation Notes: Returned to compliance on 08/24/2017. Annular sensors in regular tank and diesel tank failed - replace or repair - corrected at the time of inspection: electrical connections restored - passes the test.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)

Violation Description: Failure to operate the UST system to prevent unauthorized releases including leaks, spills, and/or overfills.

Violation Notes: Returned to compliance on 08/24/2017. Spill bucket on diesel tank failed the test - repair or replace the spill bucket and re-test - corrected at the time of inspection: cap replaced - passed the test.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12

Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.

Violation Notes: Returned to compliance on 08/24/2017. EPA ID number inactive - activate - corrected at the time of inspection: application submitted to DTSC

Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 05/05/2014.

Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-24-2017



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Citation: 40 CFR 1 262.34(d)(5)(ii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(ii)

Violation Description: Failure to post the following information next to the telephone: (A) The name and telephone number of the emergency coordinator; (B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and (C) The telephone number of the fire department, unless the facility has a direct alarm.

Violation Notes: Returned to compliance on 08/24/2017. no emergency information with location of emergency equipment posted - post emergency information with location of emergency equipment - corrected at the time of inspection.

Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)

Violation Description: Failure to prepare, maintain, and submit accurate CUPA UST Operating Permit Application for Facility information and/or Tank information.

Violation Notes: Returned to compliance on 05/14/2014.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 19 CCR 4 2729.5 - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.5

Violation Description: Failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required. Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA thresholds) by March 1.

Violation Notes: Returned to compliance on 05/14/2014.

Violation Division: Butte County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 06-11-2015  
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)

Violation Description: Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.

Violation Notes: Returned to compliance on 06/11/2015.

Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Violation Date: 06-08-2016  
Citation: 23 CCR 16 2712(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)  
Violation Description: Failure to maintain records of repairs, lining, and upgrades on site, or off site if approved by the CUPA, for the life of the UST.  
Violation Notes: Returned to compliance on 06/08/2016.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 05-02-2014  
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173  
Violation Description: Failure to properly close hazardous waste containers when not in active use.  
Violation Notes: Returned to compliance on 05/05/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-22-2018  
Citation: 23 CCR 16 2715(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)  
Violation Description: Failure to submit the UPA. of the designated operator (DO) identification and/or change of the DO within 30 days.  
Violation Notes: Returned to compliance on 08/22/2018. Designated Operator (DO) certification expired in July, 2018; updated DO statement observed in the file at the facility, but no notification to CUPA has been provided and no updates in CERS have been made to reflect the change - DO statement needs to be maintained, changes submitted to CUPA and in CERS - corrected at the time of inspection.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Violation Date: 08-22-2018  
Citation: HSC 6.7 25291(b) - California Health and Safety Code, Chapter 6.7, Section(s) 25291(b)  
Violation Description: Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance into the secondary containment.  
Violation Notes: Returned to compliance on 08/22/2018. Annular sensor in Regular Gasoline tank failed - annular sensor needs to be replaced and re-tested - corrected at the time of inspection; passed the test.  
Violation Division: Butte County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Evaluation:  
Eval General Type: Other/Unknown  
Eval Date: 01-24-2014

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

PDQ MARKET & DELI INC (Continued)

S123102870

Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-11-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-24-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct an inspection, make copies of relevant documents, if needed, take pictures, if needed - no copies made, no pictures taken at the time of inspection.  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-02-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-22-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct the inspection, make copies of documents, take pictures, collect samples, if needed - no copies made, no pictures, samples taken at the time of inspection.  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-24-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct an inspection, make copies of relevant documents, if needed, take pictures, if needed - no copies made, no pictures taken at the time of inspection.  
Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Eval General Type: Other/Unknown  
Eval Date: 05-02-2014  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-12-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-02-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-08-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-24-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Received consent to conduct an inspection, make copies of relevant documents, if needed, take pictures, if needed - no copies made, no pictures taken at the time of inspection.  
Eval Division: Butte County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Enforcement Action:  
Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-09-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-09-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-14-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-14-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 05-14-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 06-08-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 06-11-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 06-16-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 08-22-2018  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 08-24-2017

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 08-24-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 55888  
Site Name: PDQ MARKET & DELI INC  
Site Address: 156 EATON RD  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 08-24-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Coordinates:  
Site ID: 55888  
Facility Name: PDQ MARKET & DELI INC  
Env Int Type Code: HWG  
Program ID: 10276369  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 39.772880  
Longitude: -121.876850

Affiliation:  
Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Owner  
Entity Name: TAE JIN KIM

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: Parent Corporation  
Entity Name: PDQ MARKET & DELI  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Operator  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: UST Property Owner Name  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: CUPA District  
Entity Name: Butte County Environmental Health  
Entity Title: Not reported  
Affiliation Address: 202 Mira Loma Drive  
Affiliation City: Oroville  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95965  
Affiliation Phone: (530) 538-7281

Affiliation Type Desc: Document Preparer  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**S123102870**

Affiliation Type Desc: Environmental Contact  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: Identification Signer  
Entity Name: TAE JIN KIM  
Entity Title: Owner  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: 156 EATON RD  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: Operator  
Entity Name: TAE JIN KIM  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (530) 345-9966

Affiliation Type Desc: UST Permit Applicant  
Entity Name: TAE JIN KIM  
Entity Title: Owner  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (530) 345-9966

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**E15**  
**South**  
**1/8-1/4**  
**0.238 mi.**  
**1255 ft.**

**CHICO PLATING WORKS**  
**172 COMMERCIAL AVENUE**  
**CHICO, CA 95926**

**ENVIROSTOR**  
**CERS HAZ WASTE**  
**CUPA Listings**

**S101479822**  
**N/A**

**Site 1 of 3 in cluster E**

**Relative:**  
**Higher**  
**Actual:**  
**177 ft.**

**ENVIROSTOR:**  
 Facility ID: 4340004  
 Status: Refer: EPA  
 Status Date: 06/02/2011  
 Site Code: 101342  
 Site Type: Evaluation  
 Site Type Detailed: Evaluation  
 Acres: 1  
 NPL: NO  
 Regulatory Agencies: SMBRP, RWQCB 5R - Central Valley  
 Lead Agency: SMBRP  
 Program Manager: Not reported  
 Supervisor: Steven Becker  
 Division Branch: Cleanup San Joaquin  
 Assembly: 03  
 Senate: 04  
 Special Program: EPA - PASI  
 Restricted Use: NO  
 Site Mgmt Req: NONE SPECIFIED  
 Funding: Not reported  
 Latitude: 39.76795  
 Longitude: -121.8698  
 APN: 006-200-015-000  
 Past Use: METAL PLATING - OTHER  
 Potential COC: \* Metals - Sludge \* ACID SOLUTION 2>PH WITH METALS Trichloroethylene (TCE Chromium III Chromium VI Copper and compounds Cyanide (free Nickel Zinc  
 Confirmed COC: 30152-NO 30153-NO 30156-NO 30160-NO 30407-NO 30594-NO 30027-NO  
 Potential Description: OTH, SOIL, WELL  
 Alias Name: Not reported  
 Alias Type: Not reported

**Completed Info:**  
 Completed Area Name: Not reported  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Not reported  
 Completed Date: Not reported  
 Comments: Not reported

Future Area Name: Not reported  
 Future Sub Area Name: Not reported  
 Future Document Type: Not reported  
 Future Due Date: Not reported  
 Schedule Area Name: Not reported  
 Schedule Sub Area Name: Not reported  
 Schedule Document Type: Not reported  
 Schedule Due Date: Not reported  
 Schedule Revised Date: Not reported

**CERS HAZ WASTE:**  
 Site ID: 52336  
 CERS ID: 10277419  
 CERS Description: Hazardous Waste Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHICO PLATING WORKS (Continued)**

**S101479822**

Violations:

Site ID: 52336  
Site Name: NOR CAL FOOD EQUIPMENT INC  
Violation Date: 12-11-2014  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2  
Violation Description: Failure to meet any of the following consolidated manifest requirements: 1) Legible receipts for each quantity of hazardous waste that is received from a generator, 2) The generator's information (name, address, identification number, contact person, telephone number of the generator, the signature of the generator or the generator's representative), 3) Date of the shipment, 4) The manifest number, 5) The volume or quantity of each waste stream received, 6) The name, address, and identification number of the authorized facility to which the hazardous waste will be transported, 7) The transporter's information (name, address, and identification number, the driver's signature), 8) A statement, signed by the generator, certifying that the generator has established a program to reduce the volume or quantity and toxicity of the hazardous waste to the degree economically practicable. 9) The generator shall retain each receipt for at least three years.  
Violation Notes: Returned to compliance on 12/11/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 52336  
Site Name: NOR CAL FOOD EQUIPMENT INC  
Violation Date: 12-11-2014  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)  
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.  
Violation Notes: Returned to compliance on 12/17/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-11-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Enforcement Action:

Site ID: 52336  
Site Name: NOR CAL FOOD EQUIPMENT INC  
Site Address: 172 COMMERCIAL AVE  
Site City: CHICO  
Site Zip: 95973

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHICO PLATING WORKS (Continued)**

**S101479822**

Enf Action Date: 12-11-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

Coordinates:

Site ID: 52336  
Facility Name: NOR CAL FOOD EQUIPMENT INC  
Env Int Type Code: HWG  
Program ID: 10277419  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 39.767950  
Longitude: -121.869830

Affiliation:

Affiliation Type Desc: Parent Corporation  
Entity Name: NOR CAL FOOD EQUIPMENT INC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Butte County Environmental Health  
Entity Title: Not reported  
Affiliation Address: 202 Mira Loma Drive  
Affiliation City: Oroville  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95965  
Affiliation Phone: (530) 538-7281

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 172 COMMERCIAL AVE  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: Not reported

CUPA BUTTE:

Program/Element: B1 - RANGE 0 - 55 - 550 GALLONS  
Billing Status: INACTIVE, NON-BILLABLE  
CERS ID: 10277419

Program/Element: HAZ WASTE GEN < THAN 100 kg/mo

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CHICO PLATING WORKS (Continued)**

**S101479822**

Billing Status: ACTIVE, BILLABLE  
 CERS ID: 10277419

**E16**  
**South**  
**1/8-1/4**  
**0.240 mi.**  
**1268 ft.**

**B & J ENTERPRISES**  
**168 COMMERCIAL AVE**  
**CHICO, CA 95973**

**CUPA Listings S118584389**  
**N/A**

**Site 2 of 3 in cluster E**

**Relative:**  
**Higher**  
**Actual:**  
**177 ft.**

CUPA BUTTE:  
 Program/Element: HAZ WASTE GEN < THAN 100 kg/mo  
 Billing Status: INACTIVE, NON-BILLABLE  
 CERS ID: Not reported

Program/Element: B1 - RANGE 0 - 55 - 550 GALLONS  
 Billing Status: INACTIVE, NON-BILLABLE  
 CERS ID: Not reported

**17**  
**North**  
**1/8-1/4**  
**0.245 mi.**  
**1293 ft.**

**ANDERSON AUTOMOTIVE**  
**420 TODD CT**  
**CHICO, CA 95926**

**RCRA-SQG 1000596074**  
**FINDS CAD983600370**  
**ECHO**  
**CUPA Listings**  
**HAZNET**

**Relative:**  
**Higher**  
**Actual:**  
**177 ft.**

RCRA-SQG:  
 Date form received by agency: 08/12/1991  
 Facility name: ANDERSON AUTOMOTIVE  
 Facility address: 420 TODD CT  
 CHICO, CA 95926  
 EPA ID: CAD983600370  
 Contact: BILL ANDERSON  
 Contact address: 420 TODD CT  
 CHICO, CA 95926  
 Contact country: US  
 Contact telephone: 916-343-4825  
 Contact email: Not reported  
 EPA Region: 09  
 Classification: Small Small Quantity Generator  
 Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:  
 Owner/operator name: BILL ANDERSON  
 Owner/operator address: 420 TODD CT  
 CHICO, CA 95926  
 Owner/operator country: Not reported  
 Owner/operator telephone: 916-343-4825  
 Owner/operator email: Not reported  
 Owner/operator fax: Not reported  
 Owner/operator extension: Not reported  
 Legal status: Private  
 Owner/Operator Type: Owner  
 Owner/Op start date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ANDERSON AUTOMOTIVE (Continued)**

**1000596074**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002857052

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000596074  
Registry ID: 110002857052  
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110002857052>

CUPA BUTTE:

Program/Element: HAZ WASTE GEN < THAN 100 kg/mo  
Billing Status: INACTIVE, NON-BILLABLE  
CERS ID: Not reported

Program/Element: B1 - RANGE 0 - 55 - 550 GALLONS  
Billing Status: INACTIVE, NON-BILLABLE  
CERS ID: Not reported

HAZNET:

envid: 1000596074  
Year: 2006  
GEPaid: CAD983600370  
Contact: INACTIVE/VALID #CAL000081011

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ANDERSON AUTOMOTIVE (Continued)**

**1000596074**

Telephone: 9163434825  
Mailing Name: Not reported  
Mailing Address: 420 TODD CT  
Mailing City,St,Zip: CHICO, CA 959260000  
Gen County: Not reported  
TSD EPA ID: CAD028409019  
TSD County: Not reported  
Waste Category: Off-specification, aged or surplus organics  
Disposal Method: Transfer Station  
Tons: 0.41  
Cat Decode: Not reported  
Method Decode: Not reported  
Facility County: Butte

envid: 1000596074  
Year: 2006  
GEPaid: CAD983600370  
Contact: INACTIVE/VALID #CAL000081011  
Telephone: 9163434825  
Mailing Name: Not reported  
Mailing Address: 420 TODD CT  
Mailing City,St,Zip: CHICO, CA 959260000  
Gen County: Not reported  
TSD EPA ID: CAD028409019  
TSD County: Not reported  
Waste Category: Off-specification, aged or surplus organics  
Disposal Method: Transfer Station  
Tons: 0.2  
Cat Decode: Not reported  
Method Decode: Not reported  
Facility County: Butte

envid: 1000596074  
Year: 2006  
GEPaid: CAD983600370  
Contact: INACTIVE/VALID #CAL000081011  
Telephone: 9163434825  
Mailing Name: Not reported  
Mailing Address: 420 TODD CT  
Mailing City,St,Zip: CHICO, CA 959260000  
Gen County: Not reported  
TSD EPA ID: CAD028409019  
TSD County: Not reported  
Waste Category: Off-specification, aged or surplus organics  
Disposal Method: Transfer Station  
Tons: 0.02  
Cat Decode: Not reported  
Method Decode: Not reported  
Facility County: Butte

envid: 1000596074  
Year: 2006  
GEPaid: CAD983600370  
Contact: INACTIVE/VALID #CAL000081011  
Telephone: 9163434825  
Mailing Name: Not reported  
Mailing Address: 420 TODD CT

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**ANDERSON AUTOMOTIVE (Continued)**

**1000596074**

Mailing City,St,Zip: CHICO, CA 959260000  
 Gen County: Not reported  
 TSD EPA ID: CAD028409019  
 TSD County: Not reported  
 Waste Category: Off-specification, aged or surplus inorganics  
 Disposal Method: Transfer Station  
 Tons: 0.05  
 Cat Decode: Not reported  
 Method Decode: Not reported  
 Facility County: Butte

**E18**  
**South**  
**1/8-1/4**  
**0.247 mi.**  
**1302 ft.**

**SIGNS & GRAPHIC DESIGN**  
**158 COMMERCIAL DR**  
**CHICO, CA 95973**

**CERS HAZ WASTE** **S110818838**  
**CUPA Listings** **N/A**

**Site 3 of 3 in cluster E**

**Relative:**  
**Higher**  
**Actual:**  
**177 ft.**

CERS HAZ WASTE:  
 Site ID: 67776  
 CERS ID: 10278400  
 CERS Description: Hazardous Waste Generator

Violations:  
 Site ID: 67776  
 Site Name: SIGNS & GRAPHIC DESIGN  
 Violation Date: 12-08-2014  
 Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12  
 Violation Description: Failure to obtain and/or maintain an Active EPA ID.  
 Violation Notes: Returned to compliance on 01/06/2015.  
 Violation Division: Butte County Environmental Health  
 Violation Program: HW  
 Violation Source: CERS

Site ID: 67776  
 Site Name: SIGNS & GRAPHIC DESIGN  
 Violation Date: 12-08-2014  
 Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)  
 Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.  
 Violation Notes: Not reported  
 Violation Division: Butte County Environmental Health  
 Violation Program: HW  
 Violation Source: CERS

Evaluation:  
 Eval General Type: Compliance Evaluation Inspection  
 Eval Date: 12-08-2014  
 Violations Found: Yes  
 Eval Type: Routine done by local agency  
 Eval Notes: Not reported  
 Eval Division: Butte County Environmental Health  
 Eval Program: HW  
 Eval Source: CERS



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SIGNS & GRAPHIC DESIGN (Continued)**

**S110818838**

Enforcement Action:

Site ID: 67776  
Site Name: SIGNS & GRAPHIC DESIGN  
Site Address: 158 COMMERCIAL DR  
Site City: CHICO  
Site Zip: 95973  
Enf Action Date: 12-08-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: Legal Owner  
Entity Name: Christine Bieberly  
Entity Title: Not reported  
Affiliation Address: 158 Commercial Avenue  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 343-2543

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 158 COMMERCIAL DR  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: Christine Bieberly  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (530) 343-2543

Affiliation Type Desc: CUPA District  
Entity Name: Butte County Environmental Health  
Entity Title: Not reported  
Affiliation Address: 202 Mira Loma Drive  
Affiliation City: Oroville  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95965  
Affiliation Phone: (530) 538-7281

Affiliation Type Desc: Environmental Contact

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SIGNS & GRAPHIC DESIGN (Continued)**

**S110818838**

Entity Name: Christine Bieberly  
 Entity Title: Not reported  
 Affiliation Address: 158 COMMERCIAL Dr  
 Affiliation City: CHICO  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: 95973  
 Affiliation Phone: (530) 343-2543

Affiliation Type Desc: Parent Corporation  
 Entity Name: SIGNS & GRAPHIC DESIGN  
 Entity Title: Not reported  
 Affiliation Address: Not reported  
 Affiliation City: Not reported  
 Affiliation State: Not reported  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

CUPA BUTTE:  
 Program/Element: HAZ WASTE GEN < THAN 100 kg/mo  
 Billing Status: ACTIVE, BILLABLE  
 CERS ID: 10278400

**F19**  
**SW**  
**1/8-1/4**  
**0.247 mi.**  
**1303 ft.**

**PDQ MARKET AND DELI**  
**156 EATON RD**  
**CHICO, CA 95926**  
**Site 1 of 3 in cluster F**

**HIST UST** **S101628788**  
**CA FID UST** **N/A**

**Relative:**  
**Lower**  
**Actual:**  
**172 ft.**

HIST UST:  
 File Number: 000221D3  
 URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000221D3.pdf>  
 Region: Not reported  
 Facility ID: Not reported  
 Facility Type: Not reported  
 Other Type: Not reported  
 Contact Name: Not reported  
 Telephone: Not reported  
 Owner Name: Not reported  
 Owner Address: Not reported  
 Owner City,St,Zip: Not reported  
 Total Tanks: Not reported  
  
 Tank Num: Not reported  
 Container Num: Not reported  
 Year Installed: Not reported  
 Tank Capacity: Not reported  
 Tank Used for: Not reported  
 Type of Fuel: Not reported  
 Container Construction Thickness: Not reported  
 Leak Detection: Not reported

Click here for Geo Tracker PDF:

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET AND DELI (Continued)**

**S101628788**

CA FID UST:  
Facility ID: 04000284  
Regulated By: UTNKA  
Regulated ID: 00019463  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 9168950600  
Mail To: Not reported  
Mailing Address: 156 EATON RD  
Mailing Address 2: Not reported  
Mailing City,St,Zip: CHICO 95926  
Contact: Not reported  
Contact Phone: Not reported  
DUNS Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**F20**  
**SW**  
**1/8-1/4**  
**0.247 mi.**  
**1303 ft.**

**PDQ MARKET & DELI INC**  
**156 EATON RD**  
**CHICO, CA 95973**

**UST** **U003941069**  
**SWEEPS UST** **N/A**

**Site 2 of 3 in cluster F**

**Relative:**  
**Lower**  
**Actual:**  
**172 ft.**

UST:  
Facility ID: Not reported  
Permitting Agency: Butte County Environmental Health  
Latitude: 39.77288  
Longitude: -121.87685

SWEEPS UST:  
Status: Active  
Comp Number: 19463  
Number: 9  
Board Of Equalization: 44-001719  
Referral Date: 01-11-90  
Action Date: 02-08-94  
Created Date: 07-31-88  
Owner Tank Id: 1  
SWRCB Tank Id: 04-000-019463-000001  
Tank Status: A  
Capacity: 10000  
Active Date: 01-11-90  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: 3  
  
Status: Active  
Comp Number: 19463  
Number: 9  
Board Of Equalization: 44-001719  
Referral Date: 01-11-90  
Action Date: 02-08-94  
Created Date: 07-31-88  
Owner Tank Id: 2

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI INC (Continued)**

**U003941069**

SWRCB Tank Id: 04-000-019463-000002  
Tank Status: A  
Capacity: 10000  
Active Date: 01-11-90  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19463  
Number: 9  
Board Of Equalization: 44-001719  
Referral Date: 01-11-90  
Action Date: 02-08-94  
Created Date: 07-31-88  
Owner Tank Id: 3  
SWRCB Tank Id: 04-000-019463-000003  
Tank Status: A  
Capacity: 10000  
Active Date: 01-11-90  
Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: Not reported

**F21**  
**SW**  
**1/8-1/4**  
**0.247 mi.**  
**1303 ft.**

**PDQ MARKET & DELI**  
**156 EATON RD**  
**CHICO, CA 95973**  
**Site 3 of 3 in cluster F**

**LUST** **U001616589**  
**HIST UST** **N/A**  
**CUPA Listings**  
**EMI**  
**HIST CORTESE**  
**CERS**

**Relative:**  
**Lower**  
**Actual:**  
**172 ft.**

LUST:  
Lead Agency: BUTTE COUNTY  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0600700128](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600700128)  
Global Id: T0600700128  
Latitude: 39.772755666667  
Longitude: -121.875889333333  
Status: Completed - Case Closed  
Status Date: 02/01/1996  
Case Worker: LR  
RB Case Number: 040133  
Local Agency: BUTTE COUNTY  
File Location: Archived  
Local Case Number: Not reported  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

LUST:  
Global Id: T0600700128  
Contact Type: Local Agency Caseworker  
Contact Name: LESLIE ROBERTS  
Organization Name: BUTTE COUNTY  
Address: 411 MAIN STREET  
City: CHICO

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI (Continued)**

**U001616589**

Email: lroberts@buttecounty.net  
Phone Number: 5308912727  
  
Global Id: T0600700128  
Contact Type: Regional Board Caseworker  
Contact Name: RECEPTIONIST, REGION 5 REDDING  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5R)  
Address: 364 Knollcrest Drive, Suite 205  
City: REDDING  
Email: Not reported  
Phone Number: Not reported

LUST:

Global Id: T0600700128  
Action Type: ENFORCEMENT  
Date: 02/01/1996  
Action: Closure/No Further Action Letter

Global Id: T0600700128  
Action Type: Other  
Date: 01/19/1995  
Action: Leak Discovery

Global Id: T0600700128  
Action Type: Other  
Date: 01/19/1995  
Action: Leak Stopped

Global Id: T0600700128  
Action Type: Other  
Date: 03/20/1995  
Action: Leak Reported

LUST:

Global Id: T0600700128  
Status: Completed - Case Closed  
Status Date: 02/01/1996

Global Id: T0600700128  
Status: Open - Case Begin Date  
Status Date: 01/19/1995

Global Id: T0600700128  
Status: Open - Site Assessment  
Status Date: 01/19/1995

LUST REG 5:

Region: 5  
Status: Case Closed  
Case Number: 040133  
Case Type: Soil only  
Substance: GASOLINE  
Staff Initials: KLC  
Lead Agency: Local  
Program: LUST

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI (Continued)**

**U001616589**

MTBE Code: N/A

**HIST UST:**

File Number: Not reported  
URL: Not reported  
Region: STATE  
Facility ID: 00000019463  
Facility Type: Gas Station  
Other Type: Not reported  
Contact Name: RETAIL OPERATOR  
Telephone: 9168950600  
Owner Name: ORVAL HUGHES & RICHARD EISELT  
Owner Address: 156 EATON RD  
Owner City,St,Zip: CHICO, CA 95926  
Total Tanks: 0003

Tank Num: 001  
Container Num: 1  
Year Installed: 1978  
Tank Capacity: 00010000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: Not reported  
Leak Detection: None

Tank Num: 002  
Container Num: 2  
Year Installed: Not reported  
Tank Capacity: 00000000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Container Construction Thickness: Not reported  
Leak Detection: None

Tank Num: 003  
Container Num: 3  
Year Installed: Not reported  
Tank Capacity: 00000000  
Tank Used for: PRODUCT  
Type of Fuel: REGULAR  
Container Construction Thickness: Not reported  
Leak Detection: None

**CUPA BUTTE:**

Program/Element: PERMITTED UST FACILITY WITH 1-5 HM MATERIALS  
Billing Status: ACTIVE, BILLABLE  
CERS ID: 10276369

Program/Element: GENERAL HAZ WASTE  
Billing Status: ACTIVE, EXEMPT FROM BILLING  
CERS ID: 10276369

Program/Element: GENERAL UST  
Billing Status: ACTIVE, EXEMPT FROM BILLING  
CERS ID: 10276369

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

PDQ MARKET & DELI (Continued)

U001616589

EMI:

Year: 2011  
County Code: 4  
Air Basin: SV  
Facility ID: 502  
Air District Name: BUT  
SIC Code: 5541  
Air District Name: BUTTE COUNTY AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.593  
Reactive Organic Gases Tons/Yr: 0.5908059  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Year: 2012  
County Code: 4  
Air Basin: SV  
Facility ID: 502  
Air District Name: BUT  
SIC Code: 5541  
Air District Name: BUTTE COUNTY AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.593  
Reactive Organic Gases Tons/Yr: 0.5908059  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Year: 2013  
County Code: 4  
Air Basin: SV  
Facility ID: 502  
Air District Name: BUT  
SIC Code: 5541  
Air District Name: BUTTE COUNTY AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.593  
Reactive Organic Gases Tons/Yr: 0.5908059  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Year: 2014  
County Code: 4  
Air Basin: SV  
Facility ID: 502  
Air District Name: BUT

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PDQ MARKET & DELI (Continued)**

**U001616589**

SIC Code: 5541  
Air District Name: BUTTE COUNTY AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.593  
Reactive Organic Gases Tons/Yr: 0.593  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Year: 2015  
County Code: 4  
Air Basin: SV  
Facility ID: 502  
Air District Name: BUT  
SIC Code: 5541  
Air District Name: BUTTE COUNTY AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.593  
Reactive Organic Gases Tons/Yr: 0.593  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Year: 2016  
County Code: 4  
Air Basin: SV  
Facility ID: 502  
Air District Name: BUT  
SIC Code: 5541  
Air District Name: BUTTE COUNTY AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.593  
Reactive Organic Gases Tons/Yr: 0.593  
Carbon Monoxide Emissions Tons/Yr: Not reported  
NOX - Oxides of Nitrogen Tons/Yr: Not reported  
SOX - Oxides of Sulphur Tons/Yr: Not reported  
Particulate Matter Tons/Yr: Not reported  
Part. Matter 10 Micrometers and Smlr Tons/Yr:Not reported

**HIST CORTESE:**

Region: CORTESE  
Facility County Code: 4  
Reg By: LTNKA  
Reg Id: 040133

**CERS TANKS:**

Site ID: 215200  
CERS ID: T0600700128  
CERS Description: Leaking Underground Storage Tank Cleanup Site



Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**PDQ MARKET & DELI (Continued)**

**U001616589**

Affiliation:

Affiliation Type Desc: Regional Board Caseworker  
 Entity Name: RECEPTIONIST, REGION 5 REDDING - CENTRAL VALLEY RWQCB (REGION 5R)  
 Entity Title: Not reported  
 Affiliation Address: 364 Knollcrest Drive, Suite 205  
 Affiliation City: REDDING  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker  
 Entity Name: LESLIE ROBERTS - BUTTE COUNTY  
 Entity Title: Not reported  
 Affiliation Address: 411 MAIN STREET  
 Affiliation City: CHICO  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: 5308912727

**22**  
**WSW**  
**1/8-1/4**  
**0.247 mi.**  
**1305 ft.**

**DAN GAMELS RV SERVICE**  
**3268 ESPLANADE # A**  
**CHICO, CA 95973**

**CERS HAZ WASTE** **S110818930**  
**CUPA Listings** **N/A**

**Relative:**  
**Lower**  
**Actual:**  
**172 ft.**

CERS HAZ WASTE:  
 Site ID: 32732  
 CERS ID: 10278721  
 CERS Description: Hazardous Waste Generator

Violations:

Site ID: 32732  
 Site Name: GEER AUTO SERVICE  
 Violation Date: 07-02-2014  
 Citation: 22 CCR 12 66262.42 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.42  
 Violation Description: Failure to complete the uniform hazardous waste manifest exception requirements.  
 Violation Notes: Returned to compliance on 07/10/2014.  
 Violation Division: Butte County Environmental Health  
 Violation Program: HW  
 Violation Source: CERS

Site ID: 32732  
 Site Name: GEER AUTO SERVICE  
 Violation Date: 07-02-2014  
 Citation: 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)  
 Violation Description: Failure to maintain uniform hazardous waste manifest, consolidated manifest, or bills of lading copies for three years.  
 Violation Notes: Returned to compliance on 07/10/2014.  
 Violation Division: Butte County Environmental Health  
 Violation Program: HW  
 Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DAN GAMELS RV SERVICE (Continued)**

**S110818930**

Site ID: 32732  
Site Name: GEER AUTO SERVICE  
Violation Date: 07-02-2014  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)  
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.  
Violation Notes: Returned to compliance on 07/10/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 32732  
Site Name: GEER AUTO SERVICE  
Violation Date: 07-02-2014  
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173  
Violation Description: Failure to properly close hazardous waste containers when not in active use.  
Violation Notes: Returned to compliance on 07/10/2014.  
Violation Division: Butte County Environmental Health  
Violation Program: HW  
Violation Source: CERS

**Evaluation:**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-02-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 09-21-2017  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Consent to perform the inspection, review documents, copy documents, take photos or collect samples provided by Scott Christopherson at 10:30 AM. No photographs, copied documents or samples were obtained during this inspection. Scott Christopherson just took ownership on 9/1/17. Completed CERS submittal and transfer of CERS ID. Facility maintains 30g drum of waste oil, 30g drum of waste antifreeze and 30g drum of waste brake fluid.  
Eval Division: Butte County Environmental Health  
Eval Program: HW  
Eval Source: CERS

**Enforcement Action:**

Site ID: 32732  
Site Name: GEER AUTO SERVICE  
Site Address: 3268 ESPLANADE STE B  
Site City: CHICO

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DAN GAMELS RV SERVICE (Continued)**

**S110818930**

Site Zip: 95973  
Enf Action Date: 07-02-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Butte County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

**Affiliation:**

Affiliation Type Desc: Environmental Contact  
Entity Name: Scott Christopherson  
Entity Title: Not reported  
Affiliation Address: 3268 ESPLANADE STE B  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: (530) 343-9381

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 3268 ESPLANADE STE B  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95973  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: Scott Christopherson  
Entity Title: Not reported  
Affiliation Address: 3268 Esplanade Suite B  
Affiliation City: CHICO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95973  
Affiliation Phone: (530) 343-9381

Affiliation Type Desc: Parent Corporation  
Entity Name: GEER AUTO SERVICE  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Butte County Environmental Health  
Entity Title: Not reported  
Affiliation Address: 202 Mira Loma Drive  
Affiliation City: Oroville  
Affiliation State: CA  
Affiliation Country: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**DAN GAMELS RV SERVICE (Continued)**

**S110818930**

Affiliation Zip: 95965  
 Affiliation Phone: (530) 538-7281

Affiliation Type Desc: Document Preparer  
 Entity Name: Scott Christopherson  
 Entity Title: Not reported  
 Affiliation Address: Not reported  
 Affiliation City: Not reported  
 Affiliation State: Not reported  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
 Entity Name: Scott Christopherson  
 Entity Title: Owner  
 Affiliation Address: Not reported  
 Affiliation City: Not reported  
 Affiliation State: Not reported  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
 Entity Name: Scott Christopherson  
 Entity Title: Not reported  
 Affiliation Address: Not reported  
 Affiliation City: Not reported  
 Affiliation State: Not reported  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: (530) 519-1296

**CUPA BUTTE:**  
 Program/Element: HAZ WASTE GEN < THAN 100 kg/mo  
 Billing Status: ACTIVE, BILLABLE  
 CERS ID: 10278721

Program/Element: GENERAL HAZ MATERIALS  
 Billing Status: INACTIVE, NON-BILLABLE  
 CERS ID: Not reported

Program/Element: B1 - RANGE 0 - 55 - 550 GALLONS  
 Billing Status: INACTIVE, NON-BILLABLE  
 CERS ID: 10278721

23  
 SSW  
 1/4-1/2  
 0.262 mi.  
 1383 ft.

**COFFEY, GLENN L. & NANCY**  
 3156 ESPLANDE 215  
 CHICO, CA 95926

**HIST CORTESE S105023192**  
 N/A

**Relative:**  
**Higher**  
**Actual:**  
**175 ft.**

HIST CORTESE:  
 Region: CORTESE  
 Facility County Code: 18  
 Reg By: WBC&D

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**COFFEY, GLENN L. & NANCY (Continued)**

**S105023192**

Reg Id: 6A189011N88

**24**  
**South**  
**1/4-1/2**  
**0.365 mi.**  
**1929 ft.**

**BARTRAM VERN (ORCHARD)**  
**3105 ESPLANADE ST**  
**CHICO, CA 95926**

**LUST** **S104403059**  
**HIST CORTESE** **N/A**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**178 ft.**

LUST:  
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5R)  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0600700055](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600700055)  
Global Id: T0600700055  
Latitude: 39.766929  
Longitude: -121.872509  
Status: Completed - Case Closed  
Status Date: 07/08/1994  
Case Worker: Not reported  
RB Case Number: 040059  
Local Agency: BUTTE COUNTY  
File Location: Archived  
Local Case Number: Not reported  
Potential Media Affect: Aquifer used for drinking water supply  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

LUST:  
Global Id: T0600700055  
Contact Type: Local Agency Caseworker  
Contact Name: LESLIE ROBERTS  
Organization Name: BUTTE COUNTY  
Address: 411 MAIN STREET  
City: CHICO  
Email: lroberts@buttecounty.net  
Phone Number: 5308912727

Global Id: T0600700055  
Contact Type: Regional Board Caseworker  
Contact Name: RECEPTIONIST, REGION 5 REDDING  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5R)  
Address: 364 Knollcrest Drive, Suite 205  
City: REDDING  
Email: Not reported  
Phone Number: Not reported

LUST:  
Global Id: T0600700055  
Action Type: ENFORCEMENT  
Date: 07/08/1994  
Action: Closure/No Further Action Letter

Global Id: T0600700055  
Action Type: Other  
Date: 01/22/1991  
Action: Leak Stopped

Global Id: T0600700055  
Action Type: Other

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BARTRAM VERN (ORCHARD) (Continued)**

**S104403059**

Date: 01/22/1991  
Action: Leak Discovery

Global Id: T0600700055  
Action Type: Other  
Date: 06/06/1991  
Action: Leak Reported

**LUST:**

Global Id: T0600700055  
Status: Completed - Case Closed  
Status Date: 07/08/1994

Global Id: T0600700055  
Status: Open - Case Begin Date  
Status Date: 01/22/1991

Global Id: T0600700055  
Status: Open - Site Assessment  
Status Date: 01/22/1991

Global Id: T0600700055  
Status: Open - Site Assessment  
Status Date: 05/14/1991

Global Id: T0600700055  
Status: Open - Site Assessment  
Status Date: 06/10/1993

Global Id: T0600700055  
Status: Open - Verification Monitoring  
Status Date: 05/12/1994

**LUST REG 5:**

Region: 5  
Status: Case Closed  
Case Number: 040059  
Case Type: Drinking Water Aquifer affected  
Substance: DIESEL  
Staff Initials: KLC  
Lead Agency: Regional  
Program: LUST  
MTBE Code: N/A

**HIST CORTESE:**

Region: CORTESE  
Facility County Code: 4  
Reg By: LTNKA  
Reg Id: 040059

**CERS TANKS:**

Site ID: 249177  
CERS ID: T0600700055  
CERS Description: Leaking Underground Storage Tank Cleanup Site

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**BARTRAM VERN (ORCHARD) (Continued)**

**S104403059**

Affiliation:

Affiliation Type Desc: Local Agency Caseworker  
 Entity Name: LESLIE ROBERTS - BUTTE COUNTY  
 Entity Title: Not reported  
 Affiliation Address: 411 MAIN STREET  
 Affiliation City: CHICO  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: 5308912727

Affiliation Type Desc: Regional Board Caseworker  
 Entity Name: RECEPTIONIST, REGION 5 REDDING - CENTRAL VALLEY RWQCB (REGION 5R)  
 Entity Title: Not reported  
 Affiliation Address: 364 Knollcrest Drive, Suite 205  
 Affiliation City: REDDING  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

**25**  
**ESE**  
**1/4-1/2**  
**0.417 mi.**  
**2203 ft.**

**FIELD, SHIRLEY L.**  
**3122 GODMAN**  
**CHICO, CA 95926**

**HIST CORTESE** **S105023194**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**182 ft.**

HIST CORTESE:  
 Region: CORTESE  
 Facility County Code: 18  
 Reg By: WBC&D  
 Reg Id: 6A189012N84

**26**  
**WNW**  
**1/2-1**  
**0.550 mi.**  
**2902 ft.**

**SHASTA ELEMENTARY SCHOOL**  
**193 LEORA COURT**  
**CHICO, CA 95973**

**ENVIROSTOR** **S117038735**  
**SCH** **N/A**

**Relative:**  
**Higher**  
**Actual:**  
**175 ft.**

ENVIROSTOR:  
 Facility ID: 60002096  
 Status: Certified  
 Status Date: 02/13/2018  
 Site Code: 104730  
 Site Type: School Cleanup  
 Site Type Detailed: School  
 Acres: 0.86  
 NPL: NO  
 Regulatory Agencies: SMBRP  
 Lead Agency: SMBRP  
 Program Manager: Mellan Songco  
 Supervisor: Jose Salcedo  
 Division Branch: Northern California Schools & Santa Susana  
 Assembly: 03  
 Senate: 04

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHASTA ELEMENTARY SCHOOL (Continued)**

**S117038735**

Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: School District  
Latitude: 39.78026  
Longitude: -121.8825  
APN: 006-220-008, 006220008000  
Past Use: RESIDENTIAL AREA  
Potential COC: Arsenic Chlordane DDD DDE DDT Endrin Lead Polychlorinated biphenyls (PCBs Dieldrin)  
Confirmed COC: Arsenic 30004-NO 30006-NO 30007-NO 30008-NO 30010-NO Lead 30018-NO Dieldrin  
Potential Description: SOIL  
Alias Name: Proposed Shasta Elementary School Expansion  
Alias Type: Alternate Name  
Alias Name: 006-220-008  
Alias Type: APN  
Alias Name: 006220008000  
Alias Type: APN  
Alias Name: 104730  
Alias Type: Project Code (Site Code)  
Alias Name: 60002096  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Correspondence  
Completed Date: 07/27/2015  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Correspondence  
Completed Date: 06/06/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Correspondence  
Completed Date: 12/28/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Environmental Oversight Agreement  
Completed Date: 07/21/2015  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Environmental Oversight Agreement Application  
Completed Date: 06/23/2015  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Workplan



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHASTA ELEMENTARY SCHOOL (Continued)**

**S117038735**

Completed Date: 05/05/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 10/26/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Workplan  
Completed Date: 05/01/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Community Profile  
Completed Date: 03/10/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 03/16/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: 4.15 Request  
Completed Date: 03/06/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Notice  
Completed Date: 03/16/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Completion Report  
Completed Date: 12/13/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Work Notice  
Completed Date: 06/07/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 02/13/2018  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHASTA ELEMENTARY SCHOOL (Continued)**

**S117038735**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fieldwork  
Completed Date: 05/10/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fieldwork  
Completed Date: 06/14/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: School Cleanup Agreement  
Completed Date: 12/01/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 05/02/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 09/30/2014  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

**SCH:**

Facility ID: 60002096  
Site Type: School Cleanup  
Site Type Detail: School  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 0.86  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Mellan Songco  
Supervisor: Jose Salcedo  
Division Branch: Northern California Schools & Santa Susana  
Site Code: 104730  
Assembly: 03  
Senate: 04

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHASTA ELEMENTARY SCHOOL (Continued)**

**S117038735**

Special Program Status: Not reported  
Status: Certified  
Status Date: 02/13/2018  
Restricted Use: NO  
Funding: School District  
Latitude: 39.78026  
Longitude: -121.8825  
APN: 006-220-008, 006220008000  
Past Use: RESIDENTIAL AREA  
Potential COC: Arsenic, Chlordane, DDD, DDE, DDT, Endrin, Lead, Polychlorinated biphenyls (PCBs, Dieldrin  
Confirmed COC: Arsenic, 30004-NO, 30006-NO, 30007-NO, 30008-NO, 30010-NO, Lead, 30018-NO, Dieldrin  
Potential Description: SOIL  
Alias Name: Proposed Shasta Elementary School Expansion  
Alias Type: Alternate Name  
Alias Name: 006-220-008  
Alias Type: APN  
Alias Name: 006220008000  
Alias Type: APN  
Alias Name: 104730  
Alias Type: Project Code (Site Code)  
Alias Name: 60002096  
Alias Type: Envirostor ID Number  
Completed Info:  
Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Correspondence  
Completed Date: 07/27/2015  
Comments: Not reported  
Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Correspondence  
Completed Date: 06/06/2016  
Comments: Not reported  
Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Correspondence  
Completed Date: 12/28/2016  
Comments: Not reported  
Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Environmental Oversight Agreement  
Completed Date: 07/21/2015  
Comments: Not reported  
Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Environmental Oversight Agreement Application  
Completed Date: 06/23/2015  
Comments: Not reported  
Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHASTA ELEMENTARY SCHOOL (Continued)**

**S117038735**

Completed Document Type: Preliminary Endangerment Assessment Workplan  
Completed Date: 05/05/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 10/26/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Workplan  
Completed Date: 05/01/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Community Profile  
Completed Date: 03/10/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 03/16/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: 4.15 Request  
Completed Date: 03/06/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Notice  
Completed Date: 03/16/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Completion Report  
Completed Date: 12/13/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Work Notice  
Completed Date: 06/07/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 02/13/2018  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHASTA ELEMENTARY SCHOOL (Continued)**

**S117038735**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fieldwork  
Completed Date: 05/10/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fieldwork  
Completed Date: 06/14/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: School Cleanup Agreement  
Completed Date: 12/01/2016  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 05/02/2017  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 09/30/2014  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICO	S107540893		TRAFFIC STOP @ EATON RD &HWY 9		CDL

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## **STANDARD ENVIRONMENTAL RECORDS**

### ***Federal NPL site list***

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 08/13/2018	Source: EPA
Date Data Arrived at EDR: 10/04/2018	Telephone: N/A
Date Made Active in Reports: 11/09/2018	Last EDR Contact: 11/27/2018
Number of Days to Update: 36	Next Scheduled EDR Contact: 01/14/2019
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 08/13/2018	Source: EPA
Date Data Arrived at EDR: 10/04/2018	Telephone: N/A
Date Made Active in Reports: 11/09/2018	Last EDR Contact: 11/27/2018
Number of Days to Update: 36	Next Scheduled EDR Contact: 01/14/2019
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991  
Date Data Arrived at EDR: 02/02/1994  
Date Made Active in Reports: 03/30/1994  
Number of Days to Update: 56

Source: EPA  
Telephone: 202-564-4267  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 08/13/2018  
Date Data Arrived at EDR: 10/04/2018  
Date Made Active in Reports: 11/09/2018  
Number of Days to Update: 36

Source: EPA  
Telephone: N/A  
Last EDR Contact: 11/27/2018  
Next Scheduled EDR Contact: 01/14/2019  
Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016  
Date Data Arrived at EDR: 01/05/2017  
Date Made Active in Reports: 04/07/2017  
Number of Days to Update: 92

Source: Environmental Protection Agency  
Telephone: 703-603-8704  
Last EDR Contact: 07/06/2018  
Next Scheduled EDR Contact: 10/15/2018  
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 08/13/2018  
Date Data Arrived at EDR: 10/04/2018  
Date Made Active in Reports: 11/16/2018  
Number of Days to Update: 43

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 11/27/2018  
Next Scheduled EDR Contact: 01/28/2019  
Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 08/13/2018	Source: EPA
Date Data Arrived at EDR: 10/04/2018	Telephone: 800-424-9346
Date Made Active in Reports: 11/16/2018	Last EDR Contact: 11/28/2018
Number of Days to Update: 43	Next Scheduled EDR Contact: 01/28/2019
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/2018	Source: EPA
Date Data Arrived at EDR: 03/28/2018	Telephone: 800-424-9346
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 12/03/2018
Number of Days to Update: 86	Next Scheduled EDR Contact: 01/07/2019
	Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (415) 495-8895
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 12/03/2018
Number of Days to Update: 86	Next Scheduled EDR Contact: 01/07/2019
	Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (415) 495-8895
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 12/03/2018
Number of Days to Update: 86	Next Scheduled EDR Contact: 01/07/2019
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (415) 495-8895
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 12/03/2018
Number of Days to Update: 86	Next Scheduled EDR Contact: 01/07/2019
	Data Release Frequency: Quarterly

## RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (415) 495-8895
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 12/03/2018
Number of Days to Update: 86	Next Scheduled EDR Contact: 01/07/2019
	Data Release Frequency: Quarterly

## ***Federal institutional controls / engineering controls registries***

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/14/2018	Source: Department of the Navy
Date Data Arrived at EDR: 05/18/2018	Telephone: 843-820-7326
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/15/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/25/2019
	Data Release Frequency: Varies

### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 07/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/28/2018	Telephone: 703-603-0695
Date Made Active in Reports: 09/14/2018	Last EDR Contact: 11/28/2018
Number of Days to Update: 17	Next Scheduled EDR Contact: 03/11/2019
	Data Release Frequency: Varies

### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 07/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/28/2018	Telephone: 703-603-0695
Date Made Active in Reports: 09/14/2018	Last EDR Contact: 11/28/2018
Number of Days to Update: 17	Next Scheduled EDR Contact: 03/11/2019
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/24/2018

Date Data Arrived at EDR: 09/25/2018

Date Made Active in Reports: 11/09/2018

Number of Days to Update: 45

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019

Data Release Frequency: Quarterly

## ***State- and tribal - equivalent NPL***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/30/2018

Date Data Arrived at EDR: 07/31/2018

Date Made Active in Reports: 09/07/2018

Number of Days to Update: 38

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/30/2018

Next Scheduled EDR Contact: 02/11/2019

Data Release Frequency: Quarterly

## ***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/30/2018

Date Data Arrived at EDR: 07/31/2018

Date Made Active in Reports: 09/07/2018

Number of Days to Update: 38

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/30/2018

Next Scheduled EDR Contact: 02/11/2019

Data Release Frequency: Quarterly

## ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/08/2018

Date Data Arrived at EDR: 08/10/2018

Date Made Active in Reports: 08/24/2018

Number of Days to Update: 14

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 02/25/2019

Data Release Frequency: Quarterly

## ***State and tribal leaking storage tank lists***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

## LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

## LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/12/2018	Telephone: see region list
Date Made Active in Reports: 10/08/2018	Last EDR Contact: 09/12/2018
Number of Days to Update: 26	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Quarterly

## LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

## LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

## LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2008  
Date Data Arrived at EDR: 07/22/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-4834  
Last EDR Contact: 07/01/2011  
Next Scheduled EDR Contact: 10/17/2011  
Data Release Frequency: No Update Planned

## LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-622-2433  
Last EDR Contact: 09/19/2011  
Next Scheduled EDR Contact: 01/02/2012  
Data Release Frequency: Quarterly

## LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003  
Date Data Arrived at EDR: 05/19/2003  
Date Made Active in Reports: 06/02/2003  
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-542-4786  
Last EDR Contact: 07/18/2011  
Next Scheduled EDR Contact: 10/31/2011  
Data Release Frequency: No Update Planned

## LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6710  
Last EDR Contact: 09/06/2011  
Next Scheduled EDR Contact: 12/19/2011  
Data Release Frequency: No Update Planned

## LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005  
Date Data Arrived at EDR: 02/15/2005  
Date Made Active in Reports: 03/28/2005  
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)  
Telephone: 909-782-4496  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: Varies

## INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018  
Date Data Arrived at EDR: 05/18/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 63

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 10/26/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

## INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/10/2018  
Date Data Arrived at EDR: 05/18/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 63

Source: Environmental Protection Agency  
Telephone: 415-972-3372  
Last EDR Contact: 10/26/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018	Source: EPA Region 8
Date Data Arrived at EDR: 05/18/2018	Telephone: 303-312-6271
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

## INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018	Source: EPA Region 7
Date Data Arrived at EDR: 05/18/2018	Telephone: 913-551-7003
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

## INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018	Source: EPA Region 6
Date Data Arrived at EDR: 05/18/2018	Telephone: 214-665-6597
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

## INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/08/2018	Source: EPA Region 4
Date Data Arrived at EDR: 05/18/2018	Telephone: 404-562-8677
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

## INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/13/2018	Source: EPA Region 1
Date Data Arrived at EDR: 05/18/2018	Telephone: 617-918-1313
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

## INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018	Source: EPA, Region 5
Date Data Arrived at EDR: 05/18/2018	Telephone: 312-886-7439
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

## CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/12/2018	Telephone: 866-480-1028
Date Made Active in Reports: 10/09/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003  
Date Data Arrived at EDR: 04/07/2003  
Date Made Active in Reports: 04/25/2003  
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)  
Telephone: 707-576-2220  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 09/19/2011  
Next Scheduled EDR Contact: 01/02/2012  
Data Release Frequency: Quarterly

## SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006  
Date Data Arrived at EDR: 05/18/2006  
Date Made Active in Reports: 06/15/2006  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 07/18/2011  
Next Scheduled EDR Contact: 10/31/2011  
Data Release Frequency: Semi-Annually

## SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004  
Date Data Arrived at EDR: 11/18/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 07/01/2011  
Next Scheduled EDR Contact: 10/17/2011  
Data Release Frequency: Varies

## SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005  
Date Data Arrived at EDR: 04/05/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-3291  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: Semi-Annually

## SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008  
Date Data Arrived at EDR: 04/03/2008  
Date Made Active in Reports: 04/14/2008  
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)  
Telephone: 951-782-3298  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: Semi-Annually

## SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007  
Date Data Arrived at EDR: 09/11/2007  
Date Made Active in Reports: 09/28/2007  
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-467-2980  
Last EDR Contact: 08/08/2011  
Next Scheduled EDR Contact: 11/21/2011  
Data Release Frequency: Annually

## **State and tribal registered storage tank lists**

### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017  
Date Data Arrived at EDR: 05/30/2017  
Date Made Active in Reports: 10/13/2017  
Number of Days to Update: 136

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 10/10/2018  
Next Scheduled EDR Contact: 01/21/2019  
Data Release Frequency: Varies

### UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/10/2018  
Date Data Arrived at EDR: 09/12/2018  
Date Made Active in Reports: 10/03/2018  
Number of Days to Update: 21

Source: SWRCB  
Telephone: 916-341-5851  
Last EDR Contact: 09/12/2018  
Next Scheduled EDR Contact: 12/24/2018  
Data Release Frequency: Semi-Annually



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 09/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/12/2018	Telephone: 916-327-7844
Date Made Active in Reports: 10/03/2018	Last EDR Contact: 09/12/2018
Number of Days to Update: 21	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Varies

## MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 09/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/12/2018	Telephone: 866-480-1028
Date Made Active in Reports: 10/09/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Varies

## AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 09/17/2018
Number of Days to Update: 69	Next Scheduled EDR Contact: 12/31/2018
	Data Release Frequency: Quarterly

## INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/08/2018	Source: EPA Region 4
Date Data Arrived at EDR: 05/18/2018	Telephone: 404-562-9424
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018	Source: EPA Region 10
Date Data Arrived at EDR: 05/18/2018	Telephone: 206-553-2857
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

## INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018	Source: EPA Region 9
Date Data Arrived at EDR: 05/18/2018	Telephone: 415-972-3368
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018	Source: EPA Region 5
Date Data Arrived at EDR: 05/18/2018	Telephone: 312-886-6136
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

### INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2018	Source: EPA, Region 1
Date Data Arrived at EDR: 05/18/2018	Telephone: 617-918-1313
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

### INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/24/2018	Source: EPA Region 7
Date Data Arrived at EDR: 05/18/2018	Telephone: 913-551-7003
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

### INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/01/2018	Source: EPA Region 6
Date Data Arrived at EDR: 05/18/2018	Telephone: 214-665-7591
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

### INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018	Source: EPA Region 8
Date Data Arrived at EDR: 05/18/2018	Telephone: 303-312-6137
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

### **State and tribal voluntary cleanup sites**

#### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/30/2018  
Date Data Arrived at EDR: 07/31/2018  
Date Made Active in Reports: 09/07/2018  
Number of Days to Update: 38

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 10/30/2018  
Next Scheduled EDR Contact: 02/11/2019  
Data Release Frequency: Quarterly

## INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015  
Date Data Arrived at EDR: 09/29/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 142

Source: EPA, Region 1  
Telephone: 617-918-1102  
Last EDR Contact: 09/24/2018  
Next Scheduled EDR Contact: 01/07/2019  
Data Release Frequency: Varies

## **State and tribal Brownfields sites**

### BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/24/2018  
Date Data Arrived at EDR: 09/25/2018  
Date Made Active in Reports: 10/15/2018  
Number of Days to Update: 20

Source: State Water Resources Control Board  
Telephone: 916-323-7905  
Last EDR Contact: 09/25/2018  
Next Scheduled EDR Contact: 01/07/2019  
Data Release Frequency: Quarterly

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### **Local Brownfield lists**

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/18/2018  
Date Data Arrived at EDR: 09/18/2018  
Date Made Active in Reports: 11/09/2018  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 202-566-2777  
Last EDR Contact: 09/18/2018  
Next Scheduled EDR Contact: 12/31/2018  
Data Release Frequency: Semi-Annually

### **Local Lists of Landfill / Solid Waste Disposal Sites**

#### WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2000  
Date Data Arrived at EDR: 04/10/2000  
Date Made Active in Reports: 05/10/2000  
Number of Days to Update: 30

Source: State Water Resources Control Board  
Telephone: 916-227-4448  
Last EDR Contact: 10/25/2018  
Next Scheduled EDR Contact: 02/11/2019  
Data Release Frequency: No Update Planned

## SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/10/2018  
Date Data Arrived at EDR: 09/12/2018  
Date Made Active in Reports: 10/15/2018  
Number of Days to Update: 33

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 09/12/2018  
Next Scheduled EDR Contact: 12/24/2018  
Data Release Frequency: Quarterly

## HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 09/26/2018  
Date Data Arrived at EDR: 09/28/2018  
Date Made Active in Reports: 11/01/2018  
Number of Days to Update: 34

Source: Integrated Waste Management Board  
Telephone: 916-341-6422  
Last EDR Contact: 08/07/2018  
Next Scheduled EDR Contact: 02/25/2019  
Data Release Frequency: Varies

## INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 10/25/2018  
Next Scheduled EDR Contact: 02/11/2019  
Data Release Frequency: Varies

## DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: No Update Planned

## ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014  
Date Data Arrived at EDR: 08/06/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service  
Telephone: 301-443-1452  
Last EDR Contact: 11/02/2018  
Next Scheduled EDR Contact: 02/11/2019  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Hazardous waste / Contaminated Sites**

### **US HIST CDL: National Clandestine Laboratory Register**

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/21/2018	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/21/2018	Telephone: 202-307-1000
Date Made Active in Reports: 11/09/2018	Last EDR Contact: 11/26/2018
Number of Days to Update: 49	Next Scheduled EDR Contact: 03/11/2019
	Data Release Frequency: No Update Planned

### **HIST CAL-SITES: Calsites Database**

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

### **SCH: School Property Evaluation Program**

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/30/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/31/2018	Telephone: 916-323-3400
Date Made Active in Reports: 09/07/2018	Last EDR Contact: 10/30/2018
Number of Days to Update: 38	Next Scheduled EDR Contact: 02/11/2019
	Data Release Frequency: Quarterly

### **CDL: Clandestine Drug Labs**

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 06/12/2018	Telephone: 916-255-6504
Date Made Active in Reports: 08/06/2018	Last EDR Contact: 11/01/2018
Number of Days to Update: 55	Next Scheduled EDR Contact: 01/21/2019
	Data Release Frequency: Varies

### **TOXIC PITS: Toxic Pits Cleanup Act Sites**

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/30/1995	Telephone: 916-227-4364
Date Made Active in Reports: 09/26/1995	Last EDR Contact: 01/26/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/27/2009
	Data Release Frequency: No Update Planned

### **CERS HAZ WASTE: CERS HAZ WASTE**

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/22/2018  
Date Data Arrived at EDR: 10/23/2018  
Date Made Active in Reports: 11/30/2018  
Number of Days to Update: 38

Source: CalEPA  
Telephone: 916-323-2514  
Last EDR Contact: 10/23/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Quarterly

## US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/21/2018  
Date Data Arrived at EDR: 09/21/2018  
Date Made Active in Reports: 11/09/2018  
Number of Days to Update: 49

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 11/26/2018  
Next Scheduled EDR Contact: 03/11/2019  
Data Release Frequency: Quarterly

## Local Lists of Registered Storage Tanks

### SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994  
Date Data Arrived at EDR: 07/07/2005  
Date Made Active in Reports: 08/11/2005  
Number of Days to Update: 35

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/03/2005  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/28/2018  
Date Data Arrived at EDR: 05/25/2018  
Date Made Active in Reports: 07/10/2018  
Number of Days to Update: 46

Source: Department of Public Health  
Telephone: 707-463-4466  
Last EDR Contact: 11/26/2018  
Next Scheduled EDR Contact: 03/11/2019  
Data Release Frequency: Annually

### HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990  
Date Data Arrived at EDR: 01/25/1991  
Date Made Active in Reports: 02/12/1991  
Number of Days to Update: 18

Source: State Water Resources Control Board  
Telephone: 916-341-5851  
Last EDR Contact: 07/26/2001  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 09/11/2018  
Date Data Arrived at EDR: 09/12/2018  
Date Made Active in Reports: 10/11/2018  
Number of Days to Update: 29

Source: San Francisco County Department of Public Health  
Telephone: 415-252-3896  
Last EDR Contact: 11/01/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/22/2018	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 10/23/2018	Telephone: 916-323-2514
Date Made Active in Reports: 11/30/2018	Last EDR Contact: 10/23/2018
Number of Days to Update: 38	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Quarterly

## CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/05/1995	Telephone: 916-341-5851
Date Made Active in Reports: 09/29/1995	Last EDR Contact: 12/28/1998
Number of Days to Update: 24	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## Local Land Records

### LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/29/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2018	Telephone: 916-323-3400
Date Made Active in Reports: 10/01/2018	Last EDR Contact: 11/29/2018
Number of Days to Update: 32	Next Scheduled EDR Contact: 03/18/2019
	Data Release Frequency: Varies

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 08/13/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/04/2018	Telephone: 202-564-6023
Date Made Active in Reports: 11/16/2018	Last EDR Contact: 11/27/2018
Number of Days to Update: 43	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Semi-Annually

### DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/04/2018	Source: DTSC and SWRCB
Date Data Arrived at EDR: 09/05/2018	Telephone: 916-323-3400
Date Made Active in Reports: 10/02/2018	Last EDR Contact: 09/05/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/17/2018
	Data Release Frequency: Semi-Annually

## Records of Emergency Release Reports

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/26/2018	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/27/2018	Telephone: 202-366-4555
Date Made Active in Reports: 06/08/2018	Last EDR Contact: 09/25/2018
Number of Days to Update: 73	Next Scheduled EDR Contact: 01/07/2019
	Data Release Frequency: Quarterly

## CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 04/06/2018	Source: Office of Emergency Services
Date Data Arrived at EDR: 04/24/2018	Telephone: 916-845-8400
Date Made Active in Reports: 06/14/2018	Last EDR Contact: 07/27/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 11/05/2018
	Data Release Frequency: Semi-Annually

## LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/10/2018	Source: State Water Quality Control Board
Date Data Arrived at EDR: 09/12/2018	Telephone: 866-480-1028
Date Made Active in Reports: 10/08/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 26	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Quarterly

## MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/12/2018	Telephone: 866-480-1028
Date Made Active in Reports: 10/09/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Quarterly

## SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **Other Ascertainable Records**

### RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/01/2018  
Date Data Arrived at EDR: 03/28/2018  
Date Made Active in Reports: 06/22/2018  
Number of Days to Update: 86

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 12/03/2018  
Next Scheduled EDR Contact: 01/07/2019  
Data Release Frequency: Quarterly

## FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015  
Date Data Arrived at EDR: 07/08/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 11/19/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Varies

## DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 11/10/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 62

Source: USGS  
Telephone: 888-275-8747  
Last EDR Contact: 10/12/2018  
Next Scheduled EDR Contact: 01/21/2019  
Data Release Frequency: Semi-Annually

## FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 02/06/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 339

Source: U.S. Geological Survey  
Telephone: 888-275-8747  
Last EDR Contact: 10/12/2018  
Next Scheduled EDR Contact: 01/21/2019  
Data Release Frequency: N/A

## SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017  
Date Data Arrived at EDR: 02/03/2017  
Date Made Active in Reports: 04/07/2017  
Number of Days to Update: 63

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 11/16/2018  
Next Scheduled EDR Contact: 02/25/2019  
Data Release Frequency: Varies

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 08/31/2018  
Date Data Arrived at EDR: 09/25/2018  
Date Made Active in Reports: 11/09/2018  
Number of Days to Update: 45

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 09/25/2018  
Next Scheduled EDR Contact: 01/07/2019  
Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 11/05/2018
Number of Days to Update: 88	Next Scheduled EDR Contact: 02/18/2019
	Data Release Frequency: Quarterly

### 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 11/09/2018
Number of Days to Update: 73	Next Scheduled EDR Contact: 02/18/2019
	Data Release Frequency: Varies

### TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/21/2017	Telephone: 202-260-5521
Date Made Active in Reports: 01/05/2018	Last EDR Contact: 09/21/2018
Number of Days to Update: 198	Next Scheduled EDR Contact: 12/31/2018
	Data Release Frequency: Every 4 Years

### TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 01/10/2018	Telephone: 202-566-0250
Date Made Active in Reports: 01/12/2018	Last EDR Contact: 11/16/2018
Number of Days to Update: 2	Next Scheduled EDR Contact: 03/04/2019
	Data Release Frequency: Annually

### SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 10/24/2018
Number of Days to Update: 77	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 08/13/2018	Source: EPA
Date Data Arrived at EDR: 10/04/2018	Telephone: 703-416-0223
Date Made Active in Reports: 11/16/2018	Last EDR Contact: 11/27/2018
Number of Days to Update: 43	Next Scheduled EDR Contact: 03/18/2019
	Data Release Frequency: Annually

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/22/2018	Telephone: 202-564-8600
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 10/23/2018
Number of Days to Update: 44	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 08/13/2018	Source: EPA
Date Data Arrived at EDR: 10/04/2018	Telephone: 202-564-6023
Date Made Active in Reports: 11/09/2018	Last EDR Contact: 10/04/2018
Number of Days to Update: 36	Next Scheduled EDR Contact: 02/18/2019
	Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: 202-566-0500
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 10/11/2018
Number of Days to Update: 126	Next Scheduled EDR Contact: 01/21/2019
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 10/09/2018
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/21/2019
	Data Release Frequency: Quarterly

**FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

**FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

## MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/11/2018
Number of Days to Update: 43	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Quarterly

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 09/07/2018
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/17/2018
	Data Release Frequency: Varies

## COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 12/03/2018
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/18/2019
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 10/26/2018
Number of Days to Update: 15	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/03/2018	Telephone: 202-343-9775
Date Made Active in Reports: 11/09/2018	Last EDR Contact: 10/03/2018
Number of Days to Update: 37	Next Scheduled EDR Contact: 01/14/2019
	Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 10/30/2018
Number of Days to Update: 42	Next Scheduled EDR Contact: 02/11/2019
	Data Release Frequency: Varies

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/30/2018  
Date Data Arrived at EDR: 07/17/2018  
Date Made Active in Reports: 10/05/2018  
Number of Days to Update: 80

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 10/01/2018  
Next Scheduled EDR Contact: 12/31/2018  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 09/28/2017  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 11/21/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Biennially

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 07/14/2015  
Date Made Active in Reports: 01/10/2017  
Number of Days to Update: 546

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 10/09/2018  
Next Scheduled EDR Contact: 01/21/2019  
Data Release Frequency: Semi-Annually

## FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017  
Date Data Arrived at EDR: 09/11/2018  
Date Made Active in Reports: 09/14/2018  
Number of Days to Update: 3

Source: Department of Energy  
Telephone: 202-586-3559  
Last EDR Contact: 11/01/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Varies

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017  
Date Data Arrived at EDR: 10/11/2017  
Date Made Active in Reports: 11/03/2017  
Number of Days to Update: 23

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 11/16/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 08/13/2018  
Date Data Arrived at EDR: 10/04/2018  
Date Made Active in Reports: 11/16/2018  
Number of Days to Update: 43

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 11/27/2018  
Next Scheduled EDR Contact: 01/14/2019  
Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2018  
Date Data Arrived at EDR: 08/29/2018  
Date Made Active in Reports: 10/05/2018  
Number of Days to Update: 37

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 11/30/2018  
Next Scheduled EDR Contact: 03/11/2019  
Data Release Frequency: Semi-Annually

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 11/30/2018  
Next Scheduled EDR Contact: 03/11/2019  
Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 11/30/2018  
Next Scheduled EDR Contact: 03/11/2019  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2018	Source: Department of Interior
Date Data Arrived at EDR: 09/11/2018	Telephone: 202-208-2609
Date Made Active in Reports: 09/14/2018	Last EDR Contact: 09/10/2018
Number of Days to Update: 3	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Quarterly

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/07/2018	Source: EPA
Date Data Arrived at EDR: 09/05/2018	Telephone: (415) 947-8000
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 09/18/2018
Number of Days to Update: 30	Next Scheduled EDR Contact: 12/17/2018
	Data Release Frequency: Quarterly

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2018	Telephone: 202-564-0527
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 11/30/2018
Number of Days to Update: 71	Next Scheduled EDR Contact: 03/11/2019
	Data Release Frequency: Varies

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2017	Source: Department of Defense
Date Data Arrived at EDR: 06/19/2018	Telephone: 703-704-1564
Date Made Active in Reports: 09/14/2018	Last EDR Contact: 10/15/2018
Number of Days to Update: 87	Next Scheduled EDR Contact: 01/28/2019
	Data Release Frequency: Varies

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/05/2018	Telephone: 202-564-2280
Date Made Active in Reports: 09/14/2018	Last EDR Contact: 09/05/2018
Number of Days to Update: 9	Next Scheduled EDR Contact: 12/17/2018
	Data Release Frequency: Quarterly

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/22/2018  
Date Data Arrived at EDR: 08/22/2018  
Date Made Active in Reports: 10/05/2018  
Number of Days to Update: 44

Source: EPA  
Telephone: 800-385-6164  
Last EDR Contact: 11/19/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Quarterly

## CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989  
Date Data Arrived at EDR: 07/27/1994  
Date Made Active in Reports: 08/02/1994  
Number of Days to Update: 6

Source: Department of Health Services  
Telephone: 916-255-2118  
Last EDR Contact: 05/31/1994  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/24/2018  
Date Data Arrived at EDR: 09/25/2018  
Date Made Active in Reports: 10/16/2018  
Number of Days to Update: 21

Source: CAL EPA/Office of Emergency Information  
Telephone: 916-323-3400  
Last EDR Contact: 09/25/2018  
Next Scheduled EDR Contact: 01/07/2019  
Data Release Frequency: Quarterly

## CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 09/11/2018  
Date Data Arrived at EDR: 09/12/2018  
Date Made Active in Reports: 09/19/2018  
Number of Days to Update: 7

Source: San Francisco County Department of Environmental Health  
Telephone: 415-252-3896  
Last EDR Contact: 11/01/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Varies

## CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 08/28/2018  
Date Data Arrived at EDR: 08/30/2018  
Date Made Active in Reports: 11/01/2018  
Number of Days to Update: 63

Source: Livermore-Pleasanton Fire Department  
Telephone: 925-454-2361  
Last EDR Contact: 11/26/2018  
Next Scheduled EDR Contact: 02/25/2019  
Data Release Frequency: Varies

## DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 10/15/2018  
Date Data Arrived at EDR: 10/16/2018  
Date Made Active in Reports: 11/16/2018  
Number of Days to Update: 31

Source: Antelope Valley Air Quality Management District  
Telephone: 661-723-8070  
Last EDR Contact: 11/29/2018  
Next Scheduled EDR Contact: 03/18/2019  
Data Release Frequency: Varies

## DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/30/2018  
Date Data Arrived at EDR: 09/27/2018  
Date Made Active in Reports: 11/01/2018  
Number of Days to Update: 35

Source: Department of Toxic Substance Control  
Telephone: 916-327-4498  
Last EDR Contact: 11/29/2018  
Next Scheduled EDR Contact: 03/18/2019  
Data Release Frequency: Annually

**DRYCLEAN SOUTH COAST:** South Coast Air Quality Management District Drycleaner Listing  
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 10/04/2018  
Date Data Arrived at EDR: 10/05/2018  
Date Made Active in Reports: 11/01/2018  
Number of Days to Update: 27

Source: South Coast Air Quality Management District  
Telephone: 909-396-3211  
Last EDR Contact: 11/26/2018  
Next Scheduled EDR Contact: 03/11/2019  
Data Release Frequency: Varies

**EMI:** Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 06/20/2018  
Date Made Active in Reports: 08/06/2018  
Number of Days to Update: 47

Source: California Air Resources Board  
Telephone: 916-322-2990  
Last EDR Contact: 09/21/2018  
Next Scheduled EDR Contact: 12/31/2018  
Data Release Frequency: Varies

**ENF:** Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/01/2018  
Date Data Arrived at EDR: 08/02/2018  
Date Made Active in Reports: 09/07/2018  
Number of Days to Update: 36

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 11/01/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

**Financial Assurance 1:** Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/19/2018  
Date Data Arrived at EDR: 10/23/2018  
Date Made Active in Reports: 11/30/2018  
Number of Days to Update: 38

Source: Department of Toxic Substances Control  
Telephone: 916-255-3628  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

**Financial Assurance 2:** Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/14/2018  
Date Data Arrived at EDR: 08/16/2018  
Date Made Active in Reports: 09/10/2018  
Number of Days to Update: 25

Source: California Integrated Waste Management Board  
Telephone: 916-341-6066  
Last EDR Contact: 11/07/2018  
Next Scheduled EDR Contact: 02/25/2019  
Data Release Frequency: Varies

**HAZNET:** Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 10/10/2018  
Date Made Active in Reports: 11/16/2018  
Number of Days to Update: 37

Source: California Environmental Protection Agency  
Telephone: 916-255-1136  
Last EDR Contact: 10/10/2018  
Next Scheduled EDR Contact: 01/21/2019  
Data Release Frequency: Annually

## ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/20/2018  
Date Data Arrived at EDR: 08/21/2018  
Date Made Active in Reports: 09/10/2018  
Number of Days to Update: 20

Source: Department of Toxic Substances Control  
Telephone: 877-786-9427  
Last EDR Contact: 11/19/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Quarterly

## HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001  
Date Data Arrived at EDR: 01/22/2009  
Date Made Active in Reports: 04/08/2009  
Number of Days to Update: 76

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 01/22/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/20/2018  
Date Data Arrived at EDR: 08/21/2018  
Date Made Active in Reports: 09/10/2018  
Number of Days to Update: 20

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 11/19/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Quarterly

## HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/09/2018  
Date Data Arrived at EDR: 10/10/2018  
Date Made Active in Reports: 11/16/2018  
Number of Days to Update: 37

Source: Department of Toxic Substances Control  
Telephone: 916-440-7145  
Last EDR Contact: 10/10/2018  
Next Scheduled EDR Contact: 01/21/2019  
Data Release Frequency: Quarterly

## MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/10/2018  
Date Data Arrived at EDR: 09/12/2018  
Date Made Active in Reports: 10/09/2018  
Number of Days to Update: 27

Source: Department of Conservation  
Telephone: 916-322-1080  
Last EDR Contact: 09/12/2018  
Next Scheduled EDR Contact: 12/24/2018  
Data Release Frequency: Quarterly

## MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/28/2018  
Date Data Arrived at EDR: 09/05/2018  
Date Made Active in Reports: 10/03/2018  
Number of Days to Update: 28

Source: Department of Public Health  
Telephone: 916-558-1784  
Last EDR Contact: 09/05/2018  
Next Scheduled EDR Contact: 12/17/2018  
Data Release Frequency: Varies

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/09/2018  
Date Data Arrived at EDR: 08/10/2018  
Date Made Active in Reports: 09/10/2018  
Number of Days to Update: 31

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 11/14/2018  
Next Scheduled EDR Contact: 02/25/2019  
Data Release Frequency: Quarterly

## PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 09/04/2018  
Date Data Arrived at EDR: 09/05/2018  
Date Made Active in Reports: 10/03/2018  
Number of Days to Update: 28

Source: Department of Pesticide Regulation  
Telephone: 916-445-4038  
Last EDR Contact: 09/05/2018  
Next Scheduled EDR Contact: 12/17/2018  
Data Release Frequency: Quarterly

## PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 09/10/2018  
Date Data Arrived at EDR: 09/12/2018  
Date Made Active in Reports: 10/15/2018  
Number of Days to Update: 33

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 09/12/2018  
Next Scheduled EDR Contact: 12/24/2018  
Data Release Frequency: Quarterly

## NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/19/2018  
Date Data Arrived at EDR: 09/20/2018  
Date Made Active in Reports: 10/19/2018  
Number of Days to Update: 29

Source: State Water Resources Control Board  
Telephone: 916-445-3846  
Last EDR Contact: 09/17/2018  
Next Scheduled EDR Contact: 12/31/2018  
Data Release Frequency: No Update Planned

## UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 04/27/2018  
Date Data Arrived at EDR: 06/13/2018  
Date Made Active in Reports: 07/17/2018  
Number of Days to Update: 34

Source: Department of Conservation  
Telephone: 916-445-2408  
Last EDR Contact: 09/13/2018  
Next Scheduled EDR Contact: 12/24/2018  
Data Release Frequency: Varies

## WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/08/2018  
Date Data Arrived at EDR: 07/11/2018  
Date Made Active in Reports: 09/13/2018  
Number of Days to Update: 64

Source: RWQCB, Central Valley Region  
Telephone: 559-445-5577  
Last EDR Contact: 10/12/2018  
Next Scheduled EDR Contact: 01/21/2019  
Data Release Frequency: Varies

## WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007  
Date Data Arrived at EDR: 06/20/2007  
Date Made Active in Reports: 06/29/2007  
Number of Days to Update: 9

Source: State Water Resources Control Board  
Telephone: 916-341-5227  
Last EDR Contact: 11/14/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Quarterly

## CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/22/2018  
Date Data Arrived at EDR: 10/23/2018  
Date Made Active in Reports: 11/30/2018  
Number of Days to Update: 38

Source: California Environmental Protection Agency  
Telephone: 916-323-2514  
Last EDR Contact: 10/23/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

## WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009  
Date Data Arrived at EDR: 07/21/2009  
Date Made Active in Reports: 08/03/2009  
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board  
Telephone: 213-576-6726  
Last EDR Contact: 09/25/2018  
Next Scheduled EDR Contact: 01/07/2019  
Data Release Frequency: Varies

## NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 09/10/2018  
Date Data Arrived at EDR: 09/12/2018  
Date Made Active in Reports: 10/09/2018  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/12/2018  
Next Scheduled EDR Contact: 12/24/2018  
Data Release Frequency: Varies

## UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 09/10/2018  
Date Data Arrived at EDR: 09/12/2018  
Date Made Active in Reports: 10/09/2018  
Number of Days to Update: 27

Source: State Water Resource Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/12/2018  
Next Scheduled EDR Contact: 12/24/2018  
Data Release Frequency: Varies

## OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 09/10/2018  
Date Data Arrived at EDR: 09/12/2018  
Date Made Active in Reports: 10/09/2018  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/12/2018  
Next Scheduled EDR Contact: 12/24/2018  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 09/04/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/05/2018	Telephone: 866-794-4977
Date Made Active in Reports: 10/02/2018	Last EDR Contact: 12/04/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 03/18/2019
	Data Release Frequency: Varies

## WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/12/2018	Telephone: 916-341-5810
Date Made Active in Reports: 10/09/2018	Last EDR Contact: 09/12/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Quarterly

## WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 09/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/12/2018	Telephone: 866-480-1028
Date Made Active in Reports: 10/09/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Varies

## PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 09/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/12/2018	Telephone: 866-480-1028
Date Made Active in Reports: 10/09/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Varies

## SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 09/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/12/2018	Telephone: 866-480-1028
Date Made Active in Reports: 10/09/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Varies

## PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 09/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/12/2018	Telephone: 866-480-1028
Date Made Active in Reports: 10/09/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 09/10/2018

Date Data Arrived at EDR: 09/12/2018

Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028

Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018

Data Release Frequency: Varies

## EDR HIGH RISK HISTORICAL RECORDS

### ***EDR Exclusive Records***

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc.

Telephone: N/A

Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc.

Telephone: N/A

Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

#### EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc.

Telephone: N/A

Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## EDR RECOVERED GOVERNMENT ARCHIVES

### **Exclusive Recovered Govt. Archives**

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A	Source: Department of Resources Recycling and Recovery
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/13/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 196	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/30/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 182	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

## COUNTY RECORDS

### ALAMEDA COUNTY:

#### CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 10/05/2018	Source: Alameda County Environmental Health Services
Date Data Arrived at EDR: 10/10/2018	Telephone: 510-567-6700
Date Made Active in Reports: 11/01/2018	Last EDR Contact: 10/05/2018
Number of Days to Update: 22	Next Scheduled EDR Contact: 01/21/2019
	Data Release Frequency: Semi-Annually

#### UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/05/2018	Source: Alameda County Environmental Health Services
Date Data Arrived at EDR: 10/10/2018	Telephone: 510-567-6700
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 10/05/2018
Number of Days to Update: 23	Next Scheduled EDR Contact: 04/24/2047
	Data Release Frequency: Semi-Annually

### AMADOR COUNTY:

#### CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 07/01/2018	Source: Amador County Environmental Health
Date Data Arrived at EDR: 07/24/2018	Telephone: 209-223-6439
Date Made Active in Reports: 08/20/2018	Last EDR Contact: 11/29/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 03/18/2019
	Data Release Frequency: Varies

### BUTTE COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA BUTTE: CUPA Facility Listing  
Cupa facility list.

Date of Government Version: 04/21/2017  
Date Data Arrived at EDR: 04/25/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 106

Source: Public Health Department  
Telephone: 530-538-7149  
Last EDR Contact: 10/05/2018  
Next Scheduled EDR Contact: 01/21/2019  
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing  
Cupa Facility Listing

Date of Government Version: 08/02/2018  
Date Data Arrived at EDR: 08/06/2018  
Date Made Active in Reports: 08/20/2018  
Number of Days to Update: 14

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 09/24/2018  
Next Scheduled EDR Contact: 01/07/2019  
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List  
Cupa facility list.

Date of Government Version: 05/23/2018  
Date Data Arrived at EDR: 05/24/2018  
Date Made Active in Reports: 07/13/2018  
Number of Days to Update: 50

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 11/14/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/20/2018  
Date Data Arrived at EDR: 08/21/2018  
Date Made Active in Reports: 09/11/2018  
Number of Days to Update: 21

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 10/29/2018  
Next Scheduled EDR Contact: 02/11/2019  
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List  
Cupa Facility list

Date of Government Version: 08/16/2018  
Date Data Arrived at EDR: 11/06/2018  
Date Made Active in Reports: 11/14/2018  
Number of Days to Update: 8

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 10/25/2018  
Next Scheduled EDR Contact: 02/11/2019  
Data Release Frequency: Varies

EL DORADO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 09/04/2018  
Date Data Arrived at EDR: 09/05/2018  
Date Made Active in Reports: 09/18/2018  
Number of Days to Update: 13

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 11/16/2018  
Next Scheduled EDR Contact: 02/11/2019  
Data Release Frequency: Varies

## FRESNO COUNTY:

### CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/16/2018  
Date Data Arrived at EDR: 10/18/2018  
Date Made Active in Reports: 11/14/2018  
Number of Days to Update: 27

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 10/15/2018  
Next Scheduled EDR Contact: 01/14/2019  
Data Release Frequency: Semi-Annually

## GLENN COUNTY:

### CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018  
Date Data Arrived at EDR: 01/24/2018  
Date Made Active in Reports: 03/14/2018  
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District  
Telephone: 830-934-6500  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

## HUMBOLDT COUNTY:

### CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 07/11/2018  
Date Data Arrived at EDR: 07/13/2018  
Date Made Active in Reports: 08/22/2018  
Number of Days to Update: 40

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 11/19/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Semi-Annually

## IMPERIAL COUNTY:

### CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 10/22/2018  
Date Data Arrived at EDR: 10/25/2018  
Date Made Active in Reports: 11/14/2018  
Number of Days to Update: 20

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

## INYO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018  
Date Data Arrived at EDR: 04/03/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 72

Source: Inyo County Environmental Health Services  
Telephone: 760-878-0238  
Last EDR Contact: 11/14/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Varies

## KERN COUNTY:

### UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 07/20/2018  
Date Data Arrived at EDR: 07/25/2018  
Date Made Active in Reports: 09/12/2018  
Number of Days to Update: 49

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 11/01/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Quarterly

## KINGS COUNTY:

### CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/23/2018  
Date Data Arrived at EDR: 08/24/2018  
Date Made Active in Reports: 09/18/2018  
Number of Days to Update: 25

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 11/14/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Varies

## LAKE COUNTY:

### CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 11/07/2018  
Date Data Arrived at EDR: 11/08/2018  
Date Made Active in Reports: 11/14/2018  
Number of Days to Update: 6

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 10/15/2018  
Next Scheduled EDR Contact: 01/28/2019  
Data Release Frequency: Varies

## LASSEN COUNTY:

### CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 10/15/2018  
Date Data Arrived at EDR: 10/23/2018  
Date Made Active in Reports: 11/14/2018  
Number of Days to Update: 22

Source: Lassen County Environmental Health  
Telephone: 530-251-8528  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

## LOS ANGELES COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## AOCONCERN: San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009  
Date Data Arrived at EDR: 03/31/2009  
Date Made Active in Reports: 10/23/2009  
Number of Days to Update: 206

Source: EPA Region 9  
Telephone: 415-972-3178  
Last EDR Contact: 09/17/2018  
Next Scheduled EDR Contact: 12/31/2018  
Data Release Frequency: No Update Planned

## HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 09/20/2018  
Date Data Arrived at EDR: 10/12/2018  
Date Made Active in Reports: 11/16/2018  
Number of Days to Update: 35

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 10/05/2018  
Next Scheduled EDR Contact: 01/21/2019  
Data Release Frequency: Semi-Annually

## LF LOS ANGELES: List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/15/2018  
Date Data Arrived at EDR: 10/16/2018  
Date Made Active in Reports: 11/16/2018  
Number of Days to Update: 31

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 10/16/2018  
Next Scheduled EDR Contact: 01/28/2019  
Data Release Frequency: Varies

## LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2018  
Date Data Arrived at EDR: 05/01/2018  
Date Made Active in Reports: 05/14/2018  
Number of Days to Update: 13

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 10/15/2018  
Next Scheduled EDR Contact: 01/28/2019  
Data Release Frequency: Varies

## SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 07/01/2018  
Date Data Arrived at EDR: 10/16/2018  
Date Made Active in Reports: 11/16/2018  
Number of Days to Update: 31

Source: Community Health Services  
Telephone: 323-890-7806  
Last EDR Contact: 10/16/2018  
Next Scheduled EDR Contact: 01/28/2019  
Data Release Frequency: Annually

## UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017  
Date Data Arrived at EDR: 04/19/2017  
Date Made Active in Reports: 05/10/2017  
Number of Days to Update: 21

Source: City of El Segundo Fire Department  
Telephone: 310-524-2236  
Last EDR Contact: 10/15/2018  
Next Scheduled EDR Contact: 01/28/2019  
Data Release Frequency: Semi-Annually

## UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017  
Date Data Arrived at EDR: 03/10/2017  
Date Made Active in Reports: 05/03/2017  
Number of Days to Update: 54

Source: City of Long Beach Fire Department  
Telephone: 562-570-2563  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST TORRANCE: City of Torrance Underground Storage Tank  
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/02/2018	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 10/05/2018	Telephone: 310-618-2973
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 10/05/2018
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/21/2019
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/30/2018	Source: Madera County Environmental Health
Date Data Arrived at EDR: 09/04/2018	Telephone: 559-675-7823
Date Made Active in Reports: 09/19/2018	Last EDR Contact: 11/14/2018
Number of Days to Update: 15	Next Scheduled EDR Contact: 03/04/2019
	Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites  
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 10/01/2018
Number of Days to Update: 29	Next Scheduled EDR Contact: 01/14/2019
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List  
CUPA facility list.

Date of Government Version: 08/29/2018	Source: Merced County Environmental Health
Date Data Arrived at EDR: 08/31/2018	Telephone: 209-381-1094
Date Made Active in Reports: 09/19/2018	Last EDR Contact: 11/14/2018
Number of Days to Update: 19	Next Scheduled EDR Contact: 03/04/2019
	Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List  
CUPA Facility List

Date of Government Version: 07/18/2018	Source: Mono County Health Department
Date Data Arrived at EDR: 09/04/2018	Telephone: 760-932-5580
Date Made Active in Reports: 09/19/2018	Last EDR Contact: 11/26/2018
Number of Days to Update: 15	Next Scheduled EDR Contact: 03/11/2019
	Data Release Frequency: Varies

MONTEREY COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/29/2018  
Date Data Arrived at EDR: 11/01/2018  
Date Made Active in Reports: 11/16/2018  
Number of Days to Update: 15

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 10/01/2018  
Next Scheduled EDR Contact: 01/14/2019  
Data Release Frequency: Varies

## NAPA COUNTY:

### LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017  
Date Data Arrived at EDR: 01/11/2017  
Date Made Active in Reports: 03/02/2017  
Number of Days to Update: 50

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 11/21/2018  
Next Scheduled EDR Contact: 03/11/2019  
Data Release Frequency: No Update Planned

### UST NAPA: Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 08/27/2018  
Date Data Arrived at EDR: 08/28/2018  
Date Made Active in Reports: 10/03/2018  
Number of Days to Update: 36

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 11/26/2018  
Next Scheduled EDR Contact: 03/11/2019  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 11/06/2018  
Date Data Arrived at EDR: 11/08/2018  
Date Made Active in Reports: 11/14/2018  
Number of Days to Update: 6

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 10/25/2018  
Next Scheduled EDR Contact: 02/11/2019  
Data Release Frequency: Varies

## ORANGE COUNTY:

### IND\_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 07/13/2018  
Date Data Arrived at EDR: 08/08/2018  
Date Made Active in Reports: 09/10/2018  
Number of Days to Update: 33

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/05/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Annually

### LUST ORANGE: List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/13/2018  
Date Data Arrived at EDR: 08/08/2018  
Date Made Active in Reports: 09/10/2018  
Number of Days to Update: 33

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/05/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST ORANGE: List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/13/2018  
Date Data Arrived at EDR: 08/06/2018  
Date Made Active in Reports: 09/12/2018  
Number of Days to Update: 37

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/06/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Quarterly

## PLACER COUNTY:

### MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/04/2018  
Date Data Arrived at EDR: 09/06/2018  
Date Made Active in Reports: 10/03/2018  
Number of Days to Update: 27

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 11/29/2018  
Next Scheduled EDR Contact: 03/18/2019  
Data Release Frequency: Semi-Annually

## PLUMAS COUNTY:

### CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 07/19/2018  
Date Data Arrived at EDR: 07/25/2018  
Date Made Active in Reports: 09/05/2018  
Number of Days to Update: 42

Source: Plumas County Environmental Health  
Telephone: 530-283-6355  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

## RIVERSIDE COUNTY:

### LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/10/2018  
Date Data Arrived at EDR: 10/12/2018  
Date Made Active in Reports: 10/16/2018  
Number of Days to Update: 4

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 09/17/2018  
Next Scheduled EDR Contact: 12/31/2018  
Data Release Frequency: Quarterly

### UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 10/10/2018  
Date Data Arrived at EDR: 10/12/2018  
Date Made Active in Reports: 11/05/2018  
Number of Days to Update: 24

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 09/17/2018  
Next Scheduled EDR Contact: 12/31/2018  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

### CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/03/2018  
Date Data Arrived at EDR: 10/02/2018  
Date Made Active in Reports: 11/01/2018  
Number of Days to Update: 30

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 10/02/2018  
Next Scheduled EDR Contact: 01/14/2019  
Data Release Frequency: Quarterly

## ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/23/2018  
Date Data Arrived at EDR: 10/02/2018  
Date Made Active in Reports: 11/02/2018  
Number of Days to Update: 31

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 10/02/2018  
Next Scheduled EDR Contact: 01/14/2019  
Data Release Frequency: Quarterly

## SAN BENITO COUNTY:

### CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 08/07/2018  
Date Data Arrived at EDR: 08/09/2018  
Date Made Active in Reports: 09/05/2018  
Number of Days to Update: 27

Source: San Benito County Environmental Health  
Telephone: N/A  
Last EDR Contact: 11/14/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Varies

## SAN BERNARDINO COUNTY:

### PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 07/27/2018  
Date Data Arrived at EDR: 07/31/2018  
Date Made Active in Reports: 09/10/2018  
Number of Days to Update: 41

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 11/05/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

### HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 06/04/2018  
Date Data Arrived at EDR: 06/06/2018  
Date Made Active in Reports: 07/17/2018  
Number of Days to Update: 41

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 09/06/2018  
Next Scheduled EDR Contact: 12/17/2018  
Data Release Frequency: Quarterly



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018  
Date Data Arrived at EDR: 04/24/2018  
Date Made Active in Reports: 06/19/2018  
Number of Days to Update: 56

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

## SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 10/22/2018  
Date Data Arrived at EDR: 10/23/2018  
Date Made Active in Reports: 11/30/2018  
Number of Days to Update: 38

Source: Department of Environmental Health  
Telephone: 858-505-6874  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

## SAN DIEGO CO. SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010  
Date Data Arrived at EDR: 06/15/2010  
Date Made Active in Reports: 07/09/2010  
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health  
Telephone: 619-338-2371  
Last EDR Contact: 11/29/2018  
Next Scheduled EDR Contact: 03/18/2019  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008  
Date Data Arrived at EDR: 09/19/2008  
Date Made Active in Reports: 09/29/2008  
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 11/01/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Quarterly

### UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 09/17/2018  
Date Data Arrived at EDR: 09/18/2018  
Date Made Active in Reports: 10/03/2018  
Number of Days to Update: 15

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 11/01/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

### UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018  
Date Data Arrived at EDR: 06/26/2018  
Date Made Active in Reports: 07/11/2018  
Number of Days to Update: 15

Source: Environmental Health Department  
Telephone: N/A  
Last EDR Contact: 09/17/2018  
Next Scheduled EDR Contact: 12/31/2018  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 08/20/2018  
Date Data Arrived at EDR: 08/21/2018  
Date Made Active in Reports: 09/07/2018  
Number of Days to Update: 17

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 11/14/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Varies

## SAN MATEO COUNTY:

### BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 09/18/2018  
Date Data Arrived at EDR: 09/20/2018  
Date Made Active in Reports: 11/01/2018  
Number of Days to Update: 42

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 09/10/2018  
Next Scheduled EDR Contact: 12/24/2018  
Data Release Frequency: Annually

### LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 09/18/2018  
Date Data Arrived at EDR: 09/20/2018  
Date Made Active in Reports: 10/17/2018  
Number of Days to Update: 27

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 09/10/2018  
Next Scheduled EDR Contact: 12/24/2018  
Data Release Frequency: Semi-Annually

## SANTA BARBARA COUNTY:

### CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011  
Date Data Arrived at EDR: 09/09/2011  
Date Made Active in Reports: 10/07/2011  
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department  
Telephone: 805-686-8167  
Last EDR Contact: 11/14/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Varies

## SANTA CLARA COUNTY:

### CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 08/17/2018  
Date Data Arrived at EDR: 08/22/2018  
Date Made Active in Reports: 09/07/2018  
Number of Days to Update: 16

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 11/14/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Varies

### HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005  
Date Data Arrived at EDR: 03/30/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 22

Source: Santa Clara Valley Water District  
Telephone: 408-265-2600  
Last EDR Contact: 03/23/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014  
Date Data Arrived at EDR: 03/05/2014  
Date Made Active in Reports: 03/18/2014  
Number of Days to Update: 13

Source: Department of Environmental Health  
Telephone: 408-918-3417  
Last EDR Contact: 11/21/2018  
Next Scheduled EDR Contact: 03/11/2019  
Data Release Frequency: Annually

## SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/01/2018  
Date Data Arrived at EDR: 08/06/2018  
Date Made Active in Reports: 09/11/2018  
Number of Days to Update: 36

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 11/01/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Annually

## SANTA CRUZ COUNTY:

### CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 05/23/2017  
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health  
Telephone: 831-464-2761  
Last EDR Contact: 11/14/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Varies

## SHASTA COUNTY:

### CUPA SHASTA: CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/15/2017  
Date Data Arrived at EDR: 06/19/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 51

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789  
Last EDR Contact: 11/14/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Varies

## SOLANO COUNTY:

### LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 08/29/2018  
Date Data Arrived at EDR: 09/04/2018  
Date Made Active in Reports: 10/17/2018  
Number of Days to Update: 43

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 11/29/2018  
Next Scheduled EDR Contact: 03/18/2019  
Data Release Frequency: Quarterly

### UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 08/29/2018  
Date Data Arrived at EDR: 09/04/2018  
Date Made Active in Reports: 10/18/2018  
Number of Days to Update: 44

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 11/29/2018  
Next Scheduled EDR Contact: 03/18/2019  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SONOMA: Cupa Facility List Cupa Facility list

Date of Government Version: 09/24/2018  
Date Data Arrived at EDR: 09/25/2018  
Date Made Active in Reports: 10/16/2018  
Number of Days to Update: 21

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 09/24/2018  
Next Scheduled EDR Contact: 01/07/2019  
Data Release Frequency: Varies

## LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/02/2018  
Date Data Arrived at EDR: 10/04/2018  
Date Made Active in Reports: 10/25/2018  
Number of Days to Update: 21

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 09/24/2018  
Next Scheduled EDR Contact: 01/07/2019  
Data Release Frequency: Quarterly

## STANISLAUS COUNTY:

### CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 08/14/2018  
Date Data Arrived at EDR: 08/16/2018  
Date Made Active in Reports: 08/24/2018  
Number of Days to Update: 8

Source: Stanislaus County Department of Environmental Protection  
Telephone: 209-525-6751  
Last EDR Contact: 10/15/2018  
Next Scheduled EDR Contact: 01/28/2019  
Data Release Frequency: Varies

## SUTTER COUNTY:

### UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 09/18/2018  
Date Data Arrived at EDR: 09/20/2018  
Date Made Active in Reports: 10/25/2018  
Number of Days to Update: 35

Source: Sutter County Department of Agriculture  
Telephone: 530-822-7500  
Last EDR Contact: 11/29/2018  
Next Scheduled EDR Contact: 03/18/2019  
Data Release Frequency: Semi-Annually

## TEHAMA COUNTY:

### CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 07/17/2018  
Date Data Arrived at EDR: 08/02/2018  
Date Made Active in Reports: 09/07/2018  
Number of Days to Update: 36

Source: Tehama County Department of Environmental Health  
Telephone: 530-527-8020  
Last EDR Contact: 11/29/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Varies

## TRINITY COUNTY:

### CUPA TRINITY: CUPA Facility List Cupa facility list

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/22/2018  
Date Data Arrived at EDR: 10/25/2018  
Date Made Active in Reports: 11/14/2018  
Number of Days to Update: 20

Source: Department of Toxic Substances Control  
Telephone: 760-352-0381  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

## TULARE COUNTY:

### CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 09/13/2018  
Date Data Arrived at EDR: 09/14/2018  
Date Made Active in Reports: 09/19/2018  
Number of Days to Update: 5

Source: Tulare County Environmental Health Services Division  
Telephone: 559-624-7400  
Last EDR Contact: 11/29/2018  
Next Scheduled EDR Contact: 02/18/2019  
Data Release Frequency: Varies

## TUOLUMNE COUNTY:

### CUPA TUOLUMNE: CUPA Facility List Cupa facility list

Date of Government Version: 04/23/2018  
Date Data Arrived at EDR: 04/25/2018  
Date Made Active in Reports: 06/25/2018  
Number of Days to Update: 61

Source: Divison of Environmental Health  
Telephone: 209-533-5633  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Varies

## VENTURA COUNTY:

### BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/26/2018  
Date Data Arrived at EDR: 10/25/2018  
Date Made Active in Reports: 11/30/2018  
Number of Days to Update: 36

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 10/22/2018  
Next Scheduled EDR Contact: 02/04/2019  
Data Release Frequency: Quarterly

### LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011  
Date Data Arrived at EDR: 12/01/2011  
Date Made Active in Reports: 01/19/2012  
Number of Days to Update: 49

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 10/01/2018  
Next Scheduled EDR Contact: 01/14/2019  
Data Release Frequency: Annually

### LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008  
Date Data Arrived at EDR: 06/24/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 37

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 11/07/2018  
Next Scheduled EDR Contact: 02/25/2019  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/25/2018	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 10/25/2018	Telephone: 805-654-2813
Date Made Active in Reports: 11/30/2018	Last EDR Contact: 10/22/2018
Number of Days to Update: 36	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Quarterly

## UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 09/04/2018	Source: Environmental Health Division
Date Data Arrived at EDR: 09/12/2018	Telephone: 805-654-2813
Date Made Active in Reports: 10/04/2018	Last EDR Contact: 09/12/2018
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/24/2018
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 10/15/2018	Source: Yolo County Department of Health
Date Data Arrived at EDR: 10/19/2018	Telephone: 530-666-8646
Date Made Active in Reports: 11/05/2018	Last EDR Contact: 10/15/2018
Number of Days to Update: 17	Next Scheduled EDR Contact: 01/14/2019
	Data Release Frequency: Annually

## YUBA COUNTY:

### CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 11/05/2018	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 11/07/2018	Telephone: 530-749-7523
Date Made Active in Reports: 11/14/2018	Last EDR Contact: 10/25/2018
Number of Days to Update: 7	Next Scheduled EDR Contact: 02/11/2019
	Data Release Frequency: Varies

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/12/2018	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 11/14/2018	Telephone: 860-424-3375
Date Made Active in Reports: 12/04/2018	Last EDR Contact: 11/14/2018
Number of Days to Update: 20	Next Scheduled EDR Contact: 02/25/2019
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 07/13/2018  
Date Made Active in Reports: 08/01/2018  
Number of Days to Update: 19

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 10/09/2018  
Next Scheduled EDR Contact: 01/21/2019  
Data Release Frequency: Annually

## NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 07/01/2018  
Date Data Arrived at EDR: 08/01/2018  
Date Made Active in Reports: 08/31/2018  
Number of Days to Update: 30

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 10/31/2018  
Next Scheduled EDR Contact: 02/11/2019  
Data Release Frequency: Quarterly

## PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 10/23/2018  
Date Made Active in Reports: 11/27/2018  
Number of Days to Update: 35

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 10/15/2018  
Next Scheduled EDR Contact: 01/28/2019  
Data Release Frequency: Annually

## RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 02/23/2018  
Date Made Active in Reports: 04/09/2018  
Number of Days to Update: 45

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 11/16/2018  
Next Scheduled EDR Contact: 03/04/2019  
Data Release Frequency: Annually

## WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 06/15/2018  
Date Made Active in Reports: 07/09/2018  
Number of Days to Update: 24

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 09/06/2018  
Next Scheduled EDR Contact: 12/24/2018  
Data Release Frequency: Annually

## Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

## Electric Power Transmission Line Data

Source: PennWell Corporation

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## **STREET AND ADDRESS INFORMATION**

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

EATON ROAD ROUND-A-BOUNT  
INTERSECTION OF EATON RD. AND SR-99 OFF/ON-RAMP  
CHICO, CA 95973

### TARGET PROPERTY COORDINATES

Latitude (North): 39.775372 - 39° 46' 31.34"  
Longitude (West): 121.871886 - 121° 52' 18.79"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 596613.9  
UTM Y (Meters): 4403225.0  
Elevation: 175 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map: 5603350 RICHARDSON SPRINGS, CA  
Version Date: 2012  
  
Northwest Map: 5603332 NORD, CA  
Version Date: 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

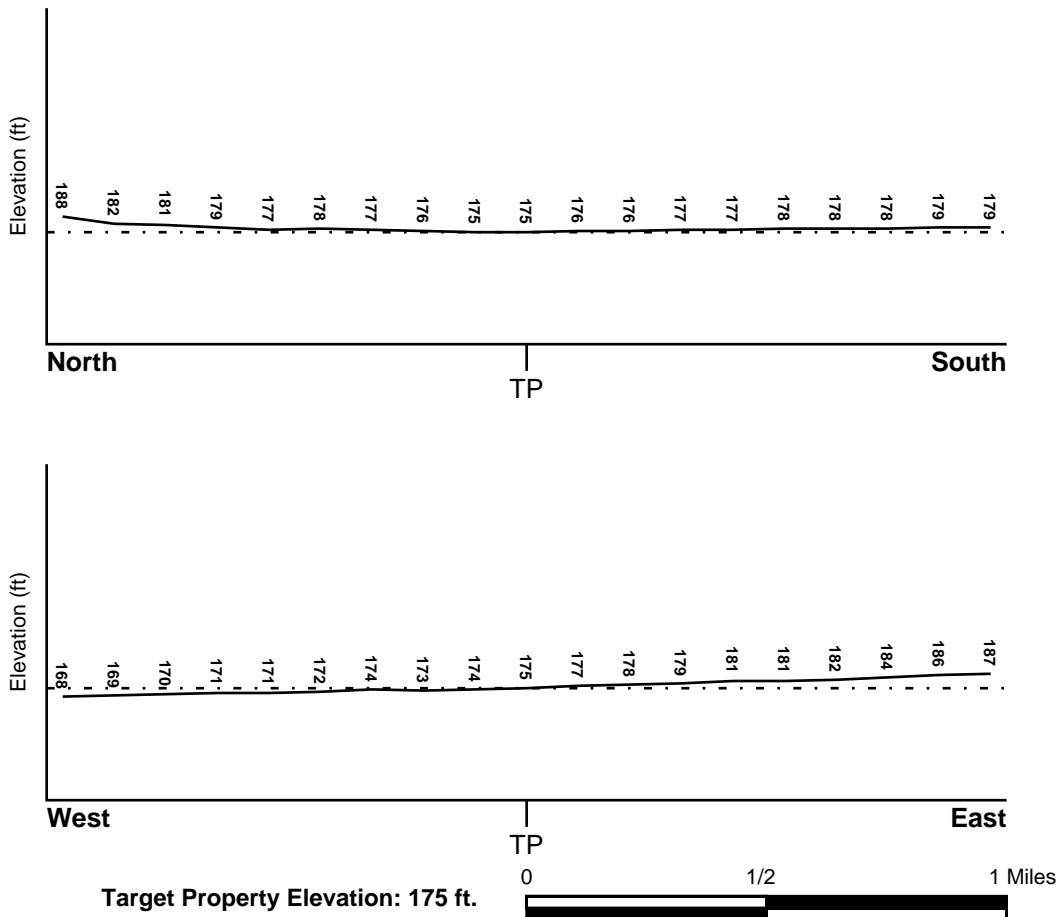
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## **FEMA FLOOD ZONE**

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06007C0340E	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06007C0320E	FEMA FIRM Flood data

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
RICHARDSON SPRINGS	YES - refer to the Overview Map and Detail Map

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### ***Site-Specific Hydrogeological Data\*:***

Search Radius:	1.25 miles
Status:	Not found

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

## GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

### ROCK STRATIGRAPHIC UNIT

Era: Cenozoic  
System: Quaternary  
Series: Quaternary  
Code: Q (*decoded above as Era, System & Series*)

### GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: CONEJO

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	30 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 7.80 Min: 6.10
2	30 inches	48 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 2.00 Min: 0.60	Max: 8.40 Min: 6.10
3	48 inches	60 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.60 Min: 0.20	Max: 8.40 Min: 6.10
4	60 inches	70 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.60 Min: 0.20	Max: 8.40 Min: 6.10

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: clay loam  
sandy clay loam  
clay

Surficial Soil Types: clay loam  
sandy clay loam  
clay

Shallow Soil Types: silty clay loam  
silty clay  
clay loam  
clay  
gravelly - sandy clay loam

Deeper Soil Types: weathered bedrock  
sandy clay loam  
sandy loam  
loam

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

stratified

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS40000193719	1/8 - 1/4 Mile East
10	USGS40000193707	1/2 - 1 Mile ESE
12	USGS40000193705	1/2 - 1 Mile ESE

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

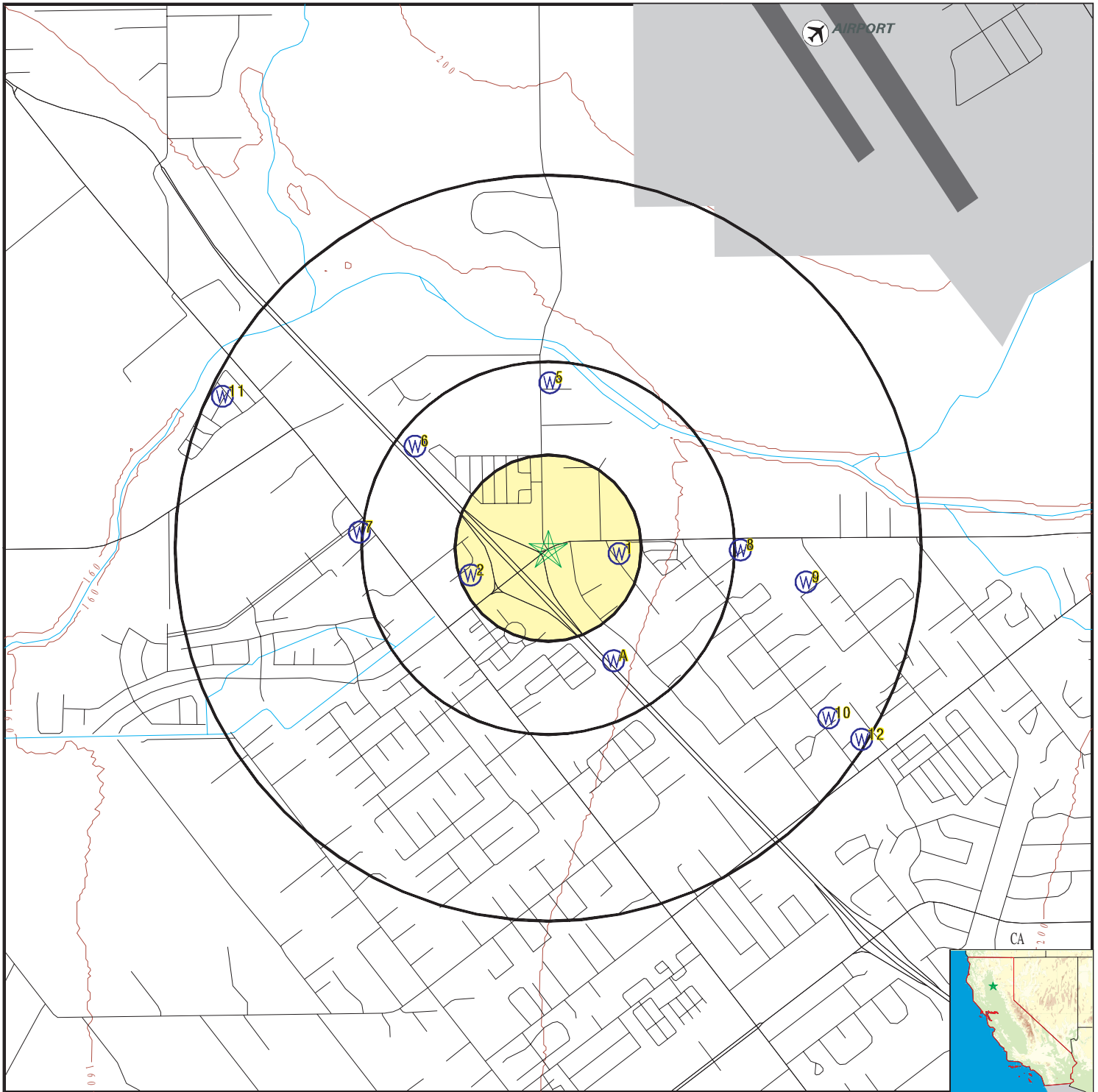
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
2	15214	1/8 - 1/4 Mile WSW
A3	15197	1/4 - 1/2 Mile SSE
A4	15198	1/4 - 1/2 Mile SE
5	CADW60000031003	1/4 - 1/2 Mile North
6	15213	1/4 - 1/2 Mile NW
7	15196	1/2 - 1 Mile West
8	CADW60000012404	1/2 - 1 Mile East
9	15199	1/2 - 1 Mile East
11	15195	1/2 - 1 Mile WNW

# PHYSICAL SETTING SOURCE MAP - 5502622.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons



- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: Eaton Road Round-A-Bout  
 ADDRESS: Intersection of Eaton Rd. and SR-99 Off/On-Ramp  
 Chico CA 95973  
 LAT/LONG: 39.775372 / 121.871886

CLIENT: Nichols Consulting Eng., Chtd.  
 CONTACT: Bobby Carpenter  
 INQUIRY #: 5502622.2s  
 DATE: December 05, 2018 11:07 am

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**1**  
**East**  
**1/8 - 1/4 Mile**  
**Higher**

**FED USGS      USGS40000193719**

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18020103
Monitor Location:	022N001E09K001M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	64
Aquifer:	Central Valley aquifer system	Well Hole Depth:	120
Formation Type:	Not Reported		
Construction Date:	19660210		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1966-02-10
Feet below surface:	35.00	Feet to sea level:	Not Reported
Note:	Not Reported		

**2**  
**WSW**  
**1/8 - 1/4 Mile**  
**Lower**

**CA WELLS      15214**

Seq:	15214	Prim sta c:	22N/01E-19D02 M
Frds no:	0410016001	County:	04
District:	02	User id:	BUG
System no:	0410016	Water type:	G
Source nam:	WELL 01 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	394628.0	Longitude:	1215229.0
Precision:	3	Status:	DS
Comment 1:	DRILLED IN 1952 TO A DEPTH OF 600-FEET.		
Comment 2:	Not Reported	Comment 3:	Not Reported
Comment 4:	Not Reported	Comment 5:	Not Reported
Comment 6:	Not Reported	Comment 7:	Not Reported

System no:	0410016	System nam:	Meadows Mobile Home Park
Hqname:	Not Reported	Address:	3541 Calle Principal
City:	Chico	State:	CA
Zip:	95926	Zip ext:	Not Reported
Pop serv:	700	Connection:	213
Area serve:	MEADOWS MOBILE HOME PARK		

**A3**  
**SSE**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      15197**

Seq:	15197	Prim sta c:	22N/01E-09P01 M
Frds no:	0400036001	County:	04
District:	34	User id:	04C
System no:	0400036	Water type:	G
Source nam:	NORTH WELL	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	394616.0	Longitude:	1215205.0
Precision:	3	Status:	AR



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Comment 1:	3156 ESPLANADE CHICO CALIFORNIA 95926		
Comment 2:	Not Reported	Comment 3:	Not Reported
Comment 4:	Not Reported	Comment 5:	Not Reported
Comment 6:	Not Reported	Comment 7:	Not Reported
System no:	0400036	System nam:	MOUNTAIN VIEW MOBILE ACRES
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		
Sample date:	30-JAN-18	Finding:	8.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	08-NOV-17	Finding:	2.6
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		
Sample date:	03-OCT-17	Finding:	0.601
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	03-OCT-17	Finding:	1.25
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	03-OCT-17	Finding:	0.505
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	03-OCT-17	Finding:	1.34
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	02-OCT-17	Finding:	8.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	07-AUG-17	Finding:	11.1
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		
Sample date:	06-JUL-17	Finding:	9.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	08-MAY-17	Finding:	11.4
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		
Sample date:	04-APR-17	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	04-APR-17	Finding:	1.12
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	04-APR-17	Finding:	0.284
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	04-APR-17	Finding:	1.07
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	04-APR-17	Finding:	0.2
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	01-FEB-17	Finding:	11.1
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		
Sample date:	04-JAN-17	Finding:	8.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	22-NOV-16	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	03-NOV-16	Finding:	10.4
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		
Sample date:	06-OCT-16	Finding:	10.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	05-JUL-16	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	05-JUL-16	Finding:	10.4
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		
Sample date:	20-APR-16	Finding:	10.3
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		
Sample date:	04-APR-16	Finding:	8.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	07-JAN-16	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	04-NOV-15	Finding:	9.9
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		
Sample date:	08-OCT-15	Finding:	7.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	05-AUG-15	Finding:	11.
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	13-JUL-15	Finding:	35.4
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	04-MAY-15	Finding:	10.8
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		
Sample date:	03-APR-15	Finding:	36.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	02-FEB-15	Finding:	10.3
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		
Sample date:	06-JAN-15	Finding:	36.9
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	12-NOV-14	Finding:	10.3
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dir:	1.		
Sample date:	03-OCT-14	Finding:	36.3
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	01-JUL-14	Finding:	35.2
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	02-APR-14	Finding:	35.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	02-JAN-14	Finding:	37.9
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-MAR-13	Finding:	36.3
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-DEC-12	Finding:	37.7
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	01-OCT-12	Finding:	34.4
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-JUL-12	Finding:	29.4
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	02-APR-12	Finding:	34.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-JAN-12	Finding:	35.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir: 2.

**A4  
SE  
1/4 - 1/2 Mile  
Higher**

**CA WELLS 15198**

Seq:	15198	Prim sta c:	22N/01E-09R01 M
Frds no:	0410002056	County:	04
District:	02	User id:	BUG
System no:	0410002	Water type:	G
Source nam:	WELL 56-01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	394616.0	Longitude:	1215201.9
Precision:	1	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	0410002	System nam:	Cal-Water Service Co.-Chico
Hqname:	CALIFORNIA WTR SERV CO	Address:	Not Reported
City:	Chico	State:	CA
Zip:	95926	Zip ext:	Not Reported
Pop serv:	75100	Connection:	21152
Area serve:	CHICO		
Sample date:	23-AUG-17	Finding:	2.422
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	10-AUG-16	Finding:	220.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	10-AUG-16	Finding:	5.6
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	10-AUG-16	Finding:	9.8
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	10-AUG-16	Finding:	2.2
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-AUG-16	Finding:	12.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-AUG-16	Finding:	17.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-AUG-16	Finding:	25.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-AUG-16	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	10-AUG-16	Finding:	2.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	10-AUG-16	Finding:	150.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	10-AUG-16	Finding:	120.
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>	Report units:	MG/L
Dir:	0.		
Sample date:	10-AUG-16	Finding:	7.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	10-AUG-16	Finding:	300.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	10-AUG-16	Finding:	11.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	10-AUG-16	Finding:	0.13
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	24-AUG-15	Finding:	23.925
Chemical:	NITRATE (AS NO <sub>3</sub> )	Report units:	MG/L
Dir:	2.		
Sample date:	13-MAY-15	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	13-MAY-15	Finding:	19.6
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dir:	0.		
Sample date:	09-FEB-15	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	09-FEB-15	Finding:	19.7
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dir:	0.		
Sample date:	13-NOV-14	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	13-NOV-14	Finding:	19.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dir:	0.		
Sample date:	12-AUG-14	Finding:	7.57
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	13-MAY-14	Finding:	7.24
Chemical:	PH, FIELD	Report units:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	12-FEB-14	Finding:	7.33
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	06-JAN-14	Finding:	7.15
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	30-DEC-13	Finding:	7.2
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	22-DEC-13	Finding:	7.2
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	16-DEC-13	Finding:	7.44
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	09-DEC-13	Finding:	7.53
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	02-DEC-13	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	26-NOV-13	Finding:	7.49
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	18-NOV-13	Finding:	7.48
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	12-NOV-13	Finding:	7.4
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	10-OCT-13	Finding:	25.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-OCT-13	Finding:	140.
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>	Report units:	MG/L
Dir:	0.		
Sample date:	10-OCT-13	Finding:	160.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	10-OCT-13	Finding:	130.
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>	Report units:	MG/L
Dir:	0.		
Sample date:	10-OCT-13	Finding:	7.5
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	10-OCT-13	Finding:	300.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	10-OCT-13	Finding:	12.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-OCT-13	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-OCT-13	Finding:	10.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	10-OCT-13	Finding:	7.2
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	10-OCT-13	Finding:	12.
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dir:	10.		
Sample date:	10-OCT-13	Finding:	220.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	10-OCT-13	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	10-OCT-13	Finding:	18.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-AUG-13	Finding:	7.63
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	14-MAY-13	Finding:	7.41
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	07-MAY-13	Finding:	0.74
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	12-FEB-13	Finding:	7.43
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	13-NOV-12	Finding:	7.77
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	14-AUG-12	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dir:	0.		
Sample date:	08-MAY-12	Finding:	7.6
Chemical:	PH, FIELD	Report units:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.	Finding:	7.3
Sample date:	14-FEB-12	Report units:	Not Reported
Chemical:	PH, FIELD		
Dir:	0.		
Sample date:	26-JAN-12	Finding:	3.
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	26-JAN-12	Finding:	2.2
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		

**5**

**North  
1/4 - 1/2 Mile  
Higher**

**CA WELLS      CADW60000031003**

Objectid:	31003	Latitude:	39.7818
Longitude:	-121.8718	Site code:	397818N1218718W001
State well numbe:	22N01E09B001M	Local well name:	'BMO 22N01E09B001M'
Well use id:	4	Well use descrip:	Residential
County id:	4	County name:	Butte
Basin code:	'5-21.57'	Basin desc:	Vina
Dwr region id:	80235	Dwr region:	Northern Region Office
Site id:	CADW60000031003		

**6**

**NW  
1/4 - 1/2 Mile  
Higher**

**CA WELLS      15213**

Seq:	15213	Prim sta c:	22N/01E-19D01 M
Frds no:	0410016002	County:	04
District:	02	User id:	BUG
System no:	0410016	Water type:	G
Source nam:	WELL 02	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	394646.3	Longitude:	1215239.0
Precision:	3	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	0410016	System nam:	Meadows Mobile Home Park
Hqname:	Not Reported	Address:	3541 Calle Principal
City:	Chico	State:	CA
Zip:	95926	Zip ext:	Not Reported
Pop serv:	700	Connection:	213
Area serve:	MEADOWS MOBILE HOME PARK		

Sample date:	17-JAN-12	Finding:	0.261
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dir:	0.		

Sample date:	17-JAN-12	Finding:	0.444
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dir:	0.		



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**7**  
**West**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      15196**

Seq:	15196	Prim sta c:	22N/01E-09E01 M
Frds no:	0400056001	County:	04
District:	34	User id:	04C
System no:	0400056	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	394634.0	Longitude:	1215249.0
Precision:	3	Status:	AR
Comment 1:	3365 ESPLANADE CHICO CALIFORNIA 95926		
Comment 2:	Not Reported	Comment 3:	Not Reported
Comment 4:	Not Reported	Comment 5:	Not Reported
Comment 6:	Not Reported	Comment 7:	Not Reported

System no:	0400056	System nam:	COUNTRY VILLA APARTMENTS
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

**8**  
**East**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADW60000012404**

Objectid:	12404	Latitude:	39.7753
Longitude:	-121.8622	Site code:	397753N1218622W001
State well numbe:	22N01E09J002M	Local well name:	"
Well use id:	4	Well use descrip:	Residential
County id:	4	County name:	Butte
Basin code:	'5-21.57'	Basin desc:	Vina
Dwr region id:	80235	Dwr region:	Northern Region Office
Site id:	CADW60000012404		

**9**  
**East**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      15199**

Seq:	15199	Prim sta c:	22N/01E-10K01 M
Frds no:	0410002058	County:	04
District:	02	User id:	BUG
System no:	0410002	Water type:	G
Source nam:	WELL 58-01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	394627.2	Longitude:	1215128.9
Precision:	1	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	0410002	System nam:	Cal-Water Service Co.-Chico
Hqname:	CALIFORNIA WTR SERV CO	Address:	Not Reported
City:	Chico	State:	CA

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Zip:	95926	Zip ext:	Not Reported
Pop serv:	75100	Connection:	21152
Area serve:	CHICO		

**10  
ESE  
1/2 - 1 Mile  
Higher**

**FED USGS    USGS40000193707**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	022N001E10N001M	Type:	Well
Description:	Not Reported	HUC:	18020103
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19640112	Well Depth:	92
Well Depth Units:	ft	Well Hole Depth:	170
Well Hole Depth Units:	ft		

**11  
WNW  
1/2 - 1 Mile  
Lower**

**CA WELLS    15195**

Seq:	15195	Prim sta c:	22N/01E-08B01 M
Frds no:	0400035001	County:	04
District:	34	User id:	04C
System no:	0400035	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	394653.0	Longitude:	1215314.0
Precision:	3	Status:	AR
Comment 1:	3549 ESPLANADE 313 CHICO CALIFORNIA 95926		
Comment 2:	Not Reported	Comment 3:	Not Reported
Comment 4:	Not Reported	Comment 5:	Not Reported
Comment 6:	Not Reported	Comment 7:	Not Reported
System no:	0400035	System nam:	RANCHO ESPLANDE MOBILE PARK
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

**12  
ESE  
1/2 - 1 Mile  
Higher**

**FED USGS    USGS40000193705**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	022N001E15C001M	Type:	Well
Description:	Not Reported	HUC:	18020103
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Construction Date: 19690917  
Well Depth Units: ft  
Well Hole Depth Units: ft

Well Depth: 50  
Well Hole Depth: 115

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95973	8	0

Federal EPA Radon Zone for BUTTE County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

---

### Federal Area Radon Information for BUTTE COUNTY, CA

Number of sites tested: 43

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.411 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.400 pCi/L	100%	0%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

#### California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

#### California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

### RADON

#### State Database: CA Radon

Source: Department of Health Services

Telephone: 916-324-2208

Radon Database for California

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### OTHER

Airport Landing Facilities: Private and public use landing facilities  
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater  
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### STREET AND ADDRESS INFORMATION

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**APPENDIX B**  
**HISTORICAL AERIAL PHOTOGRAPHS**





## **Eaton Road Round-A-Bout**

Intersection of Eaton Rd. and SR-99 Off/On-Ramp

Chico, CA 95973

Inquiry Number: 5502622.11

December 05, 2018

# The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Aerial Photo Decade Package

12/05/18

**Site Name:**

Eaton Road Round-A-Bout  
Intersection of Eaton Rd. and S  
Chico, CA 95973  
EDR Inquiry # 5502622.11

**Client Name:**

Nichols Consulting Eng.,Chtd.  
8795 Folsom Boulevard  
Sacramento, CA 95826  
Contact: Bobby Carpenter



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

### Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Acquisition Date: August 17, 1998	USGS/DOQQ
1988	1"=500'	Flight Date: January 01, 1988	USGS
1975	1"=500'	Flight Date: September 20, 1975	USGS
1973	1"=500'	Flight Date: June 30, 1973	USGS
1969	1"=500'	Flight Date: August 03, 1969	USGS
1961	1"=500'	Flight Date: January 01, 1961	USDA
1952	1"=500'	Flight Date: June 30, 1952	USDA
1947	1"=500'	Flight Date: July 10, 1947	USGS
1941	1"=500'	Flight Date: January 27, 1941	USGS
1937	1"=500'	Flight Date: September 12, 1937	USDA

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INQUIRY #: 5502622.11

YEAR: 2016

— = 500'





INQUIRY #: 5502622.11

YEAR: 2012

— = 500'





INQUIRY #: 5502622.11

YEAR: 2009

— = 500'



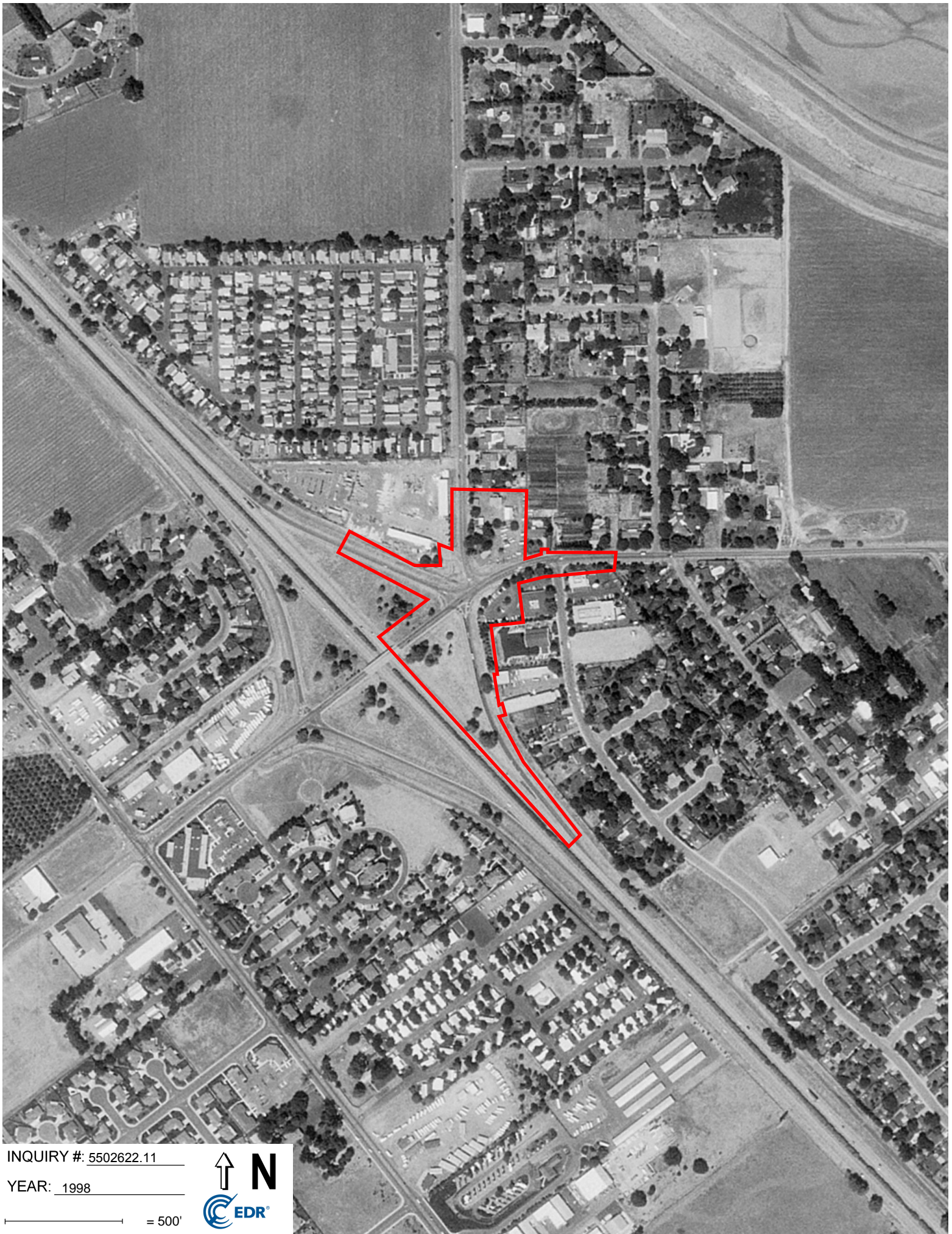


INQUIRY #: 5502622.11

YEAR: 2006

— = 500'





INQUIRY #: 5502622.11

YEAR: 1998

— = 500'





INQUIRY #: 5502622.11

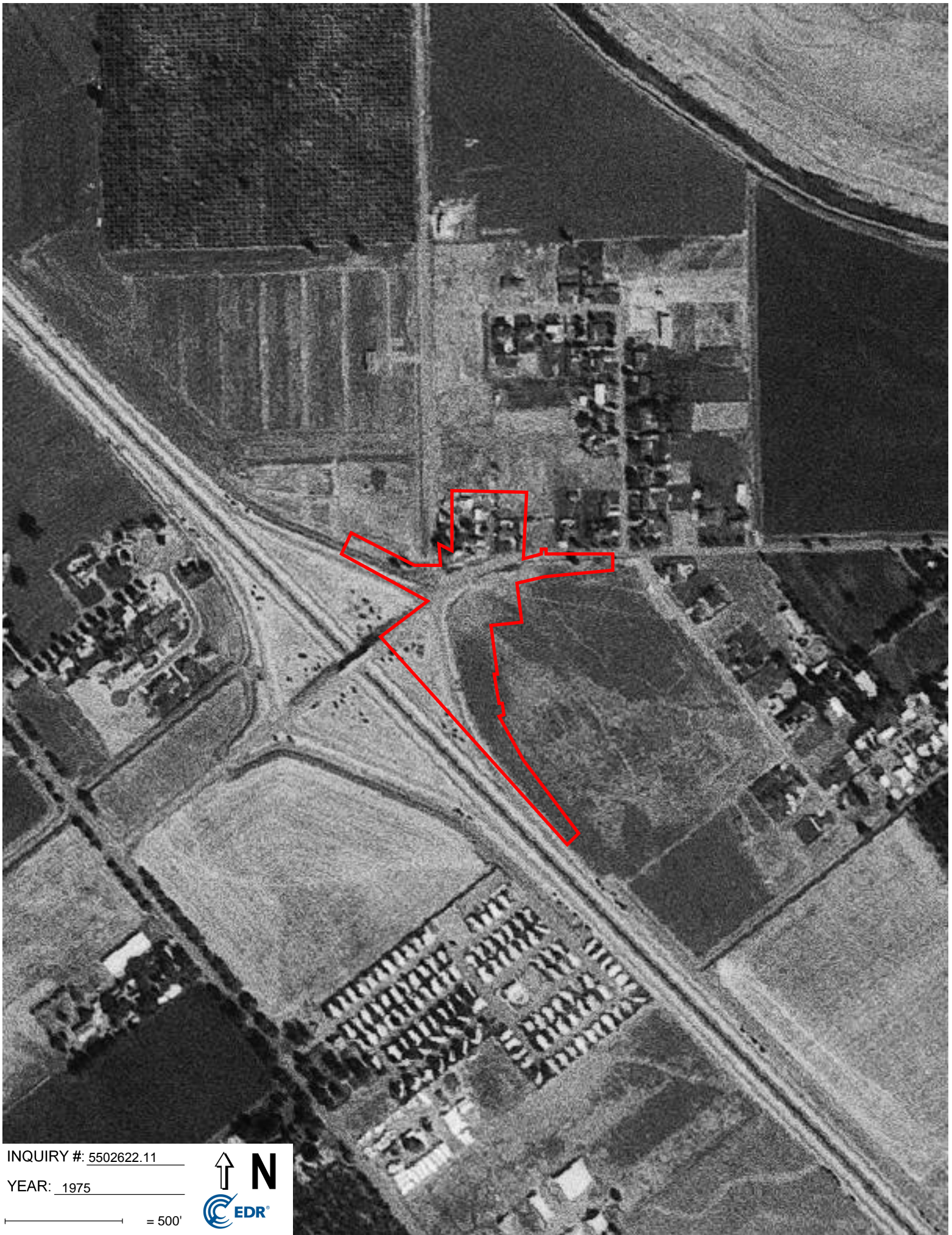
YEAR: 1988

— = 500'



Subject boundary not shown because it exceeds image extent or image is not georeferenced.



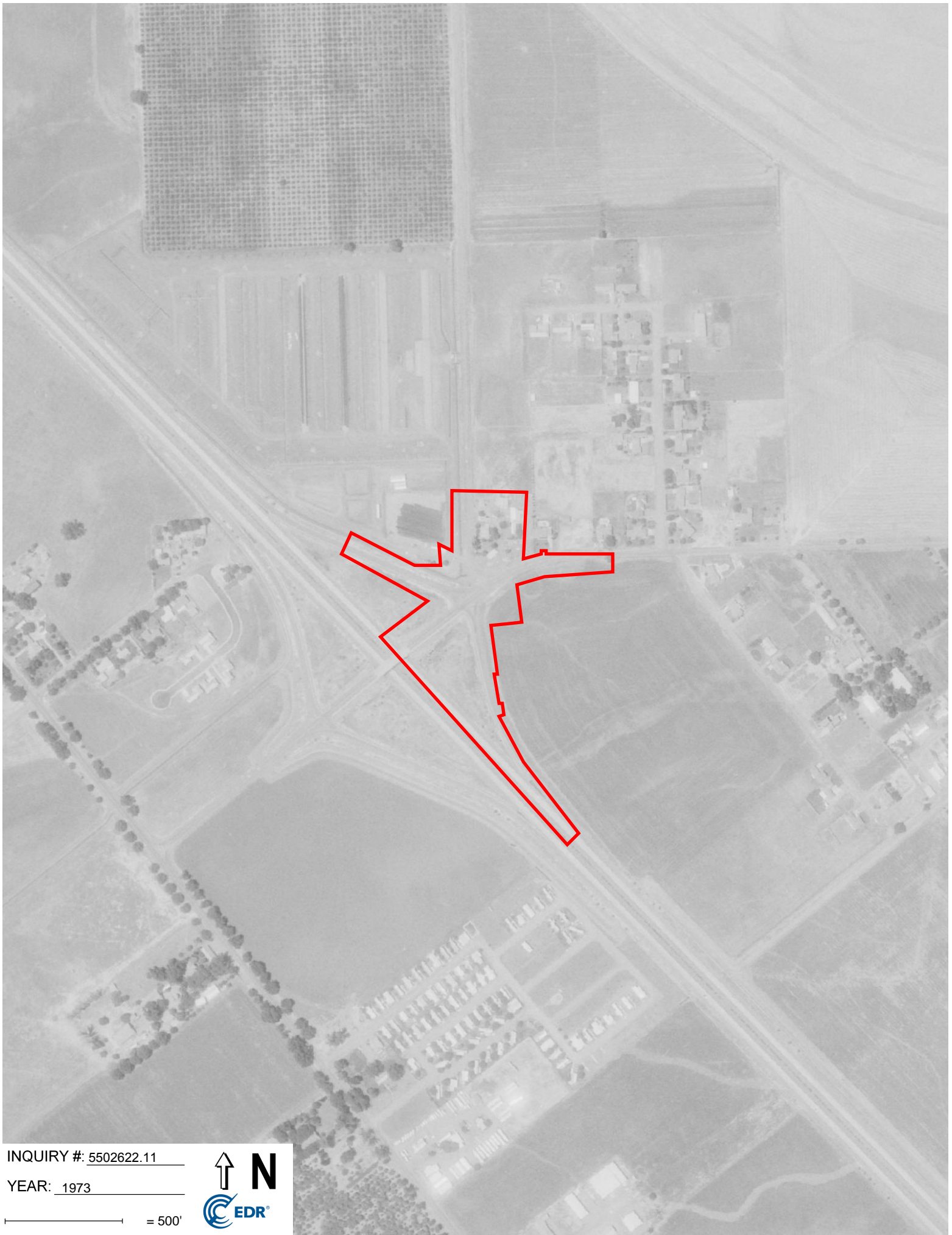


INQUIRY #: 5502622.11

YEAR: 1975

— = 500'





INQUIRY #: 5502622.11

YEAR: 1973

— = 500'





INQUIRY #: 5502622.11

YEAR: 1969

— = 500'





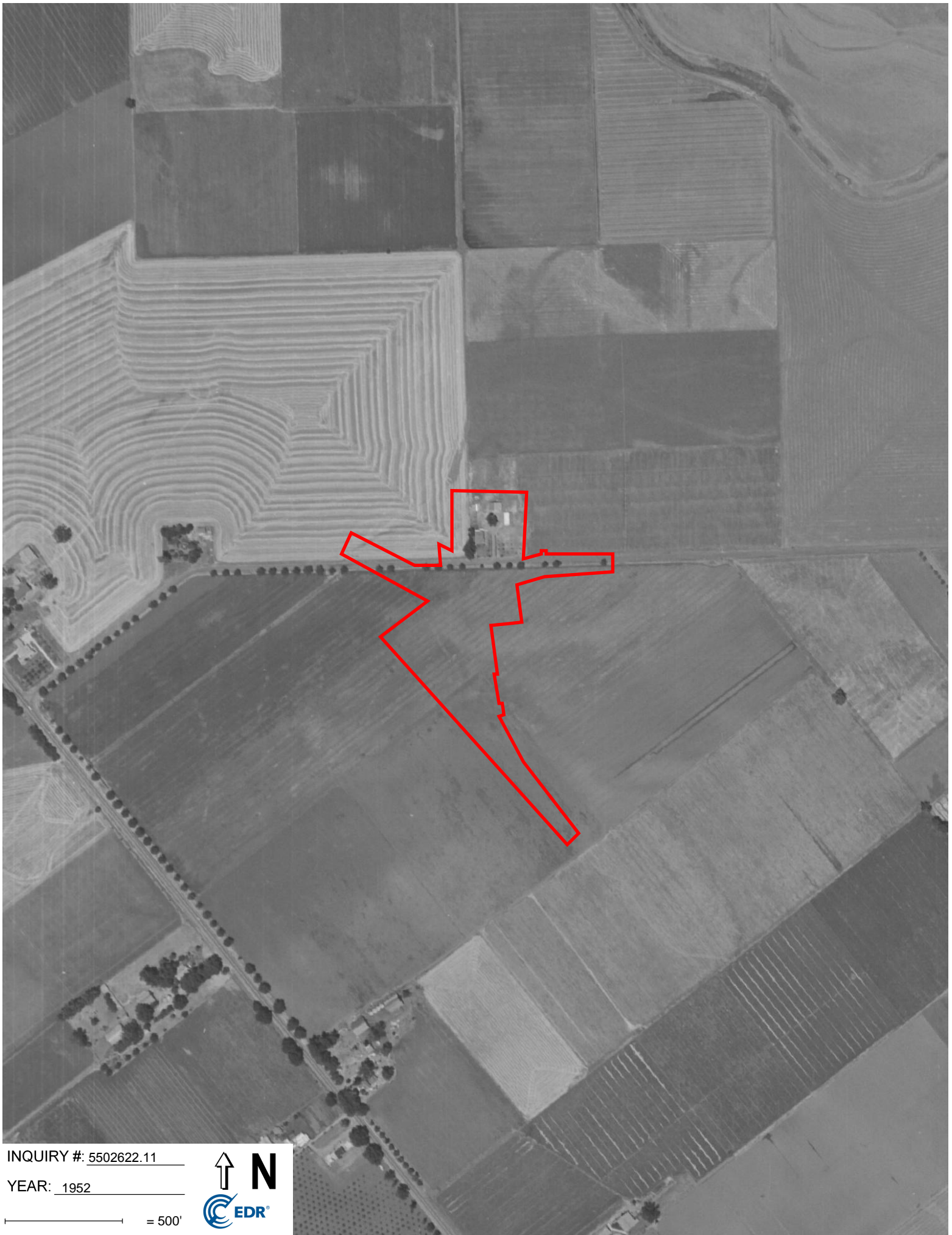
INQUIRY #: 5502622.11

YEAR: 1961

— = 500'



Subject boundary not shown because it exceeds image extent or image is not georeferenced.

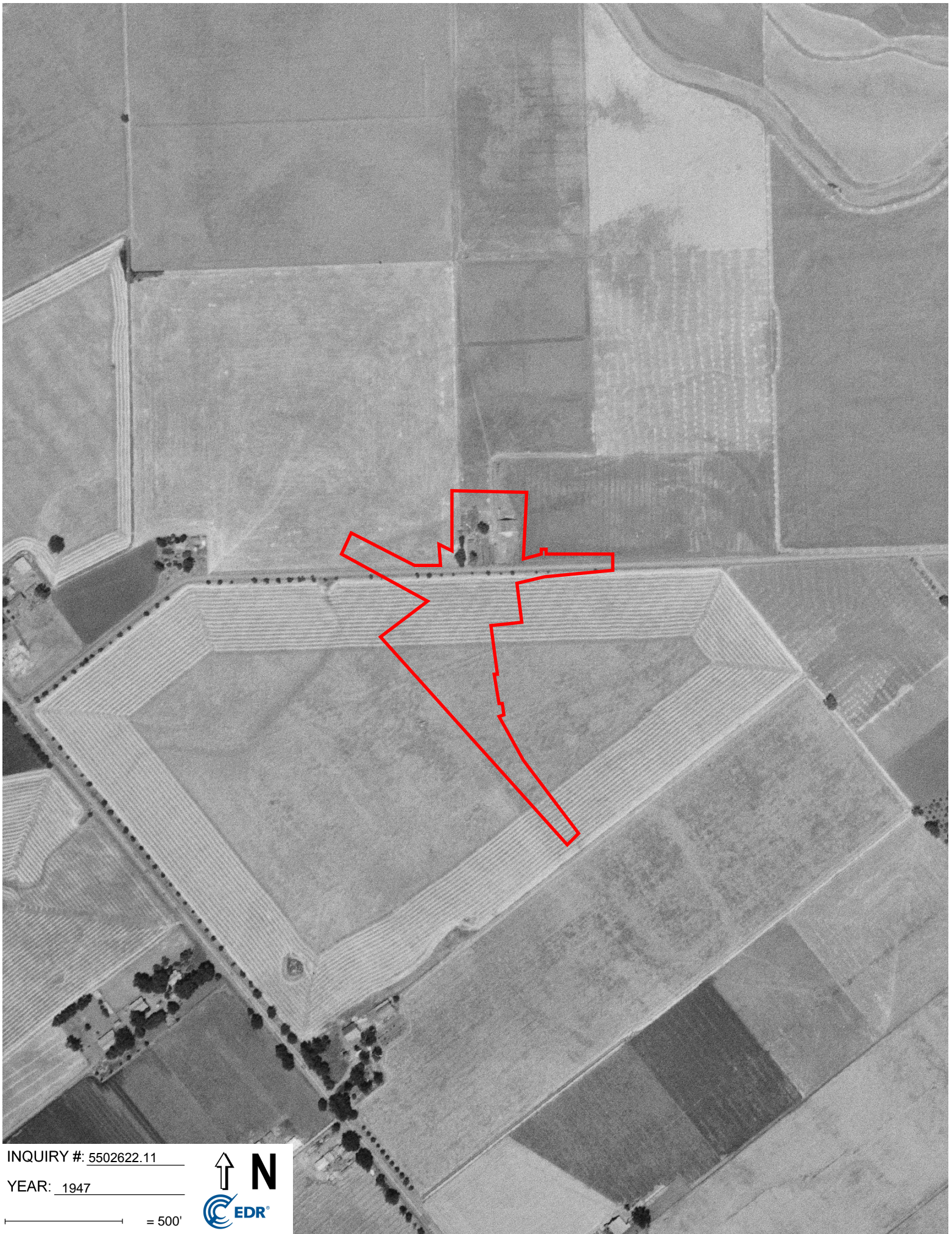


INQUIRY #: 5502622.11

YEAR: 1952

— = 500'



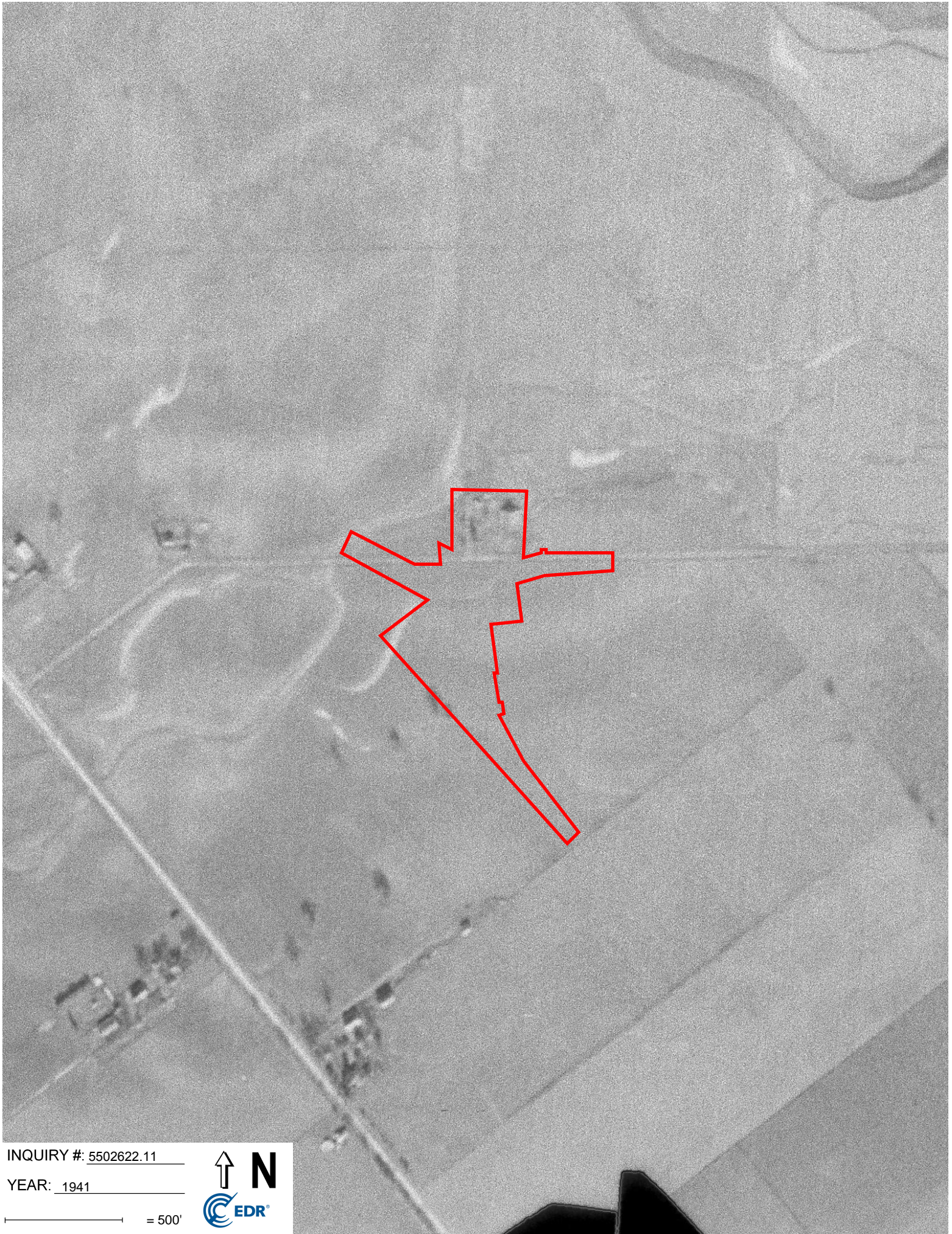


INQUIRY #: 5502622.11

YEAR: 1947

— = 500'



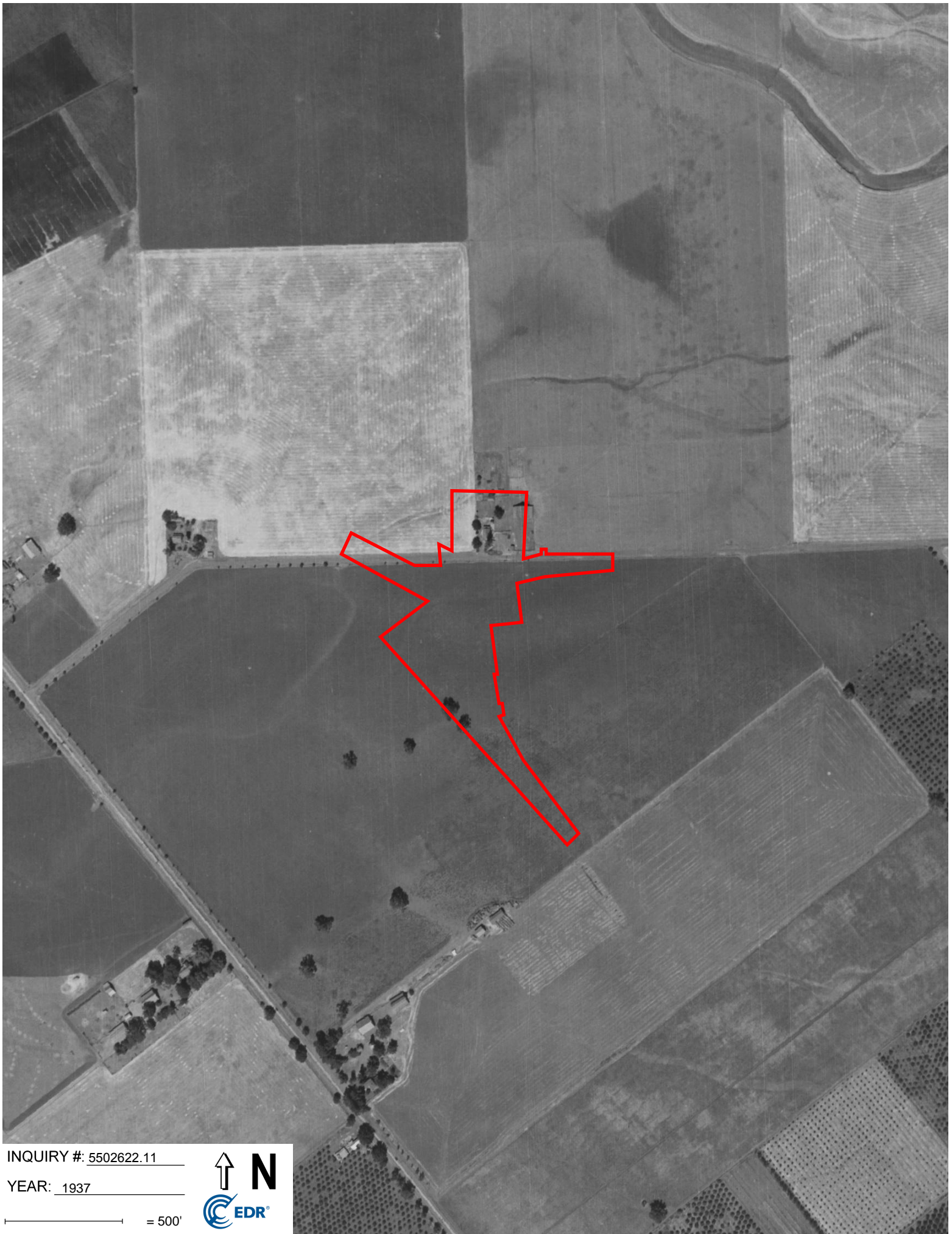


INQUIRY #: 5502622.11

YEAR: 1941

— = 500'





INQUIRY #: 5502622.11

YEAR: 1937

— = 500'





**APPENDIX C**  
**HISTORIC TOPOGRAPHIC MAPS**

Eaton Road Round-A-Bout

Intersection of Eaton Rd. and SR-99 Off/On-Ramp

Chico, CA 95973

Inquiry Number: 5502622.4

December 05, 2018

# EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Historical Topo Map Report

12/05/18

**Site Name:**

Eaton Road Round-A-Bout  
Intersection of Eaton Rd. and S  
Chico, CA 95973  
EDR Inquiry # 5502622.4

**Client Name:**

Nichols Consulting Eng.,Chtd.  
8795 Folsom Boulevard  
Sacramento, CA 95826  
Contact: Bobby Carpenter



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Nichols Consulting Eng.,Chtd. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

**Search Results:**

**Coordinates:**

<b>P.O.#</b>	NA	<b>Latitude:</b>	39.775372 39° 46' 31" North
<b>Project:</b>	Eaton Road Round-a-bout	<b>Longitude:</b>	-121.871886 -121° 52' 19" West
		<b>UTM Zone:</b>	Zone 10 North
		<b>UTM X Meters:</b>	596611.41
		<b>UTM Y Meters:</b>	4403434.73
		<b>Elevation:</b>	175.00' above sea level

**Maps Provided:**

2012	1891
1969	
1952	
1951	
1944	
1912	
1895	
1893	

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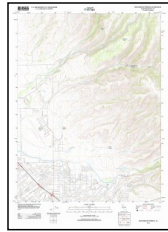
## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 2012 Source Sheets



Nord  
2012  
7.5-minute, 24000

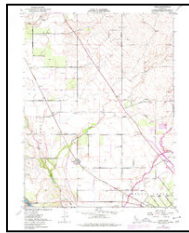


Richardson Springs  
2012  
7.5-minute, 24000

### 1969 Source Sheets



Richardson Springs  
1969  
7.5-minute, 24000  
Aerial Photo Revised 1969



Nord  
1969  
7.5-minute, 24000  
Aerial Photo Revised 1969

### 1952 Source Sheets

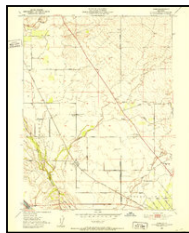


Richardson Springs  
1952  
15-minute, 62500  
Aerial Photo Revised 1947

### 1951 Source Sheets



Richardson Springs  
1951  
7.5-minute, 24000  
Aerial Photo Revised 1947

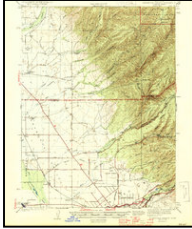


Nord  
1951  
7.5-minute, 24000  
Aerial Photo Revised 1947

## Topo Sheet Key

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### 1944 Source Sheets

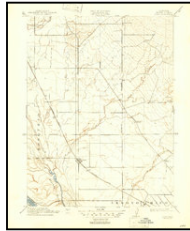


Richardson Springs  
1944  
15-minute, 62500

### 1912 Source Sheets



Keefers  
1912  
7.5-minute, 31680



Nord  
1912  
7.5-minute, 31680

### 1895 Source Sheets



Chico  
1895  
30-minute, 125000

### 1893 Source Sheets



Chico  
1893  
30-minute, 125000

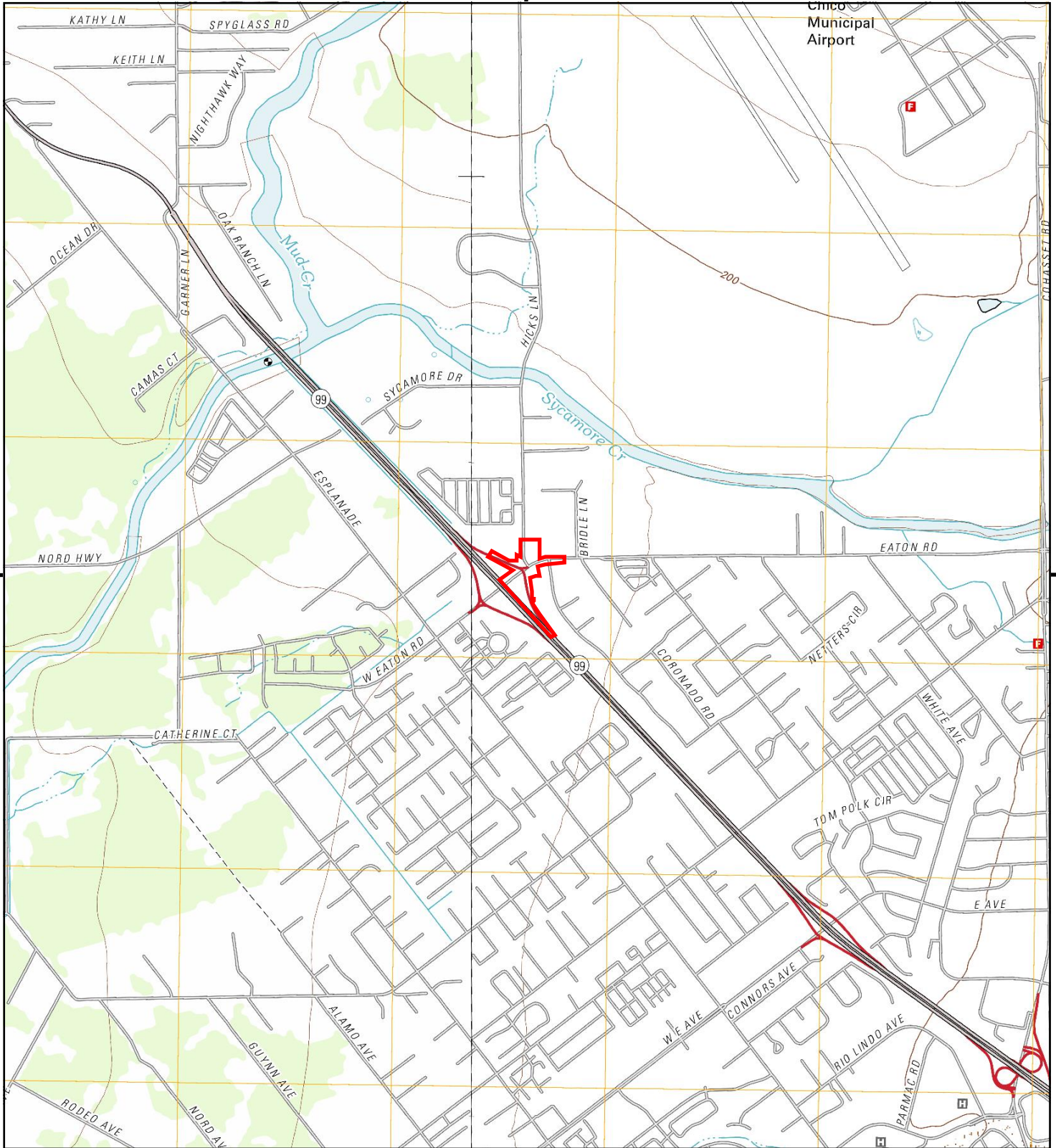
## ***Topo Sheet Key***

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

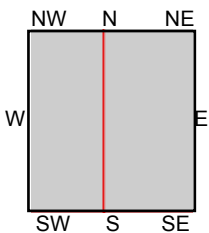
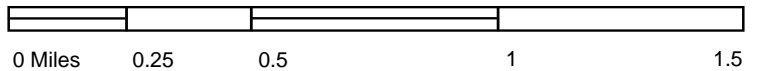
### **1891 Source Sheets**



Chico  
1891  
30-minute, 125000



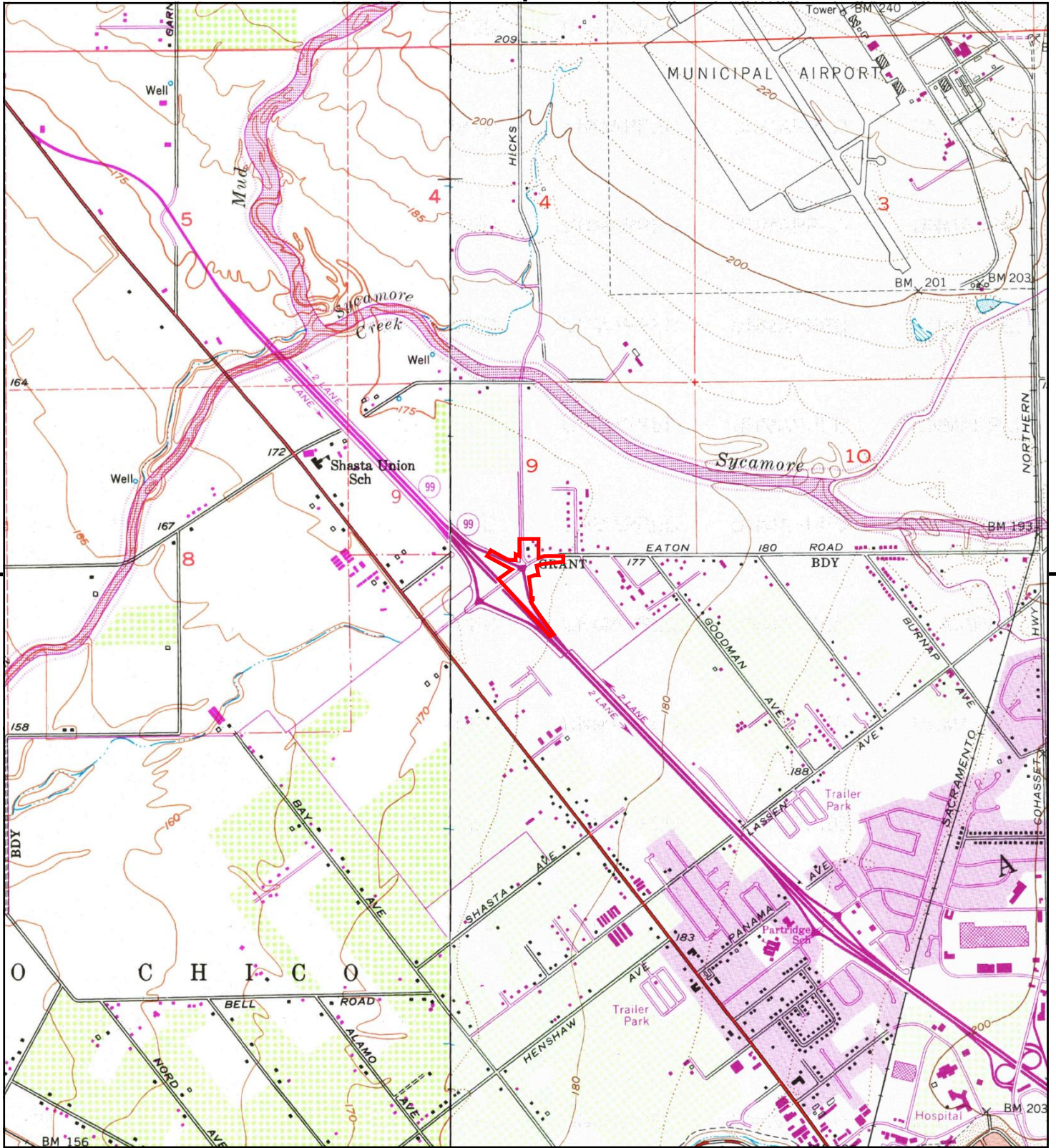
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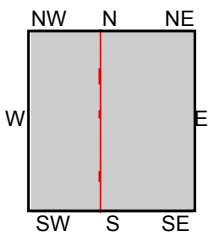
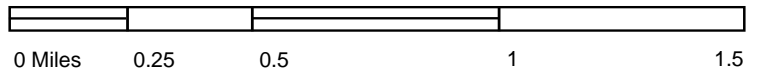
TP, Richardson Springs, 2012, 7.5-minute  
 NW, Nord, 2012, 7.5-minute

**SITE NAME:** Eaton Road Round-A-Bout  
**ADDRESS:** Intersection of Eaton Rd. and SR-99 Off/C  
 Chico, CA 95973  
**CLIENT:** Nichols Consulting Eng.,Chtd.





This report includes information from the following map sheet(s).

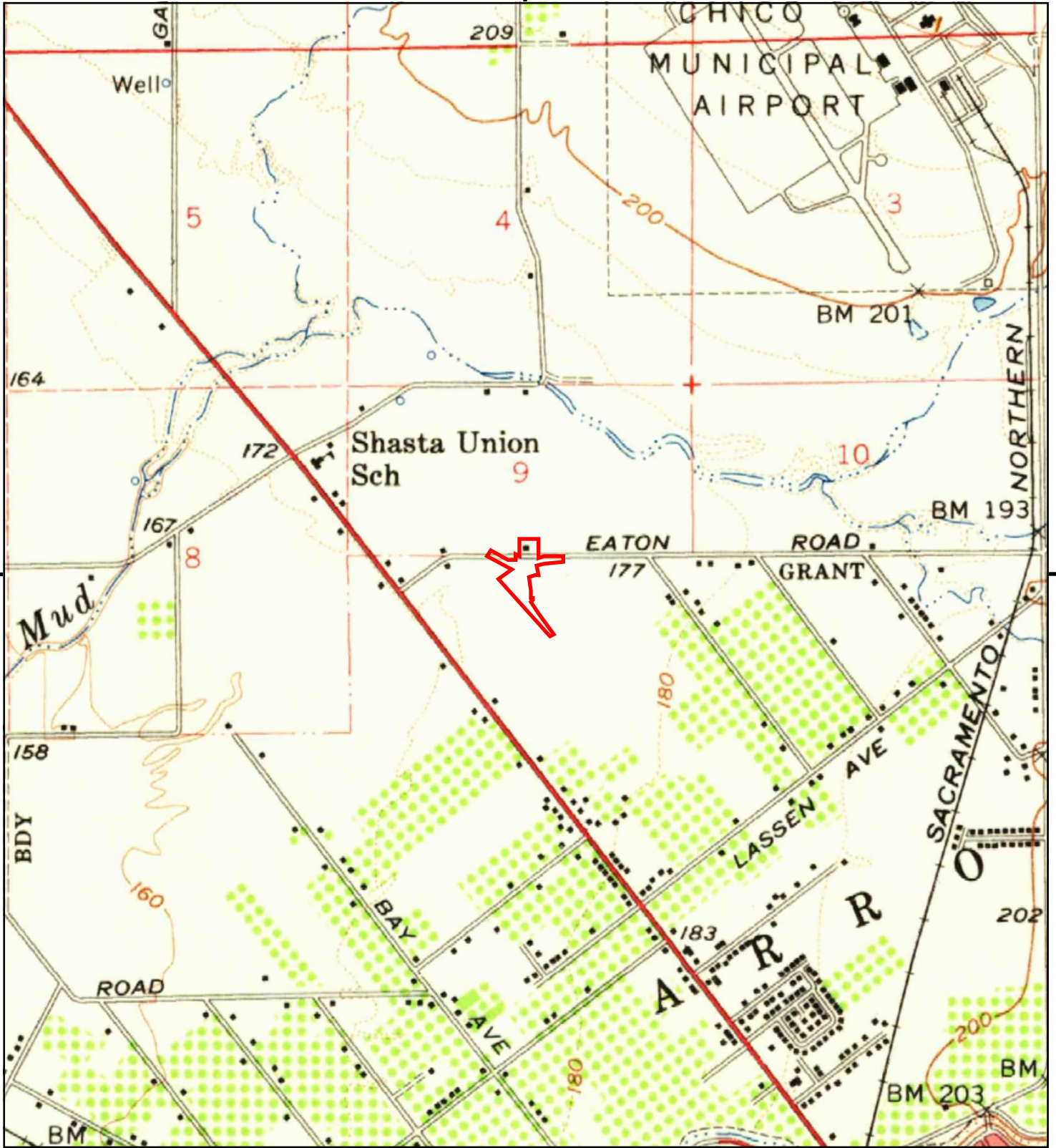


TP, Richardson Springs, 1969, 7.5-minute  
 NW, Nord, 1969, 7.5-minute

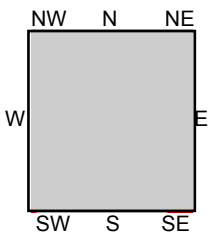
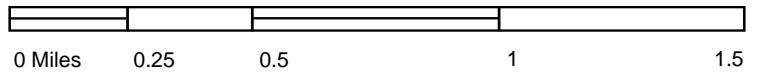
**SITE NAME:** Eaton Road Round-A-Bout  
**ADDRESS:** Intersection of Eaton Rd. and SR-99 Off/C  
 Chico, CA 95973  
**CLIENT:** Nichols Consulting Eng., Chtd.







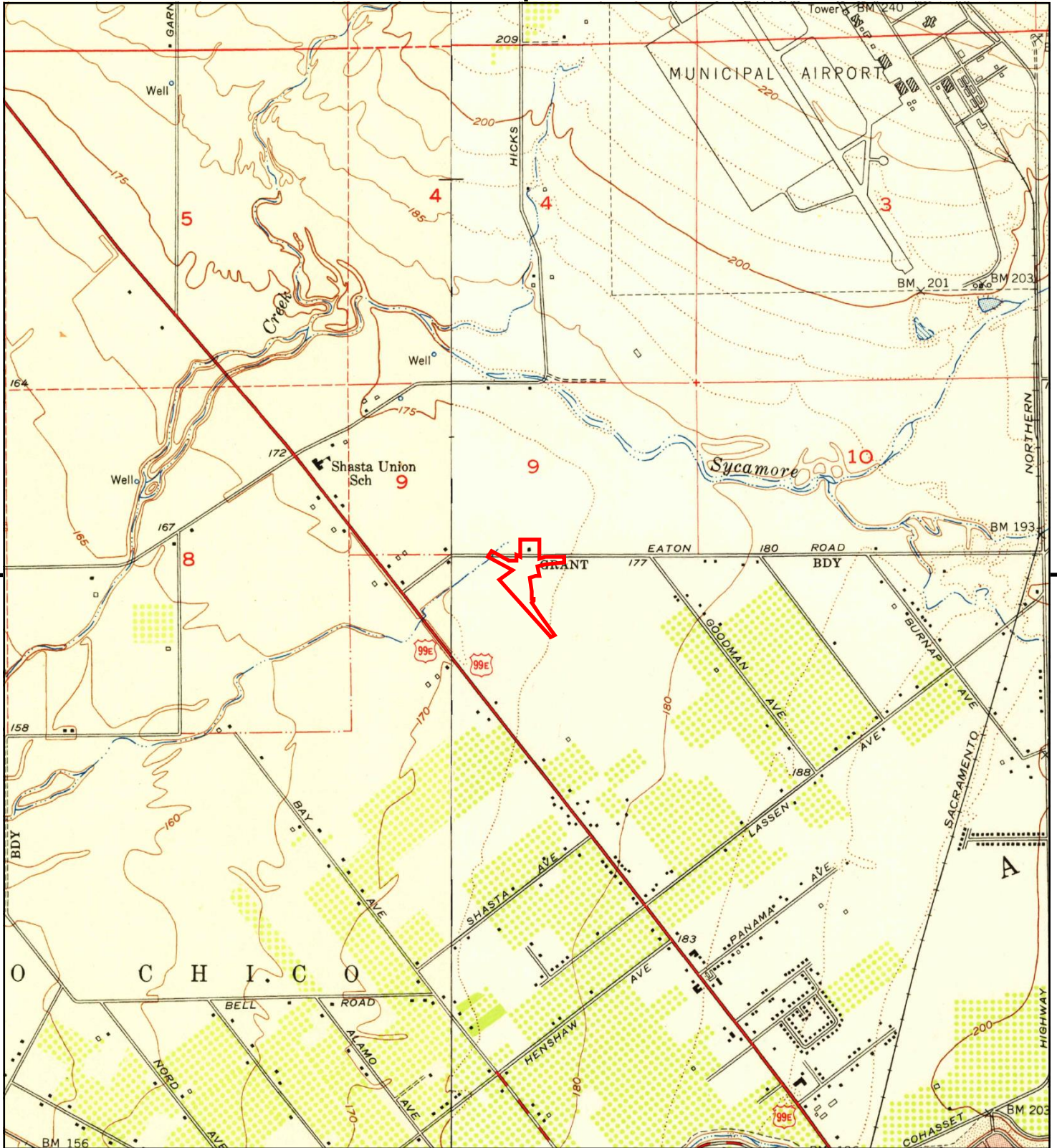
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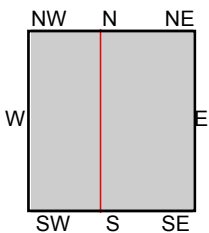
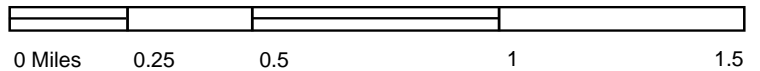
TP, Richardson Springs, 1952, 15-minute

**SITE NAME:** Eaton Road Round-A-Bout  
**ADDRESS:** Intersection of Eaton Rd. and SR-99 Off/C  
 Chico, CA 95973  
**CLIENT:** Nichols Consulting Eng., Chtd.





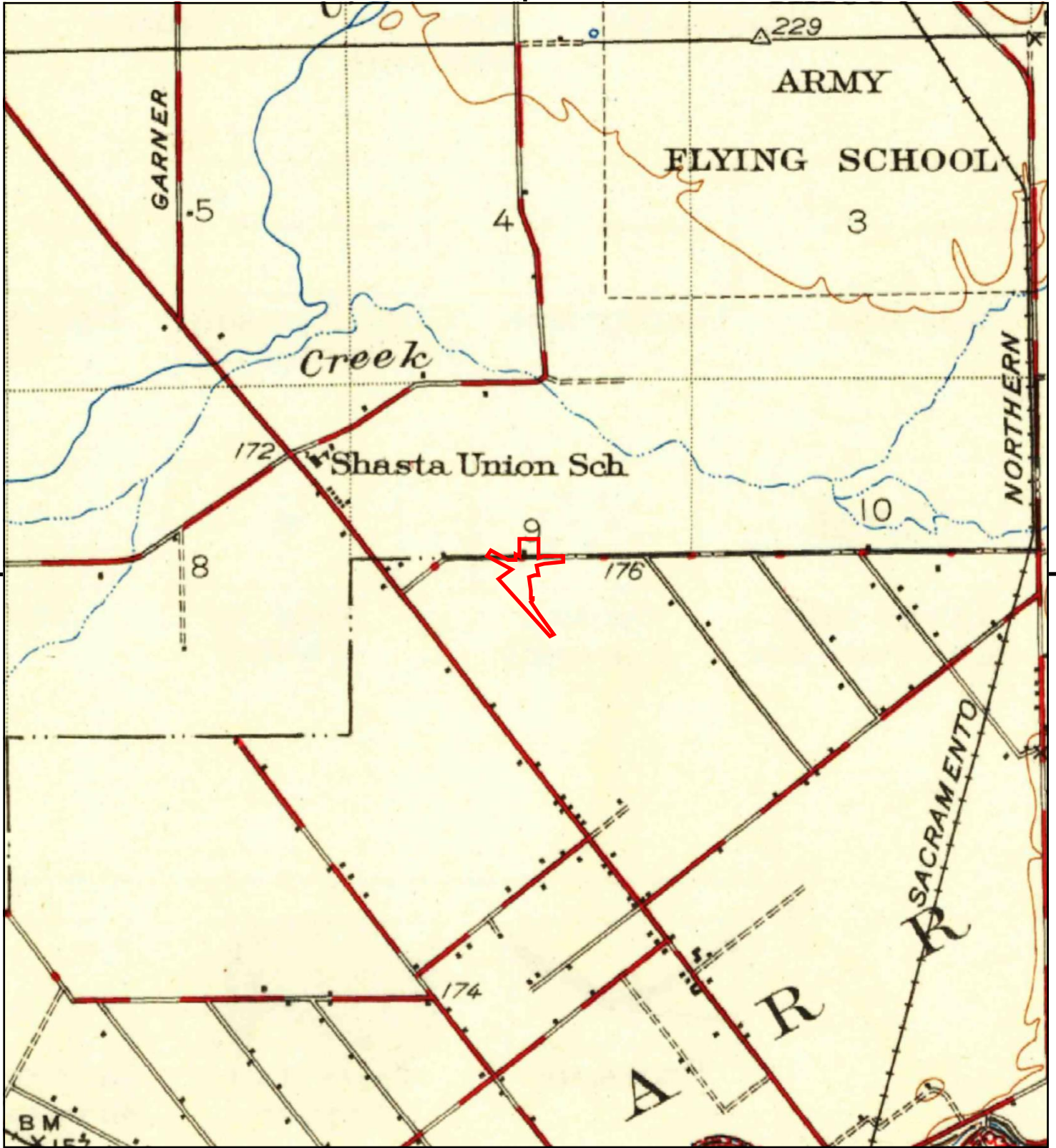
This report includes information from the following map sheet(s).



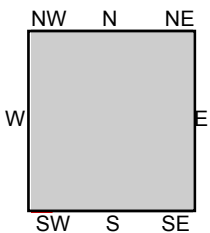
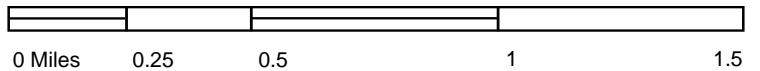
TP, Richardson Springs, 1951, 7.5-minute  
 NW, Nord, 1951, 7.5-minute

**SITE NAME:** Eaton Road Round-A-Bout  
**ADDRESS:** Intersection of Eaton Rd. and SR-99 Off/Chico, CA 95973  
**CLIENT:** Nichols Consulting Eng., Chtd.





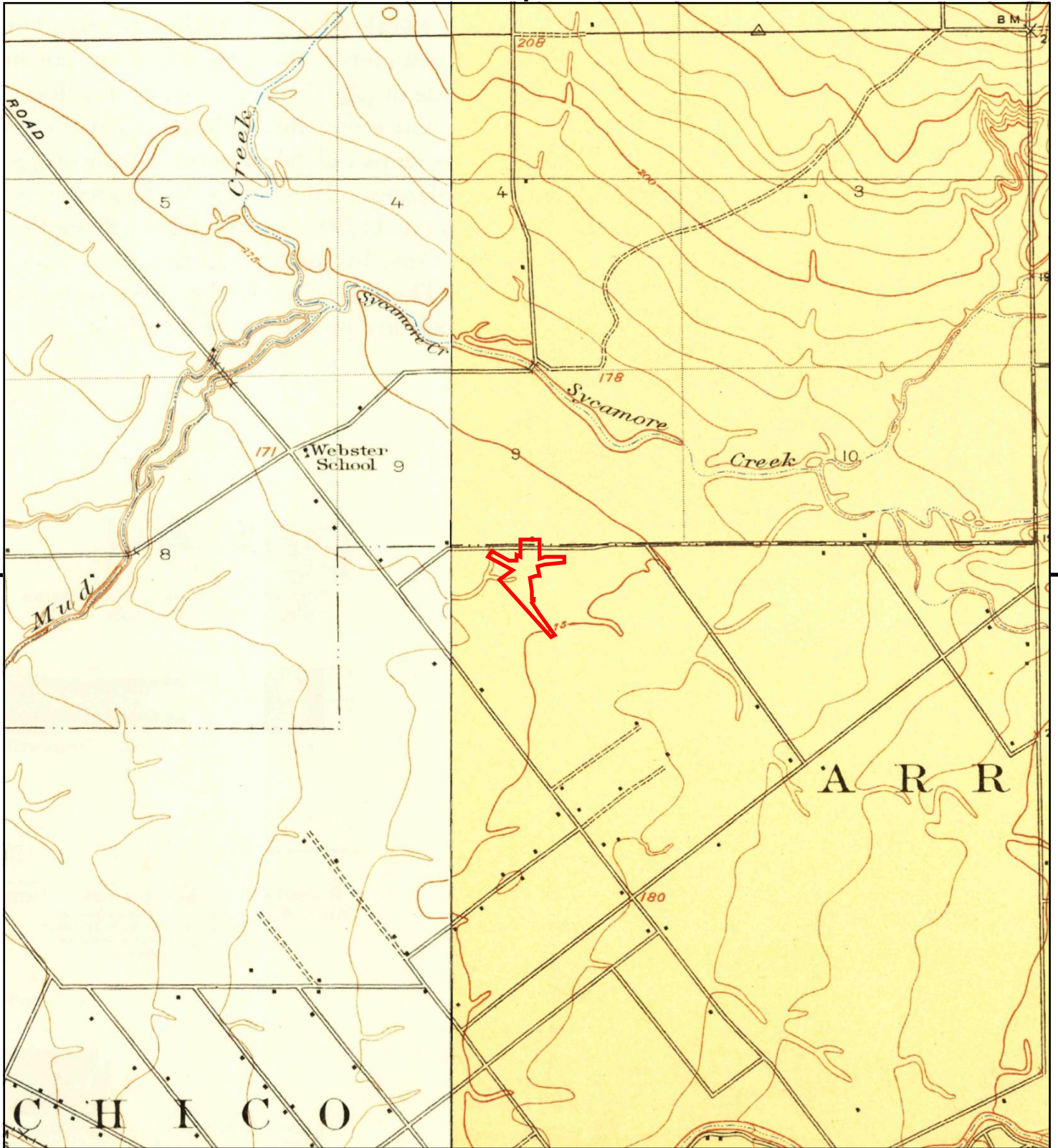
This report includes information from the following map sheet(s).



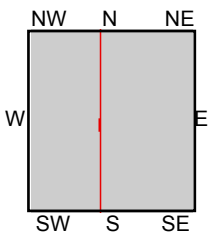
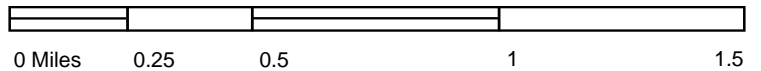
TP, Richardson Springs, 1944, 15-minute

SITE NAME: Eaton Road Round-A-Bout  
 ADDRESS: Intersection of Eaton Rd. and SR-99 Off/C  
 Chico, CA 95973  
 CLIENT: Nichols Consulting Eng., Chtd.





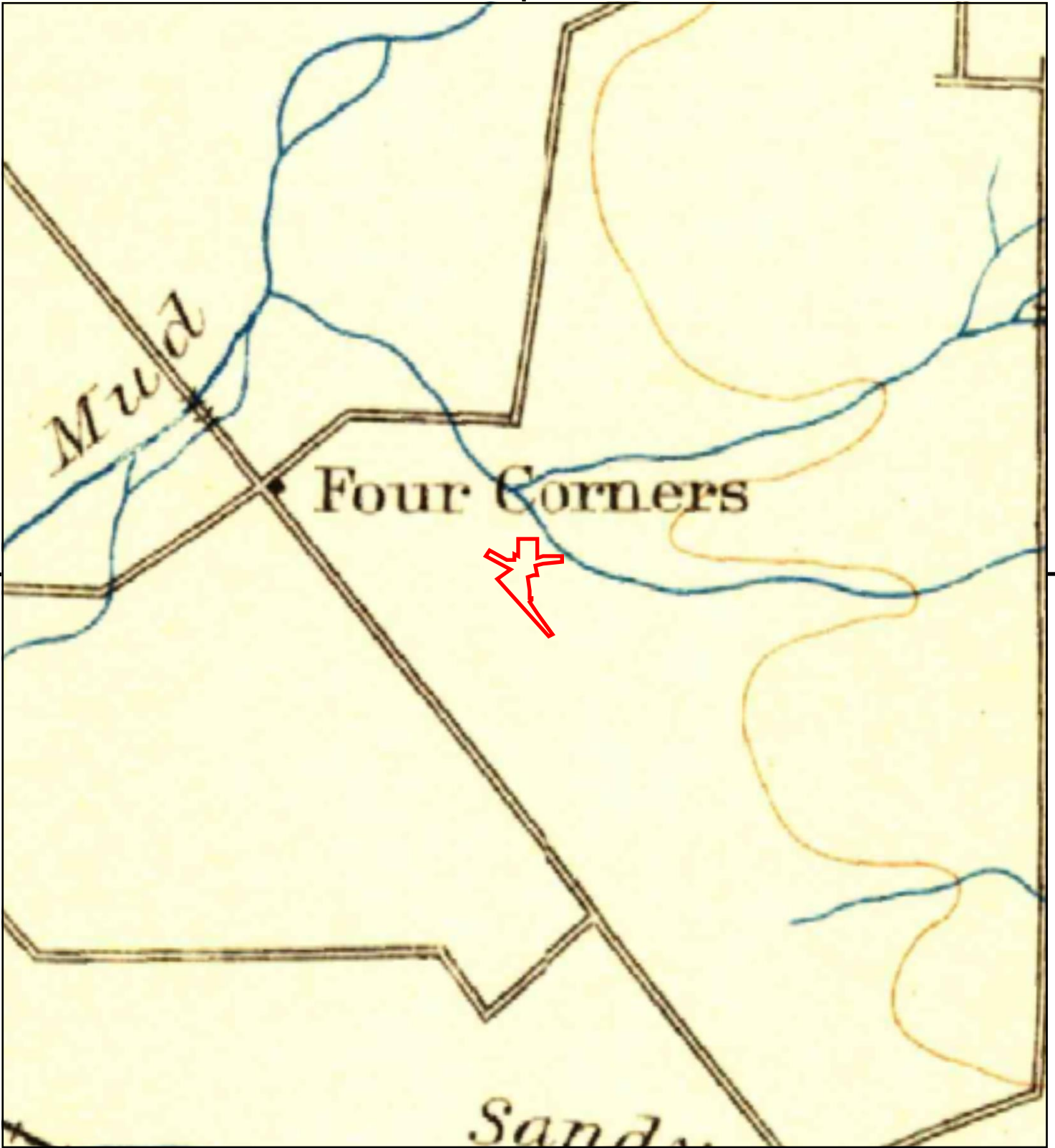
This report includes information from the following map sheet(s).



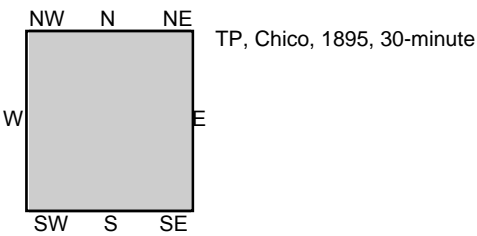
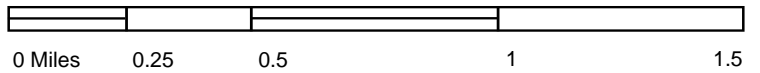
TP, Keefers, 1912, 7.5-minute  
 NW, Nord, 1912, 7.5-minute

**SITE NAME:** Eaton Road Round-A-Bout  
**ADDRESS:** Intersection of Eaton Rd. and SR-99 Off/C  
 Chico, CA 95973  
**CLIENT:** Nichols Consulting Eng., Chtd.



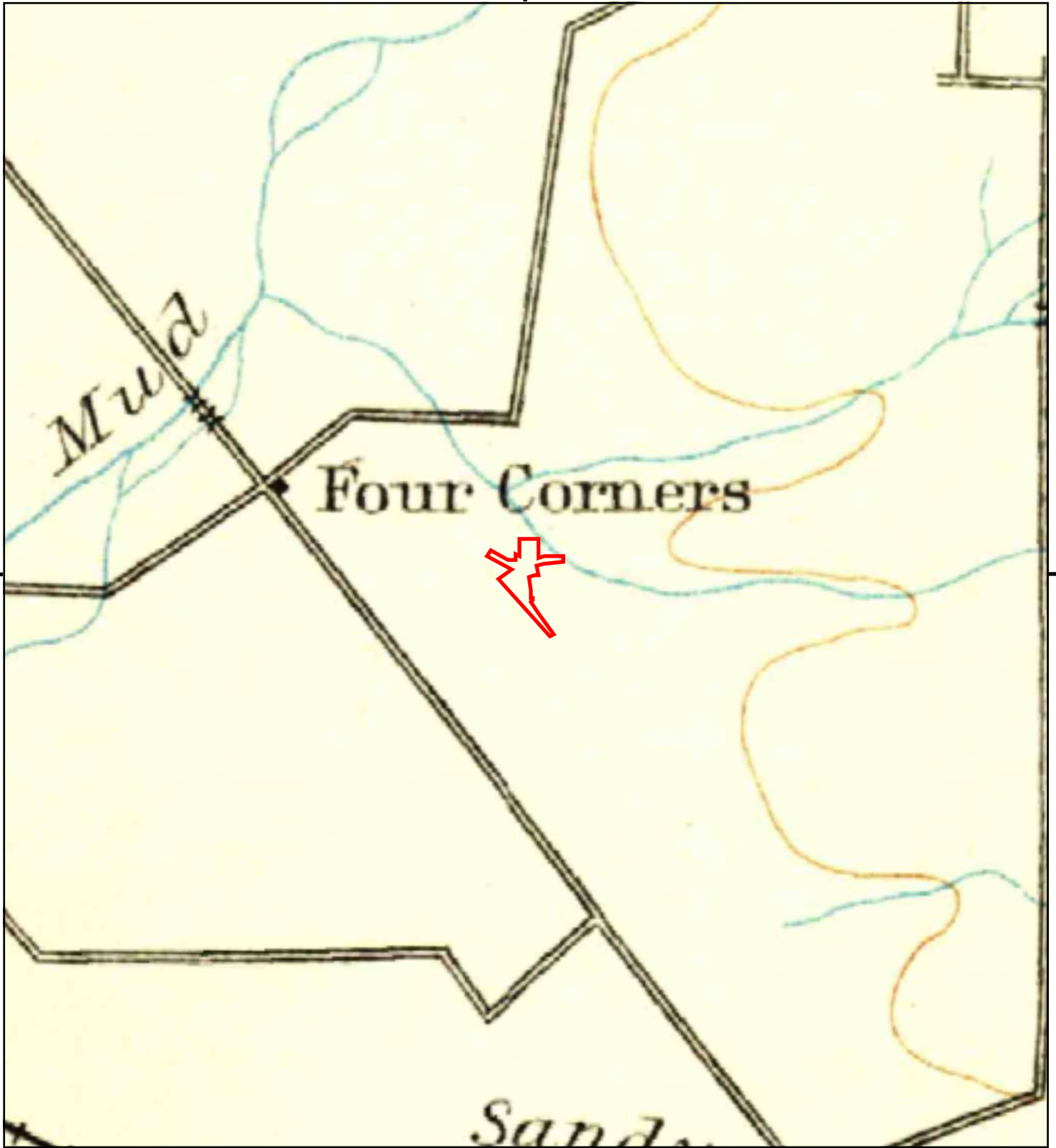


This report includes information from the following map sheet(s).

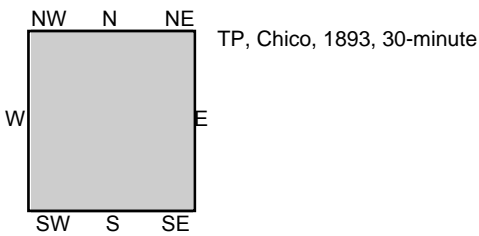
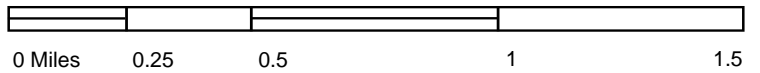


SITE NAME: Eaton Road Round-A-Bout  
ADDRESS: Intersection of Eaton Rd. and SR-99 Off/C  
Chico, CA 95973  
CLIENT: Nichols Consulting Eng., Chtd.



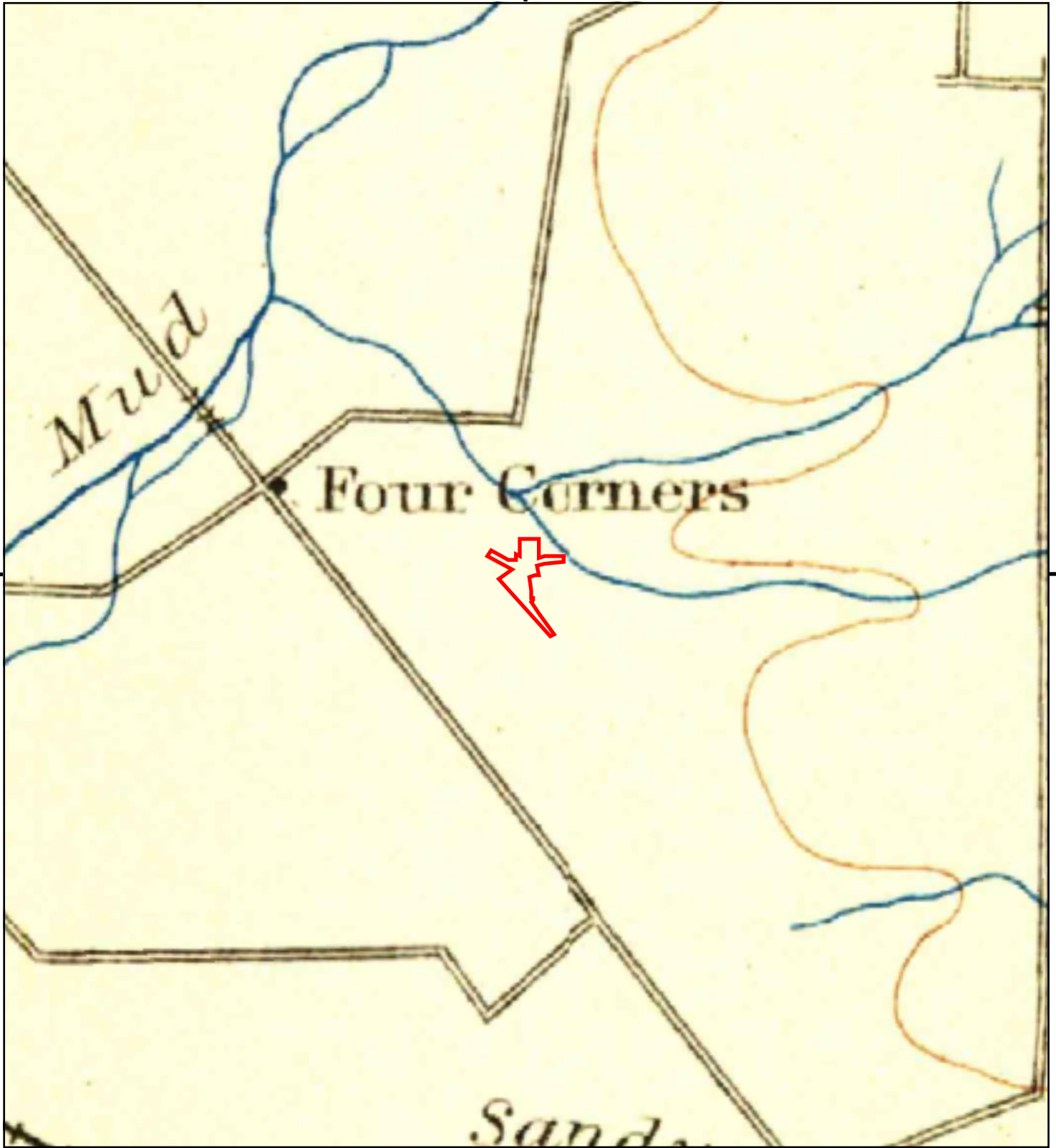


This report includes information from the following map sheet(s).

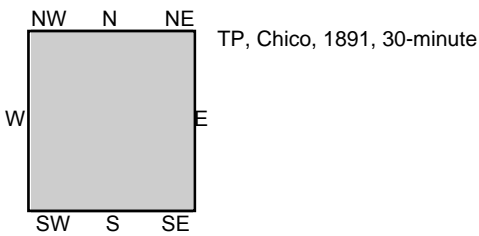
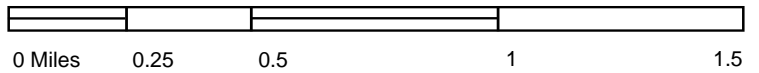


SITE NAME: Eaton Road Round-A-Bout  
 ADDRESS: Intersection of Eaton Rd. and SR-99 Off/C  
 Chico, CA 95973  
 CLIENT: Nichols Consulting Eng., Chtd.





This report includes information from the following map sheet(s).



SITE NAME: Eaton Road Round-A-Bout  
ADDRESS: Intersection of Eaton Rd. and SR-99 Off/C  
Chico, CA 95973  
CLIENT: Nichols Consulting Eng., Chtd.



**APPENDIX D**  
**SANBORN FIRE INSURANCE MAP SEARCH RESULTS**



Eaton Road Round-A-Bout

Intersection of Eaton Rd. and SR-99 Off/On-Ramp

Chico, CA 95973

Inquiry Number: 5502622.3

December 05, 2018

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Certified Sanborn® Map Report

12/05/18

**Site Name:**

Eaton Road Round-A-Bout  
Intersection of Eaton Rd. and S  
Chico, CA 95973  
EDR Inquiry # 5502622.3

**Client Name:**

Nichols Consulting Eng.,Chtd.  
8795 Folsom Boulevard  
Sacramento, CA 95826  
Contact: Bobby Carpenter



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Nichols Consulting Eng.,Chtd. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## Certified Sanborn Results:

**Certification #** E5FE-4957-BDCD  
**PO #** NA  
**Project** Eaton Road Round-a-bout

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: E5FE-4957-BDCD

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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**APPENDIX E**  
**PROPERTY TAX MAP REPORT**

**Eaton Road Round-A-Bout**

Intersection of Eaton Rd. and SR-99 Off/On-Ramp  
Chico, CA 95973

Inquiry Number: 5502622.6  
December 05, 2018

# The EDR Property Tax Map Report

## EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

## NO COVERAGE

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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**APPENDIX F**  
**BUILDING PERMIT REPORT**

**Eaton Road Round-A-Bout**

Intersection of Eaton Rd. and SR-99 Off/On-Ramp  
Chico, CA 95973

Inquiry Number: 5502622.8  
December 05, 2018

# EDR Building Permit Report

Target Property and Adjoining Properties

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### **SECTION**

**About This Report**

**Executive Summary**

**Findings**

**Glossary**

***Thank you for your business.***

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# EDR BUILDING PERMIT REPORT

## About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

## ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

## Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.



## EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of Nichols Consulting Eng., Chtd. on Dec 05, 2018.

### TARGET PROPERTY

Intersection of Eaton Rd. and SR-99 Off/On-Ramp  
Chico, CA 95973

### SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

### RESEARCH SUMMARY

Building permits identified: **YES**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

#### Butte County

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>
2018	Butte County, Development Services		X
2017	Butte County, Development Services		X
2016	Butte County, Development Services		X
2015	Butte County, Development Services		
2014	Butte County, Development Services		X
2013	Butte County, Development Services		X
2012	Butte County, Development Services		X
2011	Butte County, Development Services		X
2010	Butte County, Development Services		
2009	Butte County, Development Services		X
2008	Butte County, Development Services		X
2007	Butte County, Development Services		X
2006	Butte County, Development Services		
2005	Butte County, Development Services		
2004	Butte County, Development Services		
2003	Butte County, Development Services		X
2002	Butte County, Development Services		X
2001	Butte County, Development Services		X
2000	Butte County, Development Services		X
1999	Butte County, Development Services		X
1998	Butte County, Development Services		
1997	Butte County, Development Services		X
1996	Butte County, Development Services		X
1995	Butte County, Development Services		
1994	Butte County, Development Services		X
1993	Butte County, Development Services		X
1992	Butte County, Development Services		X

Name: JurisdictionName  
Years: Years  
Source: Source  
Phone: Phone

**BUILDING DEPARTMENT RECORDS SEARCHED**

Name: Butte County  
Years: 1992-2018  
Source: Butte County, Development Services, CHICO, CA  
Phone: (530) 538-6861

Name: Chico  
Years: 1996-2018  
Source: City of Chico, Department of Building and Development Services, CHICO, CA  
Phone: (530) 879-6700

Name: Nevada County Unincorporated Area  
Years: 1974-2018  
Source: Nevada County, Building Department, GRASS VALLEY, CA  
Phone: (530) 265-1218

Name: Redding  
Years: 1987-2018  
Source: City of Redding, Development Services, Building Division, REDDING, CA  
Phone: 530-225-4014

Name: Yuba County  
Years: 2001-2018  
Source: Yuba County, Building Department, OLIVEHURST, CA  
Phone: (530) 749-5440

## TARGET PROPERTY FINDINGS

### TARGET PROPERTY DETAIL

Intersection of Eaton Rd. and SR-99 Off/On-Ramp  
Chico, CA 95973

No Permits Found

## ADJOINING PROPERTY FINDINGS

### ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

#### EATON RD

##### 415 EATON RD

Date: **1/22/2001**  
Permit Type: **COMMERCIAL**  
Description: **METERED PEDESTAL PAC BELL**

Permit Description:  
Work Class: METERED PEDESTAL PAC  
Proposed Use:  
Permit Number: 01-0123  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: (DAN MILLER) PACIFIC BELL

##### 427 EATON RD

Date: **2/14/2014**  
Permit Type:  
Description: **Remove and replace 5 in kind rooftop Air Conditioning units**

Permit Description:  
Work Class: AC UNIT COMMERCIAL  
Proposed Use:  
Permit Number: B14-0310  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ACCO Engineered Systems

## ADJOINING PROPERTY FINDINGS

Date: **6/26/2013**  
Permit Type: **COMMERCIAL**  
Description: **INTERIOR REMODEL & ADA UPGRADES**

Permit Description:  
Work Class: O OTHER TENANT IMPR  
Proposed Use:  
Permit Number: B12-1014  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ICON GENERAL CONTRACTORS INC

Date: **5/23/2002**  
Permit Type: **COMMERCIAL**  
Description: **ELEC CIRCUITS FOR GATE**

Permit Description:  
Work Class: ELEC CIRCUITS FOR GA  
Proposed Use:  
Permit Number: 02-1309  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: FRANKS ELECTRIC

### 472 EATON RD

Date: **2/26/2013**  
Permit Type:  
Description: **Reroof**

Permit Description:  
Work Class: REROOF RESIDENTIAL  
Proposed Use:  
Permit Number: B13-0326  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: BEN ECKSTROM

## ADJOINING PROPERTY FINDINGS

Date: **5/23/2000**  
Permit Type: **RESIDENTIAL**  
Description: **REROOF**

Permit Description:  
Work Class: REROOF  
Proposed Use:  
Permit Number: 00-1164  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: EUGENE & LUCKY MYERS

### **HICKS LN**

#### **3505 HICKS LN**

Date: **2/25/2009**  
Permit Type: **MISCELLANEOUS**  
Description: **ELECTRIC PANEL FOR AT&T CABNET**

Permit Description:  
Work Class: Electric Panel  
Proposed Use:  
Permit Number: B09-0243  
Status: ISSUED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: SIERRA ENGINEERING COMPANY INC



## ADJOINING PROPERTY FINDINGS

Date: **6/15/2000**  
Permit Type: **COMMERCIAL**  
Description: **METAL BUILDING**

Permit Description:  
Work Class: METAL BUILDING  
Proposed Use:  
Permit Number: 99-2576  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: Owner

Date: **2/22/1996**  
Permit Type: **COMMERCIAL**  
Description: **UTIL & INSTALL COM COACH**

Permit Description:  
Work Class: UTIL & INSTALL COM C  
Proposed Use:  
Permit Number: 96-0167  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: Unknown

Date: **2/22/1996**  
Permit Type: **MISCELLANEOUS**  
Description: **DECK & RAMP/COM COACH**

Permit Description:  
Work Class: Wood Deck  
Proposed Use:  
Permit Number: 96-0168  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: Unknown

## ADJOINING PROPERTY FINDINGS

Date:  
Permit Type: **COMMERCIAL**  
Description: **NEW WAREHOUSE FOR STG**

Permit Description:  
Work Class: NEW WAREHOUSE FOR ST  
Proposed Use:  
Permit Number: 94-2452  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: Unknown

### 3514 HICKS LN

Date: **10/12/2007**  
Permit Type: **EH WELL SMALL**  
Description: **Well Abandonment (2)**

Permit Description:  
Work Class: Destruction  
Proposed Use:  
Permit Number: EHWS07-0384  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: Grant Hunsicker

Date: **6/8/2007**  
Permit Type: **MISCELLANEOUS**  
Description: **DEMO EX BUILDINGS (5) - ANNEXED TO CITY OF CHICO**

Permit Description:  
Work Class: Demolition  
Proposed Use:  
Permit Number: B07-1247  
Status: CLOSED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: BUTTE COUNTY,

## ADJOINING PROPERTY FINDINGS

### 3520 HICKS LN

Date: **2/10/2016**  
Permit Type: **MISCELLANEOUS**  
Description: **SOLAR ROOF - RES (7.85KW) CONNECT TO EXISTING METER**

Permit Description:  
Work Class: SOLAR ROOF-RES  
Proposed Use:  
Permit Number: B16-0261  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: KNOKE, LANCE

Date: **8/25/2003**  
Permit Type: **RESIDENTIAL**  
Description: **2ND RENEWAL BP#01-1127**

Permit Description:  
Work Class: Renewal  
Proposed Use:  
Permit Number: 03-2591  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JAMES CHRISTIAN

Date: **6/7/2002**  
Permit Type: **RESIDENTIAL**  
Description: **RENEWAL BP#01-1127**

Permit Description:  
Work Class: Renewal  
Proposed Use:  
Permit Number: 02-1488  
Status: ISSUED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JAMES CHRISTIAN

## ADJOINING PROPERTY FINDINGS

Date: **6/6/2001**  
Permit Type: **MISCELLANEOUS**  
Description: **DETACHED GARAGE**

Permit Description:

Work Class: Private Garage/Shop  
Proposed Use:  
Permit Number: 01-1127  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JAMES CHRISTIAN

Date: **4/17/2000**  
Permit Type: **RESIDENTIAL**  
Description: **COMPLETE BP#99-0632**

Permit Description:

Work Class: Remodel  
Proposed Use:  
Permit Number: 00-0761  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JAMES CHIRSTIAN

Date: **4/2/1999**  
Permit Type: **RESIDENTIAL**  
Description: **TO COMPLETE 97-1874**

Permit Description:

Work Class: TO COMPLETE 97-1874  
Proposed Use:  
Permit Number: 99-0632  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JAMES CHRISTIAN

## ADJOINING PROPERTY FINDINGS

Date: **9/2/1997**  
Permit Type: **RESIDENTIAL**  
Description: **COMPLETE BP#91-2961**

Permit Description:

Work Class: Remodel  
Proposed Use:  
Permit Number: 97-1874  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JAMES CHRISTIAN

Date: **11/30/1994**  
Permit Type: **RESIDENTIAL**  
Description: **3RD RENEWAL/GARAGE**

Permit Description:

Work Class: Renewal  
Proposed Use:  
Permit Number: 94-3012  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JAMES DAVID CHRISTIAN

Date: **11/16/1993**  
Permit Type: **RESIDENTIAL**  
Description: **2ND RENEWAL/91-2961**

Permit Description:

Work Class: Renewal  
Proposed Use:  
Permit Number: 93-3700  
Status: ISSUED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JAMES CHRISTIAN

## ADJOINING PROPERTY FINDINGS

Date: **11/16/1992**  
Permit Type: **RESIDENTIAL**  
Description: **1ST RENEWAL/91-2961**

Permit Description:  
Work Class: Renewal  
Proposed Use:  
Permit Number: 92-4006  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JAMES CHRISTIAN

### 3524 HICKS LN

Date: **1/28/2013**  
Permit Type: **MISCELLANEOUS**  
Description: **REOOF COMP 36 SQ**

Permit Description:  
Work Class: RE-ROOF RESIDENTIAL  
Proposed Use:  
Permit Number: B13-0156  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: WORKMAN, DAN

## ADJOINING PROPERTY FINDINGS

### 3528 HICKS LN

Date: **5/1/1992**  
Permit Type: **MISCELLANEOUS**  
Description: **SWIMMING POOL**

Permit Description:  
Work Class: Private Pool  
Proposed Use:  
Permit Number: 92-1253  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: KAROL & AL BILLINGSLEY

### SILVERBELL RD

### 3403 SILVERBELL RD

Date: **6/19/2012**  
Permit Type: **MISCELLANEOUS**  
Description: **REROOF DUPLEX (37)**

Permit Description:  
Work Class: RE-ROOF RESIDENTIAL  
Proposed Use:  
Permit Number: B12-0914  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: BOE ROBERT

## ADJOINING PROPERTY FINDINGS

### 3415 SILVERBELL RD

Date: **3/29/2018**  
Permit Type: **MISCELLANEOUS**  
Description: **REPLACE (6) ANT (6) RRU'S (1) SURGE**

Permit Description:  
Work Class: ANTENNA/CO-LOCATE  
Proposed Use:  
Permit Number: B18-0422  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: PEEK SITE - COM

Date: **4/5/2017**  
Permit Type: **MECH ELECTRIC PLUMB**  
Description: **REPAIR METER 200 AMP**

Permit Description:  
Work Class: ELECTRIC PANEL RES  
Proposed Use:  
Permit Number: B17-0606  
Status: ISSUED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: TONY PITTORE

Date: **1/8/2016**  
Permit Type: **MISCELLANEOUS**  
Description: **ANTENNA CO-LOCATE**

Permit Description:  
Work Class: ANTENNA/CO-LOCATE  
Proposed Use:  
Permit Number: B15-2314  
Status: ISSUED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JILL ANDOE



## ADJOINING PROPERTY FINDINGS

Date: **7/18/2012**  
Permit Type: **MISCELLANEOUS**  
Description: **CO LOCATE 9 ANNTENNA'S**

Permit Description:  
Work Class: ANTENNA/CO-LOCATE  
Proposed Use:  
Permit Number: B11-1396  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: SCHABARUM, FRANK

Date: **8/29/2011**  
Permit Type: **MISCELLANEOUS**  
Description: **FEE ESTIMATE COLOCATE ANTENNAS**

Permit Description:  
Work Class: ANTENNA/CO-LOCATE  
Proposed Use:  
Permit Number: FEE11-0231  
Status: CLOSED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

Date: **7/7/2011**  
Permit Type: **MISCELLANEOUS**  
Description: **REPLACE 6 ANTENNA COLOCATE**

Permit Description:  
Work Class: ANTENNA/CO-LOCATE  
Proposed Use:  
Permit Number: B11-0149  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: METRO PCS

## ADJOINING PROPERTY FINDINGS

Date: **11/6/2001**  
Permit Type: **COMMERCIAL**  
Description: **ADD ANTENNAS TO EX BLDG**

Permit Description:

Work Class: Antenna  
Proposed Use:  
Permit Number: 01-2592  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

Date: **8/27/1996**  
Permit Type: **COMMERCIAL**  
Description: **ELE SUBPANEL/COM**

Permit Description:

Work Class: ELE SUBPANEL/COM  
Proposed Use:  
Permit Number: 96-1949  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JOHN REHKLAN

Date: **7/22/1996**  
Permit Type: **COMMERCIAL**  
Description: **ANTENNA/COMM**

Permit Description:

Work Class: Antenna  
Proposed Use:  
Permit Number: 96-1244  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: RGS MANAGEMENT, INC.

## ADJOINING PROPERTY FINDINGS

Date: **5/29/1996**  
Permit Type: **COMMERCIAL**  
Description: **REROOF/COMM**

Permit Description:  
Work Class: REROOF/COMM  
Proposed Use:  
Permit Number: 96-1167  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JOHN REKLAU

Date: **4/17/1996**  
Permit Type: **COMMERCIAL**  
Description: **REROOF/COMM**

Permit Description:  
Work Class: REROOF/COMM  
Proposed Use:  
Permit Number: 96-0835  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JOHN RENKLAU

Date: **1/15/1993**  
Permit Type: **COMMERCIAL**  
Description: **ELEC SERV & MISC ELEC/COM**

Permit Description:  
Work Class: ELEC SERV & MISC ELE  
Proposed Use:  
Permit Number: 93-0101  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JOHN REHKLAU

## ADJOINING PROPERTY FINDINGS

### 3416 SILVERBELL RD

Date: **4/2/2009**  
Permit Type:  
Description: **Tear off and reroof**

Permit Description:  
Work Class: REROOF RESIDENTIAL  
Proposed Use:  
Permit Number: B09-0423  
Status: ISSUED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: Leo Knox

### 3435 SILVERBELL RD

Date: **9/10/2018**  
Permit Type:  
Description: **Split System Chanegout**

Permit Description:  
Work Class: HVAC FRNC HT PMP HVAC CHNG OUT...  
Proposed Use:  
Permit Number: B18-2306  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: MC CLELLAND AIR CONDITIONING INC

## ADJOINING PROPERTY FINDINGS

Date: **5/1/2013**  
Permit Type:  
Description: **Install ductless HVAC system**

Permit Description:  
Work Class: HVAC C/O RESIDENTIAL  
Proposed Use:  
Permit Number: B13-0715  
Status: RENEWABLE  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: Don Fowler

Date: **3/14/2013**  
Permit Type: **COMMERCIAL**  
Description: **FEE ESTIMATE OFFICE INFILL (228)**

Permit Description:  
Work Class: B OFFICE TENANT IMP  
Proposed Use:  
Permit Number: FEE13-0064  
Status: CLOSED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

Date: **4/15/2008**  
Permit Type: **MISCELLANEOUS**  
Description: **ROOF MOUNT SOLAR**

Permit Description:  
Work Class: SOLAR ROOF-COM  
Proposed Use:  
Permit Number: B08-0684  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: S P G SOLAR INC

## ADJOINING PROPERTY FINDINGS

Date: **6/5/2007**  
Permit Type: **MISCELLANEOUS**  
Description: **REROOF COMP SHINGLES 96 SQ**

Permit Description:  
Work Class: Re-Roof  
Proposed Use:  
Permit Number: B07-1212  
Status: ISSUED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: SARA NELSON

### 3460 SILVERBELL RD

Date: **12/12/2014**  
Permit Type: **MECH ELECTRIC PLUMB**  
Description: **RECONNECT ELEC PANEL COMM - 3 PHASE**

Permit Description:  
Work Class: 3 PHASE ELECTRIC SER  
Proposed Use:  
Permit Number: B14-2773  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: KEITH HUFF

Date: **11/25/2014**  
Permit Type: **MISCELLANEOUS**  
Description: **CARPORT FOR SOLAR (1621)**

Permit Description:  
Work Class: AWNING/CANOPY/CARPT  
Proposed Use:  
Permit Number: B14-2573  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: KNOKE, LANCE

## ADJOINING PROPERTY FINDINGS

Date: **11/25/2014**  
Permit Type: **MISCELLANEOUS**  
Description: **SOLAR - COMM ROOF MOUNT ON MAIN BLDG & CARPORT (40.71 KW)**

Permit Description:  
Work Class: SOLAR ROOF-COM  
Proposed Use:  
Permit Number: B14-2576  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: KNOKE, LANCE

Date: **11/17/2014**  
Permit Type: **MISCELLANEOUS**  
Description: **ROOF MOUNT SOLAR ON METAL BLDG (505) 9.66 KW**

Permit Description:  
Work Class: SOLAR ROOF-COM  
Proposed Use:  
Permit Number: B14-2577  
Status: VOID  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: KNOKE, LANCE

Date: **5/12/2000**  
Permit Type: **COMMERCIAL**  
Description: **ANTENNA'S(TV)**

Permit Description:  
Work Class: Antenna  
Proposed Use:  
Permit Number: 00-0931  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: MODERN BUILDING

## ADJOINING PROPERTY FINDINGS

Date: **3/24/2000**  
Permit Type: **COMMERCIAL**  
Description: **SIGN**

Permit Description:

Work Class: SIGN  
Proposed Use:  
Permit Number: 00-0388  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: MODERN BUILDING



## GLOSSARY

### General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeyman:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

## GLOSSARY

### Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use(s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

### Sample Building Permit Data

Date: Nov 09, 2000

Permit Type: Bldg -

New Permit Number: 101000000405

Status: Valuation: \$1,000,000.00

Contractor Company: OWNER-BUILDER

Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.

**APPENDIX G**  
**ENVIRONMENTAL LIEN & AUL SEARCH RESULTS**

**Eaton Road Round-A-Bout**

Intersection of Eaton Rd. and SR-99 Off/On-Ramp  
Chico, CA 95973

Inquiry Number: 5502622.7S  
February 20, 2019

**EDR Environmental Lien and AUL Search**



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

## EDR Environmental Lien and AUL Search

The EDR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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# EDR Environmental Lien and AUL Search

## TARGET PROPERTY INFORMATION

### ADDRESS

EATON ROAD ROUND-A-BOUT  
INTERSECTION OF EATON RD. AND SR-99 OFF/ON-RAMP  
CHICO, CA 95973

### RESEARCH SOURCE

Source 1: Recorder  
Butte County, California

Source 2: Assessor  
Butte County, California

### PROPERTY INFORMATION

#### **Deed 1:**

Type of Deed: Grant Deed

Title is vested in: City of Chico, a municipal corporation of the State of California

Title received from: County of Butte, a political subdivision of the State of California

Deed Dated: 01/22/2008

Deed Recorded: 01/30/2008

Instrument: 2008-0003435

**Legal Description:** All that certain piece or parcel of land being a portion of the Southwest Quarter of the Northeast Quarter of Section 9, Township 22 North, Range 1 East, M.D.B.&M., more particularly described as Parcel 1, as shown on that certain Parcel Map, filed 01/05/1978, in Book 63 of Maps, at Page 65, situate and lying in the County of Butte, State of California.

**Legal Current Owner:** City of Chico, a municipal corporation of the State of California

**Property Identifiers:** 007-240-078

### ENVIRONMENTAL LIEN

Environmental Lien: Found  Not Found

If found:

1<sup>st</sup> Party:

2<sup>nd</sup> Party:

Dated:

Recorded:

Book:

Page:

Docket:

Volume:

Instrument:

Comments:

Miscellaneous:

## EDR Environmental Lien and AUL Search

### OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AUL's:                      Found                       Not Found

If found:

1<sup>st</sup> Party:

2<sup>nd</sup> Party:

Dated:

Recorded:

Book:

Page:

Docket:

Volume:

Instrument:

Comments:

Miscellaneous:

**EDR Environmental Lien and AUL Search**

**DEED EXHIBIT**



7  
RECORDING REQUESTED BY:  
MID VALLEY TITLE 212301004-1/  
Chi-70



2008-0003435

RECORDING REQUESTED BY:  
CITY OF CHICO

Recorded | REC FEE 22.00  
Official Records  
County of  
Butte  
CANDACE J. GRUBBS  
County Clerk-Recorder  
| LV  
09:00AM 30-Jan-2008 | Page 1 of 6

WHEN RECORDED MAIL DOCUMENT  
AND TAX STATEMENT TO:

CITY OF CHICO  
CITY MANAGER  
PO BOX 3420  
CHICO, CA 95927

APN: 007-240-078-000

SPACE ABOVE THIS LINE FOR RECORDER'S USE

**GRANT DEED.**

*be*

The undersigned grantor declares:  
Documentary transfer tax is \$0.00 per R&T Code 11922  
Computed on full value of property conveyed,  
Unincorporated area; County of Butte

County of Butte Resolution No. 08-005 Dated January 08, 2008

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,  
County of Butte, a political subdivision of the State of California

hereby GRANT(S) to  
City of Chico, a municipal corporation of the State of California

The following described real property situate in the unincorporated area, County of Butte, State of California;  
more particularly described as follows:

See EXHIBIT "A" legal description and EXHIBIT "B" location map attached hereto and made a part hereof.

Dated this 22<sup>nd</sup> day of January, 2008

County of Butte, a political subdivision of the State of California  
By John R. Schooling  
John R. Schooling, Deputy Director-General Services

STATE OF CALIFORNIA  
COUNTY OF BUTTE

On \_\_\_\_\_ before me,  
the undersigned, a Notary Public in and for said State, personally  
appeared

Personally known to me (or proved to me on the basis of satisfactory evidence)  
to be the person(s) whose name(s) is/are subscribed to the within instrument and  
acknowledged to me that he/she/they Executed the same in his/her/their authorized  
capacity(ies), and that by his/her/their signature(s) on the instrument the person(s),  
or the entity upon behalf of which the person(s) acted, executed the instrument.

Witness my hand and official seal.

Signature \_\_\_\_\_

# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Butte

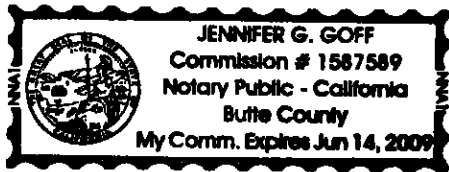
On Jan. 22, 2008 before me, Jennifer G. Goff Notary Public

personally appeared John R. Schooling

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) (s)are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Place Notary Seal Above

Signature Jennifer G. Goff  
Signature of Notary Public

## OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

### Description of Attached Document

Title or Type of Document: Grant Deed

Document Date: 1/22/08 Number of Pages: 4

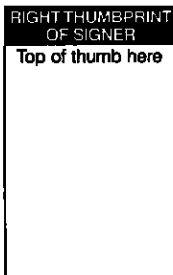
Signer(s) Other Than Named Above: \_\_\_\_\_

### Capacity(ies) Claimed by Signer(s)

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_



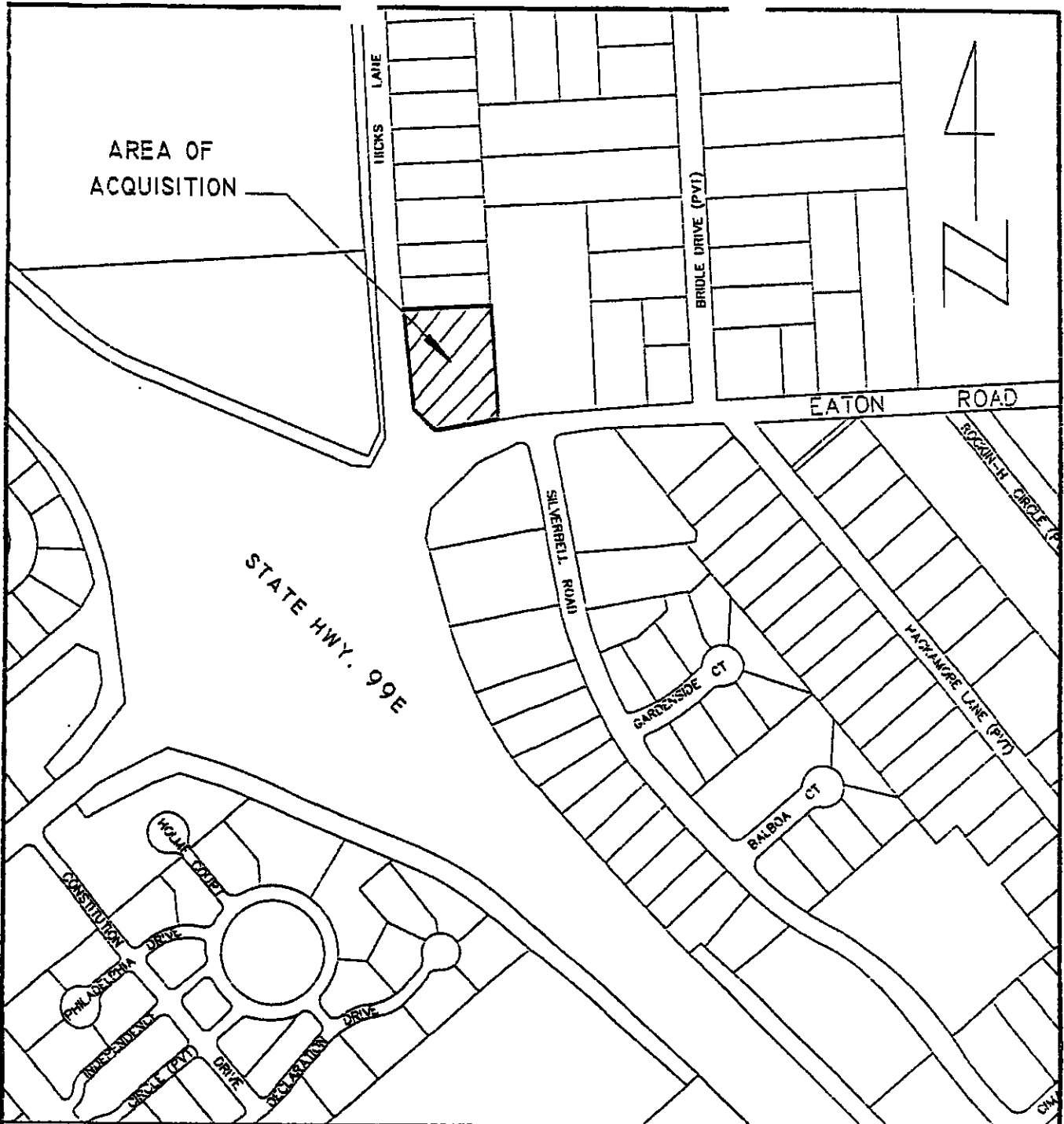
Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_







**LOCATION MAP**

A PORTION OF S.W. QUARTER OF THE N.E. QUARTER OF SECTION 9  
 T.22N., R.1E., M.D.B. & M.  
 PER BOOK 63 OF MAPS AT PAGE 65

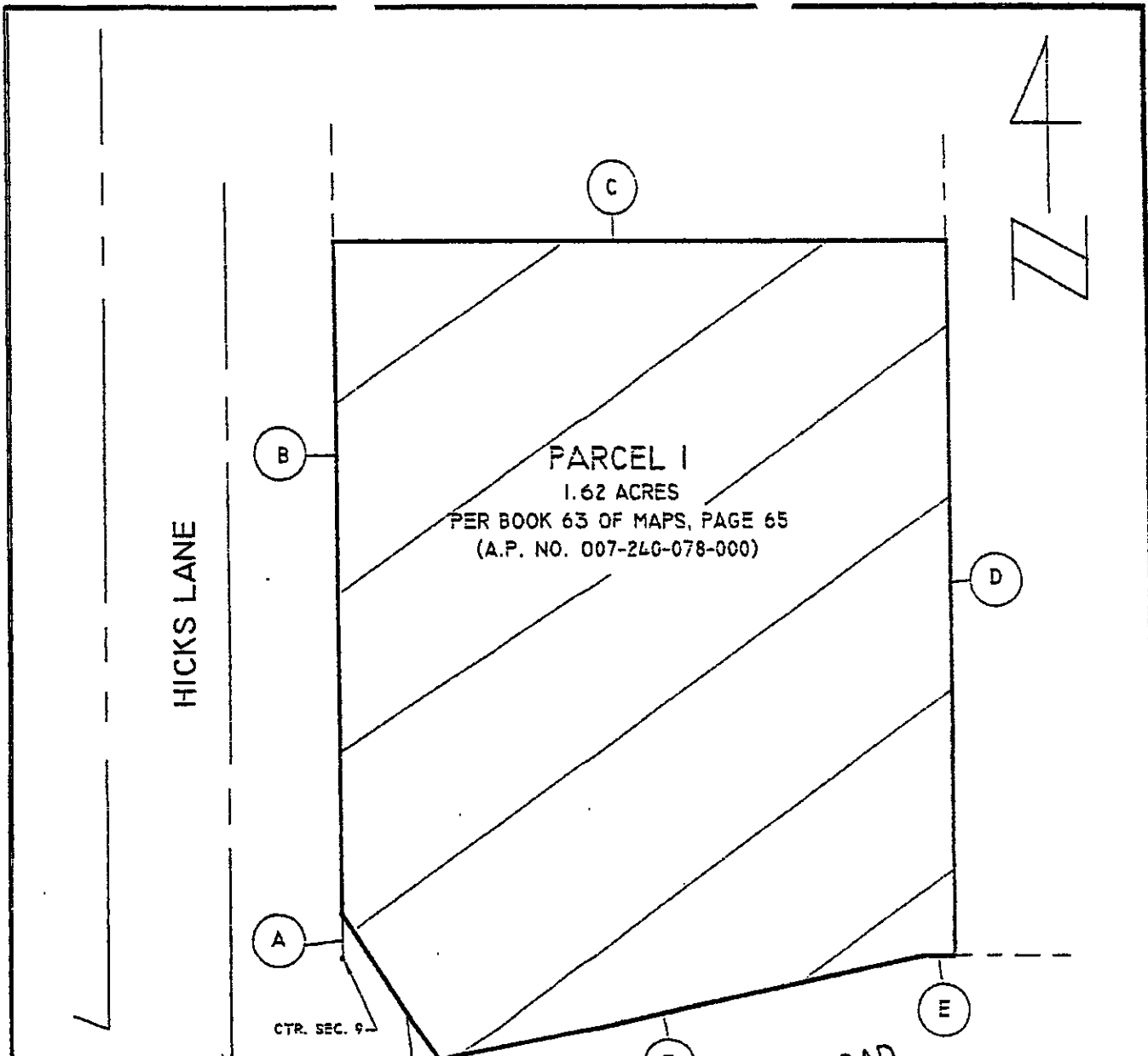
**CITY OF CHICO**

**CAPITAL PROJECT SERVICES**

DRAWN BY: T.R.      DATE: - JUNE 2007  
 CHECKED BY: J.V.      SCALE N.T.S.  
 APPROVED BY: *[Signature]*  
DIRECTOR CAPITAL PROJECT SERVICES

ACQUISITION OF PROPERTY  
 FOR  
 FIRE STATION NO. 7

EXHIBIT  
 "B"



**BOUNDARY DATA**

- (A) N 00° 01' 00" W - 16.00'
- (B) N 00° 01' 00" W - 258.31'
- (C) WEST - 241.21'
- (D) S 00° 05' 30" W - 274.31'
- (E) WEST - 12.11'
- (F) S 78° 06' 19" W - 195.42'
- (G) N 33° 36' 16" W - 67.57'

**LEGEND**

- (A) • BOUNDARY DATA LETTER
- • PROJECT BOUNDARY LINE

**CITY OF CHICO**

**CAPITAL PROJECT SERVICES**

DRAWN BY: T.R. DATE: - JUNE 2007  
 CHECKED BY: [Signature] SCALE: 1" = 60'  
 APPROVED BY: [Signature] DIRECTOR CAPITAL PROJECT SERVICES

ACQUISITION OF PROPERTY  
 FOR  
 FIRE STATION NO. 7

EXHIBIT  
 "B"  
 SHEET 2 OF 2

AFTER RECORDING, RETURN TO:  
CITY MANAGER, CITY OF CHICO  
POST OFFICE BOX 3420  
CHICO, CALIFORNIA 95927

**CERTIFICATE OF ACCEPTANCE AND CONSENT**

Grant Deed - 3514 Hicks Lane - Chico  
APN 007-240-078-000

This is to certify that the real property conveyed by the Grant Deed dated January 22, 2008, from County of Butte, a political subdivision of the State of California, to the City of Chico, a Municipal Corporation, is hereby accepted by the undersigned officer on behalf of the City Council of the City of Chico, pursuant to the Authority granted by §2R.04.030 of the Chico Municipal Code and City Council Minute Order No 26-07, approved November 27, 2007, and the grantee consents to recordation thereof by its duly authorized officer.

Date: 1/24/08

CITY OF CHICO


By:   
David Burkland  
Interim City Manager

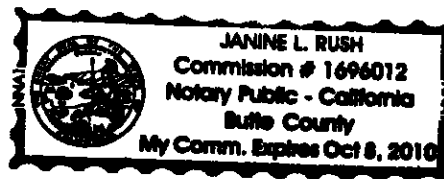
STATE OF CALIFORNIA  
COUNTY OF BUTTE

On January 24, 2008, before me Janine L. Rush, a Notary Public, personally appeared David Burkland, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY, under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

  
Signature



**APPENDIX H**  
**ADL LABORATORY REPORT AND CHAIN OF CUSTODY**



Date of Report: 02/15/2019

Bobby Carpenter

Nichols Consulting Engineers  
8795 Folsom Blvd. Suite 250  
Sacramento, CA 95826

Client Project: 1011.03.55  
BCL Project: Eaton Rd. Interchange  
BCL Work Order: 1837130  
Invoice ID: B324176, B330920

Enclosed are the results of analyses for samples received by the laboratory on 11/29/2018. If you have any questions concerning this report, please feel free to contact me.

Revised Report: This report supercedes Report ID 1000826175

Sincerely,

Contact Person: Molly Meyers  
Client Service Rep

Stuart Buttram  
Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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**NCE Chain of Custody/Laboratory Analysis Request Form**  
 Lab Name: BC Labs Page 1 of 5  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Bill to: Attn: R. Carpenter  
 Nichols Consulting Engineers  
 8795 Folsom Blvd, #250  
 Sacramento CA, 95826

NCE Project Number: FAP 1011.03.55  
18-37130

SAMPLE ID	DATE	TIME	LAB ID	MATRIX	Requested Analysis				REMARKS
					H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCL	EPA8260B	
ER-1-5	11/27/18	1100	-1	Soil				6000 Pb only	Do not analyze HUFN samples unless notified by NCE
ER-1-1.0	1100	-2							
ER-2-5	1050	-3							
ER-2-1.0	1050	-4						Hold until further notice (HUFN)	
ER-3-5	1205	-5						HUFN	
ER-3-1.0	1205	-4						HUFN	
ER-4-5	1215	-7						HUFN	
ER-4-1.0	1215	-8						HUFN	
ER-5-5	1230	-9						HUFN	
ER-5-1.0	1230	-10						HUFN	

EDF Report?  Yes  No  
 EDF Deliverable to (Email Address) \_\_\_\_\_  
 Relinquish by/date: 11/29/18 16:00 hrs  
 Received by/date: 11/29/18 16:50 hrs  
 Relinquish by/date: 11/29/18 10:00 hrs  
 Received by/date: 11/29/18 09:18 hrs  
 Relinquish by/date: \_\_\_\_\_ hrs  
 Received by/date: \_\_\_\_\_ hrs

REPORT REQUIREMENTS: (circle) I. Routine Report II. Report III. Data Validation Report IV. CLP Deliverable Report  
 Requested Report Date: \_\_\_\_\_  
 TURNAROUND TIME: \_\_\_\_\_ 24 hr. \_\_\_\_\_ 48 hr.  5 day Standard \_\_\_\_\_ Provides Verbal Prelim Results \_\_\_\_\_ Fax Prelim Results



NCE Project Site: Estan Rd. Interchange  
 Contractor/Project Manager: G. Fessano  
 Firm: NCE  
 Address: \_\_\_\_\_  
 Phone & Fax: \_\_\_\_\_  
 Sampler's Signature: [Signature]

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**NCE Chain of Custody/Laboratory Analysis Request Form** Page 2 of 15  
 Lab Name: BC Labs  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Bill to: Altin B. Carabata  
 Nicholis Consulting Engineers  
 8795 Folsom Blvd, #250  
 Sacramento CA, 95826

NCE Project Number: FDP 1011.03.55 18-37130

SAMPLE ID	DATE	TIME	LAB ID	MATRIX	Requested Analysis			
					No. of Containers & Preservative	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCL
ER-6-5	11/27/18	12:20	-11	Soil C				
ER-6-1.0	12:20		-12					
ER-7-5	11/28/18	11:40	-13					
ER-7-1.0	12/3	11:40	-14					
ER-8-5	11/28/18	11:55	-15					
ER-8-1.0	11/28/18	12:10	-16					
ER-9-5	11/28/18	12:10	-17					
ER-10-1	12/3/18	11:55						
ER-9-1.0	11/28/18	12:30	-18					

REMARKS:  
 Do not analyze HUFN samples unless notified by NCE

Hold until Further Notice (HUFN)  
 HUFN  
 HUFN  
 HUFN

EDF Report?  Yes  No  
 EDF Deliverable to (Email Address) \_\_\_\_\_

Relinquish by/date time: 11/28/18 16:50 hrs  
 Received by/date: [Signature] 11/28/18 16:50 hrs  
 Relinquish by/date: 11/28/18 16:00 hrs  
 Received by/date: [Signature] 11-28-18 09:18 hrs  
 Relinquish by/date: \_\_\_\_\_ hrs  
 Received by/date: \_\_\_\_\_ hrs

**RUSH!**

REPORT REQUIREMENTS: (circle) I. Routine Report II. Report III. Data Validation Report IV. CLP Deliverable Report

Requested Report Date: \_\_\_\_\_ 24 hr. \_\_\_\_\_ 48 hr. \_\_\_\_\_ 5 day Standard \_\_\_\_\_ Provide Verbal Prelim Results \_\_\_\_\_ Fax Prelim Results \_\_\_\_\_



NCE Project/Site: Estero Rd. Interchange  
 Contractor/Project Manager: F. Fasiano  
 Firm: NCE  
 Address: \_\_\_\_\_  
 Phone & Fax: \_\_\_\_\_  
 Sampler's Signature: [Signature]

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**NCE Chain of Custody/Laboratory Analysis Request Form**  
 Lab Name: BC Labs Page 3 of 5  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Bill to: NCE  
 Nichols Consulting Engineers  
 8795 Folsom Blvd, #250  
 Sacramento CA, 95826

NCE Project Number: 18-37130  
 Requested Analysis: \_\_\_\_\_

SAMPLE ID	DATE	TIME	LAB ID	MATRIX	Requested Analysis				REMARKS:	
					No. of Containers & Preservative	HCL	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>		
ER-10-S	11/27/16	12:10	-19	Soil					Do not analyze HUFN samples unless notified by NCE  Hold until further notice (HUFN)	
ER-10-1.0	12/10	12:30	-20		6000 Pb only					
ER-11-S	12/30	12:30	-12							
ER-11-1.0	12/30	12:30	-22							
ER-12-S	12/30	12:30	-23							
ER-12-1.0	12/30	12:30	-21							
ER-13-S	12/30	12:30	-25							
ER-13-1.0	12/30	12:30	-26							
ER-14-S	12/30	12:30	-27							
ER-14-1.0	12/30	12:30	-28							

EDF Report?  Yes  No  
 EDF Deliverable to (Email Address) \_\_\_\_\_  
 NOTES TO LAB:  
**RUSH!**

Relinquish by/date: 11/29/18 16:50 hrs  
 Received by/date: [Signature] 11/29/18 16:50 hrs  
 Relinquish by/date: 11/29/18 10:00 hrs  
 Received by/date: [Signature] 11/29/18 09:18 hrs  
 Relinquish by/date: \_\_\_\_\_ hrs  
 Received by/date: \_\_\_\_\_ hrs

REPORT REQUIREMENTS: (circle)  
 I. Routine Report \_\_\_\_\_  
 II. Report \_\_\_\_\_  
 III. Data Validation Report \_\_\_\_\_  
 IV. CLP Deliverable Report \_\_\_\_\_

Requested Report Date: \_\_\_\_\_  
 TURNAROUND TIME: \_\_\_\_\_ 24 hr. \_\_\_\_\_ 48 hr. \_\_\_\_\_ 5 day Standard \_\_\_\_\_ Provide Verbal Prelim Results \_\_\_\_\_ Fax Prelim Results \_\_\_\_\_



NCE Project/Site: Eaton Rd Interchange  
 Contractor/Project Manager: G. Fasiano  
 Firm: NCE  
 Address: \_\_\_\_\_  
 Phone & Fax: \_\_\_\_\_  
 Sampler's Signature: [Signature]

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NCE Chain of Custody/Laboratory Analysis Request Form  
 Lab Name: BC Labs Page 4 of 5  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Bill to: Attn: B. Carpenter  
 Nichols Consulting Engineers  
 8795 Folsom Blvd., #250  
 Sacramento CA, 95826

NCE Project Number: 1011.03.55

Requested Analysis  
18.37130

NCE Project/Site: Eaton Rd Interchange  
 Contractor/Project Manager: G. Fasiano  
 Firm: NCE  
 Address: \_\_\_\_\_  
 Phone & Fax: \_\_\_\_\_  
 Sampler's Signature: [Signature]

SAMPLE ID	DATE	TIME	LAB ID	MATRIX	Requested Analysis				REMARKS:
					No. of Containers & Preservative	HCL	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	
ER-15-5	1/21/18	13:40	-29	Soil	6000 Pb only				Do Not analyze HUFN Samples unless notified by NCE  Hold until further notice (HUFN)
ER-15-1.0	1/21/18	13:50	-30					HUFN	
ER-16-5	1/21/18	13:45	-31					HUFN	
ER-16-1.0	1/21/18	13:45	-32					HUFN	
ER-17-5	1/21/18	13:55	-33					HUFN	
ER-17-1.0	1/21/18	13:40	-34					HUFN	
ER-18-5	1/21/18	13:45	-35					HUFN	
ER-18-1.0	1/21/18	13:45	-36					HUFN	
ER-19-5	1/21/18	13:55	-37					HUFN	
ER-19-1.0	1/21/18	14:20	-38					HUFN	

EDF Report?  Yes  No  
 EDF Deliverable to (Email Address) \_\_\_\_\_  
 NOTES TO LAB:  
**PUSH!**

Relinquish by/date/time: 1/22/18 10:50 hrs  
 Received by/date/time: [Signature] hrs  
 Relinquish by/date/time: 1/22/18 10:00 hrs  
 Received by/date/time: [Signature] hrs  
 Relinquish by/date/time: 1/22/18 09:18 hrs  
 Received by/date/time: [Signature] hrs

REPORT REQUIREMENTS: (circle) I. Routine Report II. Report III. Data Validation Report IV. CLP Deliverable Report  
 Requested Report Date: \_\_\_\_\_  
 TURNAROUND TIME: \_\_\_\_\_ 24 hr. \_\_\_\_\_ 48 hr. \_\_\_\_\_ 5 day Standard \_\_\_\_\_ Provide Verbal Prelim Results \_\_\_\_\_ Fax Prelim Results \_\_\_\_\_

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Chain of Custody Form

Project #: 1011.03.55  
 Client: NCE  
 Project Name: Eaton  
 Street Address: Rd Interchange  
 City, State, Zip:  
 Phone:  
 Fax:  
 Work Order #: 18-37130

Analysis Requested: (Please refer to the back of this page for completion instructions and method legend.)

Comments: Same as previous pages

Result Request:  STD (1 Day)  5 Day  2 Day  1 Day

Sample Matrix:  Waste Water  Ground Water  Drinking Water  Sludge  Soil

Notes: Hold

Sample #	Description	Date Sampled	Time Sampled	Analysis Requested	Result Request	Surcharge
39	ER-20-5	11-27-18	1410		Hold	
40	ER-20-1.0		1410		Hold	
41	ER-21-5		1420		Hold	
42	ER-21-1.0		1420		Hold	

Global ID (Needed for EDF):

EDF Required? Geotracker:  Yes  No

Send Copy to State of CA? (EDT):  Yes  No

Global ID (Needed for EDF):

1. Relinquished By: [Signature] Date: 11/27/18 Time: 1410

2. Relinquished By: [Signature] Date: 11/28/18 Time: 1000

3. Relinquished By: [Signature] Date: 11-29-18 Time: 09:28

Received By: [Signature] Date: 11/28/18 Time: 1000

Received By: [Signature] Date: 11/28/18 Time: 09:28

System # (Needed for EDT):

BC Laboratories, Inc. - 4100 Atlas Ct. - Bakersfield, CA 93308 - 661.327.4911 - Fax: 661.327.1918 - www.bclabs.com

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# Laboratories, Inc.

Environmental Testing Laboratory Since 1949

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 of 1

Submission #: 18-37130

**SHIPPING INFORMATION**  
 Fed Ex  UPS  Ontrac  Hand Delivery   
 BC Lab Field Service  Other  (Specify) 650

**SHIPPING CONTAINER**  
 Ice Chest  None  Box   
 Other  (Specify) \_\_\_\_\_

**FREE LIQUID**  
 YES  NO   
 W / IS

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Comments: \_\_\_\_\_  
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO  
 Emissivity: 0.7 Container: GLASS Thermometer ID: 24 Date/Time: 11-29-18  
 Temperature: (A) 2.6 °C / (C) 31 °C Analyst Inpt: AS 09:18

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>6+</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PLA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/603/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

CHK BY [Signature] DISTRIBUTION   
 SUB-OUT

Comments: \_\_\_\_\_  
 Sample Numbering Completed By: [Signature] Date/Time: 11-29-18 1332  
 = Actual / C = Corrected

Rev 21 05/23/2016

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BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 of 2

Submission #: 18-37130

SHIPPING INFORMATION: Fed Ex  UPS  Ontrac  Hand Delivery  BC Lab Field Service  Other (Specify) 650

SHIPPING CONTAINER: Ice Chest  None  Box  Other (Specify) \_\_\_\_\_

FREE LIQUID: YES  NO  W / S

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Intact? Yes  No  Intact? Yes  No  Comments: \_\_\_\_\_

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received: YES  NO  Emissivity: 97 Container: Glass Thermometer ID: 24 Date/Time: 11-29-18

Temperature: (A) 2.6 °C / (C) 31 °C Analyst Init: AD 09:18

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>6+</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR	A	A	A	A	A	A	A	A	A	A
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TRDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: \_\_\_\_\_

Sample Numbering Completed By: \_\_\_\_\_ Date/Time: 11-29-18

= Actual / C = Corrected

Rev 21 05/23/2016



BC LABORATORIES INC. COOLER RECEIPT FORM Page 3 of 3

Submission #: 1837130

SHIPPING INFORMATION: Fed Ex  UPS  Ontrac  Hand Delivery  BC Lab Field Service  Other (Specify) GSO

SHIPPING CONTAINER: Ice Chest  None  Box  Other (Specify) \_\_\_\_\_

FREE LIQUID: YES  NO  W / S

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Intact? Yes  No  Intact? Yes  No  Comments: \_\_\_\_\_

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received: YES  NO

Emissivity: 97 Container: Glass Thermometer ID: ZH Date/Time: 11-29-18

Temperature: (A) 2.0 °C / (C) 31 °C Analyst Inpt: AS 09:18

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	21	22	23	24	25	26	27	28	29	30
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>4</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 504/505/5090										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR	*	*	*	*	*	*	*	*	*	*
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SURMA CANISTER										

Comments: \_\_\_\_\_

Sample Numbering Completed By: MA Date/Time: 11-29-18 13:34

Actual / C = Corrected

Rev 21 05/23/2016



BC LABORATORIES INC. COOLER RECEIPT FORM Page 4 of 5

Submission #: 18-37130

SHIPPING INFORMATION: Fed Ex  UPS  Ontrac  Hand Delivery  BC Lab Field Service  Other  (Specify) GSO

SHIPPING CONTAINER: Ice Chest  None  Box  Other  (Specify) \_\_\_\_\_

FREE LIQUID: YES  NO  W / S

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Comments: \_\_\_\_\_

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received: YES  NO  Emissivity: 97 Container: Glass Thermometer ID: 24 Date/Time: 11-29-18

Temperature: (A) 2.0 °C / (C) 31 °C Analyst Inpt: AS 09:18

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	31	32	33	34	35	36	37	38	39	40
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr*										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR	A	A	A	A	A	A	A	A	A	A
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: \_\_\_\_\_

Sample Numbering Completed By: AM Date/Time: 11-29-18 1534

= Actual / C = Corrected

Rev 21 05/23/2016



BC LABORATORIES INC. COOLER RECEIPT FORM Page 5 of 5

Submission #: 18-37130

SHIPPING INFORMATION: Fed Ex  UPS  Ontrac  Hand Delivery  BC Lab Field Service  Other (Specify) 650

SHIPPING CONTAINER: Ice Chest  None  Box  Other (Specify) \_\_\_\_\_

FREE LIQUID: YES  NO  W 18

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Intact? Yes  No  Intact? Yes  No  Comments: \_\_\_\_\_

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received: YES  NO  Emissivity: 0.7 Container: Glass Thermometer ID: 24 Date/Time: 11-29-18

Temperature: (A) 2.0 °C / (C) 31 °C Analyst Ingt: AD 09:18

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	41	42	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 5oz / 16oz PE UNPRES										
2oz Cr <sup>6+</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PLA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
5oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: \_\_\_\_\_

Sample Numbering Completed By: A Date/Time: 11-29 1335

Actual / Corrected

Rev 21 05/23/2016

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Nichols Consulting Engineers  
8795 Folsom Blvd. Suite 250  
Sacramento, CA 95826

**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1837130-01	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 11:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-1-S	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-02	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 11:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-1-1.0	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-03	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 10:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-2-S	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-04	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 10:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-2-1.0	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-05	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 12:05
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-3-S	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-06	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 12:05
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-3-1.0	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-07	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 10:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-4-S	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil

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Sacramento, CA 95826

**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1837130-08	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 10:40
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-4-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-09	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:15
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-5-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-10	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:15
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-5-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-11	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:20
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-6-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-12	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:20
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-6-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-13	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:25
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-7-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-14	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:25
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-7-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil

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Sacramento, CA 95826

**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1837130-15	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 11:40
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-8-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-16	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 11:40
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-8-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-17	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 11:55
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-9-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-18	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 11:55
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-9-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-19	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-10-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-20	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-10-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-21	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:30
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-11-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil

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Sacramento, CA 95826

**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1837130-22	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:30
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-11-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-23	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:35
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-12-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-24	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:35
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-12-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-25	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:50
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-13-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-26	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 12:55
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-13-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-27	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 13:05
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-14-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-28	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 13:05
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-14-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil

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8795 Folsom Blvd. Suite 250  
Sacramento, CA 95826

**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1837130-29	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 13:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-15-S	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-30	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 13:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-15-1.0	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-31	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 13:25
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-16-S	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-32	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 13:25
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-16-1.0	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-33	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 13:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-17-S	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-34	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 13:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-17-1.0	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil
1837130-35	<b>COC Number:</b>	---	<b>Receive Date:</b> 11/29/2018 09:18
	<b>Project Number:</b>	Eaton Rd. Interchange	<b>Sampling Date:</b> 11/27/2018 13:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	ER-18-S	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	NCES	<b>Sample Type:</b> Soil

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Sacramento, CA 95826

**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1837130-36	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 13:45
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-18-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-37	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 13:55
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-19-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-38	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 13:55
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-19-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-39	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 14:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-20-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-40	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 14:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-20-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-41	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 14:20
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-21-S		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil
1837130-42	<b>COC Number:</b>	---		11/29/2018 09:18	
	<b>Project Number:</b>	Eaton Rd. Interchange		<b>Sampling Date:</b>	11/27/2018 14:20
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	ER-21-1.0		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	NCES		<b>Sample Type:</b>	Soil

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Sacramento, CA 95826

**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1837130-01	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-1-S, 11/27/2018 11:00:00AM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	16	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 22:33	ARD	PE-EL4	4.902	B031169

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-03	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-2-S, 11/27/2018 10:50:00AM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	25	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 21:36	ARD	PE-EL4	5	B031169

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1837130-05	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-3-S, 11/27/2018 12:05:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	26	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 22:36	ARD	PE-EL4	4.673	B031169

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-07	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-4-S, 11/27/2018 10:40:00AM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	18	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 22:40	ARD	PE-EL4	4.854	B031169

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1837130-09	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-5-S, 11/27/2018 12:15:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	13	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 22:43	ARD	PE-EL4	4.950	B031169

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-11	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-6-S, 11/27/2018 12:20:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	15	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 22:47	ARD	PE-EL4	4.950	B031169

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### WET Test (STLC)

<b>BCL Sample ID:</b> 1837130-13	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-7-S, 11/27/2018 12:25:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	1.8	mg/L	0.50	0.16	EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	02/14/19 12:00	02/14/19 19:30	KDF	PE-OP3	1	B037766

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1837130-13	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-7-S, 11/27/2018 12:25:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	110	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 22:50	ARD	PE-EL4	4.950	B031169

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-14	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-7-1.0, 11/27/2018 12:25:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	33	mg/kg	0.25	0.12	EPA-6020	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	02/12/19 07:30	02/12/19 14:07	ARD	PE-EL4	0.980	B037476

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-15	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-8-S, 11/27/2018 11:40:00AM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	56	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:01	ARD	PE-EL4	4.902	B031169

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### WET Test (STLC)

<b>BCL Sample ID:</b> 1837130-17	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-9-S, 11/27/2018 11:55:00AM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	ND	mg/L	0.50	0.16	EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	02/14/19 12:00	02/14/19 19:32	KDF	PE-OP3	1	B037766

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-17	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-9-S, 11/27/2018 11:55:00AM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	290	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:05	ARD	PE-EL4	4.950	B031169

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1837130-18	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-9-1.0, 11/27/2018 11:55:00AM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	17	mg/kg	0.25	0.12	EPA-6020	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	02/12/19 07:30	02/12/19 14:09	ARD	PE-EL4	0.926	B037476

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-19	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-10-S, 11/27/2018 12:10:00PM
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	11	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:08	ARD	PE-EL4	4.717	B031169

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-21	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-11-S, 11/27/2018 12:30:00PM
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	42	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:11	ARD	PE-EL4	4.854	B031169

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-23	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-12-S, 11/27/2018 12:35:00PM
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	27	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:15	ARD	PE-EL4	4.854	B031169

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-25	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-13-S, 11/27/2018 12:50:00PM
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	14	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:18	ARD	PE-EL4	4.762	B031169

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1837130-27	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-14-S, 11/27/2018 1:05:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	26	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:29	ARD	PE-EL4	4.717	B031169

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-29	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-15-S, 11/27/2018 1:30:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	21	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:33	ARD	PE-EL4	4.808	B031169

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-31	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-16-S, 11/27/2018 1:25:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	21	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:36	ARD	PE-EL4	4.630	B031169

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-33	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-17-S, 11/27/2018 1:40:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	29	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:40	ARD	PE-EL4	4.902	B031169

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1837130-35	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-18-S, 11/27/2018 1:45:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	7.9	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:43	ARD	PE-EL4	4.717	B031169

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Sacramento, CA 95826

**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-37	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-19-S, 11/27/2018 1:55:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	6.7	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:46	ARD	PE-EL4	4.673	B031169

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-39	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-20-S, 11/27/2018 2:10:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	57	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 09:30	11/30/18 23:50	ARD	PE-EL4	5	B031169

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### WET Test (STLC)

<b>BCL Sample ID:</b> 1837130-41	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-21-S, 11/27/2018 2:20:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	1.3	mg/L	0.50	0.16	EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	02/14/19 12:00	02/14/19 19:34	KDF	PE-OP3	1	B037766

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1837130-41	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-21-S, 11/27/2018 2:20:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	120	mg/kg	1.2	0.60	EPA-6020	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	11/30/18 19:40	12/03/18 12:31	ARD	PE-EL2	5	B031229

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1837130-42	<b>Client Sample Name:</b> Eaton Rd. Interchange, ER-21-1.0, 11/27/2018 2:20:00PM
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	23	mg/kg	0.25	0.12	EPA-6020	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6020	02/12/19 07:30	02/12/19 14:11	ARD	PE-EL4	0.926	B037476

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

### WET Test (STLC)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: B037766</b>						
Lead	B037766-BLK1	ND	mg/L	0.50	0.16	

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### WET Test (STLC)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: B037766</b>										
Lead	B037766-BS1	LCS	19.660	20.000	mg/L	98.3		85	115	

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### WET Test (STLC)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: B037766</b>		Used client sample: N								
Lead	DUP	1904423-01	31.700	31.180		mg/L	1.7		20	
	MS	1904423-01	31.700	52.941	20.408	mg/L		104		75 - 125
	MSD	1904423-01	31.700	54.139	20.408	mg/L	2.2	110	20	75 - 125

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTL)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: B031169</b>						
Lead	B031169-BLK1	ND	mg/kg	0.25	0.12	
<b>QC Batch ID: B031229</b>						
Lead	B031229-BLK1	ND	mg/kg	0.25	0.12	
<b>QC Batch ID: B037476</b>						
Lead	B037476-BLK1	ND	mg/kg	0.25	0.12	

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLIC)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: B031169</b>										
Lead	B031169-BS1	LCS	30.025	25.000	mg/kg	120		75 - 125		
<b>QC Batch ID: B031229</b>										
Lead	B031229-BS1	LCS	27.190	25.000	mg/kg	109		75 - 125		
<b>QC Batch ID: B037476</b>										
Lead	B037476-BS1	LCS	27.811	25.000	mg/kg	111		75 - 125		

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**Reported:** 02/15/2019 9:35  
Project: Eaton Rd. Interchange  
Project Number: 1011.03.55  
Project Manager: Bobby Carpenter

### Total Concentrations (TTLC)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
<b>QC Batch ID: B031169</b>		Used client sample: Y - Description: ER-2-S, 11/27/2018 10:50									
Lead	DUP	1837130-03	24.591	27.425		mg/kg	10.9		20		
	MS	1837130-03	24.591	51.385	25.000	mg/kg		107		75 - 125	
	MSD	1837130-03	24.591	61.422	25.000	mg/kg	17.8	147	20	75 - 125	Q03
<b>QC Batch ID: B031229</b>		Used client sample: Y - Description: ER-21-S, 11/27/2018 14:20									
Lead	DUP	1837130-41	117.14	104.87		mg/kg	11.1		20		
	MS	1837130-41	117.14	137.20	25.000	mg/kg		80.2		75 - 125	
	MSD	1837130-41	117.14	112.07	25.000	mg/kg	20.2	-20.3	20	75 - 125	Q02, Q03
<b>QC Batch ID: B037476</b>		Used client sample: N									
Lead	DUP	1904273-03	12.622	13.299		mg/kg	5.2		20		
	MS	1904273-03	12.622	66.961	50.000	mg/kg		109		75 - 125	
	MSD	1904273-03	12.622	65.152	50.000	mg/kg	2.7	105	20	75 - 125	

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**Reported:** 02/15/2019 9:35  
**Project:** Eaton Rd. Interchange  
**Project Number:** 1011.03.55  
**Project Manager:** Bobby Carpenter

**Notes And Definitions**

- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A07 Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
- Q02 Matrix spike precision is not within the control limits.
- Q03 Matrix spike recovery(s) was(were) not within the control limits.

APPENDIX F  
*Noise Memo*



## MEMORANDUM

---

**To:** Maggie Ritter, District 3 Associate Environmental Planner  
**From:** Christopher Barnobi, Dudek  
Brian Grattidge, Dudek  
**Via:** Tracy R. Bettencourt MPA AICP, City of Chico  
**Subject:** HSIPL-5037(035) State Route 99 / Eaton Road Interchange Improvements  
Noise Technical Memorandum  
**Date:** January 23, 2018

---

### INTRODUCTION

The City of Chico is proposing improvements at two adjacent intersections: State Route 99 (SR 99) North Bound On-Off Ramps / Eaton Road and Eaton Road / Hicks Lane. The goal of reconfiguring these two intersections would be to improve traffic operations on the roads.

Land uses surrounding the interchange include residential and service commercial. A Comcast service center is located in the southeast quadrant of the interchange with a large parking lot fronting Eaton Road. Other service commercial uses are located south of Comcast, between the NB Off-Ramp and Silverbell Road. Pacific Supply, in the northeast quadrant, has its main access point on Hicks Lane directly north of Eaton Road. Single family residential development dominates the northeast quadrant, including a large vacant parcel adjacent to the Eaton Road / Hicks intersection, currently owned by the City. The land uses immediately west of SR 99 include office, service commercial, and residential uses.

The primary purpose of the proposed project is to improve safety for all travel modes at the SR 99 NB ramp intersection and Hicks Lane intersection with Eaton Road. The secondary purpose of this project is to improve operations, reduce delay, and enhance mobility for all travel modes at the study intersections.

The project will not require construction of large foundations or structures (no pile driving). The project would require reconstruction of streets, gutters, and sidewalk, and the installation of landscaping and street lighting.

According to 23 CFR 772.5(h), a Type I project involves “construction on new location or the physical alteration of an existing highway which significantly changes either the horizontal or

*Memorandum*

*Subject: HSIPL-5037(035) Eaton Road/SR 99 Interchange Improvements  
Noise Technical Memorandum*

---

vertical alignment or increases the number of through-traffic lanes.” The proposed project involves the construction of a single roundabout. The proposed project would not alter the vertical alignment of the roadways or increase the number of through traffic lanes nor would it significantly alter the horizontal alignments of the existing roadways. There would be a minor expansion of the SR 99 NB Off-Ramp to the east to accommodate the entry point at the roundabout. Therefore the proposed project is not a Type I project, and thus does not require a Noise Study Report. The proposed project will involve some excavation and grading during construction. This Noise Technical Memorandum has been prepared to qualitatively address construction noise. Chico noise regulations are presented to frame the discussion.

## **NOISE SIGNIFICANCE CRITERIA**

The City of Chico Municipal Code, Chapter 9.38 “Categorical Exemptions” (City of Chico 2017) contains the following regulations related to construction noise:

The following activities or sources of noise are exempt from the provisions of this chapter:

- B. Construction and Alteration of Structures. Notwithstanding any other provision of this chapter, between the hours of ten a.m. and six p.m. on Sundays and holidays, and seven a.m. and nine p.m. on other days, construction, alteration or repair of structures shall be subject to one of the following limits:
  1. No individual device or piece of equipment shall produce a noise level exceeding eighty-three (83) dBA at a distance of twenty-five (25) feet from the source. If the device or equipment is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close as possible to twenty-five (25) feet from the equipment.
  2. The noise level at any point outside of the property plane of the project shall not exceed eighty-six (86) dBA.

The noise ordinance does not specify the noise level metric. We assume that these levels are for the hourly  $L_{eq}$ .

The Chico General Plan Noise Element (Chico GPNE) includes a list of goals, policies, and actions. Policy N-1.6 is relevant to construction activities:



*Memorandum*

*Subject: HSIPL-5037(035) Eaton Road/SR 99 Interchange Improvements  
Noise Technical Memorandum*

---

Maintain special standards in the Municipal Code to allow temporary construction activities to exceed the noise standards established in this element, with limits on the time of disturbance to nearby noise-sensitive uses.

The Chico GPNE includes maximum allowable exterior noise levels from non-transportation sources. Table 1 presents those maximum average-hourly and intermittent limits.

**Table 1  
Maximum Allowable Exterior Noise Levels from Non-Transportation Sources**

Noise Level Descriptor (dBA)	Exterior Noise Level (dBA)	
	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Average-Hourly Noise Level (L <sub>eq</sub> )	55	50
Intermittent Noise Level (L <sub>2</sub> or L <sub>max</sub> )	75	65

**Notes:**

1. Noise levels are for planning purposes and may vary from the standards of the City's Noise Ordinance, which are for enforcement purposes.
2. Noise levels shall be lowered by five dB for simple tones noises, noises consisting primarily of speech or music, or for recurring impulsive noises. Noise level standards do not apply to mixed-use residential units established in conjunction with industrial or commercial uses provided interior noise levels remain below 45 dB Ldn/CNEL.
3. In areas where the existing ambient noise level exceeds the established daytime or nighttime standard, the existing level shall become the respective noise standard and an increase of 3 dBA or more shall be significant. Noise levels shall be reduced by 5 dBA if the existing ambient hourly L<sub>eq</sub> is at least 10 dBA lower than the standards.
4. Noise standards are to be applied at outdoor activity areas with the greatest exposure to the noise source. When it is not practical to mitigate exterior noise levels at patio or balconies of multi-family dwellings, a common area or onsite park may be designated as the outdoor activity area.

**CONSTRUCTION NOISE DISCUSSION**

During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise is exempt in the City's Municipal Code Chapter 9.38.

Pile driving or blasting would not be necessary during project construction. Table 2 summarizes noise levels produced by construction equipment that is commonly used on roadway construction projects. Construction equipment is expected to generate noise levels ranging from 70 to 90 dB at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance.

When the sites have an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees, an excess ground attenuation value of 1.5 dB per doubling distance can be assumed (Caltrans 2013).

*Memorandum*

*Subject: HSIPL-5037(035) Eaton Road/SR 99 Interchange Improvements*

*Noise Technical Memorandum*

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**Table 2**  
**Construction Equipment Noise Emission Levels**

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Measured L <sub>max</sub> @50ft (dBA, slow)
Auger Drill Rig	No	20	84
Backhoe	No	40	78
Compactor (ground)	No	20	83
Compressor (air)	No	40	78
Dozer	No	40	82
Dump Truck	No	40	76
Excavator	No	40	81
Flat Bed Truck	No	40	74
Front End Loader	No	40	79
Generator	No	50	81
Generator (<25KVA, VMS signs)	No	50	73
Grader	No	40	85*
Horizontal Boring Hydr. Jack	No	25	82
Man Lift	No	20	75
Pavement Scarafier	No	20	90
Paver	No	50	77
Pickup Truck	No	40	75
Pneumatic Tools	No	50	85
Pumps	No	50	81
Rock Drill	No	20	81
Roller	No	20	80
Scraper	No	40	84
Tractor	No	40	84*

Source: DOT 2006.

\* Specification 721, a specified value, not a measured result.

The noise levels generated by construction equipment would vary greatly depending on factors such as the type and specific model of the equipment, the condition of the equipment, and the operation being performed. The average sound level of the construction activity also

*Memorandum*

*Subject: HSIPL-5037(035) Eaton Road/SR 99 Interchange Improvements  
Noise Technical Memorandum*

---

depends upon the amount of time that the equipment operates and the intensity of the construction during the time period. Construction noise would also be short-term and intermittent.

The construction area is approximately 215 feet from the nearest residence, located to the northeast of the project site. At this distance, L<sub>max</sub> would be reduced by 12 to 15 dB from the levels shown on Table 2. The pavement scarifier has the highest L<sub>max</sub> of the expected equipment. Reducing the reported level by 15 dB to account for distance attenuation and soft ground, would result in a level of approximately 75 dBA L<sub>max</sub> at the closest residence. This level would not exceed the maximum allowable daytime noise level from the Chico GPNE as shown in Table 1.

Additionally construction efforts are expected to only occur during daytime hours. As specified in the Chico Municipal Code, construction shall be exempt between the hours of ten a.m. and six p.m. on Sundays and holidays, and seven a.m. and nine p.m. on other days. Considering the construction exemption and the temporary nature of the construction efforts, noise impacts from the construction of the proposed project are considered less than significant.

On average, the position of onsite construction activities, vehicles and equipment will be at or near the geographic center of the project site, which is at a distance of more than 90 feet from the nearest site boundary. At this distance, and using the Federal Transit Administration (FTA) general assessment technique for construction noise assessment, the combined noise from a pavement scarifier and grader (using reference data from Table 2), would be less than 83 dBA at the project property plane and thus compliant with Section 9.38.060B.1.b.

## **REFERENCES**

City of Chico. 2011. "Chapter 13, Noise Element." In *Chico 2030 General Plan*. April 2011. Accessed April 2017. [http://www.chico.ca.us/document\\_library/general\\_plan/documents/13.NoiseElement.pdf](http://www.chico.ca.us/document_library/general_plan/documents/13.NoiseElement.pdf).

City of Chico. 2017. "Title 9, Public Peace, Safety, and Morals; Division 5, Offenses Against Public Peace; Chapter 9.38, Noise." In *Chico Municipal Code*. Accessed March 2017. [http://library.amlegal.com/nxt/gateway.dll/California/chico\\_ca/chicomunicipalcode?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:chico\\_ca](http://library.amlegal.com/nxt/gateway.dll/California/chico_ca/chicomunicipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:chico_ca).

U.S. Department of Transportation, Federal Transit Administration, Office of Planning and Environment. 2006. FTA-VA-90-1003-06. Transit Noise and Vibration Impact Assessment. (Prepared under contract by Harris, Miller, Miller and Hanson). May.



APPENDIX G  
*ICE Report*



**SR 99/Eaton Road  
Intersection Control Evaluation  
(Step I) Report**

Prepared for:

**City of Chico**

Prepared by:



**SR 99/Eaton Road  
Intersection Control Evaluation (Step I) Report**

**Prepared for:  
City of Chico  
411 Main Street  
Chico, CA 95927**

**Prepared by:  
Omni-Means, Ltd., a GHD Company  
943 Reserve Drive, Suite 100  
Roseville, CA 95678  
(916) 782-7688**

**June 2018**

**25-2223-06  
R2206RPT003.docx**



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# 1. Introduction

This document has been prepared to present the results of a conceptual alternatives analysis performed by Omni-Means, a GHD Company, for the City of Chico in support of the Intersection Control Evaluation (ICE) - Step I process. The analysis compares safety and operations associated with a traffic signal and a roundabout alternative at the Eaton Road/State Route 99 interchange consistent with Caltrans Traffic Operations Policy Directive (TOPD) 13-02, Intersection Control Evaluation, for intersection improvements on the State Highway system.

## 2.1 Project Setting/ Land Use

The study area is shown on Figure 1 and the intersections analyzed in this report include:

1. Eaton Road/SR 99 NB Ramps
2. Eaton Road/Hicks Lane

**FIGURE 1: STUDY AREA**



The Eaton Road/SR 99 interchange is located in northwest Chico where Eaton Road serves as an east/west arterial extending from the western city limits to Cohasset Road.

Hicks Lane is a north/south collector extending from Eaton Road to the northern city limits. Most of the development in the City is located to the southeast of the Eaton Road interchange.

Land uses surrounding the interchange vary and include residential, commercial, public, and mixed use land use types. A Comcast service center is located in the southeast quadrant of the interchange with a large parking lot fronting Eaton Road. Additionally, Pacific Supply, in the northeast quadrant, has its main access point on Hicks Lane directly north of Eaton Road. Most other surrounding properties on the east side of SR 99 are single family residential.

There exists a large drainage channel directly adjacent to the NB on-ramp that is in the State right of way.

The Eaton Road/SR 99 overcrossing is located on a crest vertical curve, and there is a significant change in grade between the structure and the ramp intersections. The existing overcrossing is approximately 42' wide with a sidewalk on the south side. Both the canal and freeway overcrossing will present unique design challenges.

As indicated within Figure 1, the two existing intersections of SR 99 NB Ramps/Eaton Road and Eaton Road/Hicks Lane are closely spaced.

## 2.2 Project Background

Due to the presence of an extensive collision history, which includes a fatality in 2012, the City of Chico has identified the following two existing intersections as being of high priority in addressing safety concerns:

1. SR-99 NB On-Off Ramps/ Eaton Road,
2. Eaton Road/ Hicks Lane.

Within the past 5 years, high concentrations of broadside and rear-end collisions have been recorded at the existing site. The frequent collisions and the single fatality at the site may stem from the following two characteristics of the intersections:

1. Insufficient spacing between the two intersections
2. Visual overload from too many regulatory signs at each approach.

In addition to the collision factors listed above, it appears that the inattention to speed by drivers approaching the intersection at Eaton Road from the SR-99 NB Off Ramp has a direct influence on the number of rear end collisions recorded at the intersection of SR 99 NB Ramps/Eaton Road. Moreover, City staff has also indicated that the existing queue spill at the NB Off Ramp (which occurs during the peak hours), imposes additional safety concerns on the State Highway System.

In June 2016, the City of Chico considered a proposal for the conversion of the two existing intersections to a single signalized intersection which serves the SR-99 NB Ramps, Eaton Road and Hicks Lane (see Appendix A). A complex signal phasing system was required to accommodate the single signalized intersection concept. The analysis concluded that a single signalized intersection was insufficient in improving safety and congestion at the location. Appendix A contains the analysis.

As the interchange, specifically the SR 99 NB Ramps/Eaton Road intersection, had a history of collisions with severe injuries (and in one case, a fatality), the City was able to pursue a Highway Safety Improvement Program (HSIP) project grant through the California Department of Transportation in August 2016. In pursuing the grant, the City developed a single, 5-leg, roundabout concept in place of the existing two (2) intersections at SR 99 NB Ramps/Eaton Road and Eaton Road/Hicks Lane. As the 5-leg roundabout scored a benefit-to-cost ratio of 5.42 and was determined to be the safest alternative, the City was successful in securing HSIP grant funding for the improvement of the SR 99 NB Ramps/Eaton Road and Eaton Road/Hicks Lane intersections.

## 2.3 Project Purpose

As this project is funded by a HSIP grant, the primary purpose of this project is to improve safety for all travel modes at the SR 99 NB ramp intersection and Hicks Lane intersection with Eaton Road, through the implementation of a single, 5-leg roundabout.

The secondary purpose of this intersection improvement project is to improve operations, reduce delay, and enhance mobility for all travel modes at the study intersections through the implementation of a roundabout. Therefore, within this report, the traffic operations for the proposed roundabout alternative will be evaluated for opening year conditions consistent with the guidelines established in the Highway Design Manual Sixth Edition (HDM). The following text is quoted from Section 103.2 of the HDM for reference:

*Safety, Resurfacing, Restoration and Rehabilitation (RRR), and operational improvement projects should be designed on the basis of the current ADT.*

Although not required for a safety/operational improvement project, to understand future improvement needs associated with the project, a sensitivity analysis was conducted for an Opening Year (2020), Interim Design Year (2030) and Ultimate Design Year (2040). The objective of this analysis is to assess the operations for Opening Year (2020), Interim Design Year (2030) and Ultimate Design Year (2040) based on the proposed roundabout concept and identify if additional improvements will be warranted within the twenty year design period.

As noted previously, the purpose of the project is to improve safety at the study intersections through the implementation of the roundabout alternative. The intent of this document is to obtain Caltrans concurrence on the roundabout alternative via a comparative analysis (ICE). The remainder of this document contains a description of the following sections consistent with the Caltrans ICE document guidelines and provide a comparison of the roundabout and traffic signal alternatives at the SR 99 NB ramp intersection and Hicks Lane intersection with Eaton Road:

- Screening Objectives
- Screening Criteria
- Capacity Assessment/Analysis
- Footprint Development & Assessment
- Safety Considerations
- Recommendations & Documentation

## 3. Screening Objectives

In August 2013, Caltrans issued the TOPD 13-02 regarding Intersection Control Evaluation (ICE). According to this directive, all proposals to install or modify intersection control on State Highways must consider all three intersection control strategies (traffic signal, yield control roundabout, and all-way stop control) and the supporting design configurations during the ICE screening process. The objective of this report is to determine which of these alternatives are context-appropriate, practical to implement, and merit further consideration.

### 3.1 Project Analysis Scenarios

This section contains a brief description of the time frames for which the traffic operations analysis was conducted. The project design alternatives (discussed in further detail in the next section) were analyzed for Existing Year conditions (Year 2017), Interim Design Year Conditions (Year

2030), and Ultimate Design Year conditions (Year 2040). The analysis was conducted for both the AM and PM peak hour time periods. The peak hour turning movement volumes are summarized on Figure 2.

Comparing the traffic data, the AM and PM peak hours are fairly balanced for the Eaton Road/SR 99 SB Ramps intersection. The east side of the interchange has higher traffic volumes in the PM peak hour than the AM peak hour. An average annual growth rate of 1%-3% is projected for each movement between the Existing and Ultimate Design Year. The SB off-ramp is projected to have higher volumes in the AM peak hour than the PM peak hour, but volumes are expected to increase on the NB off-ramp during the PM peak hour.

A comparison of volumes by directionality (eastbound (EB) and westbound (WB) on the corridor) indicated that the volumes are directionally balanced; there are about the same number of vehicles travelling east as there are travelling west. However, there are higher volumes on Eaton Road during the PM peak hour than the AM peak hour.

One of the primary objectives of TOPD 13-02 is to balance the needs of all modes and users with system performance goals. For that reason, volumes for pedestrians and bicycles were also collected and analyzed. There were about 5-10 cyclists and less than 5 pedestrians using the study intersections during peak hour. There are minimal bike and pedestrian infrastructure at the interchange, which may be why there were so few users documented.

### 3.1.1 Existing Year (2017)

Traffic volumes collected in March 2017 during both AM and PM peak hours are utilized in this study. Pedestrian, cyclist, and truck volumes were measured as part of the counts, and peak hour factors were determined. These volumes were used as a base-line for future year projections. See Figure 2 for a summary of the turning movement volumes for the study intersections.

### 3.1.2 Future Forecasts

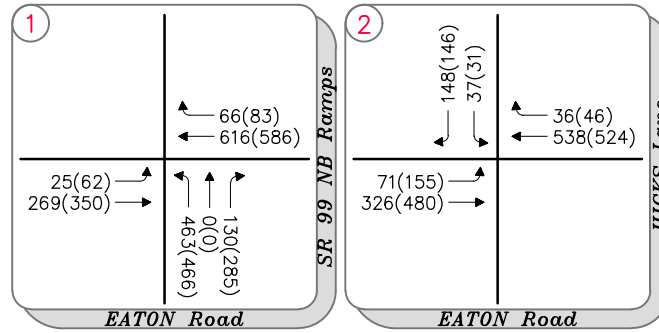
Historical data at the intersection was reviewed to understand the growth patterns and test the roundabout operations for sensitivity. A 2006 traffic study by Y&C Transportation Consultants studied the operations and improvement alternatives for this interchange. 2006 volumes from this study at the interchange were compared to the 2017 counts to derive a growth rate that is consistent with the actual growth trends that City of Chico experiences. Inset A compares the 2006 and 2017 approach/departing volumes at the study intersection and depicts a growth rate. This growth rate was utilized in deriving the 2020, 2030 and 2040 volumes to understand the design geometric sensitivities. Appendix B contains the 2006 traffic volumes.

#### INSET A

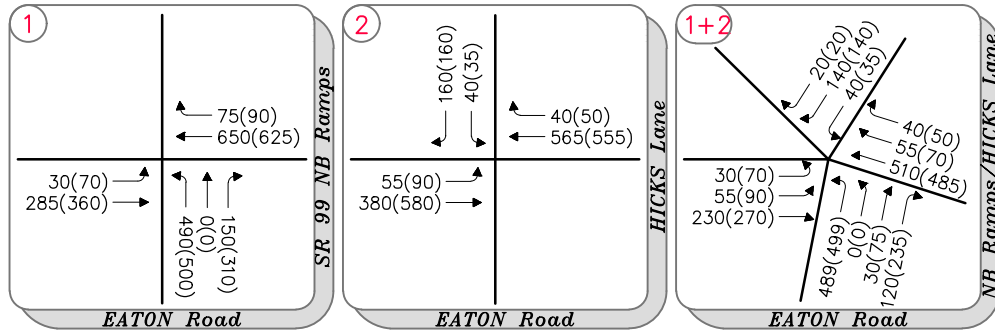
	EB Approach Vol	WB Departure Vol		EB Departure Vol	WB Approach Vol
2006 Counts	354	793	2006 Counts	230	855
2017 Counts	412	1052	2017 Counts	294	1079
<b>West of Study INTX PM</b>			<b>West of Study INTX AM</b>		
2006 Counts	499	501	2006 Counts	364	511
2017 Counts	635	669	2017 Counts	399	682
<b>East of Study INTX PM</b>			<b>East of Study INTX AM</b>		
<b>PM Annual Growth Rate -</b>			<b>AM Annual Growth Rate -</b>		
<b>2.60%</b>			<b>2.29%</b>		

# Peak Hour Traffic Volumes

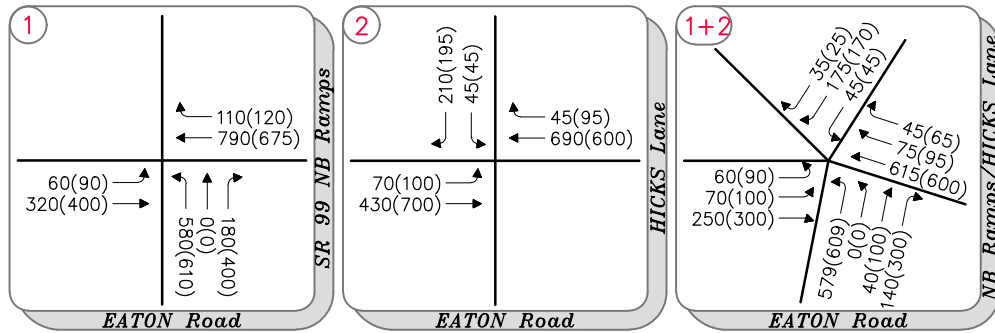
Existing Year (2017)



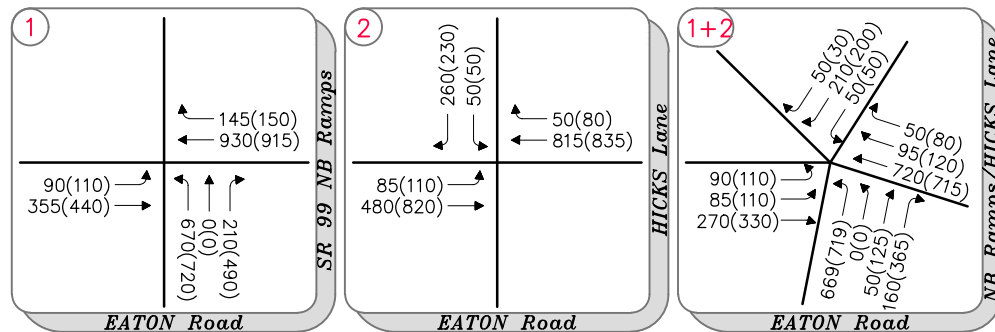
Opening Design Year (2020)



Interim Design Year (2030)



Ultimate Design Year (2040)



LEGEND:

xx - AM PEAK HOUR TRAFFIC VOLUMES  
 (xx) - PM PEAK HOUR TRAFFIC VOLUMES

Figure No. 2

6/21/2018 2:11 PM K:\PRJ\2206\T2206\T2206TG004.DWG



## 3.2 Project Design Alternatives

This study analyzes three alternatives. The first is a No Build Alternative that assumes existing lane geometrics and control. The second alternative is signalization with modified lane geometrics. The third alternative are yield-control roundabouts with modified lane geometrics. A Diverging Diamond Alternative was considered but ultimately rejected due to its inability to phase pedestrian and cyclist improvements without modifying the overcrossing.

### 3.2.1 No Build Alternative

The No-Build Alternative leaves the existing lane geometrics and intersection controls in place. In the existing conditions, the intersection of SR 99 NB Ramps/Eaton Road is an all-way stop-control, and the intersection of Eaton Road/Hicks Lane is minor street stop controlled. These two intersections are spaced about sixty feet apart.

### 3.2.2 Traffic Signal Alternative

Since a single signalized intersection failed to yield acceptable safety and operations, with this alternative, all intersections are signalized and the lane geometrics have been modified to accommodate the Ultimate Design Year volumes. The analyzed intersection includes the realignment of Hicks Lane to the east to provide 400' of spacing between the Eaton Road/SR 99 NB Ramps and Eaton Road/Hicks Lane intersections.

### 3.2.3 Roundabout Alternative

This alternative would replace the study intersections with a multi-lane roundabout designed to accommodate the Ultimate Design Year traffic forecast volumes. With this alternative, the SR 99 NB Ramps/Eaton Road and Eaton Road/Hicks Lane intersections will be combined into one five-leg roundabout.

## 4. Screening Criteria

The traffic operations for the No-Build Alternative, Signal Alternative, and Roundabout Alternative were analyzed for the AM and PM peak hours under existing (2017), opening (2020), interim design (2030), and ultimate design (2040) year conditions.

Both the No-Build and Traffic Signal Alternatives were analyzed using Synchro 10 and SimTraffic analysis software. Synchro 10 is a macroscopic analysis and optimization application that reports the Level of Service (LOS) and delay as per the Highway Capacity Manual (HCM) 2010 methodologies. SimTraffic is a traffic micro-simulation application that individually tracks and records each vehicle in the model simulating real world conditions. SimTraffic was used to record queuing characteristics for the No-Build and Traffic Signal Alternatives.

As accepted by Caltrans, SIDRA analysis software was used for the Roundabout Alternative to determine the LOS, volume to capacity ratio (V/C), delay, and the 95<sup>th</sup> percentile queues. The volume to capacity ratio (V/C) compares roadway demand (vehicle volume) with roadway carrying capacity. A V/C of 1.00 indicates that a roadway facility is operating at full capacity.

## 4.1 Traffic Operations Analysis

Traffic operations have been quantified through the determination of LOS. LOS is a qualitative measure of traffic conditions, whereby a letter grade "A" through "F" is assigned to an intersection

or roadway segment representing progressively worsening traffic conditions. LOS definitions for different types of intersection controls are outlined in Table 1.

Although Caltrans has not designated a LOS standard, Caltrans' *Guide for the Preparation of Traffic Impact Studies* (December 2002) indicates that Caltrans endeavors to maintain a target LOS at the transition between "C" and "D". However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. For this study, LOS "C" is assumed to represent the appropriate target.

## 4.2 Analysis Factors

The following criteria are incorporated in the analysis in order to most accurately reflect intersection operating conditions:

- The peak hour factor (PHF) was calculated based on data from the traffic counts collected in 2016. The PHF represents how constant vehicle volumes are during the peak hour and is equal to the peak hour volume divided by 4 times the peak 15 minute volume. A PHF of 0.95 was used.
- Truck percentages were calculated based on data from counts collected in 2016. Heavy vehicle percentages of 2% and 1% were used for the AM and PM peak hour analysis, respectively.
- SIDRA software includes an environmental factor that modifies capacity reflecting driver response times, standard of intersection geometry, visibility, operating speeds, vehicle sizes, pedestrian interference, parking, buses stopping, etc. Based on Caltrans approved analysis procedures, the following environmental factors were used to assess roundabout capacity in the Interim (2030) and Ultimate (2040) Design Years:
  - 1.00 was used for single-lane entries (with 1x1, 1x2 and 2x1 entry/circulating lane configurations)
  - 1.10 was used for dual-lane entries (with 2x2 entry/circulating lane configurations)

**TABLE 1  
LEVEL OF SERVICE (LOS) CRITERIA FOR INTERSECTIONS**

Level of Service	Type of Flow	Delay	Maneuverability	Stopped Delay/Vehicle (sec)	
				Signalized/ Roundabouts	Unsignalized/ All-Way Stop
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10.0	≤ 10.0
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	>10 and ≤ 20.0	>10 and ≤ 15.0
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 and ≤ 35.0	>15 and ≤ 25.0
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	>35 and ≤ 55.0	>25 and ≤ 35.0
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	>55 and ≤ 80.0	>35 and ≤ 50.0
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	> 80.0	> 50.0

References: 2010 Highway Capacity Manual

## 5. Capacity Assessment/Analysis for No Build Alternative

The following section summarizes the traffic operations analysis and results for the No-Build Alternative under Existing (2017), Opening Year (2020), Interim Design Year (2030), and Ultimate Design Year (2040) conditions. LOS worksheets for each analysis condition are provided in Appendix C.

### 5.1. Existing Year (2017)

Tables 2 presents the projected volume/capacity (V/C) ratio, delay, LOS, and 95<sup>th</sup> percentile queues for Existing Year conditions during AM and PM peak hour conditions.

**TABLE 2  
NO BUILD - EXISTING YEAR (2017) PEAK HOUR TRAFFIC OPERATIONS**

Int. #	Intersection/Approach	V/C Ratio <sup>1</sup>	Delay (sec) <sup>2</sup>	Level Of Service	Storage	95 <sup>th</sup> Percentile Queue (ft)
<b>Existing AM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	-	<b>58.5</b>	<b>F</b>	--	-
	Eastbound Left/Thru	<b>0.81</b>	<b>35.7</b>	<b>E</b>	685	117
	Westbound Thru (2 Lanes)	<b>0.73</b>	<b>26.5</b>	<b>D</b>	55	55
	Westbound Right	0.11	8.7	B	55	26
	Northbound Left/Thru	<b>1.18</b>	<b>135.4</b>	<b>F</b>	<b>175</b>	<b>184</b>
	Northbound Right	0.29	13.0	B	175	56
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	-	<b>13.8</b>	<b>B</b>	--	-
	Eastbound Left/Thru	0.08	9.0	A	55	37
	Eastbound Thru	-	0.3	A	55	0
	Westbound Thru	-	0.0	A	280	189
	Westbound Thru/Right	-	0.0	A	70	39
	Southbound Left	0.23	11.7	B	<b>85</b>	<b>199</b>
	Southbound Right	0.16	22.1	C	<b>85</b>	<b>149</b>
<b>Existing PM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	-	<b>68.6</b>	<b>F</b>	--	-
	Eastbound Left/Thru	<b>1.11</b>	<b>94.8</b>	<b>F</b>	685	167
	Westbound Thru (2 Lanes)	<b>0.69</b>	<b>25.5</b>	<b>D</b>	55	51
	Westbound Right	0.14	9.2	A	55	27
	Northbound Left/Thru	<b>1.22</b>	<b>138.1</b>	<b>F</b>	<b>175</b>	<b>300</b>
	Northbound Right	0.65	23.0	C	<b>175</b>	<b>193</b>
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	-	<b>16.0</b>	<b>C</b>	--	-
	Eastbound Left/Thru	0.17	9.4	A	55	52
	Eastbound Thru	-	0.7	A	55	0
	Westbound Thru	-	0.0	A	280	177
	Westbound Thru/Right	-	0.0	A	70	55
	Southbound Left	0.22	11.6	B	<b>85</b>	<b>198</b>
	Southbound Right	<b>0.22</b>	<b>36.6</b>	<b>E</b>	<b>85</b>	<b>165</b>

1. Worst lane movement (of the approach) value stated.

2. Traffic Operation outputs calculated using HCM 2000 and 2010 methodology for Unsignalized Intersections.

Due to the close proximity, intersections are expected to experience significant queuing that cannot be quantified using the Synchro software. These queues could potentially affect upstream/downstream intersection operation which will impact the progression along the corridor.

3. **Bold, red, highlighted text indicates deficient operations**

As presented within Table 2, the No Build Alternative provides acceptable intersection LOS and delay for only the Hicks Lane intersection during both the AM and PM peak hours of the Existing Year. The Eaton Road/SR 99 NB ramps intersection currently experiences unacceptable LOS of F. Deficient queueing operations are observed at both study intersections.

## 5.2 Opening Year (2020)

Tables 3 presents the projected volume/capacity (V/C) ratio, delay, LOS, and 95<sup>th</sup> percentile queues for Opening Year conditions during AM and PM peak hour conditions.

**TABLE 3  
NO BUILD - OPENING YEAR (2020) PEAK HOUR TRAFFIC OPERATIONS**

Int. #	Intersection/Approach	V/C Ratio <sup>1</sup>	Delay (sec) <sup>2</sup>	Level Of Service	Storage	95 <sup>th</sup> Percentile Queue (ft)
<b>Year 2020 AM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	-	<b>72.3</b>	<b>F</b>	--	-
	Eastbound Left/Thru	<b>0.89</b>	<b>44.4</b>	<b>E</b>	685	106
	Westbound Thru (2 Lanes)	<b>0.79</b>	<b>30.3</b>	<b>D</b>	<b>55</b>	<b>58</b>
	Westbound Right	0.13	91.0	A	55	25
	Northbound Left/Thru	<b>1.28</b>	<b>173.6</b>	<b>F</b>	<b>175</b>	<b>392</b>
	Northbound Right	0.34	14.1	B	<b>175</b>	<b>283</b>
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	-	<b>14.2</b>	<b>C</b>	--	-
	Eastbound Left/Thru	0.10	9.1	A	55	33
	Eastbound Thru	-	0.3	A	55	6
	Westbound Thru	-	0.0	A	280	186
	Westbound Thru/Right	-	0.0	A	70	52
	Southbound Left	0.25	12.1	B	<b>85</b>	<b>202</b>
	Southbound Right	0.17	22.8	C	<b>85</b>	<b>160</b>
<b>Year 2020 PM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	-	<b>85.5</b>	<b>F</b>	--	-
	Eastbound Left/Thru	<b>1.21</b>	<b>118.8</b>	<b>F</b>	685	157
	Westbound Thru (2 Lanes)	<b>0.75</b>	<b>28.8</b>	<b>D</b>	<b>55</b>	52
	Westbound Right	0.15	9.4	A	55	<b>59</b>
	Northbound Left/Thru	<b>1.33</b>	<b>177.8</b>	<b>F</b>	<b>175</b>	<b>463</b>
	Northbound Right	0.72	27.1	D	<b>175</b>	<b>332</b>
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	-	<b>15.6</b>	<b>C</b>	--	-
	Eastbound Left/Thru	0.10	9.2	A	55	47
	Eastbound Thru	-	0.5	A	55	0
	Westbound Thru	-	0.0	A	280	0
	Westbound Thru/Right	-	0.0	A	70	43
	Southbound Left	0.25	12.1	C	<b>85</b>	<b>201</b>
	Southbound Right	0.21	31.4	C	<b>85</b>	<b>160</b>

1. Worst lane movement (of the approach) value stated.

2. Traffic Operation outputs calculated using HCM 2010 methodology for Signals.

Due to the close proximity, intersections are expected to experience significant queuing that cannot be quantified using the Synchro software. These queues could potentially affect upstream/downstream intersection operation which will impact the progression along the corridor.

3. **Bold**, red, highlighted text indicates deficient operations

4. OVR = Delay > 300 Seconds

As presented within Table 3, the No Build Alternative is projected to provide acceptable intersection LOS and delay for only the Hicks Lane intersection during both the AM and PM peak hours of the Opening Year. The Eaton Road/SR 99 NB ramps intersection is projected to operate at an unacceptable LOS of F during both peak hour conditions of the Opening Year. Deficient queueing operations are observed at both study intersections.

## 5.3 Interim Design Year (2030)

Tables 4 presents the projected volume/capacity (V/C) ratio, delay, LOS, and 95<sup>th</sup> percentile queues for Interim Design Year conditions during AM and PM peak hour conditions.

**TABLE 4  
NO BUILD - INTERIM DESIGN YEAR (2030) PEAK HOUR TRAFFIC OPERATIONS**

Int. #	Intersection/Approach	V/C Ratio <sup>1</sup>	Delay (sec) <sup>2</sup>	Level Of Service	Storage	95 <sup>th</sup> Percentile Queue (ft)
<b>Year 2030 AM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	-	<b>131.4</b>	<b>F</b>	--	-
	Eastbound Left/Thru	<b>1.19</b>	<b>99.3</b>	<b>F</b>	685	133
	Westbound Thru (2 Lanes)	<b>1.05</b>	<b>57.1</b>	<b>F</b>	55	55
	Westbound Right	0.21	10.5	A	55	28
	Northbound Left/Thru	<b>1.64</b>	<b>312.1</b>	<b>F</b>	<b>175</b>	<b>521</b>
	Northbound Right	0.45	17.3	C	<b>175</b>	<b>397</b>
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	-	<b>17.5</b>	<b>C</b>	--	-
	Eastbound Left/Thru	0.09	9.7	A	55	38
	Eastbound Thru	-	0.4	A	55	0
	Westbound Thru	-	0.0	A	280	186
	Westbound Thru/Right	-	0.0	A	70	51
	Southbound Left	0.36	14.2	C	<b>85</b>	<b>203</b>
	Southbound Right	0.27	32.8	C	<b>85</b>	<b>153</b>
<b>Year 2030 PM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	-	<b>146.5</b>	<b>F</b>	--	-
	Eastbound Left/Thru	<b>1.47</b>	<b>206.6</b>	<b>F</b>	685	193
	Westbound Thru (2 Lanes)	<b>0.81</b>	<b>33.5</b>	<b>D</b>	55	51
	Westbound Right	0.20	9.9	A	55	29
	Northbound Left/Thru	<b>1.69</b>	<b>210.4</b>	<b>F</b>	<b>175</b>	<b>454</b>
	Northbound Right	<b>0.99</b>	<b>54.5</b>	<b>F</b>	<b>175</b>	<b>300</b>
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	-	<b>19.9</b>	<b>C</b>	--	-
	Eastbound Left/Thru	0.12	9.7	A	55	47
	Eastbound Thru	-	0.8	A	55	8
	Westbound Thru	-	0.0	A	280	177
	Westbound Thru/Right	-	0.0	A	70	44
	Southbound Left	0.33	13.4	B	<b>85</b>	<b>199</b>
	Southbound Right	<b>0.37</b>	<b>48.3</b>	<b>E</b>	<b>85</b>	<b>149</b>

1. Worst lane movement (of the approach) value stated.

2. Traffic Operation outputs calculated using HCM 2010 methodology for Signals.

Due to the close proximity, intersections are expected to experience significant queuing that cannot be quantified using the Synchro software. These queues could potentially affect upstream/downstream intersection operation which will impact the progression along the corridor.

3. **Bold**, red, highlighted text indicates deficient operations

4. OVR = Delay > 300 Seconds

As presented within Table 4, the No Build Alternative is projected to provide acceptable intersection LOS and delay for only the Hicks Lane intersection during both the AM and PM peak hours of the Interim Design Year. The Eaton Road/SR 99 NB ramps intersection is projected to operate at an unacceptable LOS of F during both peak hour conditions of the Interim Design Year. Deficient queueing operations are observed at both study intersections.

## 5.4 Ultimate Design Year (2040)

Tables 5 presents the projected volume/capacity (V/C) ratio, delay, LOS, and 95<sup>th</sup> percentile queues for Ultimate Design Year conditions during AM and PM peak hour conditions.

**TABLE 5  
NO BUILD - ULTIMATE DESIGN YEAR (2040) PEAK HOUR TRAFFIC OPERATIONS**

Int. #	Intersection/Approach	V/C Ratio <sup>1</sup>	Delay (sec) <sup>2</sup>	Level Of Service	Storage	95 <sup>th</sup> Percentile Queue (ft)
<b>Year 2040 AM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	-	<b>200.3</b>	<b>F</b>	--	-
	Eastbound Left/Thru	<b>1.54</b>	<b>190.0</b>	<b>F</b>	685	174
	Westbound Thru (2 Lanes)	<b>1.30</b>	<b>101.0</b>	<b>F</b>	<b>55</b>	<b>57</b>
	Westbound Right	0.30	11.7	B	55	27
	Northbound Left/Thru	<b>2.00</b>	<b>OVR</b>	<b>F</b>	<b>175</b>	<b>467</b>
	Northbound Right	0.56	21.1	C	<b>175</b>	<b>339</b>
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	-	<b>23.6</b>	<b>C</b>	--	--
	Eastbound Left/Thru	0.12	10.5	B	55	40
	Eastbound Thru	-	0.6	A	55	0
	Westbound Thru	-	0.0	A	280	184
	Westbound Thru/Right	-	0.0	A	70	59
	Southbound Left	0.50	17.8	C	<b>85</b>	<b>197</b>
	Southbound Right	0.42	<b>53.9</b>	<b>F</b>	<b>85</b>	<b>148</b>
<b>Year 2040 PM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	-	<b>237.8</b>	<b>F</b>	--	-
	Eastbound Left/Thru	<b>1.89</b>	<b>OVR</b>	<b>F</b>	685	192
	Westbound Thru (2 Lanes)	<b>1.00</b>	<b>80.5</b>	<b>F</b>	<b>55</b>	53
	Westbound Right	0.22	9.4	A	55	29
	Northbound Left/Thru	<b>2.17</b>	<b>OVR</b>	<b>F</b>	<b>175</b>	<b>456</b>
	Northbound Right	<b>1.33</b>	<b>133.8</b>	<b>F</b>	<b>175</b>	<b>300</b>
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	-	<b>41.5</b>	<b>E</b>	--	-
	Eastbound Left/Thru	0.16	11.0	B	55	48
	Eastbound Thru	-	1.4	A	55	0
	Westbound Thru	-	0.0	A	280	178
	Westbound Thru/Right	-	0.0	A	70	65
	Southbound Left	0.46	17.4	C	<b>85</b>	<b>205</b>
Southbound Right	<b>0.77</b>	<b>152.1</b>	<b>F</b>	<b>85</b>	<b>163</b>	

1. Worst lane movement (of the approach) value stated.

2. Traffic Operation outputs calculated using HCM 2010 methodology for Signals.

Due to the close proximity, intersections are expected to experience significant queuing that cannot be quantified using the Synchro software. These queues could potentially affect upstream/downstream intersection operation which will impact the progression along the corridor.

3. **Bold, red, highlighted text indicates deficient operations**

4. OVR = Delay > 300 Seconds

As presented within Table 5, both the study intersections are projected to experience unacceptable LOS for the Ultimate Design Year. Deficient queueing operations are observed at both study intersections.

## 6. Footprint Development & Assessment

The following section summarizes the development of preliminary concept layouts of the Traffic Signal and Roundabout alternatives. The layouts are useful for preliminary right-of-way needs for each alternative and also to illustrate truck turning movements. The lane geometry for the alternatives is the same for all analysis scenarios and are summarized below.

### 6.1 Traffic Signal Alternative

As mentioned within the Project Background section, the City considered a proposal for the conversion of the two existing intersections to a single signalized intersection which serves the SR-99 NB Ramps, Eaton Road and Hicks Lane (see Appendix A). Despite the complex signal phasing system required to accommodate the proposed single signalized intersection concept, this analysis concluded that such an improvement was incapable of improving safety and congestion at the location.

Due to the single signalized intersection being a non-viable option in improving safety or congestion at the existing intersections, Omni-Means developed a preliminary concept for a Traffic Signal Alternative which proposes the conversion of the two study intersections from stop control to signal control. Additionally, this Traffic Signal Alternative includes the realignment of Hicks Lane to provide a minimum intersection spacing of 400' between the two signalized intersections to meet Caltrans HDM and accommodate Ultimate Design Year queueing operations.

The Traffic Signal Alternative, as shown in Figure 3 and Appendix D, features converting the two study intersections from stop control to signal control. Additionally, this alternative includes 6' bike lanes and 6' sidewalks on both sides of Eaton Road through the study area. Other intersection lane geometrics improvements are listed below:

- 1) Eaton Road/SR 99 NB Ramps: A signalized intersection with the lane geometry shown in Figure 3 was necessary to accommodate the ultimate design year traffic forecast volumes. The intersection is centered to the west of the existing intersection location in order to increase the intersection spacing between the Eaton Road/SR 99 NB Ramps and Eaton Road/Hicks Lane intersections to be consistent with Caltrans Highway Design Standards. The following provides further detail of the improvements at this intersection:
  - a) The eastbound Eaton Road approach will be widened from one through lane to two through lanes and the left-turn lane will be extended to accommodate the ultimate design year 95<sup>th</sup> percentile queues.
  - b) The NB Off-Ramp will be realigned and widened to three lanes.
  - c) The NB On-Ramp will be realigned with the new intersection location.
  - d) The westbound Eaton Road approach will be widened to two through lanes and the right turn lane will be lengthened to accommodate projected queues.
- 2) Eaton Road/Hicks Lane: Hicks Lane will be realigned in order to provide the minimum 400' intersection spacing between the freeway ramp intersection and this intersection as defined in the Caltrans HDM. Realigning Hicks Lane will impact several private and commercial properties, including the utilization of almost the entire City owned parcel located northeast of the existing Eaton Road/Hicks Lane intersection. As presented within this preliminary concept, the proposed realignment will bring the roadway very close to two existing single family homes. Based on preliminary mapping it appears that building impacts are avoided however, the improvements are very close to the existing buildings any impact to the

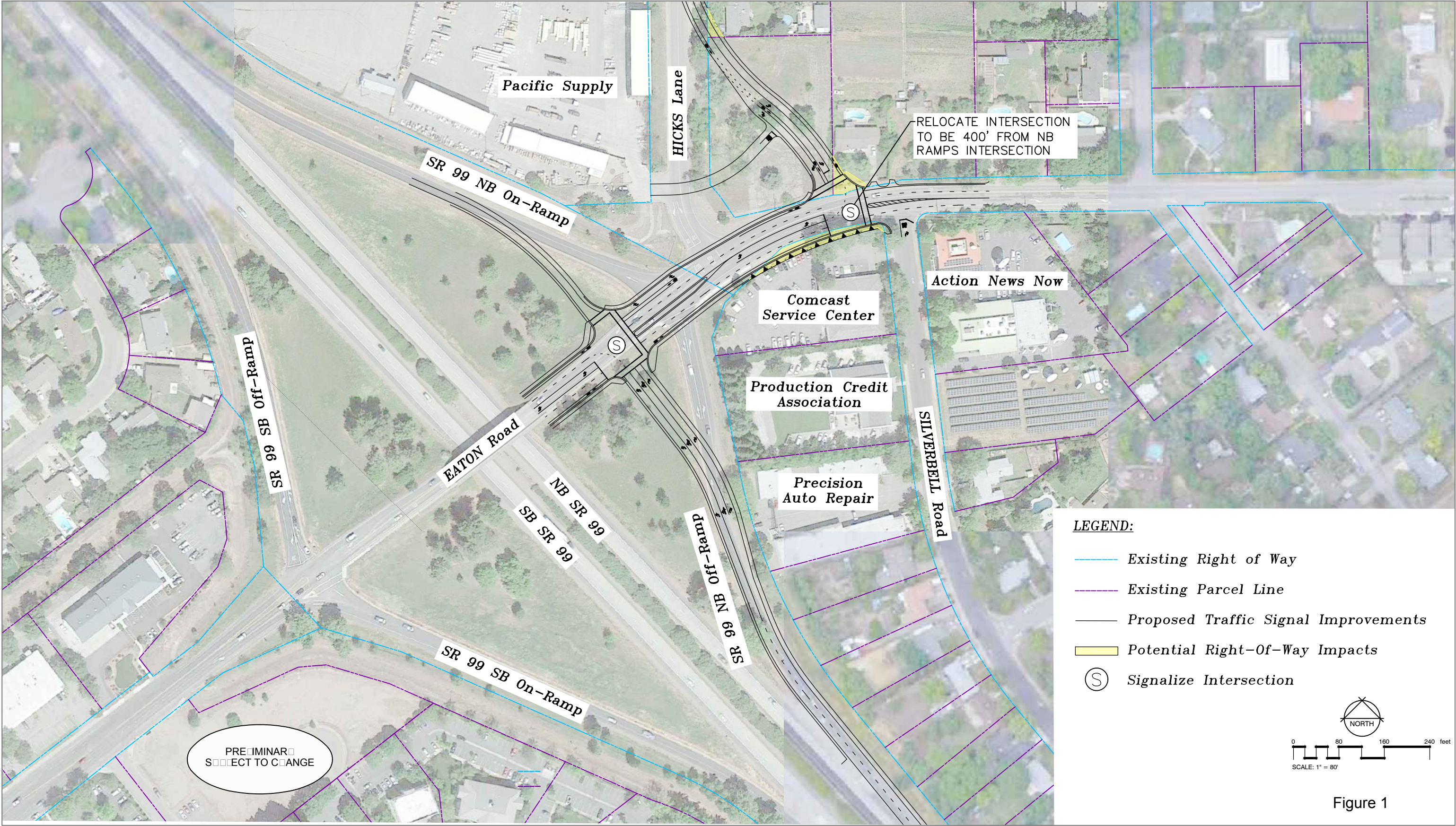


structures may not be avoided. The following provides further detail of the improvements at this intersection:

- a) Hicks Lane will be widened to have separate right and left-turn pockets.
- b) The intersection of Silverbell Road will need to be restricted to right-in/right-out access, because of its close proximity to the Eaton Road/Hicks Lane intersection.
- c) Eaton Road will be widened to two lanes in each direction, and the left-turn pocket onto Hicks Lane will be extended.

As discussed above, the implementation of the Traffic Signal Alternative would require widening of the eastbound Eaton Road (into a five-lane section) to accommodate queueing operations projected for the Ultimate Design Year. As a result a new overcrossing structure may need to be constructed for the Eaton Road/SR 99 grade separation. Due to the costs associated with the construction of this new overcrossing, the Traffic Signal Alternative becomes a non-viable option for intersection improvements.

# Traffic Signal Alternative Preliminary Layout



## SR 99/EATON ROAD INTERCHANGE PROJECT

Chico, California

### 6.1.1 Traffic Signal Performance Checks

The following design criteria were used to analyze the geometrics and safety performance of the proposed Traffic Signal Alternative:

- The “STAA-STD-56” design vehicle from the Caltrans HDM, 6th Edition (updated July 2016) shall be accommodated on all movements at the SR 99 Ramp intersections.
- The “Bus-45, motor coach” design vehicle from the Caltrans HDM, 6th Edition (updated July 2016) shall be accommodated on all movements.

Exhibits illustrating the truck turns for each condition are provided in Appendix C.

## 6.2 Roundabout Alternative

The Roundabout Alternative, as illustrated in Figure 4 and Appendix E, features converting the combining Eaton Road/SR 99 NB Ramps/Hicks Lane into one multilane roundabout intersection. Although the intersections will be combined, the local circulation and access will remain unchanged. The SR 99 overcrossing will be retained but a new pedestrian/bicycle overcrossing will ultimately need to be constructed to provide connectivity through the interchange for bikes. There is a 10' shared-use path shown on the southern side of the two intersections buffered by at least 2' of landscaping from the roadway or by a barrier at the overcrossing. Pedestrian crossings are shown a minimum of one car length from the circulatory roadway, and the pedestrian refuges at the splitter islands are at least 6' wide, which are consistent with National Cooperative Highway Research Program (NCHRP) Report 672 entitled “Roundabouts: An Information Guide, 2<sup>nd</sup> Edition” (Guide). Other intersection lane geometrics improvements, which are also consistent with the Guide, are listed below:

- 1) Eaton Road/SR 99 NB Ramps/Hicks Lane: A multilane roundabout with the lane geometry shown in Figure 4 was necessary to accommodate the ultimate design year traffic forecast volumes. The roundabout is centered on the NB Ramps intersection and will require earthwork to conform to the existing overcrossing profile. Retaining walls will likely be required at the southeast corner parking lot and the northern drainage channel to minimize right of way impacts. The parking lot located at the southeast corner of the proposed intersection may be impacted by the roundabout footprint and, if so will require a reconfiguration. The impacts will reduce the overall number of parking stalls. The following provides further detail of the improvements at this intersection:
  - a) The NB off-ramp will be reconstructed to provide standard superelevation transitions and an acceptable alignment into the roundabout and flared to provide a two lane entry into the roundabout that can accommodate the design vehicles.
  - b) The westbound approach will initially be striped as a one lane approach with the ability to be re-striped to accommodate two lanes in the Ultimate Design Year (2040) if necessary. Truck blisters are shown for right-turn movements to and from Hicks Lane. The drainage channel in the northern corner will need to be reconstructed or modified to accommodate the larger intersection footprint.
  - c) The NB off ramp will be realigned to accommodate the roundabout geometrics and grade changes.

# Roundabout Preliminary Layout - Ultimate Build

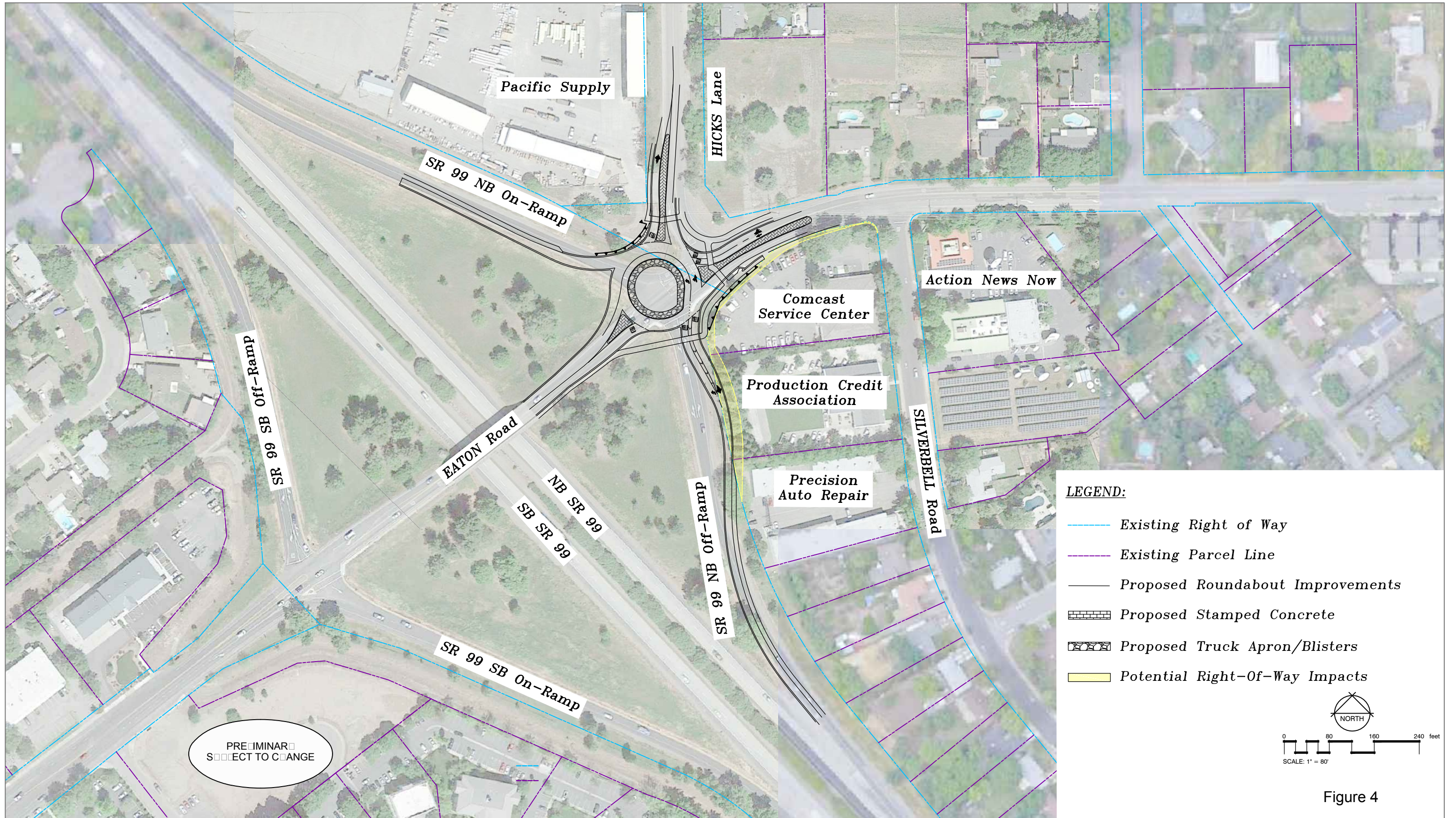


Figure 4

## SR 99/EATON ROAD INTERCHANGE PROJECT

Chico, California

## 6.2.1 Roundabout Performance Checks

Due to the complexity in the design, several performance checks have been conducted to verify the Roundabout's feasibility. These performance checks meet current Caltrans TOPD 13- 02 and Caltrans HDM Section 405.10 which mandates conformance with the NCHRP Guide.

The following design criteria were used to analyze the geometrics and safety performance of the proposed Roundabout Alternative:

1. Criteria and methodologies to be consistent with Caltrans Design Information Bulletin (DIB) 80-01: Capital Preventative Maintenance (CAPM) Guidelines, Caltrans HDM, and the NCHRP Guide. This document supersedes the original roundabout guide published by the FHWA in 2000.
2. The "STAA-STD-56" design vehicle from the Caltrans HDM, 6th Edition (updated July 2016) shall be accommodated on all movements. This vehicle shall be accommodated such that the tractor portion of the vehicle does not need to mount any truck aprons.
3. The "Bus-45, motor coach" design vehicle from the Caltrans HDM, 6th Edition (updated July 2016) shall be accommodated on all movements. This vehicle shall be accommodated such that it does not need to mount any truck aprons.
4. Fast path entry speeds on single lane roundabout approaches should be 25 mph or less.
5. Fast path entry speeds on multi-lane approaches should be 30 mph or less.

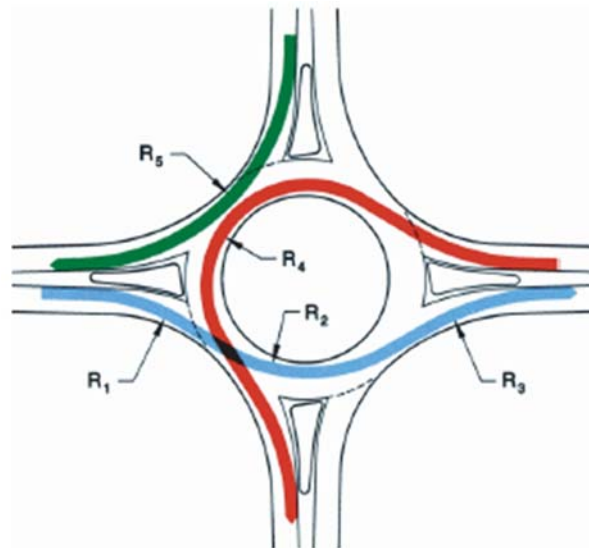
Exhibits illustrating the truck turns for each condition and the fastest path analysis exhibits are provided in Appendix C.

## 6.2.2 Fastest Path and Vehicle Speed Checks

The "Fastest Path" represents the path that the most aggressive drivers could take through the roundabout and assumes no other traffic to be within the intersection. In addition to recommendations for maximum fastest path entering speeds, NCHRP Report 672 also indicates that the differential speed between consecutive or conflicting projected fast path speeds should be less than 15 mph.

Fastest path speeds are determined for five locations per approach. These include entry speeds (referred to as V1); through movement circulating speeds (V2); exiting speeds (V3); left turn movement circulating speeds (V4); and right turn speeds (V5). A diagram of the described locations is shown in Figure 5.

**FIGURE 5 – FAST PATH CRITICAL SPEED LOCATIONS**



Fastest path speeds for the Roundabout Alternative are shown in Table 6. Exhibits illustrating the fastest path analysis can be found in Appendix D.

**TABLE 6  
SR 99 NB RAMPS/EATON ROAD/HICKS LANE FASTEST PATH SPEEDS (MPH)**

Movement	Northbound SR 99 NB Off Ramp (N#)	Southbound Hicks Lane (S#)	Eastbound Eaton Road (E#)	Westbound Eaton Road (W#)
Entering (V1)	34.8	22.1	29.0	26.2
Circulating (V2)	23.2	28.8	18.1	23.9
Exiting (V3)	34.3	29.1	27.9	24.4
Left Turn (V4)	14.5	16.4	15.8	15.9
Right Turn (V5)	21.0	18.9	N/A	15.5

Notes:

All values are in miles per hour

V3 exiting speeds are derived from vehicle acceleration formulas in NCHRP 672

V3 fast path speed measured at exit crosswalk or 100 feet downstream from V2.

As acceleration potential of vehicle determines actual exiting speed, V3 presented is a conservative estimate.

N/A = Fastest path speed does not exist for this approach

2% cross-slope assumed for determining Fastest path

As shown in Table 6, the fastest path entering and right-turning speeds are less than the desired maximum speeds for a single or multi-lane approaches, except for the following:

- Entry speed (V1) at the northbound approach for the SR 99 NB Off Ramp is currently constrained by the alignment of the northbound off ramp (to meet advisory superelevation and comfort speed standards). Therefore, the phi angle for this approach was optimized in favor of the fast path. During final design, ramp alignment and/or entry options to further reduce the fastpath will be explored.

The results of the fastest path analysis for the Roundabout Alternative are found to be acceptable as vehicle entry speeds and consecutive differential speeds are within the design requirements' threshold.

## **7. Capacity Assessment/Analysis for Build Alternatives**

The following section presents the results obtained from the evaluation of traffic operations during the Opening, Interim and Design year conditions for the proposed Traffic Signal and Roundabout Alternatives

### **7.1 Traffic Signal Alternative Analysis**

This section provides a summary of the intersection operations associated with the Traffic Signal Alternative AM and PM peak hour time periods under Opening Year (2020), Interim Design Year (2030), and Ultimate Design Year (2040) conditions. LOS worksheets for each analysis condition and lane geometrics used for this analysis are provided in Appendix D. A geometric assessment for this alternative is also provided in Section 6 of this report.

#### **7.1.1 Opening Year (2020)**

Tables 7 presents the projected volume/capacity (V/C) ratio, delay, LOS, and 95<sup>th</sup> percentile queues for Opening Year conditions during AM and PM peak hour conditions.

**TABLE 7  
SIGNAL – OPENING YEAR (2020) PEAK HOUR TRAFFIC OPERATIONS**

Int. #	Intersection/Approach	V/C Ratio <sup>1</sup>	Delay (sec) <sup>2</sup>	Level Of Service	Storage	95 <sup>th</sup> Percentile Queue (ft)
<b>Year 2020 AM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	<b>0.52</b>	<b>12.0</b>	<b>B</b>	-	-
	Eastbound Left	0.46	23.4	C	150	53
	Eastbound Thru (2 Lanes)	0.18	6.9	A	535	92
	Westbound Thru (2 Lanes)	0.56	12.7	B	410	229
	Westbound Right	0.05	10.0	A	125	25
	Northbound Left	0.50	13.7	B	1070	150
	Northbound Left/Thru	0.50	13.7	B	310	202
	Northbound Right	0.10	11.4	B	310	62
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	<b>0.38</b>	<b>7.1</b>	<b>A</b>	-	-
	Eastbound Left	0.21	13.5	B	175	60
	Eastbound Thru (2 Lanes)	0.14	2.1	A	370	53
	Westbound Thru	0.44	7.8	A	475	135
	Westbound Thru/Right				475	71
	Southbound Left	0.40	18.5	B	165	54
	Southbound Right	0.12	11.3	B	190	67
	<b>Year 2020 PM Peak Hour</b>					
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	<b>0.53</b>	<b>13.2</b>	<b>B</b>	-	-
	Eastbound Left	0.56	25.5	C	150	88
	Eastbound Thru (2 Lanes)	0.22	7.5	A	535	102
	Westbound Thru (2 Lanes)	0.56	14.5	B	410	218
	Westbound Right	0.06	11.6	B	125	36
	Northbound Left	0.49	14.7	B	1070	149
	Northbound Left/Thru	0.49	14.7	B	310	204
	Northbound Right	0.20	12.8	B	310	97
<b>1</b>	<b>Eaton Road/Hicks Lane</b>	<b>0.40</b>	<b>6.7</b>	<b>A</b>	-	-
	Eastbound Left	0.32	13.8	B	175	72
	Eastbound Thru (2 Lanes)	0.28	2.2	A	370	68
	Westbound Thru	0.44	8.1	A	475	139
	Westbound Thru/Right				475	88
	Southbound Left	0.36	18.5	B	165	52
	Southbound Right	0.11	11.2	B	190	66

1. Worst lane movement (of the approach) value stated.

2. Traffic Operation outputs calculated using HCM 2000 methodology for Signals.

As presented within Table 7, the Traffic Signal Alternative is projected to provide acceptable intersection LOS and delay for both study intersections during both the AM and PM peak hours of the Opening Year. The Traffic Signal Alternative is projected to provide acceptable 95<sup>th</sup> percentile queues for all movements.

### 7.1.2 Interim Design Year (2030)

Table 8 presents the projected volume/capacity (V/C) ratio, delay, LOS, and 95<sup>th</sup> percentile queues for Interim Design Year conditions during AM and PM peak hour conditions.



**TABLE 8  
SIGNAL - INTERIM DESIGN YEAR (2030) PEAK HOUR TRAFFIC OPERATIONS**

Int. #	Intersection/Approach	V/C Ratio <sup>1</sup>	Delay (sec) <sup>2</sup>	Level Of Service	Storage	95 <sup>th</sup> Percentile Queue (ft)
<b>Year 2030 AM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	<b>0.54</b>	<b>12.7</b>	<b>B</b>	-	-
	Eastbound Left	0.50	23.3	C	150	80
	Eastbound Thru (2 Lanes)	0.18	5.8	A	535	92
	Westbound Thru (2 Lanes)	0.61	13.1	B	410	243
	Westbound Right	0.09	9.8	A	125	34
	Northbound Left	0.45	16.0	B	1070	120
	Northbound Left/Thru	0.45	16.0	B	310	179
Northbound Right	0.12	14.0	B	310	74	
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	<b>0.48</b>	<b>7.9</b>	<b>A</b>	-	-
	Eastbound Left	0.25	14.8	B	175	72
	Eastbound Thru (2 Lanes)	0.18	2.0	A	370	61
	Westbound Thru	0.51	8.4	A	475	163
	Westbound Thru/Right				475	118
	Southbound Left	0.46	21.4	C	165	58
	Southbound Right	0.30	13.1	B	190	80
<b>Year 2030 PM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	<b>0.58</b>	<b>15.5</b>	<b>B</b>	-	-
	Eastbound Left	0.51	25.6	C	150	98
	Eastbound Thru (2 Lanes)	0.23	8.2	A	535	114
	Westbound Thru (2 Lanes)	0.61	17.3	B	410	255
	Westbound Right	0.08	13.5	B	125	36
	Northbound Left	0.58	17.6	B	1070	225
	Northbound Left/Thru	0.58	17.6	B	310	249
Northbound Right	0.30	14.8	B	310	124	
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	<b>0.45</b>	<b>7.0</b>	<b>A</b>	-	-
	Eastbound Left	0.35	14.8	B	175	87
	Eastbound Thru (2 Lanes)	0.30	2.2	A	370	83
	Westbound Thru	0.49	8.3	A	475	162
	Westbound Thru/Right				475	112
	Southbound Left	0.46	20.7	C	165	60
	Southbound Right	0.21	12.2	B	190	77

1. Worst lane movement (of the approach) value stated.

2. Traffic Operation outputs calculated using HCM2010 methodology for Signals.

As presented within Table 8, the Traffic Signal Alternative is projected to provide acceptable intersection LOS and delay for both study intersections during both the AM and PM peak hours of the Interim Design Year. The Traffic Signal Alternative is projected to provide acceptable 95<sup>th</sup> percentile queues for all movements.

### 7.1.3 Ultimate Design Year (2040)

Tables 9 show the projected volume/capacity (V/C) ratio, delay, LOS, and 95<sup>th</sup> percentile queues for Ultimate Design Year conditions during AM and PM peak hour conditions.

**TABLE 9  
SIGNAL - ULTIMATE DESIGN YEAR (2040) PEAK HOUR TRAFFIC OPERATIONS**

Int. #	Intersection/Approach	V/C Ratio <sup>1</sup>	Delay (sec) <sup>2</sup>	Level Of Service	Storage	95 <sup>th</sup> Percentile Queue (ft)
<b>Year 2040 AM Peak Hour</b>						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	<b>0.69</b>	<b>18.3</b>	<b>B</b>	-	-
	Eastbound Left	0.56	29.3	C	150	111
	Eastbound Thru (2 Lanes)	0.20	7.8	A	535	115
	Westbound Thru (2 Lanes)	0.76	20.1	C	410	317
	Westbound Right	0.14	13.4	B	125	91
	Northbound Left	0.67	21.8	C	1070	258
	Northbound Left/Thru	0.67	21.9	C	310	293
	Northbound Right	0.14	15.6	B	310	84
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	<b>0.57</b>	<b>9.8</b>	<b>A</b>	-	-
	Eastbound Left	0.24	15.8	B	175	88
	Eastbound Thru (2 Lanes)	0.20	2.2	A	370	77
	Westbound Thru	0.62	11.5	B	475	182
	Westbound Thru/Right				475	131
	Southbound Left	0.35	21.7	C	165	63
	Southbound Right	0.39	13.7	B	190	106
	<b>Year 2040 PM Peak Hour</b>					
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps</b>	<b>0.71</b>	<b>19.4</b>	<b>B</b>	-	-
	Eastbound Left	0.62	32.2	C	150	117
	Eastbound Thru (2 Lanes)	0.25	8.8	A	535	124
	Westbound Thru (2 Lanes)	0.77	22.4	C	410	317
	Westbound Right	0.14	14.7	B	125	84
	Northbound Left	0.67	22.0	C	1070	269
	Northbound Left/Thru	0.67	22.0	C	310	<b>311</b>
	Northbound Right	0.52	18.6	B	310	157
<b>2</b>	<b>Eaton Road/Hicks Lane</b>	<b>0.56</b>	<b>8.8</b>	<b>A</b>	-	-
	Eastbound Left	0.32	16.9	B	175	87
	Eastbound Thru (2 Lanes)	0.33	2.5	A	370	95
	Westbound Thru	0.62	11.5	B	475	200
	Westbound Thru/Right				475	134
	Southbound Left	0.36	22.6	C	165	61
	Southbound Right	0.35	14.1	B	190	87

1. Worst lane movement (of the approach) value stated.

2. Traffic Operation outputs calculated using HCM 2000 methodology for Signals.

3. **Bold**, red, highlighted text indicates deficient operations

As presented within Table 9, the Traffic Signal Alternative is projected to provide acceptable intersection LOS and delay for both study intersections during both peak hours of the Ultimate Design Year.

In the PM peak hour, the Traffic Signal Alternative has acceptable projected 95<sup>th</sup> percentile queues for all movements, except for the northbound left/thru movement of the Eaton Road/SR 99 NB Ramps intersection. As the northbound left/thru queue is observed to exceed the available storage by approximately 1 foot, this queue is not projected to significantly impact operations at this intersection during the PM peak hour of the Ultimate Design Year.

## 7.2 Roundabout Alternative Analysis

The Roundabout Alternative features combining the intersections of Eaton Road/SR 99 NB Ramps and Eaton Road/Hicks Lane into one multilane roundabout intersection. In the Opening (2020) and Interim Design (2030) Years, the westbound approach is initially to be striped as a single-lane approach. This westbound approach is designed with the ability to be re-striped to accommodate two lanes in the Ultimate Design Year (2040) if necessary.

This section provides a summary of the intersection operations associated with the Roundabout Alternative AM and PM peak hour time periods under Opening Year (2020), Interim Design Year (2030) and Ultimate Design Year (2040) conditions. LOS worksheets for each analysis condition and lane geometrics used for this analysis are provided in Appendix E. A geometric assessment for this alternative is also provided in Section 6 of this report.

### 7.2.1 Opening Year (2020)

Tables 10 presents the projected volume/capacity (V/C) ratio, delay, LOS, and 95<sup>th</sup> percentile queues for Interim Design Year conditions during AM and PM peak hour conditions.

**TABLE 10  
ROUNDABOUT- OPENING YEAR (2020) AM PEAK HOUR TRAFFIC OPERATIONS**

Int. #	Intersection/Approach	V/C Ratio <sup>1</sup>	Delay (sec) <sup>2</sup>	Level Of Service	Storage	95 <sup>th</sup> Percentile Queue (ft)
Year 2020 AM Peak Hour						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps/Hicks Lane</b>	<b>0.78</b>	<b>9.5</b>	<b>A</b>	<b>--</b>	<b>-</b>
	Eastbound Left/Thru	0.23	5.7	A	600	40
	Westbound Thru/Right	0.78	9.8	A	670	165
	Northbound Left	0.29	12.2	B	1600	44.3
	Northbound Left/Thru/Right	0.29	9.1	A	200	46.4
	Southbound Left/Thru/Right	0.39	11.4	B	1200	53.5
Year 2020 PM Peak Hour						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps/Hicks Lane</b>	<b>0.84</b>	<b>10.3</b>	<b>B</b>	<b>--</b>	<b>-</b>
	Eastbound Left	0.29	6.4	A	600	54.4
	Westbound Left/Thru	0.84	13.0	B	670	216.2
	Northbound Left	0.44	12.6	B	1600	79.3
	Northbound Left/Thru/Right	0.35	7.0	A	200	55.1
	Southbound Left/Thru/Right	0.38	10.0	B	1200	47.2

1. Worst lane movement (of the approach) value stated.

As presented within Table 10, the Roundabout Alternative is projected to provide acceptable intersection LOS and delay for the combined intersection of Eaton Road/SR 99 NB Ramps/Hicks Lane during the peak hours of the Opening Year. The Roundabout Alternative is also projected to provide acceptable 95<sup>th</sup> percentile queues for all movements.

### 7.2.2 Interim Design Year (2030)

Tables 11 presents the projected volume/capacity (V/C) ratio, delay, LOS, and 95<sup>th</sup> percentile queues for Interim Design Year conditions during AM and PM peak hour conditions, respectively.

**TABLE 11  
ROUNDABOUT – INTERIM DESIGN YEAR (2030) PEAK HOUR TRAFFIC OPERATIONS**

Int. #	Intersection/Approach	V/C Ratio <sup>1</sup>	Delay (sec) <sup>2</sup>	Level Of Service	Storage	95 <sup>th</sup> Percentile Queue (ft)
Year 2030 AM Peak Hour						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps/Hicks Lane</b>	<b>0.89</b>	<b>11.2</b>	<b>B</b>	<b>--</b>	<b>-</b>
	Eastbound Left/Thru	0.26	6.3	A	600	50.2
	Westbound Thru/Right	0.89	13.1	B	670	262.9
	Northbound Left	0.33	12.5	B	1600	53.1
	Northbound Left/Thru/Right	0.33	9.3	A	200	57.3
	Southbound Left/Thru/Right	0.52	14.7	B	1200	89.7
Year 2030 PM Peak Hour						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps/Hicks Lane</b>	<b>0.99</b>	<b>14.6</b>	<b>B</b>	<b>--</b>	<b>-</b>
	Westbound Left/Thru	0.99	24.9	C	670	455
	Northbound Left	0.47	14.0	B	1600	88.3
	Northbound Left/Thru/Right	0.47	8.6	A	200	93.4
	Southbound Left/Thru/Right	0.49	13.4	B	1200	77.6

1. Worst lane movement (of the approach) value stated.

As presented within Table 11, the Roundabout Alternative is projected to provide acceptable intersection LOS and delay for the combined intersection of Eaton Road/SR 99 NB Ramps/Hicks Lane during the peak hours of the Interim Design Year. The Roundabout Alternative is also projected to provide acceptable 95<sup>th</sup> percentile queues for all movements.

### 7.2.3 Ultimate Design Year (2040)

Tables 12 presents the projected volume/capacity (V/C) ratio, delay, LOS, and 95<sup>th</sup> percentile queues for Ultimate Design Year conditions during AM and PM peak hour conditions, respectively.

**TABLE 12  
 ROUNDABOUT – ULTIMATE DESIGN YEAR (2040) PEAK HOUR TRAFFIC OPERATIONS**

Int. #	Intersection/Approach	V/C Ratio <sup>1</sup>	Delay (sec) <sup>2</sup>	Level Of Service	Storage	95 <sup>th</sup> Percentile Queue (ft)
Year 2040 AM Peak Hour						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps/Hicks Lane</b>	<b>0.63</b>	<b>10.3</b>	<b>B</b>	--	-
	Eastbound Left/Thru	0.31	6.7	A	600	60.3
	Westbound Thru	0.63	10.5	B	670	110.4
	Westbound Thru/Right	0.63	9.4	A	<b>95</b>	<b>116.1</b>
	Northbound Left	0.41	13.3	B	1600	71.1
	Northbound Left/Thru/Right	0.41	10.0	A	200	77.6
	Southbound Left/Thru/Right	0.59	13.6	B	1200	92
Year 2040 PM Peak Hour						
<b>1</b>	<b>Eaton Road/SR 99 NB Ramps/Hicks Lane</b>	<b>0.88</b>	<b>15.3</b>	<b>B</b>	--	-
	Eastbound Left/Thru	0.38	6.7	A	600	83.2
	Westbound Thru	0.88	19.2	B	670	270.4
	Westbound Left/Thru	0.70	13.9	B	<b>95</b>	<b>133.8</b>
	Northbound Left	0.62	15.3	B	1600	172.7
	Northbound Left/Thru/Right	0.57	10.3	B	200	134.6
	Southbound Left/Thru/Right	0.77	34.7	C	1200	187.4

1. Worst lane movement (of the approach) value stated.

3. **Bold**, red, highlighted text indicates deficient operations

As shown in Table 12, the Roundabout Alternative is projected to provide acceptable intersection LOS and delay for the Eaton Road/SR 99 NB Ramps/Hicks Lane intersection during both peak hours of the Ultimate Design Year condition.

During both peak hours, the Roundabout Alternative is projected to provide acceptable 95<sup>th</sup> percentile queues for all movements, except for the westbound movement. In the AM peak hour, the westbound thru/right movement is projected to exceed the available storage by approximately 20 feet. Similarly, in the PM peak hour, the westbound left/thru movement is projected to exceed the available storage by approximately 39 feet. As the westbound queue is projected to exceed the available storage by approximately 1-2 cars (based on an assumed length of 25 feet per passenger vehicle) in both scenarios, this queue is not projected to significantly impact operations at this intersection during the AM and PM peak hours of the Ultimate Design Year.

A comparison of the intersection v/c ratios between both peak hours of the Interim (2030) and Ultimate Design (2040) Years indicates a decrease in the degree of saturation from Year 2030 to Year 2040. This marked decrease occurs due to the re-striping of the westbound approach from a single-lane (in the Interim Design Year) to a dual-lane entry in the Ultimate Design Year.

## 8. Safety Considerations

Safety is a key evaluation factor brought forth in the TOPD 13-02, and one of the goals of the ICE process is to identify projects that will ensure a reasonable level of safety and operational performance for all users.

### 8.1 Historic Collision Data

Historical collision data for a five year interval (2011 through 2016) was obtained from the Statewide Integrated Traffic Records System (SWITRS) and Transportation Injury Mapping System (TIMS) databases, and supplemented by collision reports compiled by the City of Chico Police Department. Table 13 provides the summary of the type of collisions that happened in that time period at the study intersections.

**TABLE 13  
SUMMARY OF COLLISION DATA**

No.	Intersections	Property Damage Only	Fatal	Injury (Severe)	Injury (Other Visible)	Injury (Complaint of Pain)
1	Eaton Road/ SR 99 NB Ramp	14	1	1	4	4
2	Eaton Road/ Hicks Lane	1	0	0	0	1

As shown in Table 14, there was one fatal collision and one severe injury collision at the Eaton Road/SR 99 NB Ramps intersection. These 26 collisions can be further classified into the following collision types:

- 10 cases of broadside collisions (38%)
- 8 cases of rear end collisions (31%)
- 7 cases of hitting fixed objects (27%)
- 1 case of an overturn (4%)

### 8.2 Safety Analysis

#### 8.2.1 Collision Cost Analysis

Caltrans provides a Safety Performance/Collision Cost Analysis Tool on their website (<http://www.dot.ca.gov/trafficops/ice.html>) that is used to calculate the collision costs and projected savings for various intersection improvements. The Collision Costs are based on the existing intersection configuration, ADT, and existing collision data. The file has historical Crash Modification Factors (CMF) for conversion of an all-way stop control and two-way stop control to a roundabout and traffic signal (see Appendix F).

#### *Eaton Road/SR 99 NB Ramps/Hicks Lane*

This intersection was analyzed as an existing all way stop (multi-legged or offset tee). Conversion to a multi-legged traffic signal results in a CMF of 1.25 and an average reduction of \$13,000 per collision. This means that the number of collisions is expected to increase, but the cost of each collision should be reduced. This results in an expected in a 12% reduction in collision costs.

Conversion to a multi-lane roundabout results in a CMF of 1.0 and an average reduction of \$89,300 per collision. The frequency of collisions is predicted to remain the same, but the average collision cost for a roundabout is significantly reduced. The result is a 67% reduction in collision costs.

As noted above, statistics have shown that, the conversion of a stop-controlled intersection to a signal results in a reduction of collision costs. However, a roundabout is shown to have a more significant impact. Therefore, the Roundabout Alternative will be more likely to increase intersection safety than the Traffic Signal Alternative.

## 8.2.2 Reduced Speed Potential

Typically the roundabout geometric design requires the driver to reduce the speed in the intersection to 15-25 MPH. Conversely, drivers can travel through a signalized intersection at speeds higher than posted speed limits due to lack of geometric constraints. Due to reduced travel speeds through the intersection and expected reduction in crashes, the roundabout alternative is likely to eliminate most severe crash types.

## 8.2.3 Pedestrian and Bike Safety

A key component of roundabout design focuses on non-motorized vehicle facilities through shared-use paths and two-stage crossings. The shared-use path conveys both pedestrian and bicycle traffic through the intersection. The path provides the opportunity for cyclists to exit the bicycle lane via a bicycle ramp and navigate the intersection on the shared-use path and through the crosswalks. As an alternative to taking the shared-use path, cyclists are also given an option to exit the bicycle lane and entering the roadway to ride with vehicle traffic through the roundabout. Crosswalks are split into two separate crossings through the provision of pedestrian refuges at the splitter islands. These two-stage crossings reduce the amount of sustained time a pedestrian is in potential conflict with motorized vehicles by limiting the length of each crossing and limiting each crossing to one direction of vehicle travel at a time.

# 9. Alternatives Comparison

## 9.1 Traffic Signal Alternative

Based on the geometric concept shown in Appendix D, the Traffic Signal Alternative has the following potential impacts and considerations:

- Caltrans right-of-way and highway access control limits may need to be revised to accommodate the Traffic Signal Alternative footprint which extends beyond the existing intersection layout.
- The existing SR 99/Eaton Road overcrossing may need to be removed, and a new five lane structure may need to be constructed to provide an additional through lane in both directions, longer left-turn pockets, bike lanes, and sidewalks.
- The northbound off-ramp may need to be reconstructed to the mainline in order to provide additional lanes and new alignment.
- Earthwork (fill) may be required for the NB ramp intersection in order to raise it to conform to the existing overcrossing profile.
- Bike lanes (6') and sidewalks (6') are proposed to be provided on Eaton Road.

- Eaton Road is proposed to be widened to four lanes, and existing stop-controlled intersections will become traffic signals.
- The roadway improvements under this alternative may encroach into properties adjacent to Eaton Road. Partial acquisition of each parcel may be required.
- The realignment of Hicks Lane under this alternative may encroach into several residential properties and cross through a vacant parcel. Partial acquisition of each parcel may be required.
- The driveway to the property located at on the northwest corner of Hicks Lane may need to be realigned.

## 9.2 Roundabout Alternative

Based on the geometric concept shown on Figure 4 and also in Appendix E, the Roundabout Alternative has the following potential impacts and considerations:

- Caltrans right-of-way and highway access control limits may need to be revised to accommodate the Roundabout Alternative footprint which extends beyond the existing intersection layout.
- A new pedestrian/bicycle structure over SR 99 will need to be constructed.
- Depending upon the roundabout northbound approach entry alignment, The northbound off-ramp may need to be reconstructed in order to provide standard superelevation transitions.
- The drainage channel north of the Eaton Road/SR 99 NB Ramps/Hicks Lane intersection will need to be reconstructed or modified.
- Significant earthwork (fill) will be required for the intersection in order to raise them to conform to the existing/proposing overcrossing profile. It is our understanding that Caltrans has a programmed project to raise the profile of the overcrossing structure to increase the vertical clearance.
- A shared-use path is proposed on the south side of Eaton Road west of the intersection and on both sides east of the intersection. A shared use path crossing is also provided across Hicks Lane.
- The roadway improvements under this alternative would encroach into several properties adjacent to Eaton Road and the northbound off ramp in the southeast quadrant. Partial acquisition of each parcel would be required.

## 9.3 Construction Cost

Preliminary estimated construction costs have been developed for both the Traffic Signal Alternative and the Roundabout Alternative with copies of these preliminary cost estimates provided in Appendix D and E. The estimated capital costs for each alternative are provided below:

- \$11.65 Million for Traffic Signal Alternative
- \$4.59 Million for Roundabout Alternative

As shown, the construction costs which represent the initial project investment will be lower for the Roundabout Alternative when compared to the Traffic Signal Alternative.



## 10. Recommendations

The traffic forecast volumes for the Eaton Road/SR 99 interchange show growth in this area. The No Build Alternative analysis shows that significant congestion and delay is occurring with current traffic volumes, and there have been serious collisions at the study intersections; therefore, improvements need to be made to this interchange. Table 14 summarizes and compares the performance for both the Traffic Signal Alternative and the Roundabout Alternative.

**TABLE 14  
ALTERNATIVE COMPARISON SUMMARY**

Category	Traffic Signal Alternative	Roundabout Alternative
<b>Traffic Operations</b>	<b>Eaton Road/ SR 99 NB Ramps</b>	<b>Eaton Road/ SR 99 NB Ramps/Hicks Lane</b>
	<ul style="list-style-type: none"> <li>(Interim Design Year) LOS B, all queues accommodated</li> <li>(Ultimate Design Year) LOS B, all queues accommodated</li> </ul>	<ul style="list-style-type: none"> <li>(Interim Design Year) LOS B, all queues accommodated</li> <li>(Ultimate Design Year) LOS B, all queues accommodated</li> </ul>
	<b>Eaton Road/ Hicks Lane</b>	
	<ul style="list-style-type: none"> <li>(Interim Design Year) LOS A, all queues accommodated</li> <li>(Ultimate Design Year) LOS A, all queues accommodated</li> </ul>	
<b>Pedestrian Access</b>	<p>Access provided on both sides of Eaton Road with 6' sidewalks attached to back of curb. Crosswalks and ADA accessible ramps will also be provided for pedestrians at the intersections.</p> <p>Pedestrians will have to cross up to five lanes in one crossing.</p> <p>Anticipated vehicular speeds range from 35-45 mph.</p>	<p>Access provided on south side of Eaton Road with a 10' shared-use path separated from roadway with a 5' minimum landscaped buffer from the roadway or barrier along the overcrossing. The landscape buffer is provided for pedestrian safety and to guide them to the correct crossing location.</p> <p>Crosswalks and ADA accessible ramps will also be provided for pedestrians at the SB on-ramp and NB off-ramp. There will also be a pedestrian crossing across the EB Eaton Road approach to the SB ramps intersection. This crossing will connect to the sidewalk on the north side of Eaton Road.</p> <p>Pedestrians will have to cross a maximum of two lanes at a time. Pedestrian refuges will be provided in splitter islands to shorten crossing distances.</p> <p>Anticipated vehicular speeds range from 20-30 mph.</p>
<b>Safety</b>	Crash Modification Factors (CMF):	Crash Modification Factors (CMF):
	<ul style="list-style-type: none"> <li>Total Collisions: -0.17%</li> <li>Fatal/Injury Collisions: -0.23%</li> </ul>	<ul style="list-style-type: none"> <li>Total Collisions: 56%-72%</li> <li>Fatal/Injury Collisions: 78%-88%</li> </ul>
	No inherent speed reduction from roadway geometrics.	Speed reduction via roadway geometry.
	Longer pedestrian crossings	Shorter pedestrian crossings

**TABLE 14  
ALTERNATIVE COMPARISON SUMMARY (CONT'D)**

<b>Category</b>	<b>Traffic Signal Alternative</b>	<b>Roundabout Alternative</b>
<b>Right-of-way Impacts</b>	<p>Right-of-way from 4-5 properties will be required.</p> <p>Comcast parking lot will need to be slightly modified with a potential reduction in the number of parking stalls.</p> <p>Buildings impacted by the Hicks Lane realignment.</p>	<p>Right-of-way from 4 properties will be required.</p> <p>Comcast parking lot will need to be reconfigured, with a potential reduction in the number of parking stalls.</p> <p>No buildings affected.</p>
<b>SR 99 Impacts</b>	<p>Grade separation will need to be reconstructed.</p> <p>Northbound and southbound off-ramps will need to be reconstructed.</p>	<p>Overcrossing retained.</p> <p>Pedestrian/Bicycle overcrossing will need to be constructed.</p> <p>Northbound and southbound off-ramps will need to be reconstructed.</p>
<b>Drainage Channel Impacts</b>	<p>The SB Off-Ramp encroaches into the drainage channel. A retaining wall will be required.</p>	<p>Drainage channel will need to be reconstructed or modified in the north corner of the Eaton Road/SR 99 NB Ramps/Hicks Lane intersection.</p>
<b>Capital Costs</b>	<p>Approximately \$11.62 million</p>	<p>Approximately \$4.59 million</p>

Based on the analysis presented within this report, the Roundabout Alternative provides superior safety benefits and better meets the needs of the project purpose than the Traffic Signal Alternative. As presented within Table 14, the Roundabout Alternative possesses lower capital costs than the proposed Traffic Signal Alternative. Therefore, consistent with the findings presented within this document, this study recommends the Roundabout Alternative to be pursued into the Design Phase.

## **Appendices**

APPENDIX A – SHORT TERM EATON ROAD/SR 99 INTERCHANGE IMPROVEMENTS TRAFFIC STUDY BY TRAFFICWORKS

APPENDIX B – SR 99/EATON ROAD INTERCHANGE IMPROVEMENT ALTERNATIVES TRAFFIC STUDY BY Y&C TRANSPORTATION CONSULTANTS, INC

APPENDIX C – NO BUILD ANALYSIS

NO BUILD SYNCHRO ANALYSIS

APPENDIX D –SIGNAL BUILD ANALYSIS

SIGNAL BUILD SYNCHRO ANALYSIS

SIGNAL LAYOUT & TRUCK TURN EXHIBITS

SIGNAL COST ESTIMATE

APPENDIX E – ROUNDABOUT ANALYSIS

SIDRA 7 ROUNDABOUT ANALYSIS

ROUNDABOUT LAYOUT, FASTEST PATH, & TRUCK TURN EXHIBITS

ROUNDABOUT COST ESTIMATE

APPENDIX F – COLLISION COST ANALYSIS

**APPENDIX A – SHORT TERM EATON ROAD/SR 99  
INTERCHANGE IMPROVEMENTS TRAFFIC STUDY BY  
TRAFFICWORKS**

# **TRAFFIC STUDY**

for

## **Short-Term**

### **Eaton Road / SR 99 Interchange**

### **Improvements**

June 6, 2016

PREPARED FOR:  
CITY OF CHICO

PREPARED BY:



# DRAFT

## EXECUTIVE SUMMARY

### What is the purpose of this study?

The purpose of this study is to assess traffic operations at the Eaton Road and SR 99 ramp terminal intersections for the current and 2021 forecast years and determine appropriate lane configurations and intersection controls that would accommodate 5-year horizon volumes as an interim solution to resolve current interchange congestion.

### What scenarios were analyzed in the future year analysis?

- Scenario 1 – “Single Intersection” combines both the SR99 Northbound ramps and Hicks Lane intersections with split phasing for every approach.
- Scenario 2 – “Clustered Intersection” configuration includes the Eaton Road/SR 99 NB Ramps and Eaton Road/Hicks Lane intersections operating as two closely spaced intersections with a single clustered signal system utilizing phase overlaps.
- Scenario 3 – “Clustered Intersection with High-T” (also called a Continuous Green T) intersection at the Eaton Road/Hicks Lane intersection and unique signal phasing with overlaps. This scenario also combines the northbound ramps and Hicks Lane into a single signal system.
- Scenario 4 – “STOP control at Hicks Lane” utilizes a standard signal configuration and phasing at the Eaton Road/SR99 NB Ramps intersection and side street STOP control on Hicks Lane
- Scenario 5 – “Realign Hicks Lane to Silverbell Road” consists of installing a standard signal and phasing at the northbound ramps intersection. Hicks Lane is relocated east, away from the ramps, to align with Silverbell Road.

All the scenarios also include signalization, using a standard configuration, at the Eaton Road / SR99 southbound ramps intersection.

### How do the various scenarios operate?

The following table provides a brief summary and comparison of all five studied scenarios:

Scenario	Works for 2021 volumes?	Pros	Cons
Scenario 1	No	-	Does not work with 2021 volumes
Scenario 2	No	-	Does not work with 2021 volumes
Scenario 3	Yes	Intersections operate better than LOS standards in 2021	Very complex signal phasing with multiple overlaps. May be very hard to implement and operate/maintain.
		Lane configurations within existing pavement widths	Risk of driver confusion due to visibility of multiple signal indications. This is a significant safety concern.
Scenario 4	Yes	Intersections operate better than LOS standards in 2021	Excessive queuing and LOS "F" conditions on Hicks Lane
		Simple, standard signal configuration at Eaton Rd/SR 99 NB Ramps	Potential for queue spill back in the northbound ramp terminal intersection associated with un-signalized left-turns to Hicks Lane
		Simplest overall solution	Safety concerns at Hicks Lane due to closely spaced intersections
Scenario 5	Yes	Ramp terminals operate better than LOS standards in 2021	Silver Bell Road approach operates at LOS "F" under side street STOP control
		Simple, standard signal configuration at Eaton Rd/SR 99 NB Ramps	Right-of-way acquisition needed for Hicks Lane realignment
		Improved safety with more storage space between intersections	Implementation timeframe longer due to R/W process

**What is the recommendation?**

Scenarios 3, 4, and 5 could all work as interim solutions with each having a unique set of challenges. The very complex signal phasing and visibility of multiple/conflicting closely spaced signal heads renders Scenario 3 much less desirable from a safety perspective. Scenario 3 is not recommended.

Ultimately, there is no ideal short-term, low-cost improvement alternative for the northbound ramps/Hicks lane intersections. Scenario 4, followed as soon as possible by Scenario 5, offers the best construction efficiency and best operating ramp intersections. However, Hicks Lane will function very poorly until such time as the roadway realignment occurs.

Signalization of the Eaton Road / SR99 Southbound ramps, in their current configuration, is feasible and operationally acceptable for a 5-year horizon with any of the scenarios discussed above.

**APPENDIX B –TRAFFIC STUDY BY Y&C TRANSPORTATION  
CONSULTANTS, INC**



DRAFT

**SR 99/Eaton Road Interchange  
Improvement Alternatives**

**TRAFFIC STUDY**

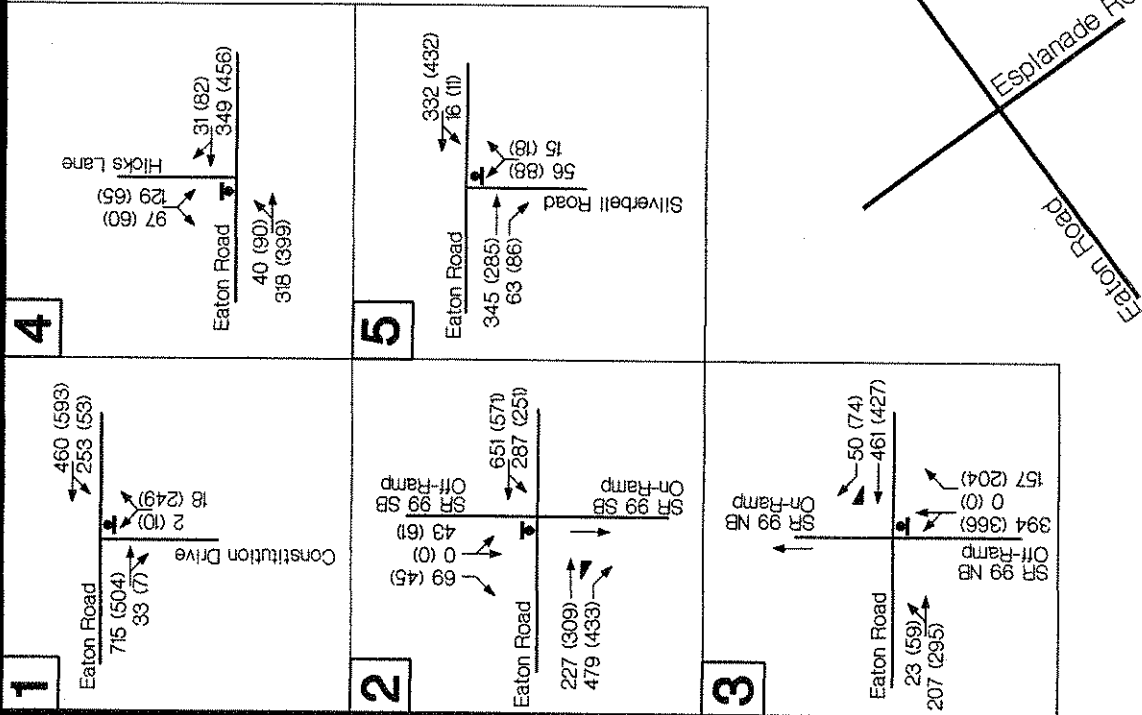
Prepared by

Y&C TRANSPORTATION CONSULTANTS, INC.

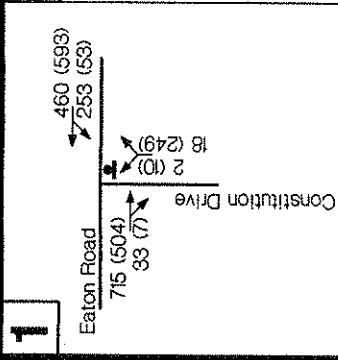
March, 2006



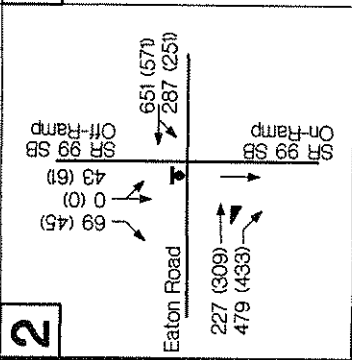
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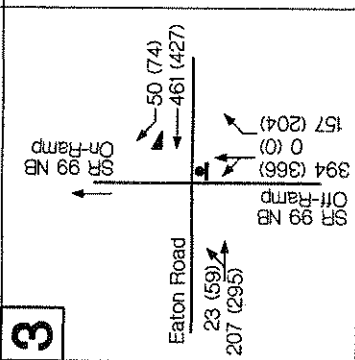
**1**



**2**



**3**



**LEGEND**

- XX (XX) AM (PM) Peak Hour Traffic Volume
- Stop Sign Controlled Approach
- Permitted Turning Movement
- Raised Parkchop Island for Free Right-Turn Movement

**CITY OF CHICO**  
**SR 99/EATON RD INTERCHANGE**  
**EXISTING(2006) PEAK HOUR**  
**TRAFFIC VOLUMES AND**  
**LANE CONFIGURATIONS**

**Figure 2**

## **APPENDIX C – NO BUILD ANALYSIS**

### **NO BUILD SYNCHRO ANALYSIS**

Intersection	
Intersection Delay, s/veh	58.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑↑	↑		↑	↑			
Traffic Vol, veh/h	25	269	0	0	616	66	463	0	130	0	0	0
Future Vol, veh/h	25	269	0	0	616	66	463	0	130	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	292	0	0	670	72	503	0	141	0	0	0
Number of Lanes	0	1	0	0	2	1	0	1	1	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	35.7	24.8	108.6
HCM LOS	E	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	9%	0%	0%	0%
Vol Thru, %	0%	0%	91%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	463	130	294	308	308	66
LT Vol	463	0	25	0	0	0
Through Vol	0	0	269	308	308	0
RT Vol	0	130	0	0	0	66
Lane Flow Rate	503	141	320	335	335	72
Geometry Grp	8	8	8	7	7	7
Degree of Util (X)	1.193	0.287	0.759	0.689	0.689	0.099
Departure Headway (Hd)	8.535	7.308	9.195	7.943	7.943	5.43
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	428	490	396	459	459	664
Service Time	6.298	5.07	6.895	5.643	5.643	3.13
HCM Lane V/C Ratio	1.175	0.288	0.808	0.73	0.73	0.108
HCM Control Delay	135.4	13	35.7	26.5	26.5	8.7
HCM Lane LOS	F	B	E	D	D	A
HCM 95th-tile Q	19.6	1.2	6.2	5.1	5.1	0.3

**Intersection**

Int Delay, s/veh 2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑
Traffic Vol, veh/h	71	326	538	36	37	148
Future Vol, veh/h	71	326	538	36	37	148
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	85
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	75	343	566	38	39	156

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	604	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	970	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	970	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	970	-	-	-	249	694
HCM Lane V/C Ratio	0.077	-	-	-	0.156	0.224
HCM Control Delay (s)	9	0.3	-	-	22.1	11.7
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5	0.9

Intersection	
Intersection Delay, s/veh	68.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑↑	↑		↑	↑			
Traffic Vol, veh/h	62	350	0	0	586	83	466	0	285	0	0	0
Future Vol, veh/h	62	350	0	0	586	83	466	0	285	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	65	368	0	0	617	87	491	0	300	0	0	0
Number of Lanes	0	1	0	0	2	1	0	1	1	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	94.8	23.5	94.4
HCM LOS	F	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	15%	0%	0%	0%
Vol Thru, %	0%	0%	85%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	466	285	412	293	293	83
LT Vol	466	0	62	0	0	0
Through Vol	0	0	350	293	293	0
RT Vol	0	285	0	0	0	83
Lane Flow Rate	491	300	434	308	308	87
Geometry Grp	8	8	8	7	7	7
Degree of Util (X)	1.195	0.631	1.063	0.662	0.662	0.129
Departure Headway (Hd)	9.072	7.834	9.4	8.175	8.175	5.669
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	402	465	390	444	444	636
Service Time	6.772	5.534	7.1	5.875	5.875	3.369
HCM Lane V/C Ratio	1.221	0.645	1.113	0.694	0.694	0.137
HCM Control Delay	138.1	23	94.8	25.5	25.5	9.2
HCM Lane LOS	F	C	F	D	D	A
HCM 95th-tile Q	19	4.3	14	4.7	4.7	0.4

**Intersection**

Int Delay, s/veh 3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑
Traffic Vol, veh/h	155	480	524	46	31	146
Future Vol, veh/h	155	480	524	46	31	146
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	85
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	163	505	552	48	33	154

**Major/Minor**

	Major1	Major2	Minor2		
Conflicting Flow All	600	0	-	0	1155 300
Stage 1	-	-	-	-	576 -
Stage 2	-	-	-	-	579 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	973	-	-	-	190 696
Stage 1	-	-	-	-	525 -
Stage 2	-	-	-	-	524 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	973	-	-	-	146 696
Mov Cap-2 Maneuver	-	-	-	-	146 -
Stage 1	-	-	-	-	403 -
Stage 2	-	-	-	-	524 -

**Approach**

	EB	WB	SB
HCM Control Delay, s	2.8	0	16
HCM LOS			C

**Minor Lane/Major Mvmt**

	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	973	-	-	-	146	696
HCM Lane V/C Ratio	0.168	-	-	-	0.224	0.221
HCM Control Delay (s)	9.4	0.7	-	-	36.6	11.6
HCM Lane LOS	A	A	-	-	E	B
HCM 95th %tile Q(veh)	0.6	-	-	-	0.8	0.8

Intersection	
Intersection Delay, s/veh	72.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑↑	↑		↑	↑			
Traffic Vol, veh/h	30	285	0	0	650	75	490	0	150	0	0	0
Future Vol, veh/h	30	285	0	0	650	75	490	0	150	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	310	0	0	707	82	533	0	163	0	0	0
Number of Lanes	0	1	0	0	2	1	0	1	1	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	44.4	28.1	136.2
HCM LOS	E	D	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	10%	0%	0%	0%
Vol Thru, %	0%	0%	90%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	490	150	315	325	325	75
LT Vol	490	0	30	0	0	0
Through Vol	0	0	285	325	325	0
RT Vol	0	150	0	0	0	75
Lane Flow Rate	533	163	342	353	353	82
Geometry Grp	8	8	8	7	7	7
Degree of Util (X)	1.29	0.339	0.827	0.734	0.734	0.114
Departure Headway (Hd)	8.719	7.489	9.511	8.193	8.193	5.674
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	415	478	383	445	445	636
Service Time	6.509	5.278	7.211	5.893	5.893	3.374
HCM Lane V/C Ratio	1.284	0.341	0.893	0.793	0.793	0.129
HCM Control Delay	173.6	14.1	44.4	30.3	30.3	9.1
HCM Lane LOS	F	B	E	D	D	A
HCM 95th-tile Q	23.3	1.5	7.5	5.9	5.9	0.4



Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑
Traffic Vol, veh/h	55	380	565	40	40	160
Future Vol, veh/h	55	380	565	40	40	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	85
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	400	595	42	42	168

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	637	0	-	0	932
Stage 1	-	-	-	-	616
Stage 2	-	-	-	-	316
Critical Hdwy	4.14	-	-	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	2.22	-	-	-	3.52
Pot Cap-1 Maneuver	943	-	-	-	265
Stage 1	-	-	-	-	501
Stage 2	-	-	-	-	712
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	943	-	-	-	244
Mov Cap-2 Maneuver	-	-	-	-	244
Stage 1	-	-	-	-	461
Stage 2	-	-	-	-	712

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	943	-	-	-	244	677
HCM Lane V/C Ratio	0.061	-	-	-	0.173	0.249
HCM Control Delay (s)	9.1	0.3	-	-	22.8	12.1
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.6	1

Intersection	
Intersection Delay, s/veh	85.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑↑	↑		↑	↑			
Traffic Vol, veh/h	70	360	0	0	625	90	500	0	310	0	0	0
Future Vol, veh/h	70	360	0	0	625	90	500	0	310	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	74	379	0	0	658	95	526	0	326	0	0	0
Number of Lanes	0	1	0	0	2	1	0	1	1	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	118.8	26.4	120.1
HCM LOS	F	D	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	16%	0%	0%	0%
Vol Thru, %	0%	0%	84%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	500	310	430	313	313	90
LT Vol	500	0	70	0	0	0
Through Vol	0	0	360	313	313	0
RT Vol	0	310	0	0	0	90
Lane Flow Rate	526	326	453	329	329	95
Geometry Grp	8	8	8	7	7	7
Degree of Util (X)	1.296	0.695	1.133	0.708	0.708	0.14
Departure Headway (Hd)	9.284	8.043	9.702	8.307	8.307	5.797
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	395	454	376	438	438	622
Service Time	6.984	5.743	7.402	6.007	6.007	3.497
HCM Lane V/C Ratio	1.332	0.718	1.205	0.751	0.751	0.153
HCM Control Delay	177.8	27.1	118.8	28.8	28.8	9.4
HCM Lane LOS	F	D	F	D	D	A
HCM 95th-tile Q	22.7	5.2	16	5.4	5.4	0.5

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑
Traffic Vol, veh/h	90	580	555	50	35	160
Future Vol, veh/h	90	580	555	50	35	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	85
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	611	584	53	37	168

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	637	0	-	0	1107 319
Stage 1	-	-	-	-	611 -
Stage 2	-	-	-	-	496 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	943	-	-	-	204 677
Stage 1	-	-	-	-	504 -
Stage 2	-	-	-	-	577 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	943	-	-	-	173 677
Mov Cap-2 Maneuver	-	-	-	-	173 -
Stage 1	-	-	-	-	427 -
Stage 2	-	-	-	-	577 -

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	943	-	-	-	173	677
HCM Lane V/C Ratio	0.1	-	-	-	0.213	0.249
HCM Control Delay (s)	9.2	0.5	-	-	31.4	12.1
HCM Lane LOS	A	A	-	-	D	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.8	1

Intersection	
Intersection Delay, s/veh	131.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑↑	↑		↑	↑			
Traffic Vol, veh/h	60	320	0	0	790	110	580	0	180	0	0	0
Future Vol, veh/h	60	320	0	0	790	110	580	0	180	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	65	348	0	0	859	120	630	0	196	0	0	0
Number of Lanes	0	1	0	0	2	1	0	1	1	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	99.3	51.4	242.3
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	16%	0%	0%	0%
Vol Thru, %	0%	0%	84%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	580	180	380	395	395	110
LT Vol	580	0	60	0	0	0
Through Vol	0	0	320	395	395	0
RT Vol	0	180	0	0	0	110
Lane Flow Rate	630	196	413	429	429	120
Geometry Grp	8	8	8	7	7	7
Degree of Util (X)	1.615	0.436	1.06	0.92	0.92	0.175
Departure Headway (Hd)	9.55	8.309	10.628	8.941	8.941	6.4
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	385	436	347	408	408	564
Service Time	7.25	6.009	8.328	6.641	6.641	4.1
HCM Lane V/C Ratio	1.636	0.45	1.19	1.051	1.051	0.213
HCM Control Delay	312.1	17.3	99.3	57.1	57.1	10.5
HCM Lane LOS	F	C	F	F	F	B
HCM 95th-tile Q	35.4	2.2	12.9	9.9	9.9	0.6

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↔	↔
Traffic Vol, veh/h	70	430	690	45	45	210
Future Vol, veh/h	70	430	690	45	45	210
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	85
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	453	726	47	47	221

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	773	0	-	0	1125 387
Stage 1	-	-	-	-	750 -
Stage 2	-	-	-	-	375 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	838	-	-	-	199 611
Stage 1	-	-	-	-	427 -
Stage 2	-	-	-	-	665 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	838	-	-	-	176 611
Mov Cap-2 Maneuver	-	-	-	-	176 -
Stage 1	-	-	-	-	377 -
Stage 2	-	-	-	-	665 -

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	17.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	838	-	-	-	176	611
HCM Lane V/C Ratio	0.088	-	-	-	0.269	0.362
HCM Control Delay (s)	9.7	0.4	-	-	32.8	14.2
HCM Lane LOS	A	A	-	-	D	B
HCM 95th %tile Q(veh)	0.3	-	-	-	1	1.6

Intersection	
Intersection Delay, s/veh	146.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑↑	↑		↑	↑			
Traffic Vol, veh/h	90	400	0	0	675	120	610	0	400	0	0	0
Future Vol, veh/h	90	400	0	0	675	120	610	0	400	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	95	421	0	0	711	126	642	0	421	0	0	0
Number of Lanes	0	1	0	0	2	1	0	1	1	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	206.6	29.9	209.1
HCM LOS	F	D	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	18%	0%	0%	0%
Vol Thru, %	0%	0%	82%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	610	400	490	338	338	120
LT Vol	610	0	90	0	0	0
Through Vol	0	0	400	338	338	0
RT Vol	0	400	0	0	0	120
Lane Flow Rate	642	421	516	355	355	126
Geometry Grp	8	8	8	7	7	7
Degree of Util (X)	1.609	0.915	1.357	0.765	0.765	0.187
Departure Headway (Hd)	9.802	8.552	10.419	8.37	8.37	5.851
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	379	425	351	437	437	618
Service Time	7.502	6.252	8.119	6.07	6.07	3.551
HCM Lane V/C Ratio	1.694	0.991	1.47	0.812	0.812	0.204
HCM Control Delay	310.4	54.5	206.6	33.5	33.5	9.9
HCM Lane LOS	F	F	F	D	D	A
HCM 95th-tile Q	34.4	10	23	6.5	6.5	0.7

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑
Traffic Vol, veh/h	100	700	600	95	45	195
Future Vol, veh/h	100	700	600	95	45	195
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	85
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	105	737	632	100	47	205

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	732	0	-	0	1261
Stage 1	-	-	-	-	682
Stage 2	-	-	-	-	579
Critical Hdwy	4.14	-	-	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	2.22	-	-	-	3.52
Pot Cap-1 Maneuver	868	-	-	-	162
Stage 1	-	-	-	-	464
Stage 2	-	-	-	-	524
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	868	-	-	-	129
Mov Cap-2 Maneuver	-	-	-	-	129
Stage 1	-	-	-	-	369
Stage 2	-	-	-	-	524

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	868	-	-	-	129	631
HCM Lane V/C Ratio	0.121	-	-	-	0.367	0.325
HCM Control Delay (s)	9.7	0.8	-	-	48.3	13.4
HCM Lane LOS	A	A	-	-	E	B
HCM 95th %tile Q(veh)	0.4	-	-	-	1.5	1.4

Intersection	
Intersection Delay, s/veh	200.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑↑	↑		↑	↑			
Traffic Vol, veh/h	90	355	0	0	930	145	670	0	210	0	0	0
Future Vol, veh/h	90	355	0	0	930	145	670	0	210	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	98	386	0	0	1011	158	728	0	228	0	0	0
Number of Lanes	0	1	0	0	2	1	0	1	1	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	190	89	341.6
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	20%	0%	0%	0%
Vol Thru, %	0%	0%	80%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	670	210	445	465	465	145
LT Vol	670	0	90	0	0	0
Through Vol	0	0	355	465	465	0
RT Vol	0	210	0	0	0	145
Lane Flow Rate	728	228	484	505	505	158
Geometry Grp	8	8	8	7	7	7
Degree of Util (X)	1.908	0.522	1.303	1.082	1.082	0.231
Departure Headway (Hd)	10.228	8.978	11.727	9.481	9.481	6.921
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	364	404	314	389	389	523
Service Time	7.928	6.678	9.427	7.181	7.181	4.621
HCM Lane V/C Ratio	2	0.564	1.541	1.298	1.298	0.302
HCM Control Delay	442	21.1	190	101	101	11.7
HCM Lane LOS	F	C	F	F	F	B
HCM 95th-tile Q	45.5	2.9	19.4	14.5	14.5	0.9



Intersection						
Int Delay, s/veh	4.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑
Traffic Vol, veh/h	85	480	815	50	50	260
Future Vol, veh/h	85	480	815	50	50	260
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	85
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	89	505	858	53	53	274

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	911	0	-	0	1316 456
Stage 1	-	-	-	-	885 -
Stage 2	-	-	-	-	431 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	743	-	-	-	149 551
Stage 1	-	-	-	-	364 -
Stage 2	-	-	-	-	623 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	743	-	-	-	124 551
Mov Cap-2 Maneuver	-	-	-	-	124 -
Stage 1	-	-	-	-	303 -
Stage 2	-	-	-	-	623 -

Approach	EB	WB	SB
HCM Control Delay, s	2.1	0	23.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	743	-	-	-	124	551
HCM Lane V/C Ratio	0.12	-	-	-	0.424	0.497
HCM Control Delay (s)	10.5	0.6	-	-	53.9	17.8
HCM Lane LOS	B	A	-	-	F	C
HCM 95th %tile Q(veh)	0.4	-	-	-	1.8	2.7

Intersection	
Intersection Delay, s/veh	237.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑↑	↑		↑	↑			
Traffic Vol, veh/h	110	440	0	0	915	150	720	0	490	0	0	0
Future Vol, veh/h	110	440	0	0	915	150	720	0	490	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	116	463	0	0	963	158	758	0	516	0	0	0
Number of Lanes	0	1	0	0	2	1	0	1	1	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	341.5	70.5	338
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	20%	0%	0%	0%
Vol Thru, %	0%	0%	80%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	720	490	550	458	458	150
LT Vol	720	0	110	0	0	0
Through Vol	0	0	440	458	458	0
RT Vol	0	490	0	0	0	150
Lane Flow Rate	758	516	579	482	482	158
Geometry Grp	8	8	8	7	7	7
Degree of Util (X)	1.984	1.178	1.664	1.043	1.043	0.236
Departure Headway (Hd)	10.777	9.514	12.141	7.607	7.607	5.092
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	349	387	307	482	482	709
Service Time	8.477	7.214	9.841	5.307	5.307	2.792
HCM Lane V/C Ratio	2.172	1.333	1.886	1	1	0.223
HCM Control Delay	477	133.8	341.5	80.5	80.5	9.4
HCM Lane LOS	F	F	F	F	F	A
HCM 95th-tile Q	46.4	17.8	30.6	14.9	14.9	0.9

Intersection						
Int Delay, s/veh	6.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑
Traffic Vol, veh/h	110	820	835	80	50	230
Future Vol, veh/h	110	820	835	80	50	230
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	85
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	116	863	879	84	53	242

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	963	0	-	0	1585 482
Stage 1	-	-	-	-	921 -
Stage 2	-	-	-	-	664 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	711	-	-	-	99 530
Stage 1	-	-	-	-	348 -
Stage 2	-	-	-	-	474 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	711	-	-	-	68 530
Mov Cap-2 Maneuver	-	-	-	-	68 -
Stage 1	-	-	-	-	239 -
Stage 2	-	-	-	-	474 -

Approach	EB	WB	SB
HCM Control Delay, s	2.5	0	41.5
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	711	-	-	-	68	530
HCM Lane V/C Ratio	0.163	-	-	-	0.774	0.457
HCM Control Delay (s)	11	1.4	-	-	152.1	17.4
HCM Lane LOS	B	A	-	-	F	C
HCM 95th %tile Q(veh)	0.6	-	-	-	3.6	2.4

Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	WB	WB	NB	NB
Directions Served	LT	T	R	LT	R
Maximum Queue (ft)	150	66	30	207	68
Average Queue (ft)	69	40	12	106	36
95th Queue (ft)	117	55	26	184	56
Link Distance (ft)	98	31	31	418	
Upstream Blk Time (%)	2	20	1		
Queuing Penalty (veh)	7	46	1		
Storage Bay Dist (ft)					175
Storage Blk Time (%)				3	
Queuing Penalty (veh)				3	

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	WB	WB	B10	SB	SB
Directions Served	LT	T	TR	T	L	R
Maximum Queue (ft)	35	202	75	254	202	143
Average Queue (ft)	12	170	7	217	185	137
95th Queue (ft)	37	189	39	239	199	149
Link Distance (ft)	31	91	91	193	182	
Upstream Blk Time (%)	1	100	0	99	100	
Queuing Penalty (veh)	2	0	0	0	0	
Storage Bay Dist (ft)						85
Storage Blk Time (%)					0	100
Queuing Penalty (veh)					0	37

Zone Summary

Zone wide Queuing Penalty: 97

Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	B13	WB	WB	NB	NB
Directions Served	LT	T	T	R	LT	R
Maximum Queue (ft)	175	147	55	33	367	261
Average Queue (ft)	102	11	40	14	157	77
95th Queue (ft)	167	69	51	27	300	193
Link Distance (ft)	98	314	31	31	418	
Upstream Blk Time (%)	19	0	20	1	1	
Queuing Penalty (veh)	77	0	45	2	0	
Storage Bay Dist (ft)						175
Storage Blk Time (%)					16	
Queuing Penalty (veh)					44	

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	WB	WB	B10	SB	SB
Directions Served	LT	T	TR	T	L	R
Maximum Queue (ft)	58	194	113	245	202	144
Average Queue (ft)	26	165	12	214	183	125
95th Queue (ft)	52	177	55	236	198	165
Link Distance (ft)	31	91	91	193	182	
Upstream Blk Time (%)	3	100	0	98	93	
Queuing Penalty (veh)	8	0	0	0	0	
Storage Bay Dist (ft)						85
Storage Blk Time (%)					18	100
Queuing Penalty (veh)					27	31

Zone Summary

Zone wide Queuing Penalty: 234

Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	WB	WB	NB	NB
Directions Served	LT	T	R	LT	R
Maximum Queue (ft)	136	68	31	374	255
Average Queue (ft)	67	43	13	187	99
95th Queue (ft)	106	58	25	392	283
Link Distance (ft)	98	31	31	418	
Upstream Blk Time (%)	2	21	1	3	
Queuing Penalty (veh)	6	51	2	0	
Storage Bay Dist (ft)					175
Storage Blk Time (%)				29	
Queuing Penalty (veh)				44	

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	EB	WB	WB	B10	SB	SB
Directions Served	LT	T	T	TR	T	L	R
Maximum Queue (ft)	36	12	200	92	247	211	145
Average Queue (ft)	9	0	168	8	216	185	134
95th Queue (ft)	33	6	186	52	237	202	160
Link Distance (ft)	31	31	91	91	193	182	
Upstream Blk Time (%)	1	0	100		100	91	
Queuing Penalty (veh)	1	0	0		0	0	
Storage Bay Dist (ft)							85
Storage Blk Time (%)						6	100
Queuing Penalty (veh)						11	40

Zone Summary

Zone wide Queuing Penalty: 155
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Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	B13	WB	WB	NB	NB
Directions Served	LT	T	T	R	LT	R
Maximum Queue (ft)	169	119	57	40	431	300
Average Queue (ft)	99	11	41	15	237	143
95th Queue (ft)	157	79	52	29	463	332
Link Distance (ft)	98	314	31	31	418	
Upstream Blk Time (%)	14		21	1	18	
Queuing Penalty (veh)	57		50	3	0	
Storage Bay Dist (ft)						175
Storage Blk Time (%)					41	
Queuing Penalty (veh)					128	

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	WB	WB	B10	SB	SB
Directions Served	LT	T	TR	T	L	R
Maximum Queue (ft)	55	180	65	247	204	130
Average Queue (ft)	20	164	11	214	186	118
95th Queue (ft)	47	173	43	235	201	160
Link Distance (ft)	31	91	91	193	182	
Upstream Blk Time (%)	2	100	0	96	100	
Queuing Penalty (veh)	6	0	0	0	0	
Storage Bay Dist (ft)						85
Storage Blk Time (%)					20	100
Queuing Penalty (veh)					32	35

Zone Summary

Zone wide Queuing Penalty: 310

Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	B13	WB	WB	NB	NB
Directions Served	LT	T	T	R	LT	R
Maximum Queue (ft)	155	13	60	37	474	300
Average Queue (ft)	84	1	44	14	429	279
95th Queue (ft)	133	8	55	28	521	397
Link Distance (ft)	98	314	31	31	418	
Upstream Blk Time (%)	7		22	1	89	
Queuing Penalty (veh)	24		67	3	0	
Storage Bay Dist (ft)						175
Storage Blk Time (%)					97	
Queuing Penalty (veh)					175	

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	WB	WB	B10	SB	SB
Directions Served	LT	T	TR	T	L	R
Maximum Queue (ft)	32	197	95	245	207	144
Average Queue (ft)	14	168	10	215	188	132
95th Queue (ft)	38	186	51	236	203	153
Link Distance (ft)	31	91	91	193	182	
Upstream Blk Time (%)	1	100	0	100	98	
Queuing Penalty (veh)	2	0	0	0	0	
Storage Bay Dist (ft)						85
Storage Blk Time (%)					3	99
Queuing Penalty (veh)					6	44

Zone Summary

Zone wide Queuing Penalty: 322
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Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	B13	WB	WB	NB	NB
Directions Served	LT	T	T	R	LT	R
Maximum Queue (ft)	183	145	56	41	467	300
Average Queue (ft)	136	30	44	15	438	300
95th Queue (ft)	193	124	51	29	454	300
Link Distance (ft)	98	314	31	31	418	
Upstream Blk Time (%)	47		22	1	92	
Queuing Penalty (veh)	192		59	3	0	
Storage Bay Dist (ft)						175
Storage Blk Time (%)					100	0
Queuing Penalty (veh)					400	1

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	EB	WB	WB	B10	SB	SB
Directions Served	LT	T	T	TR	T	L	R
Maximum Queue (ft)	50	12	190	70	249	213	145
Average Queue (ft)	20	1	165	12	216	186	135
95th Queue (ft)	47	8	177	44	238	199	149
Link Distance (ft)	31	31	91	91	193	182	
Upstream Blk Time (%)	2	0	100	0	99	100	
Queuing Penalty (veh)	9	0	0	0	0	0	
Storage Bay Dist (ft)							85
Storage Blk Time (%)						0	100
Queuing Penalty (veh)						0	45

Zone Summary

Zone wide Queuing Penalty: 709
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Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	B13	WB	WB	NB	NB
Directions Served	LT	T	T	R	LT	R
Maximum Queue (ft)	173	65	67	33	474	300
Average Queue (ft)	118	6	45	14	444	298
95th Queue (ft)	174	33	57	27	467	339
Link Distance (ft)	98	314	31	31	418	
Upstream Blk Time (%)	28		23	1	99	
Queuing Penalty (veh)	93		84	3	0	
Storage Bay Dist (ft)						175
Storage Blk Time (%)					100	
Queuing Penalty (veh)					210	

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	WB	WB	B10	SB	SB
Directions Served	LT	T	TR	T	L	R
Maximum Queue (ft)	35	197	89	245	206	138
Average Queue (ft)	14	168	11	214	185	134
95th Queue (ft)	40	184	59	232	197	148
Link Distance (ft)	31	91	91	193	182	
Upstream Blk Time (%)	1	100	0	100	100	
Queuing Penalty (veh)	3	0	0	0	0	
Storage Bay Dist (ft)						85
Storage Blk Time (%)						100
Queuing Penalty (veh)						50

Zone Summary

Zone wide Queuing Penalty: 444
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Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	B13	WB	WB	NB	NB
Directions Served	LT	T	T	R	LT	R
Maximum Queue (ft)	190	169	58	36	469	300
Average Queue (ft)	147	34	44	16	438	300
95th Queue (ft)	192	127	53	29	456	300
Link Distance (ft)	98	314	31	31	418	
Upstream Blk Time (%)	54		23	1	90	
Queuing Penalty (veh)	225		81	4	0	
Storage Bay Dist (ft)						175
Storage Blk Time (%)					100	2
Queuing Penalty (veh)					489	12

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	WB	WB	B10	SB	SB
Directions Served	LT	T	TR	T	L	R
Maximum Queue (ft)	67	192	102	247	219	145
Average Queue (ft)	18	166	14	216	183	126
95th Queue (ft)	48	178	65	236	205	163
Link Distance (ft)	31	91	91	193	182	
Upstream Blk Time (%)	2	100	0	99	100	
Queuing Penalty (veh)	8	0	0	0	0	
Storage Bay Dist (ft)						85
Storage Blk Time (%)					17	100
Queuing Penalty (veh)					40	50

Zone Summary























Zone wide Queuing Penalty: 908

## **APPENDIX D – SIGNAL BUILD ANALYSIS**

SIGNAL BUILD SYNCHRO ANALYSIS  
SIGNAL LAYOUT & TRUCK TURN EXHIBITS.  
SIGNAL COST ESTIMATE

HCM Signalized Intersection Capacity Analysis  
 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Year 2020 Conditions  
 AM Peak Hour

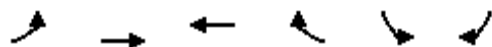
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (vph)	30	285	0	0	650	75	490	0	150	0	0	0
Future Volume (vph)	30	285	0	0	650	75	490	0	150	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1770	3539			3539	1583	1681	1681	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1770	3539			3539	1583	1681	1681	1583			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	300	0	0	684	79	516	0	158	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	52	0	0	109	0	0	0
Lane Group Flow (vph)	32	300	0	0	684	27	258	258	49	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases						8			2			
Actuated Green, G (s)	1.8	22.0			16.0	16.0	14.2	14.2	14.2			
Effective Green, g (s)	1.8	22.0			16.0	16.0	14.2	14.2	14.2			
Actuated g/C Ratio	0.04	0.48			0.35	0.35	0.31	0.31	0.31			
Clearance Time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Vehicle Extension (s)	1.5	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	69	1692			1230	550	518	518	488			
v/s Ratio Prot	c0.02	0.08			c0.19		c0.15	0.15				
v/s Ratio Perm						0.02			0.03			
v/c Ratio	0.46	0.18			0.56	0.05	0.50	0.50	0.10			
Uniform Delay, d1	21.6	6.8			12.1	10.0	13.0	13.0	11.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	1.8	0.1			0.5	0.0	0.8	0.8	0.1			
Delay (s)	23.4	6.9			12.7	10.0	13.7	13.7	11.4			
Level of Service	C	A			B	A	B	B	B			
Approach Delay (s)		8.5			12.4			13.2			0.0	
Approach LOS		A			B			B			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			12.0				HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio			0.52									
Actuated Cycle Length (s)			46.0				Sum of lost time (s)		14.0			
Intersection Capacity Utilization			69.0%				ICU Level of Service		C			
Analysis Period (min)			15									

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis

## 2: Eaton Rd & Hicks Ln

Year 2020 Conditions  
AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	55	380	565	40	40	160
Future Volume (vph)	55	380	565	40	40	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1	5.1		4.2	4.2
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3504		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	3539	3504		1770	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	58	400	595	42	42	168
RTOR Reduction (vph)	0	0	6	0	0	105
Lane Group Flow (vph)	58	400	631	0	42	63
Turn Type	Prot	NA	NA		Prot	pm+ov
Protected Phases	7	4	8		1	7
Permitted Phases						1
Actuated Green, G (s)	5.4	23.9	14.3		2.1	7.5
Effective Green, g (s)	5.4	23.9	14.3		2.1	7.5
Actuated g/C Ratio	0.15	0.68	0.41		0.06	0.21
Clearance Time (s)	4.2	5.1	5.1		4.2	4.2
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	270	2396	1419		105	524
v/s Ratio Prot	0.03	c0.11	c0.18		c0.02	0.02
v/s Ratio Perm						0.02
v/c Ratio	0.21	0.17	0.44		0.40	0.12
Uniform Delay, d1	13.1	2.1	7.6		16.0	11.2
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	0.0	0.2		2.5	0.1
Delay (s)	13.5	2.1	7.8		18.5	11.3
Level of Service	B	A	A		B	B
Approach Delay (s)		3.6	7.8		12.8	
Approach LOS		A	A		B	























### Intersection Summary

HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	35.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	34.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

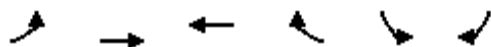
Year 2020 Conditions  
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (vph)	70	360	0	0	625	90	500	0	310	0	0	0
Future Volume (vph)	70	360	0	0	625	90	500	0	310	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1787	3574			3574	1599	1698	1698	1599			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1787	3574			3574	1599	1698	1698	1599			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	74	379	0	0	658	95	526	0	326	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	64	0	0	222	0	0	0
Lane Group Flow (vph)	74	379	0	0	658	31	263	263	104	0	0	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases						8			2			
Actuated Green, G (s)	3.8	24.8			16.8	16.8	16.1	16.1	16.1			
Effective Green, g (s)	3.8	24.8			16.8	16.8	16.1	16.1	16.1			
Actuated g/C Ratio	0.07	0.49			0.33	0.33	0.32	0.32	0.32			
Clearance Time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Vehicle Extension (s)	1.5	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	133	1748			1184	529	539	539	507			
v/s Ratio Prot	c0.04	0.11			c0.18		c0.15	0.15				
v/s Ratio Perm						0.02			0.06			
v/c Ratio	0.56	0.22			0.56	0.06	0.49	0.49	0.20			
Uniform Delay, d1	22.6	7.4			13.9	11.6	14.0	14.0	12.6			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	2.8	0.1			0.6	0.0	0.7	0.7	0.2			
Delay (s)	25.5	7.5			14.5	11.6	14.7	14.7	12.8			
Level of Service	C	A			B	B	B	B	B			
Approach Delay (s)		10.4			14.1			14.0			0.0	
Approach LOS		B			B			B			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			13.2				HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio			0.53									
Actuated Cycle Length (s)			50.7				Sum of lost time (s)		14.0			
Intersection Capacity Utilization			69.5%				ICU Level of Service		C			
Analysis Period (min)			15									
c	Critical Lane Group											

# HCM Signalized Intersection Capacity Analysis

## 2: Eaton Rd & Hicks Ln

Year 2020 Conditions  
PM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	90	580	555	50	35	160
Future Volume (vph)	90	580	555	50	35	160
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1	5.1		4.2	4.2
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	3574	3530		1787	1599
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1787	3574	3530		1787	1599
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	611	584	53	37	168
RTOR Reduction (vph)	0	0	8	0	0	108
Lane Group Flow (vph)	95	611	629	0	37	60
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	NA		Prot	pm+ov
Protected Phases	7	4	8		1	7
Permitted Phases						1
Actuated Green, G (s)	6.1	24.8	14.5		2.1	8.2
Effective Green, g (s)	6.1	24.8	14.5		2.1	8.2
Actuated g/C Ratio	0.17	0.69	0.40		0.06	0.23
Clearance Time (s)	4.2	5.1	5.1		4.2	4.2
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	301	2448	1413		103	547
v/s Ratio Prot	0.05	c0.17	c0.18		c0.02	0.02
v/s Ratio Perm						0.02
v/c Ratio	0.32	0.25	0.44		0.36	0.11
Uniform Delay, d1	13.2	2.2	7.9		16.4	11.1
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.6	0.1	0.2		2.1	0.1
Delay (s)	13.8	2.2	8.1		18.5	11.2
Level of Service	B	A	A		B	B
Approach Delay (s)		3.8	8.1		12.5	
Approach LOS		A	A		B	

### Intersection Summary

HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	36.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



HCM Signalized Intersection Capacity Analysis  
 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Year 2030 Conditions  
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑	↗	↘	↗	↗			
Traffic Volume (vph)	60	320	0	0	790	110	380	0	180	0	0	0
Future Volume (vph)	60	320	0	0	790	110	380	0	180	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1770	3539			3539	1583	1681	1681	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1770	3539			3539	1583	1681	1681	1583			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	337	0	0	832	116	400	0	189	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	63	0	0	139	0	0	0
Lane Group Flow (vph)	63	337	0	0	832	53	200	200	50	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases						8			2			
Actuated Green, G (s)	3.5	26.7			19.0	19.0	13.0	13.0	13.0			
Effective Green, g (s)	3.5	26.7			19.0	19.0	13.0	13.0	13.0			
Actuated g/C Ratio	0.07	0.54			0.38	0.38	0.26	0.26	0.26			
Clearance Time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Vehicle Extension (s)	1.5	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	125	1908			1358	607	441	441	415			
v/s Ratio Prot	c0.04	0.10			c0.24		c0.12	0.12				
v/s Ratio Perm						0.03			0.03			
v/c Ratio	0.50	0.18			0.61	0.09	0.45	0.45	0.12			
Uniform Delay, d1	22.2	5.8			12.3	9.7	15.3	15.3	13.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	1.2	0.0			0.8	0.1	0.7	0.7	0.1			
Delay (s)	23.3	5.8			13.1	9.8	16.0	16.0	14.0			
Level of Service	C	A			B	A	B	B	B			
Approach Delay (s)		8.6			12.7			15.4			0.0	
Approach LOS		A			B			B			A	

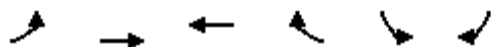
Intersection Summary		
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.54	B
Actuated Cycle Length (s)	49.5	Sum of lost time (s)
Intersection Capacity Utilization	69.0%	14.0
Analysis Period (min)	15	ICU Level of Service
		C

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis

## 2: Eaton Rd & Hicks Ln

Year 2030 Conditions  
AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	70	430	690	45	45	210
Future Volume (vph)	70	430	690	45	45	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1	5.1		4.2	4.2
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3507		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	3539	3507		1770	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	74	453	726	47	47	221
RTOR Reduction (vph)	0	0	5	0	0	63
Lane Group Flow (vph)	74	453	768	0	47	158
Turn Type	Prot	NA	NA		Prot	pm+ov
Protected Phases	7	4	8		1	7
Permitted Phases						1
Actuated Green, G (s)	6.7	28.1	17.2		2.3	9.0
Effective Green, g (s)	6.7	28.1	17.2		2.3	9.0
Actuated g/C Ratio	0.17	0.71	0.43		0.06	0.23
Clearance Time (s)	4.2	5.1	5.1		4.2	4.2
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	298	2504	1519		102	526
v/s Ratio Prot	0.04	0.13	c0.22		0.03	c0.05
v/s Ratio Perm						0.05
v/c Ratio	0.25	0.18	0.51		0.46	0.30
Uniform Delay, d1	14.3	1.9	8.2		18.1	12.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	0.0	0.3		3.3	0.3
Delay (s)	14.8	2.0	8.4		21.4	13.1
Level of Service	B	A	A		C	B
Approach Delay (s)		3.8	8.4		14.5	
Approach LOS		A	A		B	






















### Intersection Summary

HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	39.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

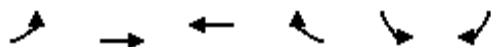
Year 2030 Conditions  
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (vph)	90	400	0	0	675	120	610	0	400	0	0	0
Future Volume (vph)	90	400	0	0	675	120	610	0	400	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1787	3574			3574	1599	1698	1698	1599			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1787	3574			3574	1599	1698	1698	1599			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	421	0	0	711	126	642	0	421	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	85	0	0	266	0	0	0
Lane Group Flow (vph)	95	421	0	0	711	41	321	321	155	0	0	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases						8			2			
Actuated Green, G (s)	6.0	29.1			18.9	18.9	19.0	19.0	19.0			
Effective Green, g (s)	6.0	29.1			18.9	18.9	19.0	19.0	19.0			
Actuated g/C Ratio	0.10	0.50			0.33	0.33	0.33	0.33	0.33			
Clearance Time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Vehicle Extension (s)	1.5	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	185	1796			1166	521	557	557	524			
v/s Ratio Prot	c0.05	0.12			c0.20		c0.19	0.19				
v/s Ratio Perm						0.03			0.10			
v/c Ratio	0.51	0.23			0.61	0.08	0.58	0.58	0.30			
Uniform Delay, d1	24.6	8.1			16.4	13.5	16.1	16.1	14.5			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	1.0	0.1			0.9	0.1	1.4	1.4	0.3			
Delay (s)	25.6	8.2			17.3	13.5	17.6	17.6	14.8			
Level of Service	C	A			B	B	B	B	B			
Approach Delay (s)		11.4			16.7			16.5			0.0	
Approach LOS		B			B			B			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			15.5		HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			57.9		Sum of lost time (s)				14.0			
Intersection Capacity Utilization			69.5%		ICU Level of Service				C			
Analysis Period (min)			15									
c	Critical Lane Group											

# HCM Signalized Intersection Capacity Analysis

## 2: Eaton Rd & Hicks Ln

Year 2030 Conditions  
PM Peak Hour



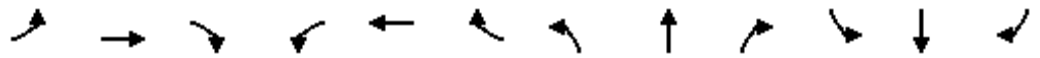
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	100	700	600	95	45	195
Future Volume (vph)	100	700	600	95	45	195
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1	5.1		4.2	4.2
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	3574	3501		1787	1599
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1787	3574	3501		1787	1599
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	105	737	632	100	47	205
RTOR Reduction (vph)	0	0	14	0	0	91
Lane Group Flow (vph)	105	737	718	0	47	114
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	NA		Prot	pm+ov
Protected Phases	7	4	8		1	7
Permitted Phases						1
Actuated Green, G (s)	6.4	26.7	16.1		2.2	8.6
Effective Green, g (s)	6.4	26.7	16.1		2.2	8.6
Actuated g/C Ratio	0.17	0.70	0.42		0.06	0.23
Clearance Time (s)	4.2	5.1	5.1		4.2	4.2
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	299	2498	1475		102	535
v/s Ratio Prot	0.06	c0.21	c0.20		c0.03	0.04
v/s Ratio Perm						0.04
v/c Ratio	0.35	0.30	0.49		0.46	0.21
Uniform Delay, d1	14.1	2.2	8.0		17.4	12.0
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.7	0.1	0.3		3.3	0.2
Delay (s)	14.8	2.2	8.3		20.7	12.2
Level of Service	B	A	A		C	B
Approach Delay (s)		3.8	8.3		13.8	
Approach LOS		A	A		B	

### Intersection Summary

HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	38.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	39.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis  
 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Year 2040 Conditions  
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑	↗	↘	↗	↗			
Traffic Volume (vph)	90	355	0	0	930	145	670	0	210	0	0	0
Future Volume (vph)	90	355	0	0	930	145	670	0	210	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1770	3539			3539	1583	1681	1681	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1770	3539			3539	1583	1681	1681	1583			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	374	0	0	979	153	705	0	221	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	72	0	0	151	0	0	0
Lane Group Flow (vph)	95	374	0	0	979	81	352	353	70	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases						8			2			
Actuated Green, G (s)	6.1	33.3			23.0	23.0	19.8	19.8	19.8			
Effective Green, g (s)	6.1	33.3			23.0	23.0	19.8	19.8	19.8			
Actuated g/C Ratio	0.10	0.53			0.37	0.37	0.31	0.31	0.31			
Clearance Time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Vehicle Extension (s)	1.5	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	171	1873			1294	578	529	529	498			
v/s Ratio Prot	c0.05	0.11			c0.28		0.21	c0.21				
v/s Ratio Perm						0.05			0.04			
v/c Ratio	0.56	0.20			0.76	0.14	0.67	0.67	0.14			
Uniform Delay, d1	27.1	7.8			17.5	13.3	18.7	18.7	15.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	2.2	0.1			2.6	0.1	3.2	3.2	0.1			
Delay (s)	29.3	7.8			20.1	13.4	21.8	21.9	15.6			
Level of Service	C	A			C	B	C	C	B			
Approach Delay (s)		12.2			19.2			20.4			0.0	
Approach LOS		B			B			C			A	

Intersection Summary

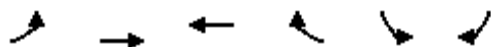
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	62.9	Sum of lost time (s)	14.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis

## 2: Eaton Rd & Hicks Ln

Year 2040 Conditions  
AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	85	480	815	50	50	260
Future Volume (vph)	85	480	815	50	50	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1	5.1		4.2	4.2
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3508		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	3539	3508		1770	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	89	505	858	53	53	274
RTOR Reduction (vph)	0	0	5	0	0	35
Lane Group Flow (vph)	89	505	906	0	53	239
Turn Type	Prot	NA	NA		Prot	pm+ov
Protected Phases	7	4	8		1	7
Permitted Phases						1
Actuated Green, G (s)	9.8	33.7	19.7		4.0	13.8
Effective Green, g (s)	9.8	33.7	19.7		4.0	13.8
Actuated g/C Ratio	0.21	0.72	0.42		0.09	0.29
Clearance Time (s)	4.2	5.1	5.1		4.2	4.2
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	369	2537	1470		150	606
v/s Ratio Prot	0.05	0.14	c0.26		0.03	c0.08
v/s Ratio Perm						0.07
v/c Ratio	0.24	0.20	0.62		0.35	0.39
Uniform Delay, d1	15.5	2.2	10.7		20.3	13.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.0	0.8		1.4	0.4
Delay (s)	15.8	2.2	11.5		21.7	13.7
Level of Service	B	A	B		C	B
Approach Delay (s)		4.3	11.5		15.0	
Approach LOS		A	B		B	






















### Intersection Summary

HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	47.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

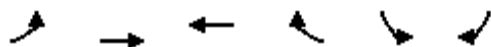
Year 2040 Conditions  
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (vph)	110	440	0	0	915	150	720	0	490	0	0	0
Future Volume (vph)	110	440	0	0	915	150	720	0	490	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1787	3574			3574	1599	1698	1698	1599			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1787	3574			3574	1599	1698	1698	1599			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	116	463	0	0	963	158	758	0	516	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	78	0	0	239	0	0	0
Lane Group Flow (vph)	116	463	0	0	963	80	379	379	277	0	0	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases						8			2			
Actuated Green, G (s)	6.9	33.9			22.8	22.8	21.7	21.7	21.7			
Effective Green, g (s)	6.9	33.9			22.8	22.8	21.7	21.7	21.7			
Actuated g/C Ratio	0.11	0.52			0.35	0.35	0.33	0.33	0.33			
Clearance Time (s)	4.2	5.1			5.1	5.1	4.7	4.7	4.7			
Vehicle Extension (s)	1.5	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	188	1852			1245	557	563	563	530			
v/s Ratio Prot	c0.06	0.13			c0.27		c0.22	0.22				
v/s Ratio Perm						0.05			0.17			
v/c Ratio	0.62	0.25			0.77	0.14	0.67	0.67	0.52			
Uniform Delay, d1	28.0	8.7			19.0	14.6	18.8	18.8	17.7			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	4.2	0.1			3.1	0.1	3.2	3.2	0.9			
Delay (s)	32.2	8.8			22.1	14.7	22.0	22.0	18.6			
Level of Service	C	A			C	B	C	C	B			
Approach Delay (s)		13.5			21.0			20.6			0.0	
Approach LOS		B			C			C			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			19.4		HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			65.4		Sum of lost time (s)				14.0			
Intersection Capacity Utilization			83.6%		ICU Level of Service				E			
Analysis Period (min)			15									
c	Critical Lane Group											

# HCM Signalized Intersection Capacity Analysis

## 2: Eaton Rd & Hicks Ln

Year 2040 Conditions  
PM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	110	820	835	80	50	230
Future Volume (vph)	110	820	835	80	50	230
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.1	5.1		4.2	4.2
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	3574	3527		1787	1599
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1787	3574	3527		1787	1599
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	116	863	879	84	53	242
RTOR Reduction (vph)	0	0	8	0	0	33
Lane Group Flow (vph)	116	863	955	0	53	209
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	NA		Prot	pm+ov
Protected Phases	7	4	8		1	7
Permitted Phases						1
Actuated Green, G (s)	10.0	35.3	21.1		4.0	14.0
Effective Green, g (s)	10.0	35.3	21.1		4.0	14.0
Actuated g/C Ratio	0.21	0.73	0.43		0.08	0.29
Clearance Time (s)	4.2	5.1	5.1		4.2	4.2
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	367	2595	1531		147	598
v/s Ratio Prot	0.06	0.24	c0.27		0.03	c0.07
v/s Ratio Perm						0.06
v/c Ratio	0.32	0.33	0.62		0.36	0.35
Uniform Delay, d1	16.4	2.4	10.7		21.1	13.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.5	0.1	0.8		1.5	0.4
Delay (s)	16.9	2.5	11.5		22.6	14.1
Level of Service	B	A	B		C	B
Approach Delay (s)		4.2	11.5		15.6	
Approach LOS		A	B		B	

### Intersection Summary

HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	48.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	L	LT	R
Maximum Queue (ft)	64	102	110	273	190	43	208	261	79
Average Queue (ft)	22	43	52	138	63	8	49	128	35
95th Queue (ft)	53	85	92	229	142	25	150	202	62
Link Distance (ft)		582	582	379	379			611	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	150					125	300		300
Storage Blk Time (%)		0			0			0	
Queuing Penalty (veh)		0			0			0	

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	T	TR	L	R
Maximum Queue (ft)	66	61	66	165	106	59	81
Average Queue (ft)	30	7	18	74	30	24	41
95th Queue (ft)	60	32	53	135	71	54	67
Link Distance (ft)		379	379	346	346	379	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	175						185
Storage Blk Time (%)							
Queuing Penalty (veh)							

Zone Summary

Zone wide Queuing Penalty: 1
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Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	L	LT	R
Maximum Queue (ft)	107	121	126	261	193	57	186	229	120
Average Queue (ft)	46	54	60	138	77	12	50	133	57
95th Queue (ft)	88	96	102	218	152	36	149	204	97
Link Distance (ft)		582	582	379	379			611	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	150					125	300		300
Storage Blk Time (%)	0	0			1				
Queuing Penalty (veh)	0	0			1				

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	T	TR	L	R
Maximum Queue (ft)	82	53	90	172	122	63	80
Average Queue (ft)	39	8	27	79	42	21	39
95th Queue (ft)	72	33	68	139	88	52	66
Link Distance (ft)		379	379	346	346	379	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	175						185
Storage Blk Time (%)							
Queuing Penalty (veh)							

Zone Summary

Zone wide Queuing Penalty: 1
------------------------------

Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	L	LT	R
Maximum Queue (ft)	90	114	109	295	226	48	151	195	97
Average Queue (ft)	42	44	53	147	90	13	35	113	41
95th Queue (ft)	80	83	92	243	178	34	120	179	74
Link Distance (ft)		582	582	379	379			611	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	150					125	300		300
Storage Blk Time (%)		0			1				
Queuing Penalty (veh)		0			1				

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	T	TR	L	R
Maximum Queue (ft)	87	48	76	183	164	59	102
Average Queue (ft)	36	7	26	92	51	30	47
95th Queue (ft)	72	31	64	163	118	58	80
Link Distance (ft)		379	379	346	346	379	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	175						185
Storage Blk Time (%)							
Queuing Penalty (veh)							

Zone Summary

Zone wide Queuing Penalty: 1
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Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	L	LT	R
Maximum Queue (ft)	120	124	129	291	227	45	218	248	155
Average Queue (ft)	57	62	66	161	99	15	110	173	77
95th Queue (ft)	98	106	114	255	189	36	225	249	124
Link Distance (ft)		582	582	379	379			611	
Upstream Blk Time (%)				0					
Queuing Penalty (veh)				0					
Storage Bay Dist (ft)	150					125	300		300
Storage Blk Time (%)	0	0			1				
Queuing Penalty (veh)	0	0			1				

Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	T	TR	L	R
Maximum Queue (ft)	111	82	99	173	148	67	98
Average Queue (ft)	46	13	38	91	55	30	47
95th Queue (ft)	87	48	83	162	112	60	77
Link Distance (ft)		379	379	346	346	379	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	175						185
Storage Blk Time (%)							
Queuing Penalty (veh)							

Zone Summary

Zone wide Queuing Penalty: 2
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**Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd**

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	L	LT	R
Maximum Queue (ft)	128	121	133	352	317	167	280	325	95
Average Queue (ft)	61	58	61	213	149	25	137	207	47
95th Queue (ft)	111	110	115	317	260	91	258	293	84
Link Distance (ft)		582	582	379	379			611	
Upstream Blk Time (%)				0	0				
Queuing Penalty (veh)				1	0				
Storage Bay Dist (ft)	150					125	300		300
Storage Blk Time (%)	0	0			7		0	0	
Queuing Penalty (veh)	0	0			10		0	2	

**Intersection: 2: Eaton Rd & Hicks Ln**

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	T	TR	L	R
Maximum Queue (ft)	108	66	95	212	170	78	138
Average Queue (ft)	45	11	29	114	66	31	61
95th Queue (ft)	88	43	77	185	131	63	106
Link Distance (ft)		379	379	346	346	379	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	175						185
Storage Blk Time (%)							0
Queuing Penalty (veh)							0

**Zone Summary**

Zone wide Queuing Penalty: 13

Intersection: 1: SR 99 NB Off Ramp/SR 99 NB On Ramp & Eaton Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	L	LT	R
Maximum Queue (ft)	133	139	138	364	315	133	273	345	199
Average Queue (ft)	69	68	72	206	155	25	155	219	93
95th Queue (ft)	117	120	124	317	266	84	269	311	157
Link Distance (ft)		582	582	379	379			611	
Upstream Blk Time (%)				0	0				
Queuing Penalty (veh)				0	0				
Storage Bay Dist (ft)	150					125	300		300
Storage Blk Time (%)	0	0			7		0	1	
Queuing Penalty (veh)	1	0			11		0	6	

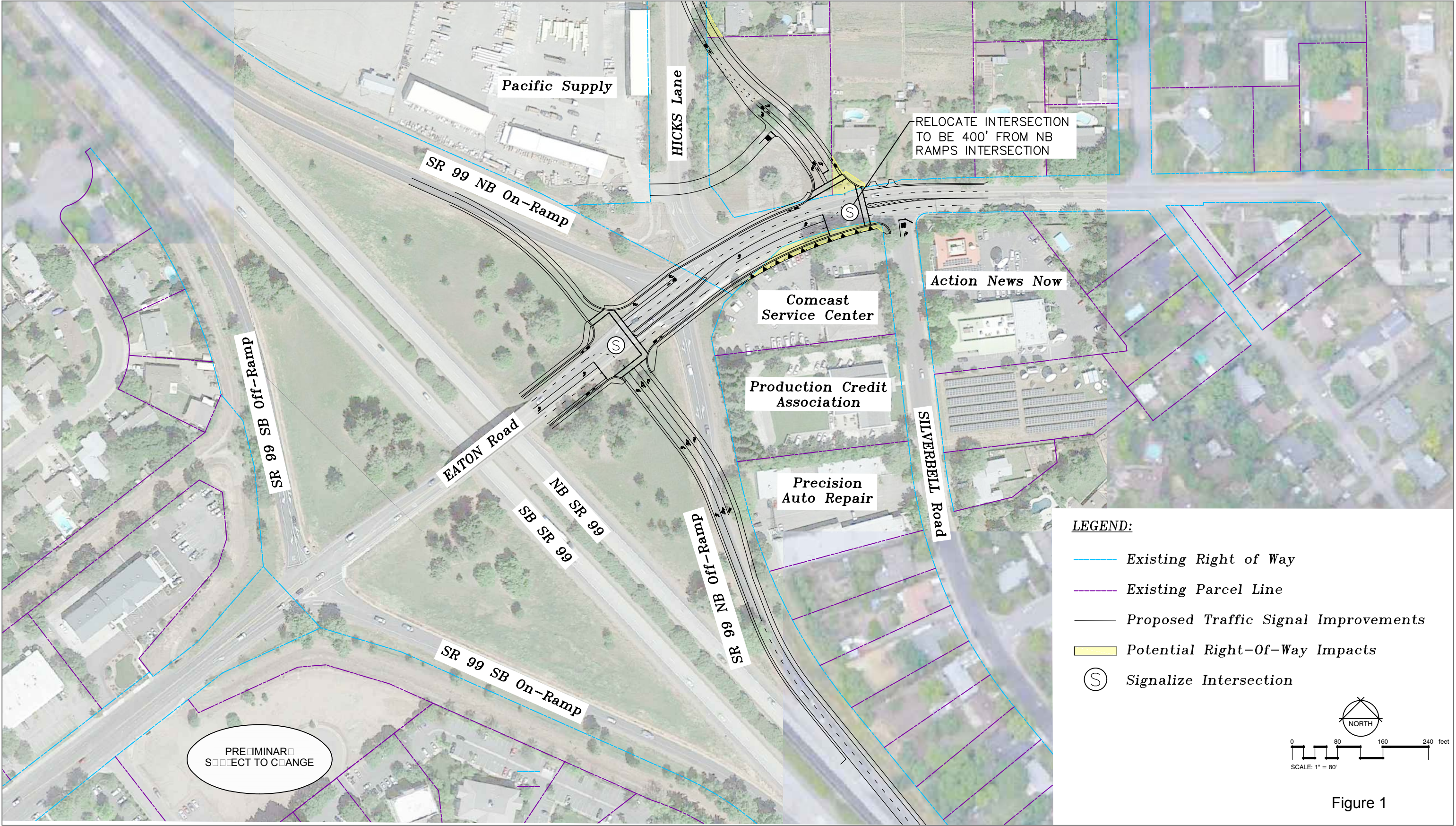
Intersection: 2: Eaton Rd & Hicks Ln

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	T	TR	L	R
Maximum Queue (ft)	104	91	118	215	158	72	101
Average Queue (ft)	51	17	44	113	70	31	53
95th Queue (ft)	87	58	95	200	134	61	87
Link Distance (ft)		379	379	346	346	379	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	175						185
Storage Blk Time (%)							
Queuing Penalty (veh)							

Zone Summary

Zone wide Queuing Penalty: 18

# Traffic Signal Alternative: Preliminary Layout

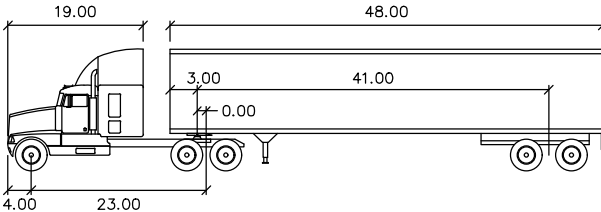


## SR 99/EATON ROAD INTERCHANGE PROJECT

Chico, California

# Truck Turn - STAA and CA Legal (Right-Turn Movement Only)

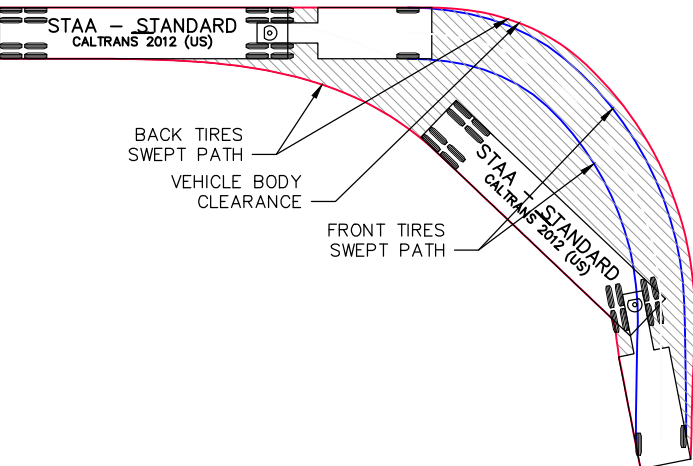
### VEHICLE PROFILE



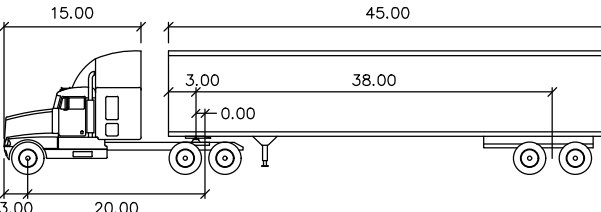
STAA - STANDARD feet

Tractor Width	: 8.50	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 26.3
Tractor Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		

### LEGEND



### VEHICLE PROFILE



CA LEGAL - 65 FT feet

Tractor Width	: 8.50	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 26.3
Tractor Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		

### LEGEND

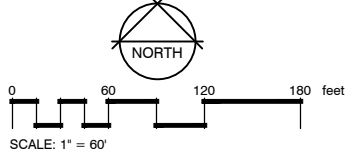
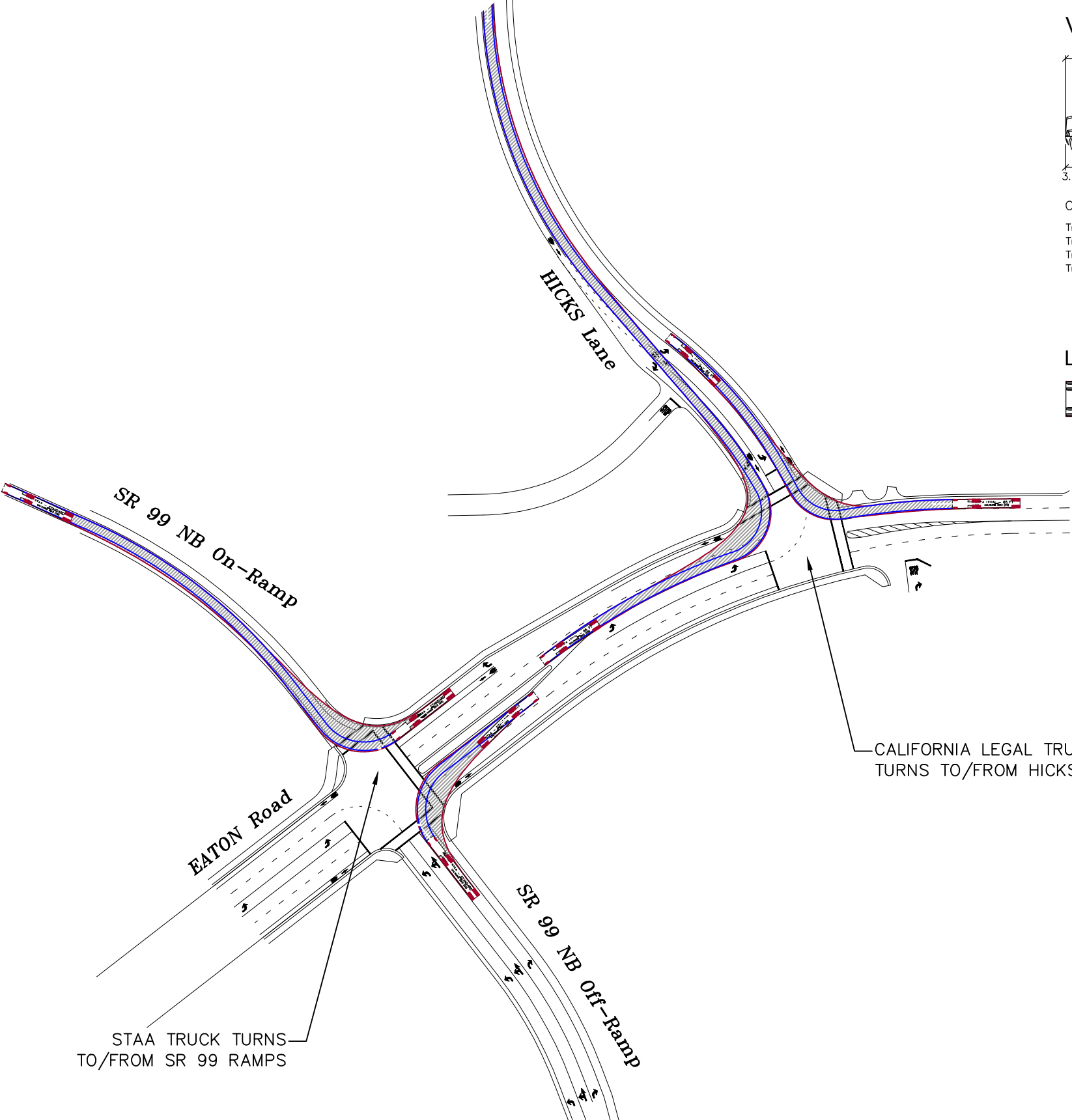
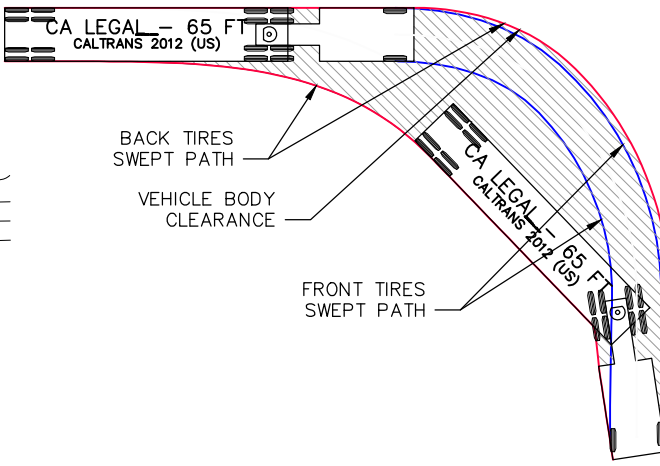


Figure 2

## SR 99/EATON ROAD INTERCHANGE PROJECT

Chico, California





**PROJECT**  
**PRELIMINARY COST ESTIMATE**

EA: 03-123456

EA: 03-123456 PID: 31234567

PID: 31234567

District-County-Route: 03-BUT-99

PM: R36.31

Type of Estimate : Preliminary Engineering

Program Code : Forthcoming

Project Limits : Route 99 (PM R36.31)

Project Description: Construct Traffic Signals at SR 99 NB Ramps/Eaton Road, and Eaton Road/ Hicks Lane.  
Construct new overcrossing, realign ramps and Hicks Lane.

Scope : Intersection Reconstruction

Alternative : Traffic Signal Alternative

**SUMMARY OF PROJECT COST ESTIMATE**

	Current Year Cost	Escalated Cost	Escalated Cost in State R/W
TOTAL ROADWAY COST	\$ 6,426,360	\$ 6,817,725	\$ 4,090,635
TOTAL STRUCTURES COST	\$ 5,068,800	\$ 5,377,490	\$ 5,377,490
SUBTOTAL CONSTRUCTION COST	\$ 11,495,160	\$ 12,195,215	\$ 9,468,125
TOTAL RIGHT OF WAY COST	\$ 125,000	\$ 135,000	\$ 81,000
<b>TOTAL CAPITAL OUTLAY COSTS</b>	<b>\$ 11,621,000</b>	<b>\$ 12,331,000</b>	<b>\$ 9,550,000</b>
PR/ED SUPPORT	\$ -	\$ -	\$ -
PS&E SUPPORT	\$ -	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -	\$ -
<b>TOTAL SUPPORT COST</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

<b>TOTAL PROJECT COST</b>	<b>\$ 11,650,000</b>	<b>\$ 12,350,000</b>	<b>\$ 9,550,000</b>
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*If Project has been programmed enter Programmed Amount*

Month / Year /

Date of Estimate (Month/Year)                     5 / 2018                     /

Estimated Construction Start (Month/Year)                     1 / 2020                     /

Number of Working Days = 140 =

Estimated Mid-Point of Construction (Month/Year)                     5 / 2020                     /

Estimated Construction End (Month/Year)                     10 / 2020                     /

Number of Plant Establishment Days 260

**Estimated Project Schedule**

PID Approval	N/A
PA/ED Approval	September-18
PS&E	July-19
RTL	October-19
Begin Construction	March-20

Reviewed by District O.E. or  
Cost Estimate Certifier

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer / Cost Estimate Certifier

Date

Phone

Approved by Project Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone



**SECTION 1: EARTHWORK**

Item code	Unit	Quantity		Unit Price (\$)		Cost
190101	Roadway Excavation	CY	6,000	x	30.00	= \$ 180,000
19010X	Roadway Excavation (Type X) ADL	CY	600	x	60.00	= \$ 36,000
194001	Ditch Excavation	CY	0	x	0.00	= \$ -
19801X	Imported Borrow	CY	3,000	x	50.00	= \$ 150,000
192037	Structure Excavation (Retaining Wall)	CY	220	x	80.00	= \$ 17,600
193013	Structure Backfill (Retaining Wall)	CY	260	x	120.00	= \$ 31,200
193031	Pervious Backfill Material (Retaining Wall)	CY	0	x	0.00	= \$ -
160101	Clearing & Grubbing	LS	1	x	5,000.00	= \$ 5,000
170101	Develop Water Supply	LS	1	x	10,000.00	= \$ 10,000

<b>TOTAL EARTHWORK SECTION ITEMS</b>	<b>\$</b>	<b>429,800</b>
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**SECTION 2: PAVEMENT STRUCTURAL SECTION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY	0	x	0.00	= \$ -
400050	Continuously Reinforced Concrete Pavement	CY	0	x	0.00	= \$ -
404092	Seal Pavement Joint	LF	0	x	0.00	= \$ -
404093	Seal Isolation Joint	LF	0	x	0.00	= \$ -
413117	Seal Concrete Pavement Joint (Silicone)	LF	0	x	0.00	= \$ -
413118	Seal Pavement Joint (Asphalt Rubber)	LF	0	x	0.00	= \$ -
280010	Rapid Strength Concrete Base	CY	0	x	0.00	= \$ -
410095	Dowel Bar (Drill and Bond)	EA	0	x	0.00	= \$ -
390132	Hot Mix Asphalt (Type A)	TON	5,800	x	110.00	= \$ 638,000
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	0	x	0.00	= \$ -
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD	0	x	0.00	= \$ -
26020X	Class 2 Aggregate Base	CY	7,300	x	60.00	= \$ 438,000
290201	Asphalt Treated Permeable Base	CY	0	x	0.00	= \$ -
250401	Class 4 Aggregate Subbase	CY	0	x	0.00	= \$ -
374002	Asphaltic Emulsion (Fog Seal Coat)	TON	0	x	0.00	= \$ -
397005	Tack Coat	TON	4	x	900.00	= \$ 3,600
377501	Slurry Seal	TON	0	x	0.00	= \$ -
3750XX	Screenings (Type XX)	TON	0	x	0.00	= \$ -
374492	Asphaltic Emulsion (Polymer Modified)	TON	0	x	0.00	= \$ -
370001	Sand Cover (Seal)	TON	0	x	0.00	= \$ -
731530	Minor Concrete (Textured Paving)	CY	9	x	800.00	= \$ 7,200
731502	Minor Concrete (Miscellaneous Construction)	CY	200	x	600.00	= \$ 120,000
39407X	Place Hot Mix Asphalt Dike (Type A)	LF	0	x	0.00	= \$ -
150771	Remove Asphalt Concrete Dike	LF	0	x	0.00	= \$ -
420201	Grind Existing Concrete Pavement	SQYD	0	x	0.00	= \$ -
150860	Remove Base and Surfacing	CY	0	x	80.00	= \$ -
390095	Replace Asphalt Concrete Surfacing	CY	0	x	0.00	= \$ -
15312X	Remove Concrete	LF	800	x	20.00	= \$ 16,000
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	0	x	0.00	= \$ -
153103	Cold Plane Asphalt Concrete Pavement	SQYD	3,000	x	45.00	= \$ 135,000
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA	0	x	0.00	= \$ -
413113	Repair Spalled Joints, Polyester Grout	SQYD	0	x	0.00	= \$ -
420102	Groove Existing Concrete Pavement	SQYD	0	x	0.00	= \$ -
390136	Minor Hot Mix Asphalt	TON	0	x	0.00	= \$ -
394095	Roadside Paving (Miscellaneous Areas)	SQYD	0	x	0.00	= \$ -

<b>TOTAL PAVEMENT STRUCTURAL SECTION ITEMS</b>	<b>\$</b>	<b>1,357,800</b>
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**SECTION 3: DRAINAGE**

Item code	Unit	Quantity	Unit Price (\$)	Cost
15080X Remove Culvert	LF	0	x 0.00 = \$	-
150820 Modify Inlet	EA	0	x 0.00 = \$	-
155232 Sand Backfill	CY	0	x 0.00 = \$	-
15020X Abandon Culvert	EA	0	x 0.00 = \$	-
152430 Adjust Inlet	LF	0	x 0.00 = \$	-
155003 Cap Inlet	EA	0	x 0.00 = \$	-
510501 Minor Concrete	CY	0	x 0.00 = \$	-
510502 Minor Concrete (Minor Structure)	CY	50	x 1,800.00 = \$	90,000
5105XX Minor Concrete (Type XX)	CY	0	x 0.00 = \$	-
620XXX XX" Alternative Pipe Culvert (Type X)	LF	0	x 0.00 = \$	-
6411XX XX" Plastic Pipe	LF	0	x 0.00 = \$	-
65XXXX XX" Reinforced Concrete Pipe (Type X)	LF	1,000	x 165.00 = \$	165,000
6650XX XX" Corrugated Steel Pipe (0.XXX" Thick)	LF	0	x 0.00 = \$	-
68XXXX XX" Plastic Pipe (Edge Drain)	LF	0	x 0.00 = \$	-
69011X XX" Corrugated Steel Pipe Downdrain (0.XXX" Th	LF	0	x 0.00 = \$	-
70321X XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF	0	x 0.00 = \$	-
70XXXX XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF	0	x 0.00 = \$	-
7050XX XX" Steel Flared End Section	EA	2	x 1,000.00 = \$	2,000
703233 Grated Line Drain	LF	0	x 0.00 = \$	-
72XXXX Rock Slope Protection (Type and Method)	CY	5	x 200.00 = \$	1,000
72901X Rock Slope Protection Fabric (Class X)	SQYD	15	x 20.00 = \$	300
721420 Concrete (Ditch Lining)	CY	0	x 0.00 = \$	-
721430 Concrete (Channel Lining)	CY	0	x 0.00 = \$	-
750001 Miscellaneous Iron and Steel	LB	3,700	x 3.00 = \$	11,100

<b>TOTAL DRAINAGE ITEMS</b>	<b>\$</b>	<b>269,400</b>
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**SECTION 4: SPECIALTY ITEMS**

Item code	Unit	Quantity	Unit Price (\$)	Cost
080050 Progress Schedule (Critical Path Method)	LS	0	x 0.00 = \$	-
582001 Sound Wall (Masonry Block)	SQFT	0	x 0.00 = \$	-
510530 Minor Concrete (Wall)	CY	0	x 0.00 = \$	-
15325X Remove Sound Wall	LF/LS	0	x 0.00 = \$	-
070030 Lead Compliance Plan	LS	1	x 10,000.00 = \$	10,000
141120 Treated Wood Waste	LB	1,000	x 1.50 = \$	1,500
153221 Remove Concrete Barrier	LF	0	x 0.00 = \$	-
150662 Remove Metal Beam Guard Railing	LF	300	x 20.00 = \$	6,000
150668 Remove Flared End Section	EA	0	x 0.00 = \$	-
8000XX Chain Link Fence (Type XX)	LF	0	x 0.00 = \$	-
80XXXX XX" Chain Link Gate (Type CL-6)	EA	0	x 0.00 = \$	-
832001 Metal Beam Guard Railing	LF	200	x 50.00 = \$	10,000
839301 Single Thrie Beam Barrier	LF	0	x 0.00 = \$	-
839310 Double Thrie Beam Barrier	LF	0	x 0.00 = \$	-
839521 Cable Railing	LF	0	x 0.00 = \$	-
8395XX Terminal System (Type CAT)	EA	0	x 0.00 = \$	-
839585 Alternative Flared Terminal System	EA	0	x 0.00 = \$	-
839584 Alternative In-line Terminal System	EA	2	x 1,500.00 = \$	3,000
4906XX CIDH Concrete Piling (Insert Diameter)	LF	0	x 0.00 = \$	-
839XXX Crash Cushion (Insert Type)	EA	0	x 0.00 = \$	-
83XXXX Concrete Barrier (Insert Type)	LF	0	x 0.00 = \$	-
520103 Retaining Wall	SQFT	3,000	x 85.00 = \$	255,000
510060 Structural Concrete, Retaining Wall	CY	0	x 0.00 = \$	-
513553 Retaining Wall (Masonry Wall)	SQFT	0	x 0.00 = \$	-
511035 Architectural Treatment	SQFT	0	x 0.00 = \$	-
598001 Anti-Graffiti Coating	SQFT	0	x 0.00 = \$	-
203070 Rock Stain	SQFT	0	x 0.00 = \$	-
5136XX Reinforced Concrete Crib Wall (Type X)	SQFT	0	x 0.00 = \$	-
83954X Transition Railing (Type X)	EA	0	x 0.00 = \$	-
597601 Prepare and Stain Concrete	SQFT	0	x 0.00 = \$	-
839561 Rail Tensioning Assembly	EA	0	x 0.00 = \$	-
83958X End Anchor Assembly (Type X)	EA	0	x 0.00 = \$	-

<b>TOTAL SPECIALTY ITEMS</b>	<b>\$</b>	<b>285,500</b>
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**SECTION 5: ENVIRONMENTAL**

**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity		Unit Price (\$)	=	Cost
	LS	0	x	0.00	= \$	-
130670	Temporary Reinforced Silt Fence	0	x	0.00	= \$	-
141000	Temporary Fence (Type ESA)	1,000	x	10.00	= \$	10,000
<i>Subtotal Environmental Mitigation</i>						\$ 10,000

**5B - LANDSCAPE AND IRRIGATION**

Item code	Unit	Quantity		Unit Price (\$)	=	Cost
20XXXX	Highway Planting	1	x	80,000.00	= \$	80,000
20XXXX	Irrigation System	0	x	0.00	= \$	-
204099	Plant Establishment Work	1	x	15,000.00	= \$	15,000
204101	Extend Plant Establishment Work	0	x	0.00	= \$	-
20XXXX	Follow-up Landscape Project	0	x	0.00	= \$	-
150685	Remove Irrigation Facility	0	x	0.00	= \$	-
20XXXX	Maintain Existing (Irrigation or Planted Areas)	0	x	0.00	= \$	-
206400	Check and Test Existing Irrigation Facilities	0	x	0.00	= \$	-
21011X	Imported Topsoil (X)	0	x	0.00	= \$	-
20XXXX	Rock Blanket, Rock Mulch, DG, Gravel Mulch	0	x	0.00	= \$	-
200122	Weed Germination	0	x	0.00	= \$	-
208304	Water Meter	0	x	0.00	= \$	-
2087XX	XX" Conduit (Use for Irrigation x-overs)	0	x	0.00	= \$	-
20890X	Extend X" Conduit (Use for Extension of Irrigation)	0	x	0.00	= \$	-
<i>Subtotal Landscape and Irrigation</i>						\$ 95,000

**5C - EROSION CONTROL**

Item code	Unit	Quantity		Unit Price (\$)	=	Cost
210010	Move In/Move Out (Erosion Control)	2	x	1,000.00	= \$	2,000
210350	Fiber Rolls	1,000	x	10.00	= \$	10,000
210360	Compost Sock	0	x	0.00	= \$	-
2102XX	Rolled Erosion Control Product (X)	0	x	0.00	= \$	-
21025X	Bonded Fiber Matrix	0	x	0.00	= \$	-
210300	Hydromulch	0	x	0.00	= \$	-
210420	Straw	0	x	0.00	= \$	-
210430	Hydroseed	6,000	x	0.25	= \$	1,500
210600	Compost	6,000	x	2.00	= \$	12,000
210630	Incorporate Materials	0	x	0.00	= \$	-
<i>Subtotal Erosion Control</i>						\$ 25,500

**5D - NPDES**

Item code	Unit	Quantity		Unit Price (\$)	=	Cost
130300	Prepare SWPPP	1	x	4,000.00	= \$	4,000
130200	Prepare WPCP	0	x	0.00	= \$	-
130100	Job Site Management	1	x	15,000.00	= \$	15,000
130330	Storm Water Annual Report	1	x	1,000.00	= \$	1,000
130310	Rain Event Action Plan (REAP)	20	x	100.00	= \$	2,000
130320	Storm Water Sampling and Analysis Day	20	x	400.00	= \$	8,000
130520	Temporary Hydraulic Mulch	0	x	0.00	= \$	-
130550	Temporary Hydroseed	0	x	0.00	= \$	-
130505	Move-In/Move-Out (Temporary Erosion Control)	2	x	1,000.00	= \$	2,000
130640	Temporary Fiber Roll	1,500	x	5.00	= \$	7,500
130900	Temporary Concrete Washout	1	x	2,000.00	= \$	2,000
130710	Temporary Construction Entrance	0	x	0.00	= \$	-
130610	Temporary Check Dam	0	x	0.00	= \$	-
130620	Temporary Drainage Inlet Protection	8	x	150.00	= \$	1,200
130730	Street Sweeping	1	x	30,000.00	= \$	30,000
<i>Subtotal NPDES</i>						\$ 72,700

<b>TOTAL ENVIRONMENTAL</b>	<b>\$ 203,200</b>
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**Supplemental Work for NPDES**

066595	Water Pollution Control Maintenance Sharing*	1	x	2,500.00	= \$	2,500
066596	Additional Water Pollution Control**	1	x	2,500.00	= \$	2,500
066597	Storm Water Sampling and Analysis***	1	x	2,500.00	= \$	2,500
<i>Subtotal Supplemental Work for NDPS</i>						\$ 7,500

\*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

\*\*Applies to both SWPPPs and WPCP projects.

\*\*\* Applies only to project with SWPPPs.

**SECTION 6: TRAFFIC ITEMS**

**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
860460	Lighting and Sign Illumination	LS	1 x 100,000.00 = \$	100,000
860201	Signal and Lighting	LS	2 x 300,000.00 = \$	600,000
860990	Closed Circuit Television System	LS	0 x 0.00 = \$	-
86110X	Ramp Metering System (Location X)	LS	0 x 0.00 = \$	-
86070X	Interconnection Conduit and Cable	LF/LS	0 x 0.00 = \$	-
5602XX	Furnish Sign Structure (Type X)	LB	0 x 0.00 = \$	-
5602XX	Install Sign Structure (Type X)	LB	0 x 0.00 = \$	-
498040	XX" CIDHC Pile (Sign Foundation)	LF	0 x 0.00 = \$	-
86080X	Inductive Loop Detectors	EA/LS	0 x 0.00 = \$	-
8609XX	Traffic Monitoring Station (Type X)	LS	0 x 0.00 = \$	-
15075X	Remove Sign Structure	EA/LS	0 x 0.00 = \$	-
151581	Reconstruct Sign Structure	EA	0 x 0.00 = \$	-
152641	Modify Sign Structure	EA	0 x 0.00 = \$	-
860090	Maintain Existing Traffic Management System Eler	LS	0 x 0.00 = \$	-
86XXXX	Fiber Optic Conduit System	LS	0 x 0.00 = \$	-
<b>Subtotal Traffic Electrical</b>				<b>\$ 700,000</b>

**6B - Traffic Signing and Striping**

Item code	Unit	Quantity	Unit Price (\$)	Cost
566011	Roadside Sign - One Post	EA	30 x 350.00 = \$	10,500
566012	Roadside Sign - Two Post	EA	6 x 500.00 = \$	3,000
5602XX	Furnish Sign	SQFT	400 x 15.00 = \$	6,000
568016	Install Sign Panel on Existing Frame	SQFT	0 x 0.00 = \$	-
150711	Remove Painted Traffic Stripe	LF	0 x 0.00 = \$	-
141101	Remove Existing Painted Traffic Stripe (Hazardous Waste)	LF	0 x 0.00 = \$	-
150712	Remove Painted Pavement Marking	SQFT	0 x 0.00 = \$	-
150742	Remove Roadside Sign	EA	6 x 150.00 = \$	900
152320	Reset Roadside Sign	EA	0 x 0.00 = \$	-
152390	Relocate Roadside Sign	EA	0 x 0.00 = \$	-
82010X	Delineator (Class X)	EA	0 x 0.00 = \$	-
840502	Thermoplastic Traffic Stripe (Enhanced Wet Night	LF	0 x 0.00 = \$	-
846012	Thermoplastic Crosswalk and Pavement Marking (	SQFT	0 x 0.00 = \$	-
120090	Construction Area Signs	LS	1 x 25,000.00 = \$	25,000
84XXXX	Permanent Pavement Delineation	LS	1 x 20,000.00 = \$	20,000
<b>Subtotal Traffic Signing and Striping</b>				<b>\$ 65,400</b>

**6C - Traffic Management Plan**

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X	Portable Changeable Message Signs	LS	1 x \$ 20,000 = \$	20,000
<b>Subtotal Traffic Management Plan</b>				<b>\$ 20,000</b>

**6C - Stage Construction and Traffic Handling**

Item code	Unit	Quantity	Unit Price (\$)	Cost
120199	Traffic Plastic Drum	EA	0 x 0.00 = \$	-
12016X	Channelizer (Type X)	EA	300 x 35.00 = \$	10,500
120120	Type III Barricade	EA	15 x 50.00 = \$	750
129100	Temporary Crash Cushion Module	EA	0 x 0.00 = \$	-
120100	Traffic Control System	LS	1 x 80,000.00 = \$	80,000
129110	Temporary Crash Cushion	EA	8 x 2,500.00 = \$	20,000
129000	Temporary Railing (Type K)	LF	4,000 x 20.00 = \$	80,000
120149	Temporary Pavement Marking (Paint)	SQFT	1,450 x 3.00 = \$	4,350
82010X	Delineator (Class X)	EA	0 x 0.00 = \$	-
<b>Subtotal Stage Construction and Traffic Handling</b>				<b>\$ 195,600</b>

<b>TOTAL TRAFFIC ITEMS</b>	<b>\$ 981,000</b>
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**SECTION 7: DETOURS**

Includes constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
190101 Roadway Excavation	CY	0	x 0.00 = \$	-
19801X Imported Borrow	CY/TON	0	x 0.00 = \$	-
390132 Hot Mix Asphalt (Type A)	TON	0	x 0.00 = \$	-
26020X Class 2 Aggregate Base	TON/CY	0	x 0.00 = \$	-
250401 Class 4 Aggregate Subbase	CY	0	x 0.00 = \$	-
130620 Temporary Drainage Inlet Protection	EA	0	x 0.00 = \$	-
129000 Temporary Railing (Type K)	LF	0	x 0.00 = \$	-
128601 Temporary Signal System	LS	0	x 0.00 = \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	0	x 0.00 = \$	-
80010X Temporary Fence (Type X)	LF	0	x 0.00 = \$	-
XXXXXX Some Item	Unit	0	x 0.00 = \$	-
<b>TOTAL DETOURS</b>				<b>\$ -</b>

SUBTOTAL SECTIONS 1 through 7    \$    3,526,700

**SECTION 8: MINOR ITEMS**

<b>8A - Americans with Disabilities Act Items</b>				
ADA Items			2.0%	\$ 70,534
<b>8B - Bike Path Items</b>				
Bike Path Items			2.0%	\$ 70,534
<b>8C - Other Minor Items</b>				
Other Minor Items			5.0%	\$ 176,335
Total of Section 1-7	\$	3,526,700	x 9.0%	= \$ 317,403
<b>TOTAL MINOR ITEMS</b>				<b>\$ 317,500</b>

**SECTIONS 9: MOBILIZATION**

Item code				
999990	Total Section 1-8	\$ 3,844,200	x 10%	= \$ 384,420
<b>TOTAL MOBILIZATION</b>				<b>\$ 384,500</b>

**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost
066670 Payment Adjustments For Price Index Fluctuations	LS	1	x 7,000.00 = \$	7,000
066094 Value Analysis	LS	0	x 0.00 = \$	-
066070 Maintain Traffic	LS	1	x 120,000.00 = \$	120,000
066919 Dispute Resolution Board	LS	1	x 7,500.00 = \$	7,500
066921 Dispute Resolution Advisor	LS	1	x 5,000.00 = \$	5,000
066015 Federal Trainee Program	LS	0	x 0.00 = \$	-
066610 Partnering	LS	1	x 20,000.00 = \$	20,000
066204 Remove Rock and Debris	LS	0	x 0.00 = \$	-
066222 Locate Existing Crossover	LS	0	x 0.00 = \$	-
XXXXXX Some Item	Unit		x = \$	-
<i>Cost of NPDES Supplemental Work specified in Section 5D</i>				<i>= \$ 7,500</i>
Total Section 1-8	\$	3,844,200	= \$	-
<b>TOTAL SUPPLEMENTAL WORK</b>				<b>\$ 167,000</b>



**SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES**

Item code		Unit	Quantity		Unit Price (\$)	=	Cost
066105	Resident Engineers Office	LS	1	x	25,000.00	=	\$25,000
066063	Traffic Management Plan - Public Information	LS	1	x	15,000.00	=	\$15,000
066901	Water Expenses	LS	1	x	10,000.00	=	\$10,000
8609XX	Traffic Monitoring Station (X)	LS	0	x	0.00	=	\$0
066841	Traffic Controller Assembly	LS	0	x	0.00	=	\$0
066840	Traffic Signal Controller Assembly	LS	0	x	0.00	=	\$0
066062	COZEEP Contract	LS	1	x	60,000.00	=	\$60,000
066838	Reflective Numbers and Edge Sealer	LS	0	x	0.00	=	\$0
066065	Tow Truck Service Patrol	LS	0	x	0.00	=	\$0
066916	Annual Construction General Permit Fee	LS	1	x	500.00	=	\$500
Total Section 1-8			\$ 3,844,200			= \$	-

<b>TOTAL STATE FURNISHED</b>	<b>\$110,500</b>
------------------------------	------------------

**SECTION 12: TIME-RELATED OVERHEAD**

Total of Roadway and Structures Contract Items excluding Mobilization	\$8,490,600 (used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency)	\$9,575,000 (used to check if project is greater than \$5 million excluding contingency)

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **10%**

Item code		Unit	Quantity		Unit Price (\$)	=	Cost
070018	Time-Related Overhead	WD	140	X	\$6,065	=	\$849,100

<b>TOTAL TIME-RELATED OVERHEAD</b>	<b>\$849,060</b>
------------------------------------	------------------

Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

**SECTION 13: ROADWAY CONTINGENCY**

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-12	\$	5,355,260	x	<b>20%</b>	=	\$1,071,052
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<b>TOTAL CONTINGENCY</b>	<b>\$1,071,100</b>
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**II. STRUCTURE ITEMS**

DATE OF ESTIMATE	06/04/13		00/00/00		00/00/00
Name	Eaton Rd/SR 99 OC		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	12 0160		57-XXX		57-XXX
Structure Type	Cast-in-place concrete		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	88.00 LF		0 LF		0 LF
Total Length (Feet)	192.00 LF		0 LF		0 LF
Total Area (Square Feet)	16896 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	5.28 LF		0 LF		0 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$250.00		\$0		\$0
<b>COST OF EACH</b>	<b>\$4,224,000</b>		<b>\$0</b>		<b>\$0</b>

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100		\$0		\$0
<b>COST OF EACH</b>	<b>\$0</b>		<b>\$0</b>		<b>\$0</b>

<b>TOTAL COST OF BRIDGES</b>	<b>\$4,224,000</b>
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<b>TOTAL COST OF BUILDINGS</b>	<b>\$0</b>
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Structures Mobilization Percentage	10%	<b>\$422,400</b>
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	10%	<b>\$422,400</b>
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<b>TOTAL COST OF STRUCTURES</b>	<b>\$5,068,800</b>
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Estimate Prepared By: \_\_\_\_\_  
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

\_\_\_\_\_ Date

### III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	125,000
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	0
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements	\$	0
		_____ 0%		
J)		Design Appreciation Factor	\$	0
		_____ 0%		
K)		Utility Relocation (Construction Cost)	\$	0

L) 

<b>TOTAL RIGHT OF WAY ESTIMATE</b>	<b>\$125,000</b>
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M) 

<b>TOTAL R/W ESTIMATE: Escalated</b>	<b>\$135,000</b>
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N) 

<b>RIGHT OF WAY SUPPORT</b>	<b>\$60,000</b>
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Support Cost Estimate  
Prepared By \_\_\_\_\_  
Project Coordinator<sup>1</sup> Phone \_\_\_\_\_

Utility Estimate Prepared  
By \_\_\_\_\_  
Utility Coordinator<sup>2</sup> Phone \_\_\_\_\_

R/W Acquisition Estimate  
Prepared By \_\_\_\_\_  
Right of Way Estimator<sup>3</sup> Phone \_\_\_\_\_

Note: Items G & H applied to items A + B

<sup>1</sup> When estimate has Support Costs only

<sup>2</sup> When estimate has Utility Relocation

<sup>3</sup> When R/W Acquisition is required

### IV. SUPPORT COST ESTIMATE SUMMARY

Note: Use PRSM project data.

Total by FY		Escalated Support Cost for Estimate To Completion (ETC)				Total \$
		PA&ED	PS&E	RW	CON	
<b>&lt; 2010</b>	Expended					
	ETC					
<b>2011</b>	Expended					
	ETC					
<b>2012</b>	Expended					
	ETC					
<b>2013</b>	Expended					
	ETC					
<b>2014</b>	Expended					
	ETC					
<b>2015</b>	Expended					
	ETC					
<b>2016</b>	Expended					
	ETC					
<b>2017</b>	Expended					
	ETC					
<b>2018</b>	Expended					
	ETC					
<b>2019</b>	Expended					
	ETC					
<b>2020</b>	Expended					
	ETC					
<b>2021</b>	Expended					
	ETC					
<b>2022</b>	Expended					
	ETC					
<b>2023</b>	Expended					
	ETC					
<b>2024</b>	Expended					
	ETC					
<b>2025 &gt;</b>	Expended					
	ETC					
<b>EAC (Expended + ETC)</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Approved Budget (PRSM)</b>						
<b>Difference (Budget - EAC)</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Support Ratio (EAC / Cap Cost)</b>		<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>

<b>Total Capital Cost:</b>	<b>\$11,621,000</b>
<b>Total Capital Outlay Support Cost:</b>	<b>\$0</b>
<b>Overall Percent Support Cost:</b>	<b>0.00%</b>

PRSM workplan hours/costs verified against approved MWA:

\_\_\_\_\_ Date

Office Chief -

Approved by: \_\_\_\_\_ Date

Project Control -

## **APPENDIX E – ROUNDABOUT ANALYSIS**

SIDRA 7 ROUNDABOUT ANALYSIS  
ROUNDABOUT LAYOUT, FASTEST PATH, & TRUCK TURN  
EXHIBITS  
ROUNDABOUT COST ESTIMATE

# LANE SUMMARY

 Site: 1 [NB-2020 AM Peak Hour]

Eaton Road/SR 99 NB Ramps/Hicks Lane  
2030 AM Peak Hour  
Roundabout

Lane Use and Performance													
	Demand Flows		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Queue Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
	Total veh/h	HV %											
South: SR 99 NB Off-Ramp													
Lane 1	304	2.0	1052	0.289	100	12.2	LOS B	1.7	44.3	Full	1600	0.0	0.0
Lane 2 <sup>d</sup>	369	2.0	1278	0.289	100	9.1	LOS A	1.8	46.4	Short	200	0.0	NA
Approach	674	2.0		0.289		10.5	LOS B	1.8	46.4				
East: WB Eaton Road													
Lane 1 <sup>d</sup>	637	2.0	821	0.776	100	9.8	LOS A	6.5	165.0	Full	670	0.0	0.0
Approach	637	2.0		0.776		9.8	LOS A	6.5	165.0				
North: SB Hicks Lane													
Lane 1 <sup>d</sup>	211	2.0	534	0.394	100	11.4	LOS B	2.1	53.5	Full	1200	0.0	0.0
Approach	211	2.0		0.394		11.4	LOS B	2.1	53.5				
West: EB Eaton Road													
Lane 1 <sup>d</sup>	332	2.0	1468	0.226	100	5.7	LOS A	1.6	40.0	Full	600	0.0	0.0
Approach	332	2.0		0.226		5.7	LOS A	1.6	40.0				
Intersection	1853	2.0		0.776		9.5	LOS A	6.5	165.0				

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

<sup>d</sup> Dominant lane on roundabout approach

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# LANE SUMMARY

 Site: 1 [NB-2020 PM Peak Hour]

Eaton Road/SR 99 NB Ramps/Hicks Lane  
2030 PM Peak Hour  
Roundabout

Lane Use and Performance													
	Demand	Flows		Deg.	Lane	Average	Level of	95% Back of Queue		Lane	Lane	Cap.	Prob.
	Total	HV	Cap.	Satn	Util.	Delay	Service	Veh	Dist	Config	Length	Adj.	Block.
	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: SR 99 NB Off-Ramp													
Lane 1 <sup>d</sup>	525	1.0	1205	0.436	100	12.6	LOS B	3.1	79.3	Full	1600	0.0	0.0
Lane 2	327	1.0	944	0.347	80 <sup>5</sup>	7.0	LOS A	2.2	55.1	Short	200	0.0	NA
Approach	853	1.0		0.436		10.5	LOS B	3.1	79.3				
East: WB Eaton Road													
Lane 1 <sup>d</sup>	637	1.0	756	0.842	100	13.0	LOS B	8.6	216.2	Full	670	0.0	0.0
Approach	637	1.0		0.842		13.0	LOS B	8.6	216.2				
North: SB Hicks Lane													
Lane 1 <sup>d</sup>	205	1.0	543	0.378	100	10.0	LOS B	1.9	47.2	Full	1200	0.0	0.0
Approach	205	1.0		0.378		10.0	LOS B	1.9	47.2				
West: EB Eaton Road													
Lane 1 <sup>d</sup>	453	1.0	1580	0.286	100	6.4	LOS A	2.2	54.4	Full	600	0.0	0.0
Approach	453	1.0		0.286		6.4	LOS A	2.2	54.4				
Intersection	2147	1.0		0.842		10.3	LOS B	8.6	216.2				

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

<sup>5</sup> Lane under-utilisation found by the program

<sup>d</sup> Dominant lane on roundabout approach

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# LANE SUMMARY

 Site: 1 [NB-2030 AM Peak Hour]

Eaton Road/SR 99 NB Ramps/Hicks Lane  
2030 AM Peak Hour  
Roundabout

Lane Use and Performance													
	Demand	Flows		Deg.	Lane	Average	Level of	95% Back of Queue		Lane	Lane	Cap.	Prob.
	Total	HV	Cap.	Satn	Util.	Delay	Service	Veh	Dist	Config	Length	Adj.	Block.
	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: SR 99 NB Off-Ramp													
Lane 1	346	2.0	1057	0.328	100	12.5	LOS B	2.1	53.1	Full	1600	0.0	0.0
Lane 2 <sup>d</sup>	454	2.0	1385	0.328	100	9.3	LOS A	2.3	57.3	Short	200	0.0	NA
Approach	800	2.0		0.328		10.7	LOS B	2.3	57.3				
East: WB Eaton Road													
Lane 1 <sup>d</sup>	774	2.0	872	0.887	100	13.1	LOS B	10.4	262.9	Full	670	0.0	0.0
Approach	774	2.0		0.887		13.1	LOS B	10.4	262.9				
North: SB Hicks Lane													
Lane 1 <sup>d</sup>	268	2.0	512	0.524	100	14.7	LOS B	3.5	89.7	Full	1200	0.0	0.0
Approach	268	2.0		0.524		14.7	LOS B	3.5	89.7				
West: EB Eaton Road													
Lane 1 <sup>d</sup>	400	2.0	1518	0.263	100	6.3	LOS A	2.0	50.2	Full	600	0.0	0.0
Approach	400	2.0		0.263		6.3	LOS A	2.0	50.2				
Intersection	2242	2.0		0.887		11.2	LOS B	10.4	262.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

<sup>d</sup> Dominant lane on roundabout approach

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# LANE SUMMARY

 Site: 1 [NB-2030 PM Peak Hour]

Eaton Road/SR 99 NB Ramps/Hicks Lane  
2030 PM Peak Hour  
Roundabout

Lane Use and Performance													
	Demand Flows		Cap.	Deg.	Lane	Average	Level of	95% Back of Queue		Lane	Lane	Cap.	Prob.
	Total	HV	veh/h	Satn	Util.	Delay	Service	Veh	Dist	Config	Length	Adj.	Block.
	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: SR 99 NB Off-Ramp													
Lane 1	456	1.0	970	0.470	100	14.0	LOS B	3.5	88.3	Full	1600	0.0	0.0
Lane 2 <sup>d</sup>	608	1.0	1294	0.470	100	8.6	LOS A	3.7	93.4	Short	200	0.0	NA
Approach	1063	1.0		0.470		10.9	LOS B	3.7	93.4				
East: WB Eaton Road													
Lane 1 <sup>d</sup>	800	1.0	809	0.989	100	24.9	LOS C	18.1	455.0	Full	670	0.0	0.0
Approach	800	1.0		0.989		24.9	LOS C	18.1	455.0				
North: SB Hicks Lane													
Lane 1 <sup>d</sup>	253	1.0	518	0.488	100	13.4	LOS B	3.1	77.6	Full	1200	0.0	0.0
Approach	253	1.0		0.488		13.4	LOS B	3.1	77.6				
West: EB Eaton Road													
Lane 1 <sup>d</sup>	516	1.0	1552	0.332	100	6.6	LOS A	2.7	67.9	Full	600	0.0	0.0
Approach	516	1.0		0.332		6.6	LOS A	2.7	67.9				
Intersection	2632	1.0		0.989		14.6	LOS B	18.1	455.0				

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

<sup>d</sup> Dominant lane on roundabout approach

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# LANE SUMMARY

 Site: 1 [NB-2040 AM Peak Hour]

Eaton Road/SR 99 NB Ramps/Hicks Lane  
2040 AM Peak Hour  
Roundabout

Lane Use and Performance													
	Demand	Flows		Deg.	Lane	Average	Level of	95% Back of	Queue	Lane	Lane	Cap.	Prob.
	Total	HV	Cap.	Satn	Util.	Delay	Service	Veh	Dist	Config	Length	Adj.	Block.
	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: SR 99 NB Off-Ramp													
Lane 1	401	2.0	974	0.412	100	13.3	LOS B	2.8	71.1	Full	1600	0.0	0.0
Lane 2 <sup>d</sup>	525	2.0	1276	0.412	100	10.0	LOS A	3.1	77.6	Short	200	0.0	NA
Approach	926	2.0		0.412		11.4	LOS B	3.1	77.6				
East: WB Eaton Road													
Lane 1	420	2.0	662	0.634	100	10.5	LOS B	4.3	110.4	Full	670	0.0	0.0
Lane 2 <sup>d</sup>	490	2.0	773	0.634	100	9.4	LOS A	4.6	116.1	Short	95	0.0	NA
Approach	911	2.0		0.634		9.9	LOS A	4.6	116.1				
North: SB Hicks Lane													
Lane 1 <sup>d</sup>	326	2.0	550	0.593	100	13.6	LOS B	3.6	92.0	Full	1200	0.0	0.0
Approach	326	2.0		0.593		13.6	LOS B	3.6	92.0				
West: EB Eaton Road													
Lane 1 <sup>d</sup>	468	2.0	1532	0.306	100	6.7	LOS A	2.4	60.3	Full	600	0.0	0.0
Approach	468	2.0		0.306		6.7	LOS A	2.4	60.3				
Intersection	2632	2.0		0.634		10.3	LOS B	4.6	116.1				

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).  
Roundabout LOS Method: SIDRA Roundabout LOS.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

<sup>d</sup> Dominant lane on roundabout approach

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# LANE SUMMARY

 Site: 1 [NB-2040 PM Peak Hour]

Eaton Road/SR 99 NB Ramps/Hicks Lane  
2040 PM Peak Hour  
Roundabout

Lane Use and Performance													
	Demand	Flows		Deg.	Lane	Average	Level of	95% Back of Queue		Lane	Lane	Cap.	Prob.
	Total	HV	Cap.	Satn	Util.	Delay	Service	Veh	Dist	Config	Length	Adj.	Block.
	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: SR 99 NB Off-Ramp													
Lane 1 <sup>d</sup>	757	1.0	1228	0.616	100	15.3	LOS B	6.9	172.7	Full	1600	0.0	0.0
Lane 2	517	1.0	908	0.569	92 <sup>5</sup>	10.3	LOS B	5.3	134.6	Short	200	0.0	NA
Approach	1274	1.0		0.616		13.2	LOS B	6.9	172.7				
East: WB Eaton Road													
Lane 1 <sup>d</sup>	591	1.0	674	0.878	100	19.2	LOS B	10.7	270.4	Full	670	0.0	0.0
Lane 2	372	1.0	529	0.702	80 <sup>7</sup>	13.9	LOS B	5.3	133.8	Short	95	0.0	NA
Approach	963	1.0		0.878		17.1	LOS B	10.7	270.4				
North: SB Hicks Lane													
Lane 1 <sup>d</sup>	295	1.0	383	0.769	100	34.7	LOS C	7.4	187.4	Full	1200	0.0	0.0
Approach	295	1.0		0.769		34.7	LOS C	7.4	187.4				
West: EB Eaton Road													
Lane 1 <sup>d</sup>	579	1.0	1541	0.376	100	6.7	LOS A	3.3	83.2	Full	600	0.0	0.0
Approach	579	1.0		0.376		6.7	LOS A	3.3	83.2				
Intersection	3111	1.0		0.878		15.3	LOS B	10.7	270.4				

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).  
Roundabout LOS Method: SIDRA Roundabout LOS.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

<sup>5</sup> Lane under-utilisation found by the program

<sup>7</sup> Lane under-utilisation specified by the user

<sup>d</sup> Dominant lane on roundabout approach

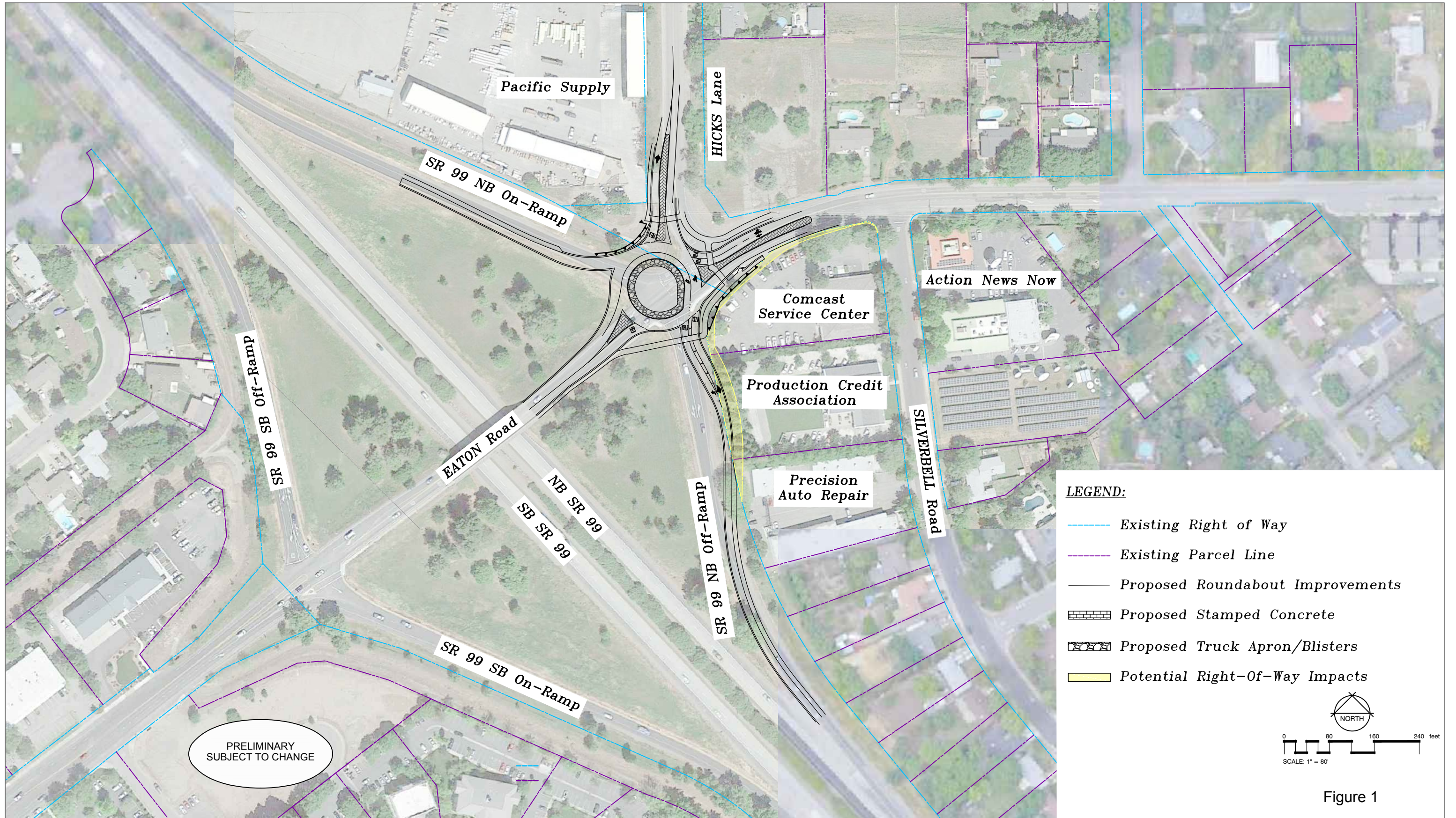
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Project: K:\PRJ\2206\T2206\T2206-SIDRA\2040 Eaton NB\_Draft Final.sip7



# Preliminary Layout - Ultimate Build

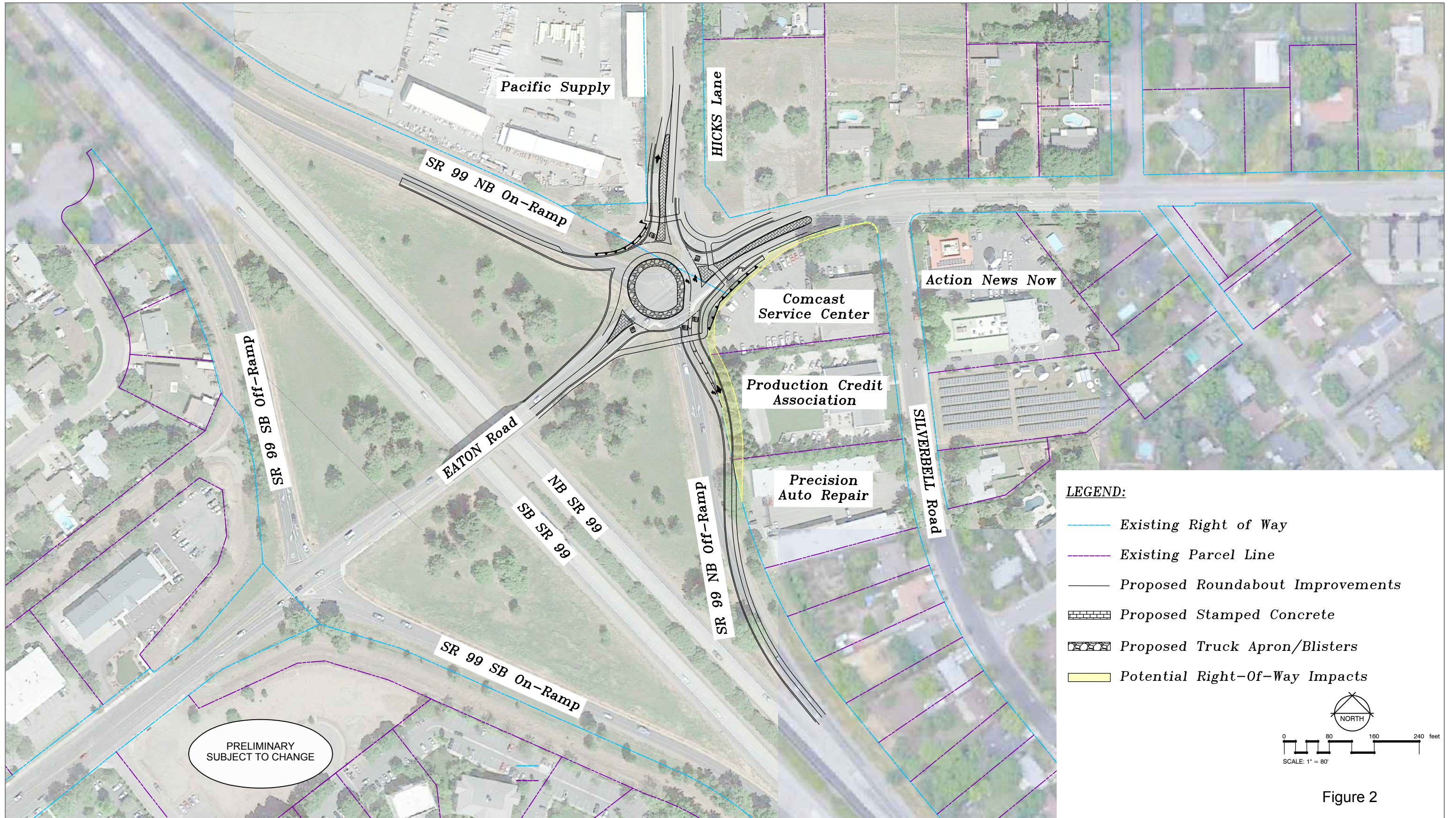


PRELIMINARY  
SUBJECT TO CHANGE

## SR 99/EATON ROAD INTERCHANGE PROJECT

Chico, California

# Preliminary Layout - Interim Build



PRELIMINARY  
SUBJECT TO CHANGE

## SR 99/EATON ROAD INTERCHANGE PROJECT

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# Fast Path (NB and SB)

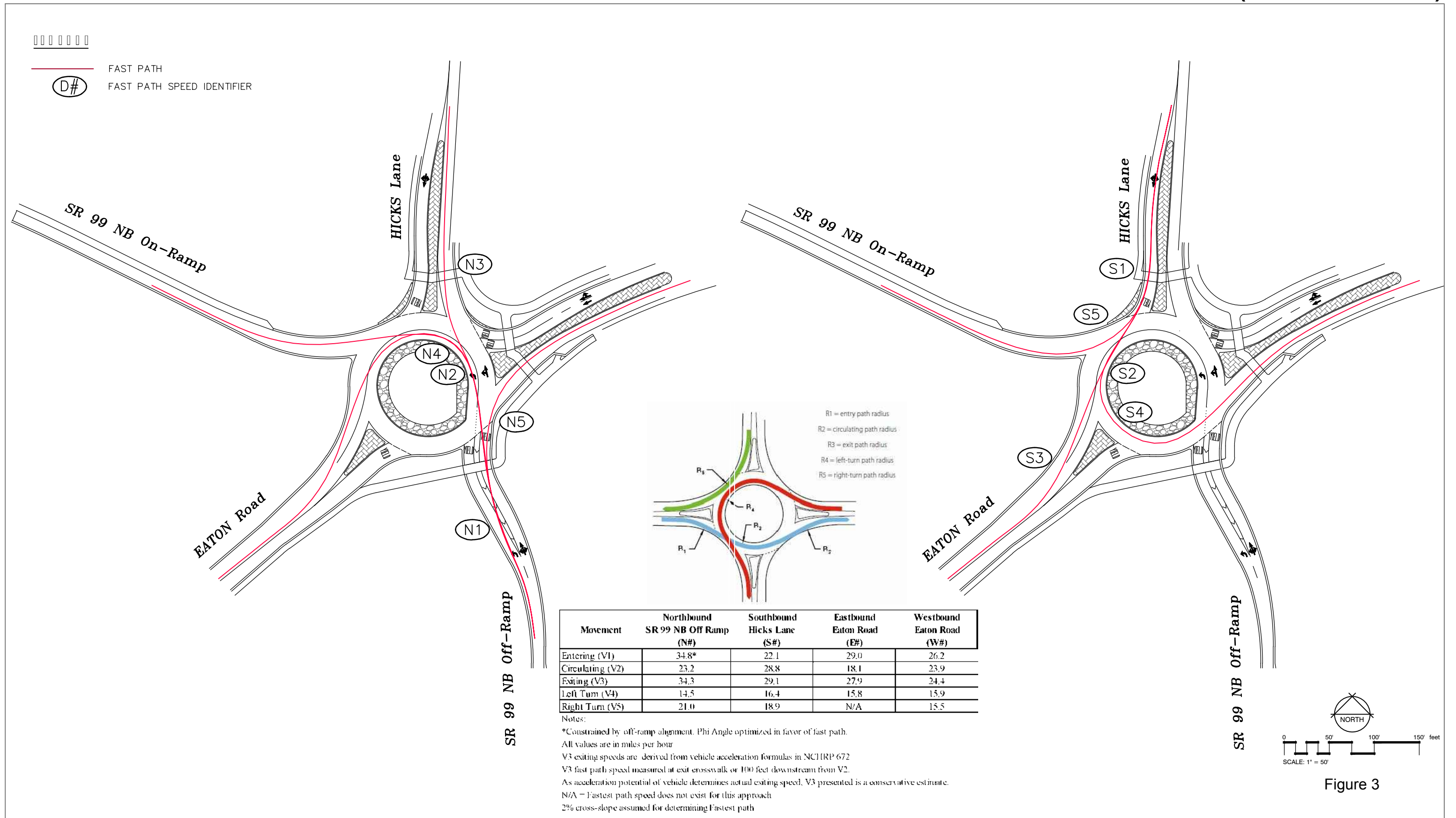


Figure 3

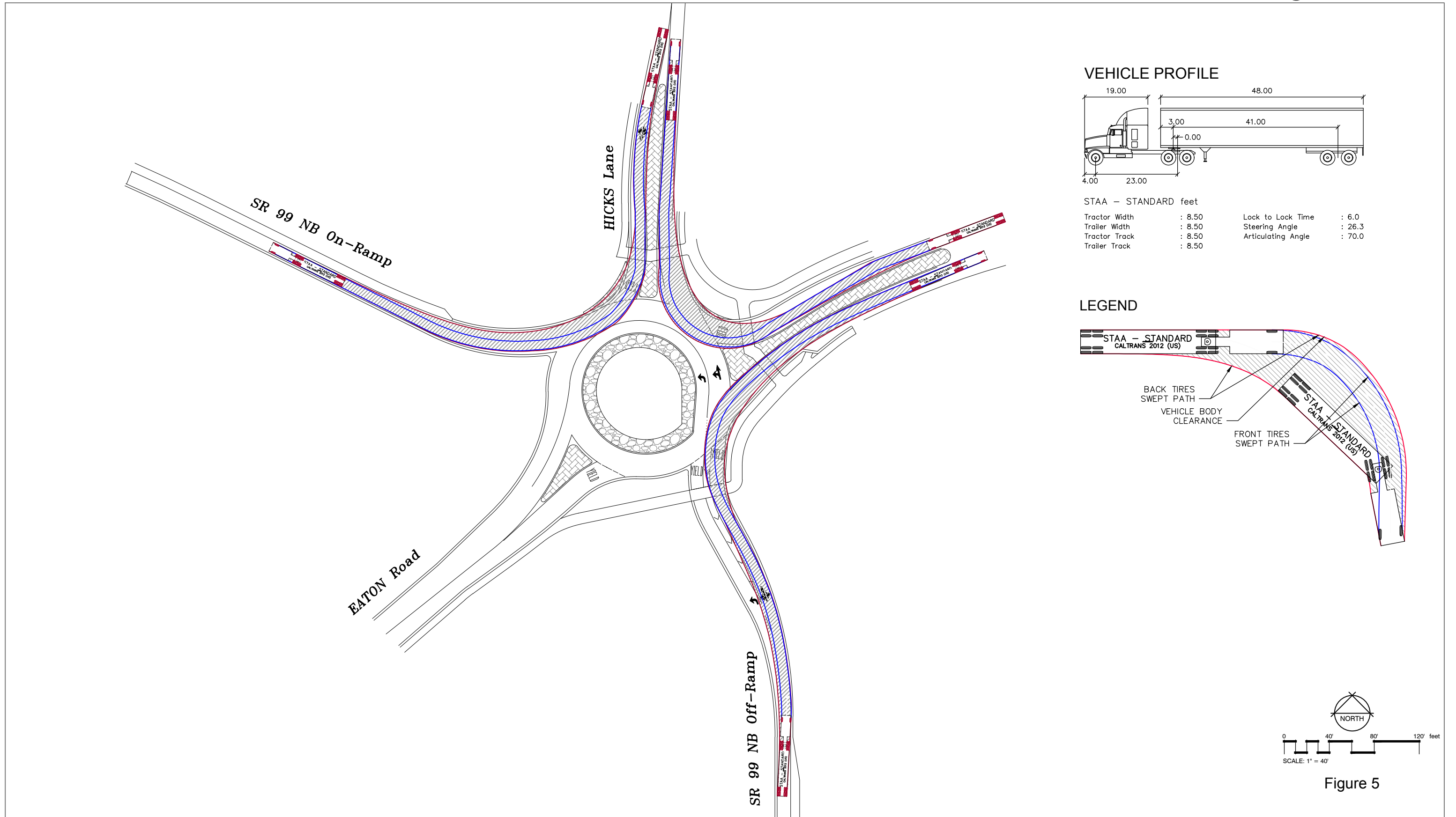
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# Truck Turn - STAA Right Turns



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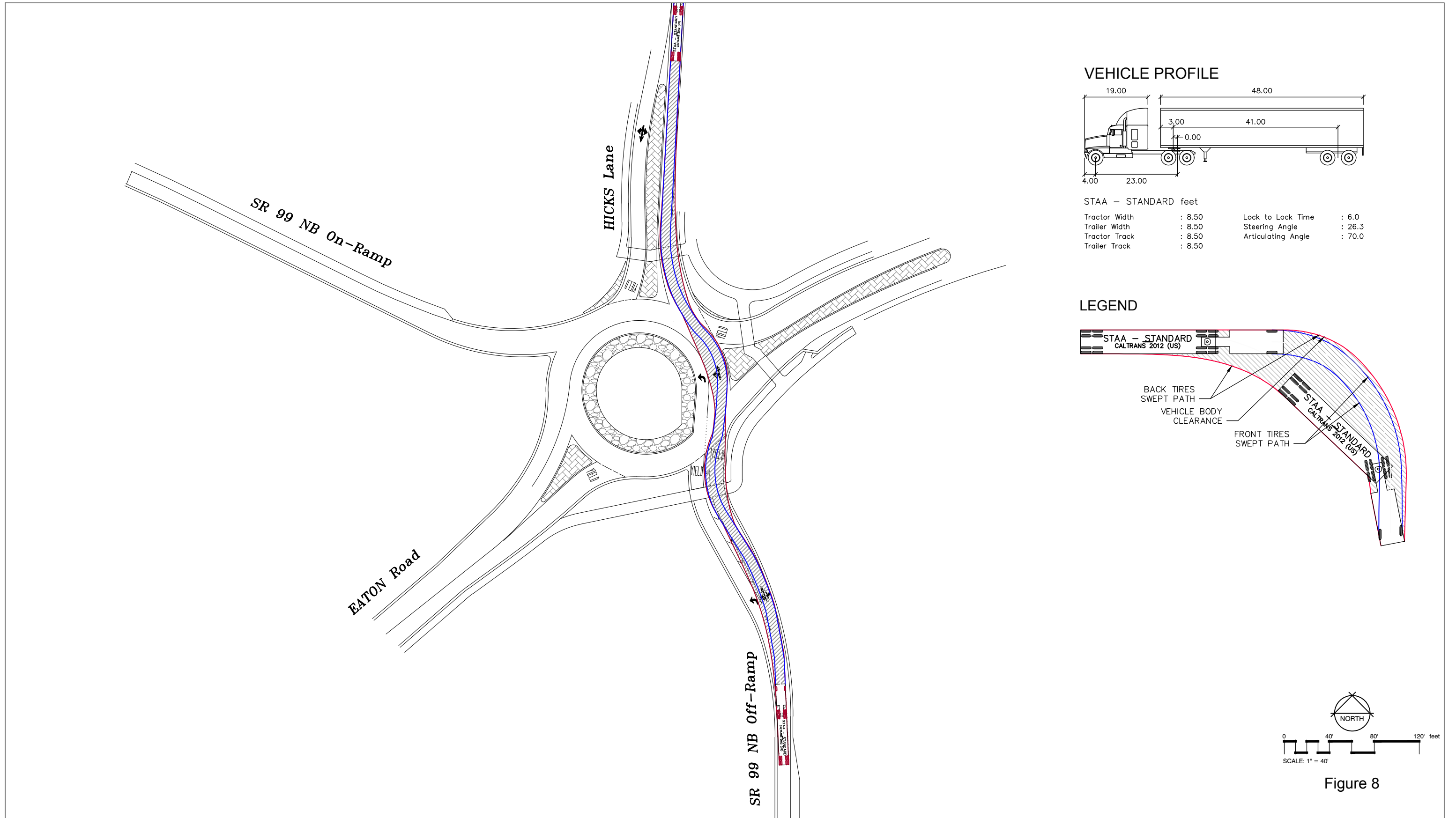
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 PROJECT NO. CA 9 011  
 SHEET NO. 22011  
 DATE: 01/11/2011  
 www.gm.com  
 SAN JOSE OFFICE: 415.554.1000  
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 DALLAS OFFICE: 972.342.1000  
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# Truck Turn - STAA Northbound Thru to Hicks Lane



## SR 99/EATON ROAD INTERCHANGE PROJECT

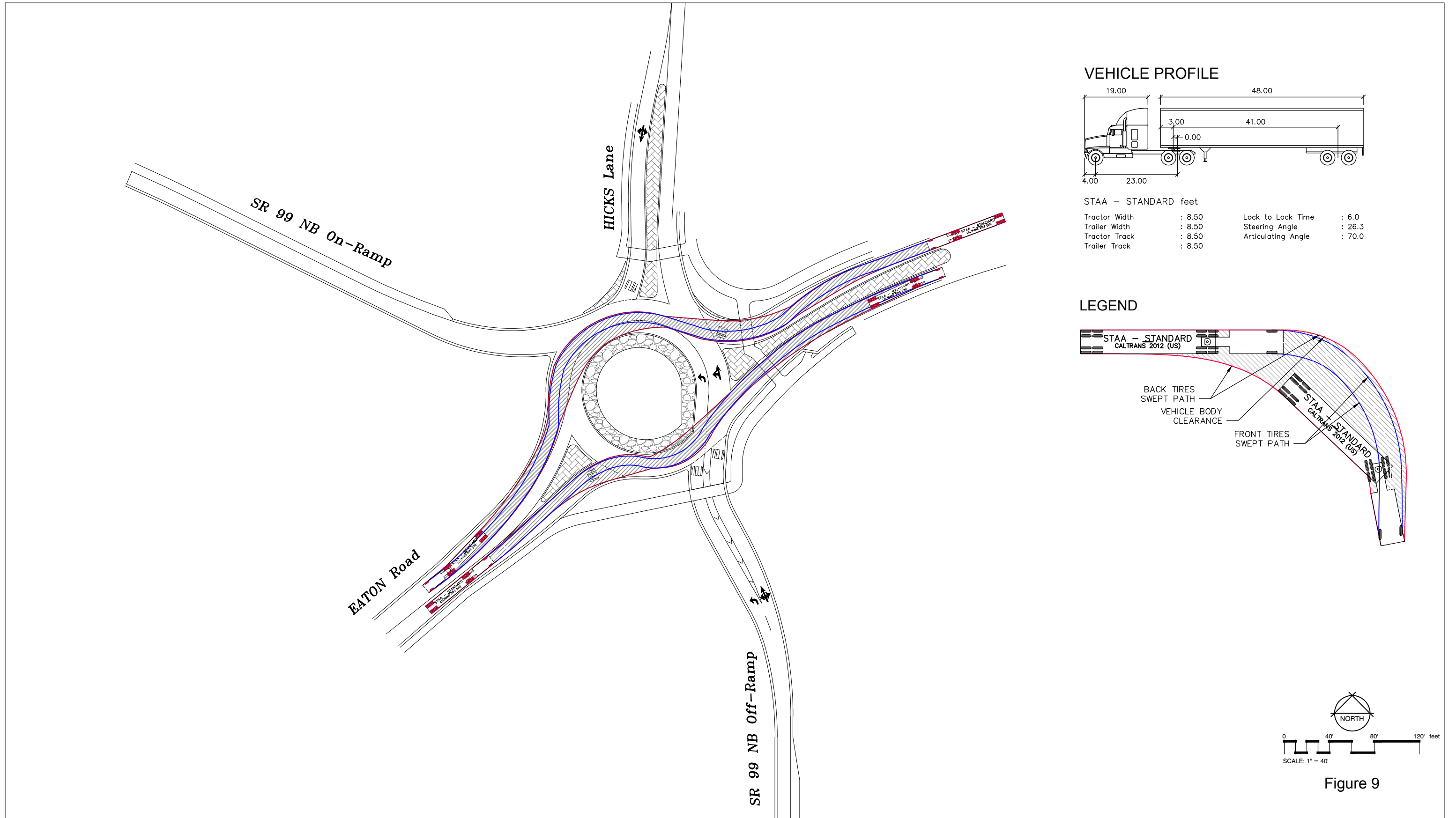
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# Truck Turns - STAA East & Westbound Thrus on Eaton Road



## SR 99/EATON ROAD INTERCHANGE PROJECT

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# Truck Turn - STAA Eastbound Left to Hicks Lane

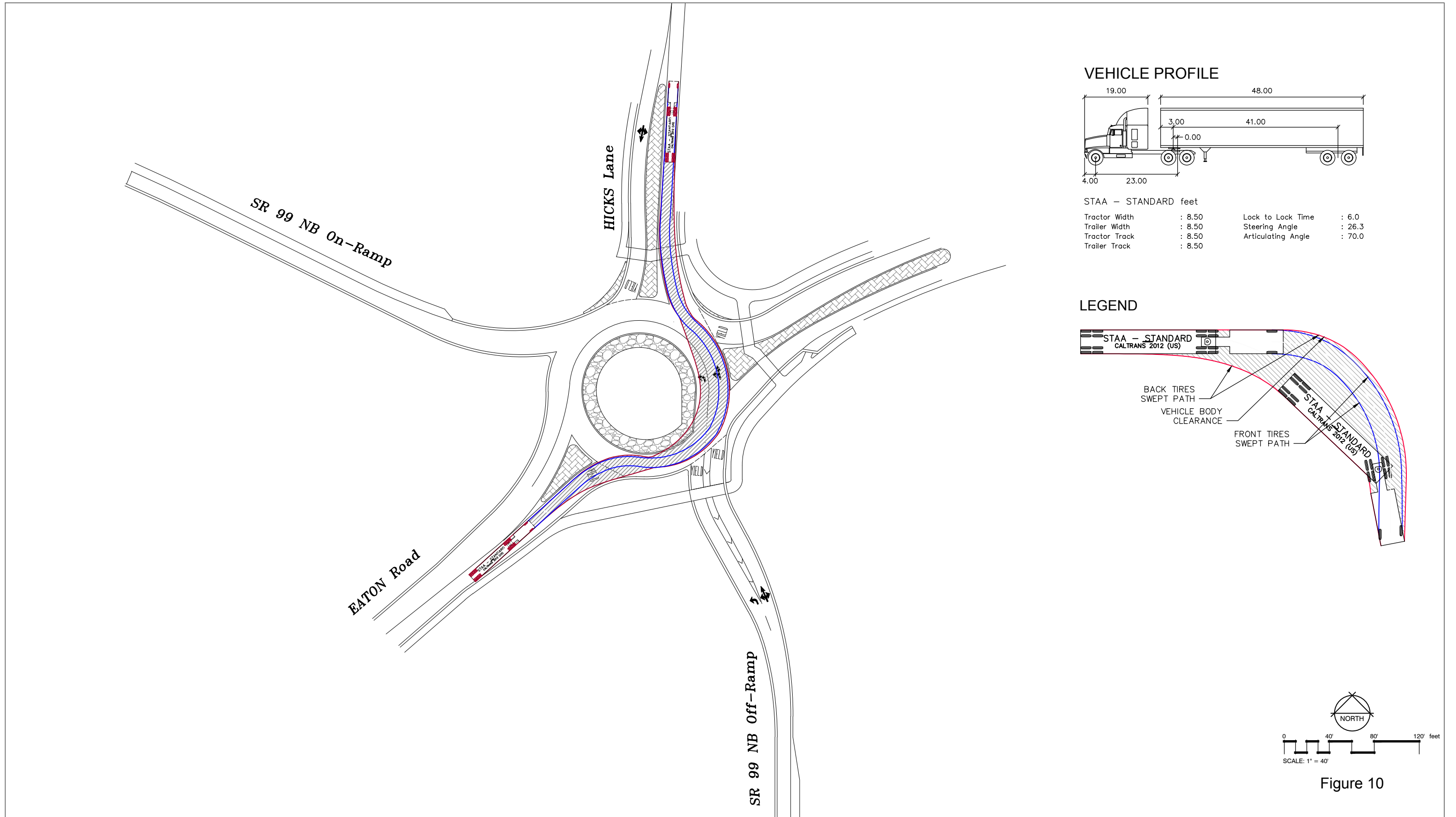


Figure 10

## SR 99/EATON ROAD INTERCHANGE PROJECT

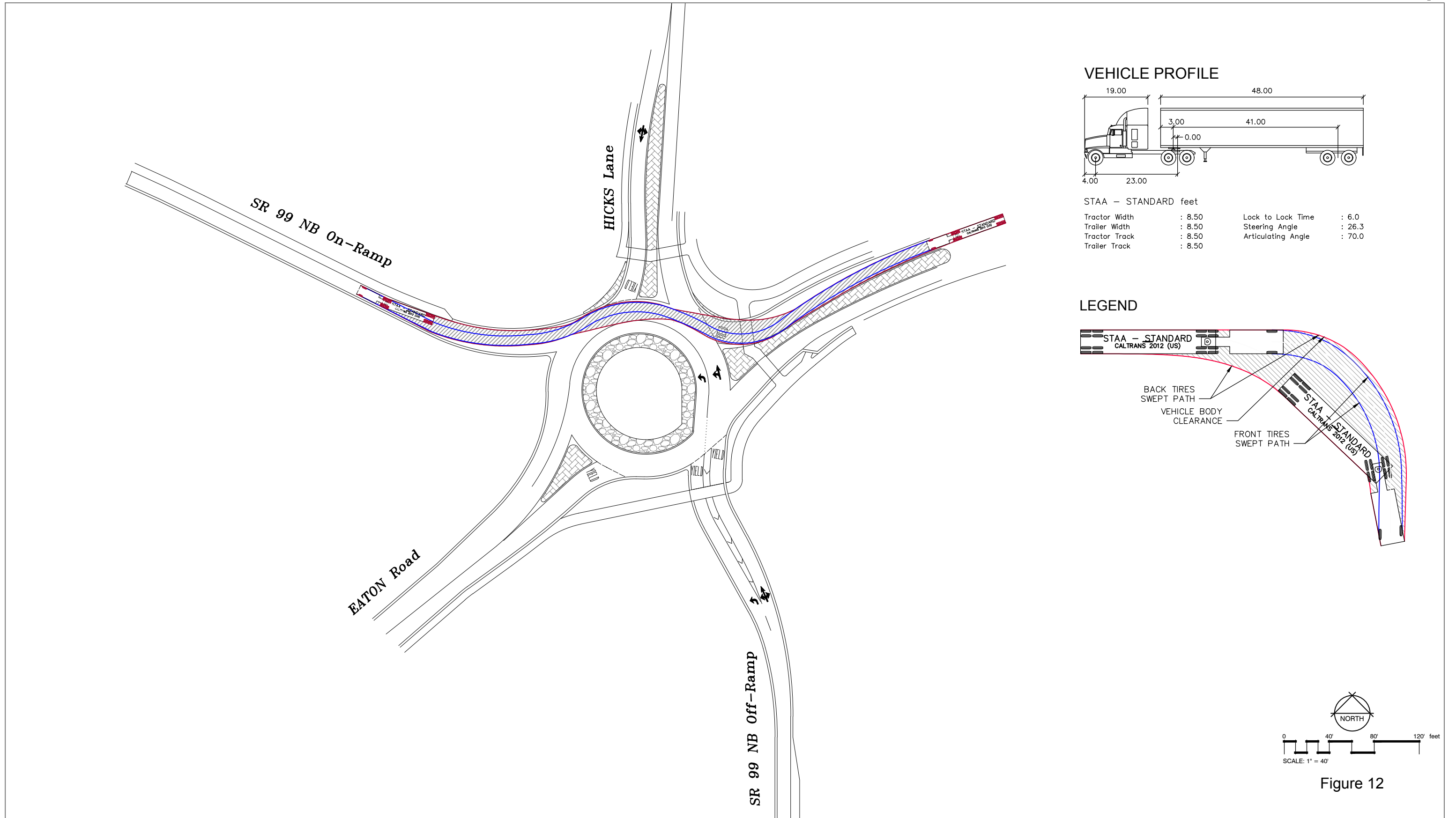
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# Truck Turn - STAA Westbound Thru to SR 99 On Ramp



## SR 99/EATON ROAD INTERCHANGE PROJECT

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# Truck Turn - STAA Southbound Left to Eaton Road

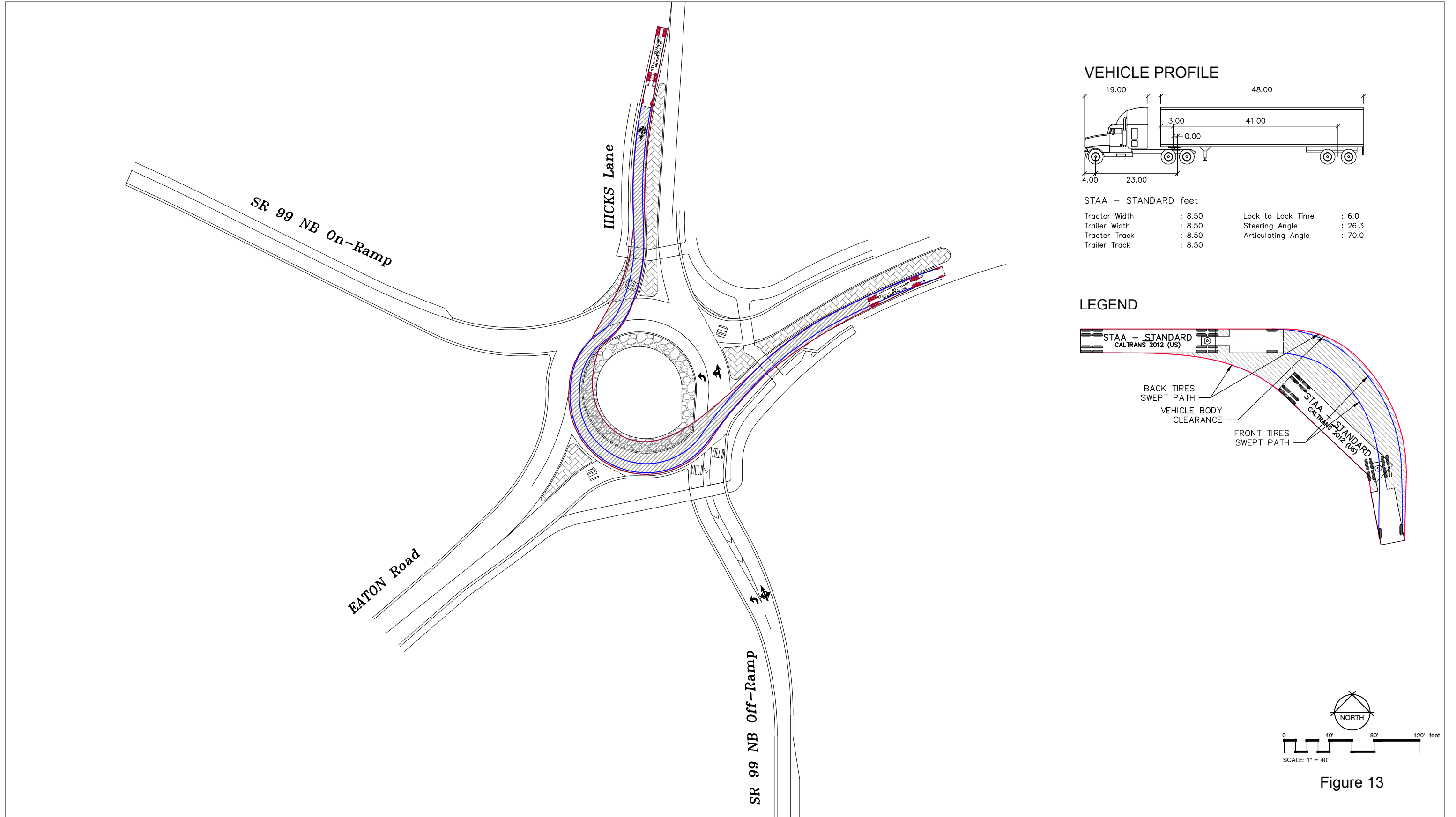


Figure 13

## SR 99/EATON ROAD INTERCHANGE PROJECT

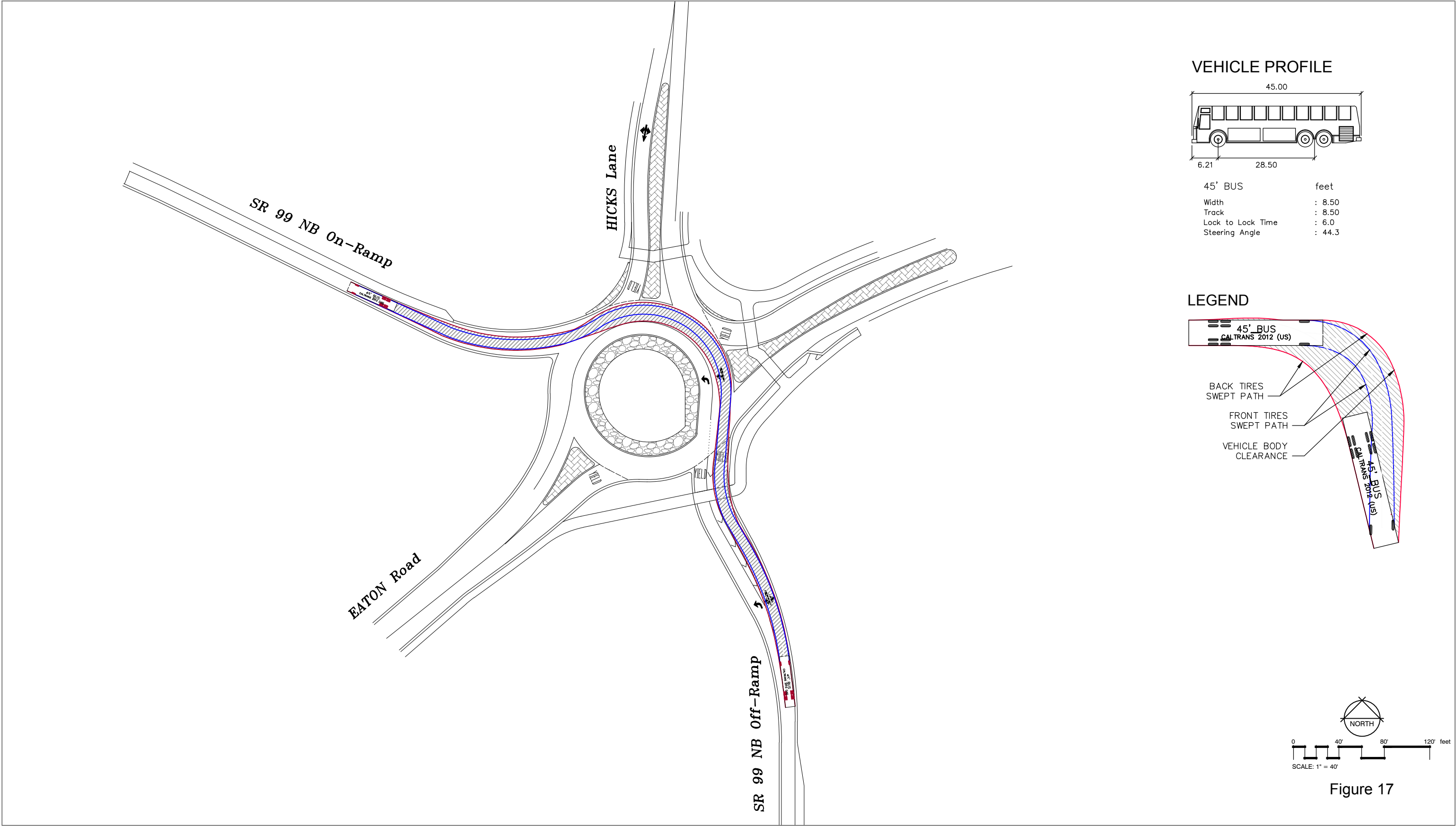
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# Bus Turn - Bus 45 Northbound Left to SR 99 On Ramp



## SR 99/EATON ROAD INTERCHANGE PROJECT

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# Bus Turn - Bus 45 East & Westbound Thrus on Eaton Road

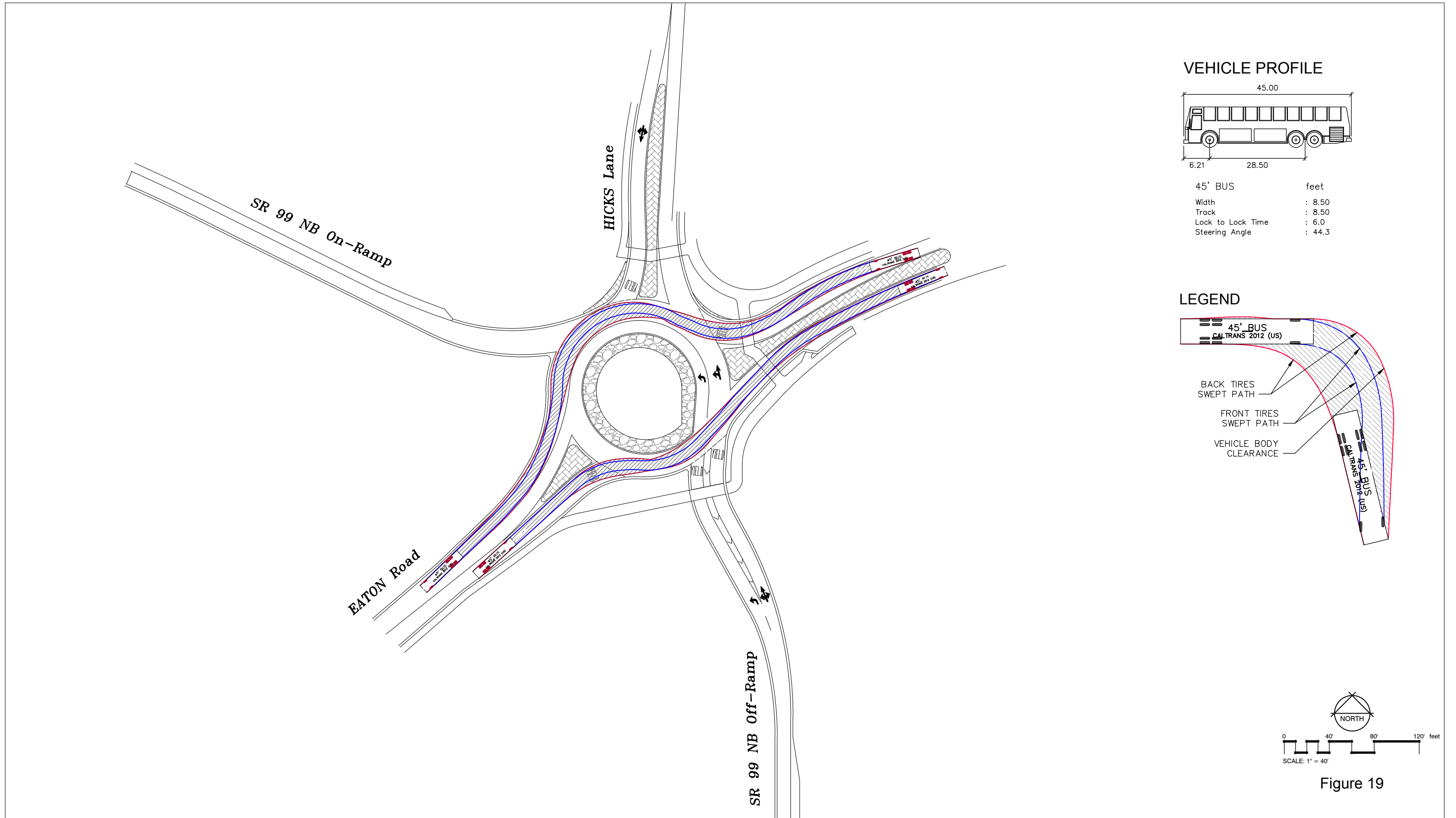


Figure 19

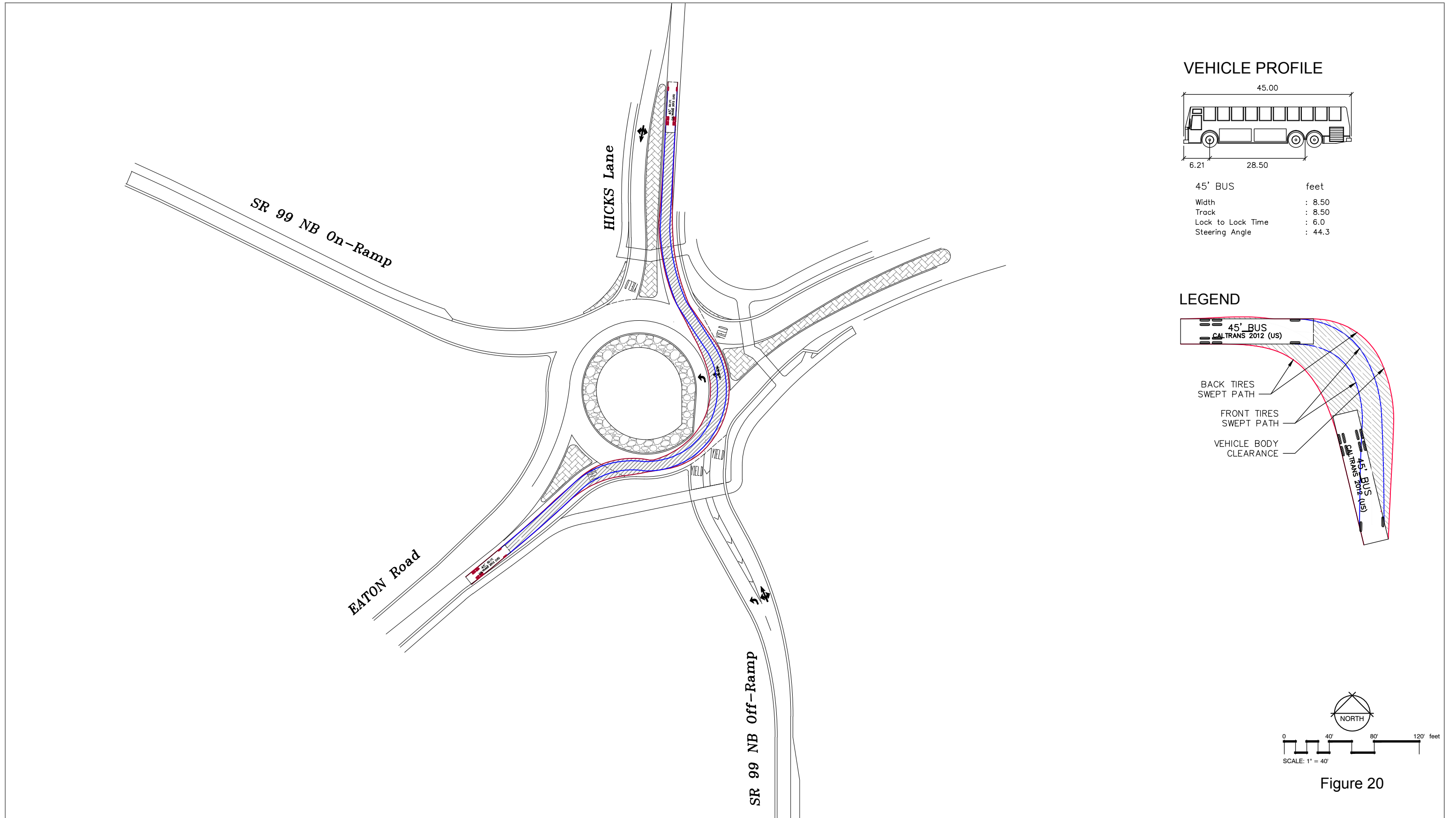
## SR 99/EATON ROAD INTERCHANGE PROJECT

Chico, California



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# Bus Turn - Bus 45 Eastbound Left to Hicks Lane



## SR 99/EATON ROAD INTERCHANGE PROJECT

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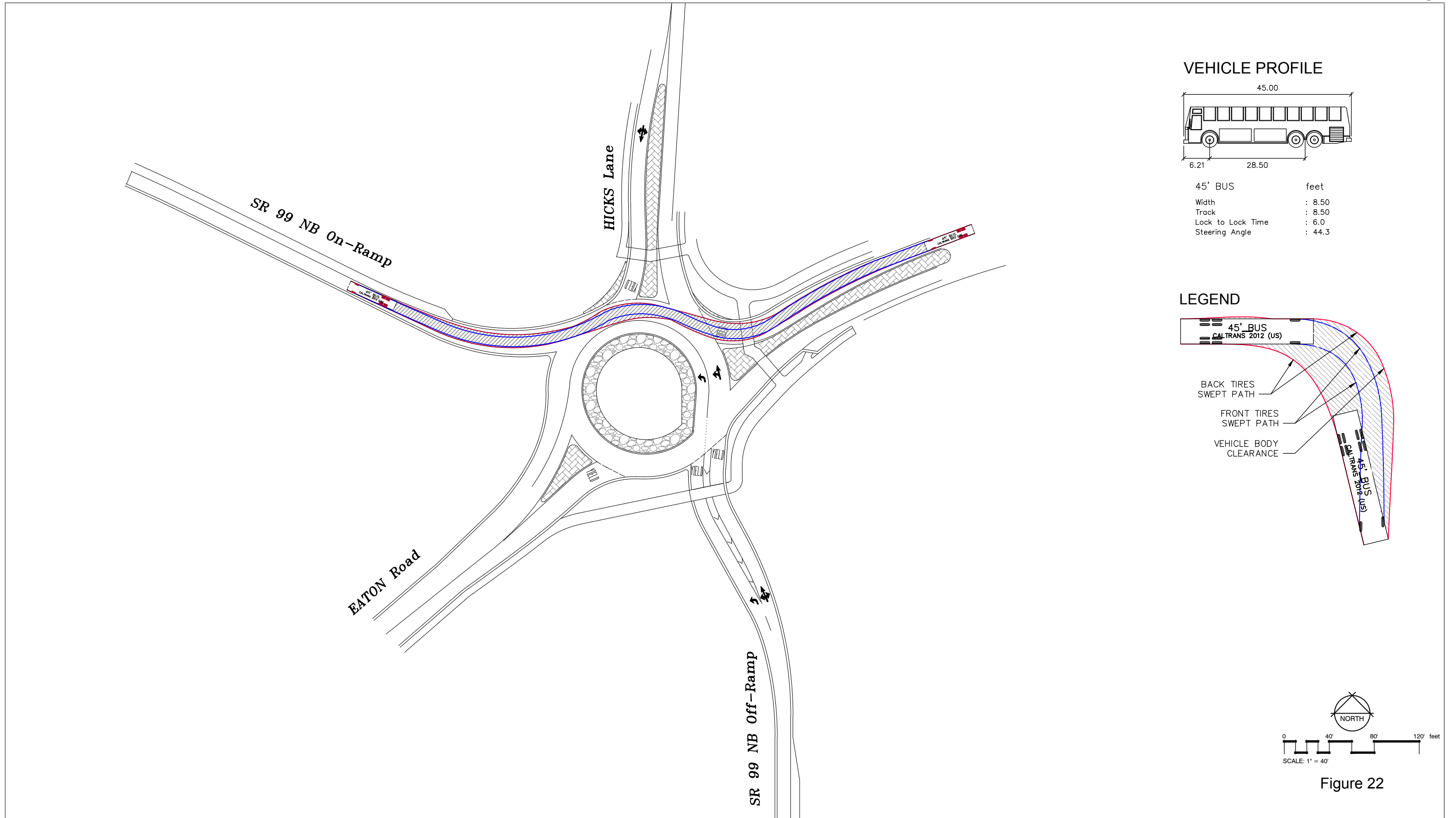


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# Bus Turn - Bus 45 Westbound Thru to SR 99 On Ramp



## SR 99/EATON ROAD INTERCHANGE PROJECT

Chico, California

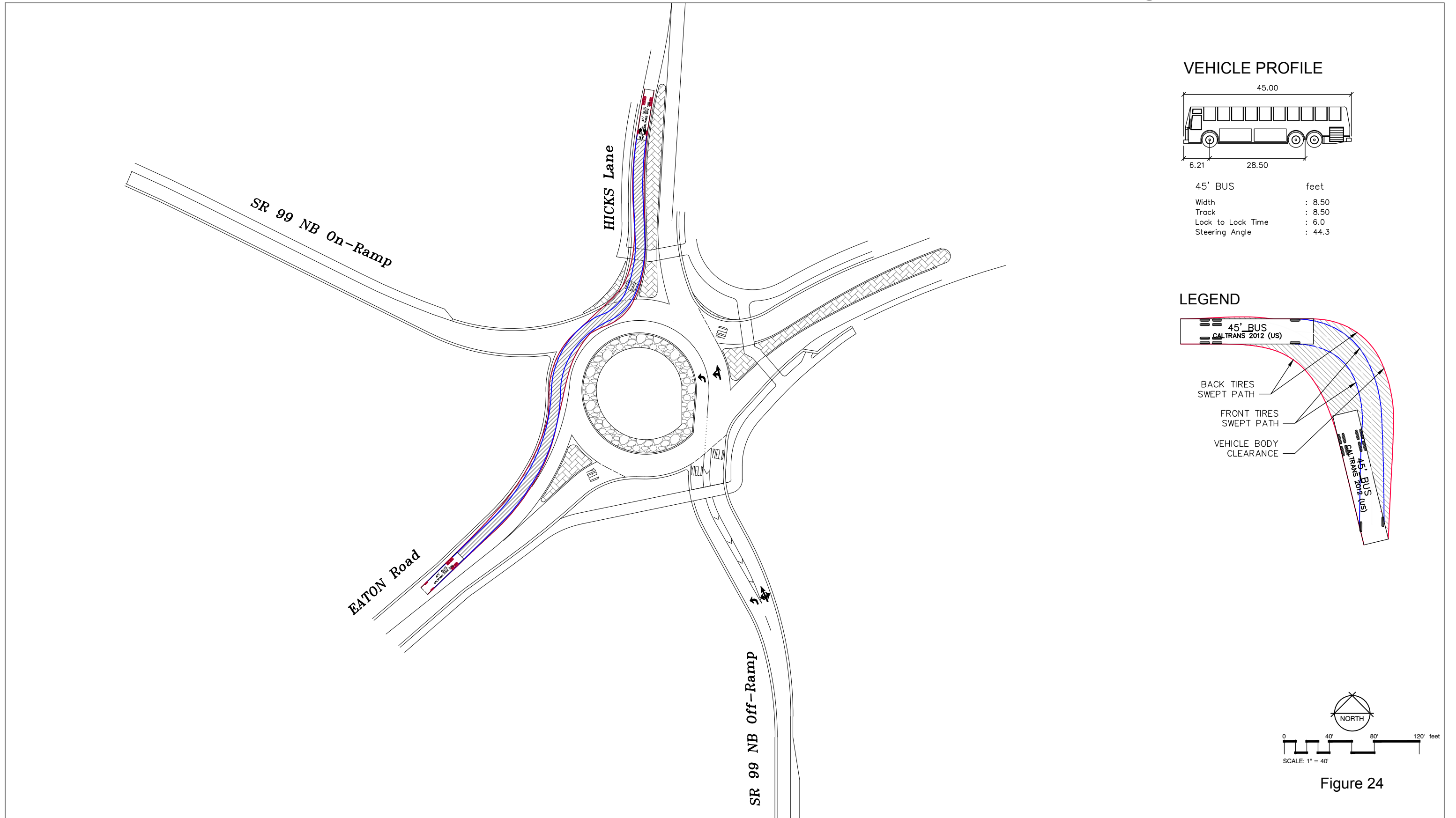


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# Bus Turn - Bus 45 Southbound Right to Eaton Road



## SR 99/EATON ROAD INTERCHANGE PROJECT

Chico, California



SACRAMENTO REGION  
 01/15/2011 10:00 AM  
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Ma 21, 2011





**SECTION 1: EARTHWORK**

Item code	Unit	Quantity		Unit Price (\$)		Cost
190101	Roadway Excavation	CY	6,800	x	30.00	= \$ 204,000
19010X	Roadway Excavation (Type X) ADL	CY	800	x	60.00	= \$ 48,000
194001	Ditch Excavation	CY	0	x	0.00	= \$ -
19801X	Imported Borrow	CY	4,000	x	50.00	= \$ 200,000
192037	Structure Excavation (Retaining Wall)	CY	220	x	80.00	= \$ 17,600
193013	Structure Backfill (Retaining Wall)	CY	260	x	120.00	= \$ 31,200
193031	Pervious Backfill Material (Retaining Wall)	CY	0	x	0.00	= \$ -
160101	Clearing & Grubbing	LS	1	x	5,000.00	= \$ 5,000
170101	Develop Water Supply	LS	1	x	10,000.00	= \$ 10,000

<b>TOTAL EARTHWORK SECTION ITEMS</b>	<b>\$</b>	<b>515,800</b>
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**SECTION 2: PAVEMENT STRUCTURAL SECTION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY	0	x	0.00	= \$ -
400050	Continuously Reinforced Concrete Pavement	CY	0	x	0.00	= \$ -
404092	Seal Pavement Joint	LF	0	x	0.00	= \$ -
404093	Seal Isolation Joint	LF	0	x	0.00	= \$ -
413117	Seal Concrete Pavement Joint (Silicone)	LF	0	x	0.00	= \$ -
413118	Seal Pavement Joint (Asphalt Rubber)	LF	0	x	0.00	= \$ -
280010	Rapid Strength Concrete Base	CY	0	x	0.00	= \$ -
410095	Dowel Bar (Drill and Bond)	EA	0	x	0.00	= \$ -
390132	Hot Mix Asphalt (Type A)	TON	2,600	x	105.00	= \$ 273,000
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	0	x	0.00	= \$ -
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD	0	x	0.00	= \$ -
26020X	Class 2 Aggregate Base	CY	3,500	x	60.00	= \$ 210,000
290201	Asphalt Treated Permeable Base	CY	0	x	0.00	= \$ -
250401	Class 4 Aggregate Subbase	CY	0	x	0.00	= \$ -
374002	Asphaltic Emulsion (Fog Seal Coat)	TON	0	x	0.00	= \$ -
397005	Tack Coat	TON	4	x	900.00	= \$ 3,600
377501	Slurry Seal	TON	0	x	0.00	= \$ -
3750XX	Screenings (Type XX)	TON	0	x	0.00	= \$ -
374492	Asphaltic Emulsion (Polymer Modified)	TON	0	x	0.00	= \$ -
370001	Sand Cover (Seal)	TON	0	x	0.00	= \$ -
731530	Minor Concrete (Textured Paving)	CY	100	x	800.00	= \$ 80,000
731502	Minor Concrete (Miscellaneous Construction)	CY	300	x	600.00	= \$ 180,000
39407X	Place Hot Mix Asphalt Dike (Type A)	LF	0	x	0.00	= \$ -
150771	Remove Asphalt Concrete Dike	LF	0	x	0.00	= \$ -
420201	Grind Existing Concrete Pavement	SQYD	0	x	0.00	= \$ -
150860	Remove Base and Surfacing	CY	60	x	80.00	= \$ 4,800
390095	Replace Asphalt Concrete Surfacing	CY	0	x	0.00	= \$ -
15312X	Remove Concrete	LF	800	x	20.00	= \$ 16,000
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	0	x	0.00	= \$ -
153103	Cold Plane Asphalt Concrete Pavement	SQYD	3,000	x	45.00	= \$ 135,000
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA	0	x	0.00	= \$ -
413113	Repair Spalled Joints, Polyester Grout	SQYD	0	x	0.00	= \$ -
420102	Groove Existing Concrete Pavement	SQYD	0	x	0.00	= \$ -
390136	Minor Hot Mix Asphalt	TON	0	x	0.00	= \$ -
394095	Roadside Paving (Miscellaneous Areas)	SQYD	0	x	0.00	= \$ -

<b>TOTAL PAVEMENT STRUCTURAL SECTION ITEMS</b>	<b>\$</b>	<b>902,400</b>
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**SECTION 3: DRAINAGE**

Item code		Unit	Quantity		Unit Price (\$)		Cost
15080X	Remove Culvert	LF	0	x	0.00	= \$	-
150820	Modify Inlet	EA	0	x	0.00	= \$	-
155232	Sand Backfill	CY	0	x	0.00	= \$	-
15020X	Abandon Culvert	EA	0	x	0.00	= \$	-
152430	Adjust Inlet	LF	0	x	0.00	= \$	-
155003	Cap Inlet	EA	0	x	0.00	= \$	-
510501	Minor Concrete	CY	0	x	0.00	= \$	-
510502	Minor Concrete (Minor Structure)	CY	50	x	1,800.00	= \$	90,000
5105XX	Minor Concrete (Type XX)	CY	0	x	0.00	= \$	-
620XXX	XX" Alternative Pipe Culvert (Type X)	LF	0	x	0.00	= \$	-
6411XX	XX" Plastic Pipe	LF	0	x	0.00	= \$	-
65XXXX	XX" Reinforced Concrete Pipe (Type X)	LF	1,000	x	165.00	= \$	165,000
6650XX	XX" Corrugated Steel Pipe (0.XXX" Thick)	LF	0	x	0.00	= \$	-
68XXXX	XX" Plastic Pipe (Edge Drain)	LF	0	x	0.00	= \$	-
69011X	XX" Corrugated Steel Pipe Downdrain (0.XXX" Th	LF	0	x	0.00	= \$	-
70321X	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF	0	x	0.00	= \$	-
70XXXX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF	0	x	0.00	= \$	-
7050XX	XX" Steel Flared End Section	EA	2	x	1,000.00	= \$	2,000
703233	Grated Line Drain	LF	0	x	0.00	= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY	5	x	200.00	= \$	1,000
72901X	Rock Slope Protection Fabric (Class X)	SQYD	15	x	20.00	= \$	300
721420	Concrete (Ditch Lining)	CY	0	x	0.00	= \$	-
721430	Concrete (Channel Lining)	CY	0	x	0.00	= \$	-
750001	Miscellaneous Iron and Steel	LB	3,700	x	3.00	= \$	11,100

<b>TOTAL DRAINAGE ITEMS</b>	<b>\$</b>	<b>269,400</b>
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**SECTION 4: SPECIALTY ITEMS**

Item code		Unit	Quantity		Unit Price (\$)		Cost
080050	Progress Schedule (Critical Path Method)	LS	0	x	0.00	= \$	-
582001	Sound Wall (Masonry Block)	SQFT	0	x	0.00	= \$	-
510530	Minor Concrete (Wall)	CY	0	x	0.00	= \$	-
15325X	Remove Sound Wall	LF/LS	0	x	0.00	= \$	-
070030	Lead Compliance Plan	LS	1	x	10,000.00	= \$	10,000
141120	Treated Wood Waste	LB	1,000	x	1.50	= \$	1,500
153221	Remove Concrete Barrier	LF	0	x	0.00	= \$	-
150662	Remove Metal Beam Guard Railing	LF	300	x	20.00	= \$	6,000
150668	Remove Flared End Section	EA	0	x	0.00	= \$	-
8000XX	Chain Link Fence (Type XX)	LF	0	x	0.00	= \$	-
80XXXX	XX" Chain Link Gate (Type CL-6)	EA	0	x	0.00	= \$	-
832001	Metal Beam Guard Railing	LF	200	x	50.00	= \$	10,000
839301	Single Thrie Beam Barrier	LF	0	x	0.00	= \$	-
839310	Double Thrie Beam Barrier	LF	0	x	0.00	= \$	-
839521	Cable Railing	LF	0	x	0.00	= \$	-
8395XX	Terminal System (Type CAT)	EA	0	x	0.00	= \$	-
839585	Alternative Flared Terminal System	EA	0	x	0.00	= \$	-
839584	Alternative In-line Terminal System	EA	2	x	1,500.00	= \$	3,000
4906XX	CIDH Concrete Piling (Insert Diameter)	LF	0	x	0.00	= \$	-
839XXX	Crash Cushion (Insert Type)	EA	0	x	0.00	= \$	-
83XXXX	Concrete Barrier (Insert Type)	LF	0	x	0.00	= \$	-
520103	Retaining Wall	SQFT	3,000	x	85.00	= \$	255,000
510060	Structural Concrete, Retaining Wall	CY	0	x	0.00	= \$	-
513553	Retaining Wall (Masonry Wall)	SQFT	0	x	0.00	= \$	-
511035	Architectural Treatment	SQFT	0	x	0.00	= \$	-
598001	Anti-Graffiti Coating	SQFT	0	x	0.00	= \$	-
203070	Rock Stain	SQFT	0	x	0.00	= \$	-
5136XX	Reinforced Concrete Crib Wall (Type X)	SQFT	0	x	0.00	= \$	-
83954X	Transition Railing (Type X)	EA	0	x	0.00	= \$	-
597601	Prepare and Stain Concrete	SQFT	0	x	0.00	= \$	-
839561	Rail Tensioning Assembly	EA	0	x	0.00	= \$	-
83958X	End Anchor Assembly (Type X)	EA	0	x	0.00	= \$	-

<b>TOTAL SPECIALTY ITEMS</b>	<b>\$</b>	<b>285,500</b>
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**SECTION 5: ENVIRONMENTAL**

**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
	LS	0	x	0.00	= \$	-
130670	Temporary Reinforced Silt Fence	0	x	0.00	= \$	-
141000	Temporary Fence (Type ESA)	1,000	x	10.00	= \$	10,000
<i>Subtotal Environmental Mitigation</i>						<b>\$ 10,000</b>

**5B - LANDSCAPE AND IRRIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
20XXXX	Highway Planting	1	x	80,000.00	= \$	80,000
20XXXX	Irrigation System	1	x	40,000.00	= \$	40,000
204099	Plant Establishment Work	1	x	30,000.00	= \$	30,000
204101	Extend Plant Establishment Work	0	x	0.00	= \$	-
20XXXX	Follow-up Landscape Project	0	x	0.00	= \$	-
150685	Remove Irrigation Facility	0	x	0.00	= \$	-
20XXXX	Maintain Existing (Irrigation or Planted Areas)	0	x	0.00	= \$	-
206400	Check and Test Existing Irrigation Facilities	0	x	0.00	= \$	-
21011X	Imported Topsoil (X)	0	x	0.00	= \$	-
20XXXX	Rock Blanket, Rock Mulch, DG, Gravel Mulch	0	x	0.00	= \$	-
200122	Weed Germination	0	x	0.00	= \$	-
208304	Water Meter	0	x	0.00	= \$	-
2087XX	XX" Conduit (Use for Irrigation x-overs)	0	x	0.00	= \$	-
20890X	Extend X" Conduit (Use for Extension of Irrigation)	0	x	0.00	= \$	-
<i>Subtotal Landscape and Irrigation</i>						<b>\$ 150,000</b>

**5C - EROSION CONTROL**

Item code	Unit	Quantity		Unit Price (\$)		Cost
210010	Move In/Move Out (Erosion Control)	2	x	1,000.00	= \$	2,000
210350	Fiber Rolls	1,000	x	10.00	= \$	10,000
210360	Compost Sock	0	x	0.00	= \$	-
2102XX	Rolled Erosion Control Product (X)	0	x	0.00	= \$	-
21025X	Bonded Fiber Matrix	0	x	0.00	= \$	-
210300	Hydromulch	0	x	0.00	= \$	-
210420	Straw	0	x	0.00	= \$	-
210430	Hydroseed	6,000	x	0.25	= \$	1,500
210600	Compost	6,000	x	2.00	= \$	12,000
210630	Incorporate Materials	0	x	0.00	= \$	-
<i>Subtotal Erosion Control</i>						<b>\$ 25,500</b>

**5D - NPDES**

Item code	Unit	Quantity		Unit Price (\$)		Cost
130300	Prepare SWPPP	1	x	4,000.00	= \$	4,000
130200	Prepare WPCP	0	x	0.00	= \$	-
130100	Job Site Management	1	x	15,000.00	= \$	15,000
130330	Storm Water Annual Report	1	x	1,000.00	= \$	1,000
130310	Rain Event Action Plan (REAP)	20	x	100.00	= \$	2,000
130320	Storm Water Sampling and Analysis Day	20	x	400.00	= \$	8,000
130520	Temporary Hydraulic Mulch	0	x	0.00	= \$	-
130550	Temporary Hydroseed	0	x	0.00	= \$	-
130505	Move-In/Move-Out (Temporary Erosion Control)	2	x	1,000.00	= \$	2,000
130640	Temporary Fiber Roll	1,500	x	5.00	= \$	7,500
130900	Temporary Concrete Washout	1	x	2,000.00	= \$	2,000
130710	Temporary Construction Entrance	0	x	0.00	= \$	-
130610	Temporary Check Dam	0	x	0.00	= \$	-
130620	Temporary Drainage Inlet Protection	8	x	150.00	= \$	1,200
130730	Street Sweeping	1	x	30,000.00	= \$	30,000
<i>Subtotal NPDES</i>						<b>\$ 72,700</b>

<b>TOTAL ENVIRONMENTAL</b>	<b>\$ 258,200</b>
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**Supplemental Work for NPDES**

066595	Water Pollution Control Maintenance Sharing*	1	x	2,500.00	= \$	2,500
066596	Additional Water Pollution Control**	1	x	2,500.00	= \$	2,500
066597	Storm Water Sampling and Analysis***	1	x	2,500.00	= \$	2,500
<i>Subtotal Supplemental Work for NDPS</i>						<b>\$ 7,500</b>

\*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

\*\*Applies to both SWPPPs and WPCP projects.

\*\*\* Applies only to project with SWPPPs.

**SECTION 6: TRAFFIC ITEMS**

**6A - Traffic Electrical**

Item code	Unit	Quantity		Unit Price (\$)	=	Cost
860460	Lighting and Sign Illumination	LS	1	x	220,000.00	= \$ 220,000
860201	Signal and Lighting	LS	0	x	0.00	= \$ -
860990	Closed Circuit Television System	LS	0	x	0.00	= \$ -
86110X	Ramp Metering System (Location X)	LS	0	x	0.00	= \$ -
86070X	Interconnection Conduit and Cable	LF/LS	0	x	0.00	= \$ -
5602XX	Furnish Sign Structure (Type X)	LB	0	x	0.00	= \$ -
5602XX	Install Sign Structure (Type X)	LB	0	x	0.00	= \$ -
498040	XX" CIDHC Pile (Sign Foundation)	LF	0	x	0.00	= \$ -
86080X	Inductive Loop Detectors	EA/LS	0	x	0.00	= \$ -
8609XX	Traffic Monitoring Station (Type X)	LS	0	x	0.00	= \$ -
15075X	Remove Sign Structure	EA/LS	0	x	0.00	= \$ -
151581	Reconstruct Sign Structure	EA	0	x	0.00	= \$ -
152641	Modify Sign Structure	EA	0	x	0.00	= \$ -
860090	Maintain Existing Traffic Management System Eler	LS	0	x	0.00	= \$ -
86XXXX	Fiber Optic Conduit System	LS	0	x	0.00	= \$ -
<b>Subtotal Traffic Electrical</b>						<b>\$ 220,000</b>

**6B - Traffic Signing and Striping**

Item code	Unit	Quantity		Unit Price (\$)	=	Cost
566011	Roadside Sign - One Post	EA	30	x	350.00	= \$ 10,500
566012	Roadside Sign - Two Post	EA	6	x	500.00	= \$ 3,000
5602XX	Furnish Sign	SQFT	400	x	15.00	= \$ 6,000
568016	Install Sign Panel on Existing Frame	SQFT	0	x	0.00	= \$ -
150711	Remove Painted Traffic Stripe	LF	0	x	0.00	= \$ -
141101	Remove Existing Painted Traffic Stripe (Hazardous Waste)	LF	0	x	0.00	= \$ -
150712	Remove Painted Pavement Marking	SQFT	0	x	0.00	= \$ -
150742	Remove Roadside Sign	EA	6	x	150.00	= \$ 900
152320	Reset Roadside Sign	EA	0	x	0.00	= \$ -
152390	Relocate Roadside Sign	EA	0	x	0.00	= \$ -
82010X	Delineator (Class X)	EA	0	x	0.00	= \$ -
840502	Thermoplastic Traffic Stripe (Enhanced Wet Night	LF	0	x	0.00	= \$ -
846012	Thermoplastic Crosswalk and Pavement Marking (	SQFT	0	x	0.00	= \$ -
120090	Construction Area Signs	LS	1	x	25,000.00	= \$ 25,000
84XXXX	Permanent Pavement Delineation	LS	1	x	20,000.00	= \$ 20,000
<b>Subtotal Traffic Signing and Striping</b>						<b>\$ 65,400</b>

**6C - Traffic Management Plan**

Item code	Unit	Quantity		Unit Price (\$)	=	Cost
12865X	Portable Changeable Message Signs	LS	1	x	\$ 20,000	= \$ 20,000
<b>Subtotal Traffic Management Plan</b>						<b>\$ 20,000</b>

**6C - Stage Construction and Traffic Handling**

Item code	Unit	Quantity		Unit Price (\$)	=	Cost
120199	Traffic Plastic Drum	EA	0	x	0.00	= \$ -
12016X	Channelizer (Type X)	EA	300	x	35.00	= \$ 10,500
120120	Type III Barricade	EA	15	x	50.00	= \$ 750
129100	Temporary Crash Cushion Module	EA	0	x	0.00	= \$ -
120100	Traffic Control System	LS	1	x	80,000.00	= \$ 80,000
129110	Temporary Crash Cushion	EA	8	x	2,500.00	= \$ 20,000
129000	Temporary Railing (Type K)	LF	4,000	x	20.00	= \$ 80,000
120149	Temporary Pavement Marking (Paint)	SQFT	1,450	x	3.00	= \$ 4,350
82010X	Delineator (Class X)	EA	0	x	0.00	= \$ -
<b>Subtotal Stage Construction and Traffic Handling</b>						<b>\$ 195,600</b>

<b>TOTAL TRAFFIC ITEMS</b>	<b>\$ 501,000</b>
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**SECTION 7: DETOURS**

Includes constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
190101 Roadway Excavation	CY	0	x 0.00 = \$	-
19801X Imported Borrow	CY/TON	0	x 0.00 = \$	-
390132 Hot Mix Asphalt (Type A)	TON	0	x 0.00 = \$	-
26020X Class 2 Aggregate Base	TON/CY	0	x 0.00 = \$	-
250401 Class 4 Aggregate Subbase	CY	0	x 0.00 = \$	-
130620 Temporary Drainage Inlet Protection	EA	0	x 0.00 = \$	-
129000 Temporary Railing (Type K)	LF	0	x 0.00 = \$	-
128601 Temporary Signal System	LS	0	x 0.00 = \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	0	x 0.00 = \$	-
80010X Temporary Fence (Type X)	LF	0	x 0.00 = \$	-
XXXXXX Some Item	Unit	0	x 0.00 = \$	-
<b>TOTAL DETOURS</b>				<b>\$ -</b>

SUBTOTAL SECTIONS 1 through 7    \$    2,732,300

**SECTION 8: MINOR ITEMS**

<b>8A - Americans with Disabilities Act Items</b>				
ADA Items			2.0%	\$ 54,646
<b>8B - Bike Path Items</b>				
Bike Path Items			0.0%	\$ -
<b>8C - Other Minor Items</b>				
Other Minor Items			3.0%	\$ 81,969
Total of Section 1-7	\$ 2,732,300	x	5.0%	= \$ 136,615
<b>TOTAL MINOR ITEMS</b>				<b>\$ 136,700</b>

**SECTIONS 9: MOBILIZATION**

Item code				
999990	Total Section 1-8	\$ 2,869,000	x 10%	= \$ 286,900
<b>TOTAL MOBILIZATION</b>				<b>\$ 286,900</b>

**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost
066670 Payment Adjustments For Price Index Fluctuations	LS	1	x 7,000.00 = \$	7,000
066094 Value Analysis	LS	0	x 0.00 = \$	-
066070 Maintain Traffic	LS	1	x 120,000.00 = \$	120,000
066919 Dispute Resolution Board	LS	1	x 7,500.00 = \$	7,500
066921 Dispute Resolution Advisor	LS	1	x 5,000.00 = \$	5,000
066015 Federal Trainee Program	LS	0	x 0.00 = \$	-
066610 Partnering	LS	1	x 20,000.00 = \$	20,000
066204 Remove Rock and Debris	LS	0	x 0.00 = \$	-
066222 Locate Existing Crossover	LS	0	x 0.00 = \$	-
XXXXXX Some Item	Unit		x = \$	-
<i>Cost of NPDES Supplemental Work specified in Section 5D</i>				<i>= \$ 7,500</i>
Total Section 1-8	\$ 2,869,000		= \$	-
<b>TOTAL SUPPLEMENTAL WORK</b>				<b>\$ 167,000</b>

**SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES**

Item code		Unit	Quantity		Unit Price (\$)	=	Cost
066105	Resident Engineers Office	LS	1	x	25,000.00	=	\$25,000
066063	Traffic Management Plan - Public Information	LS	1	x	15,000.00	=	\$15,000
066901	Water Expenses	LS	1	x	10,000.00	=	\$10,000
8609XX	Traffic Monitoring Station (X)	LS	0	x	0.00	=	\$0
066841	Traffic Controller Assembly	LS	0	x	0.00	=	\$0
066840	Traffic Signal Controller Assembly	LS	0	x	0.00	=	\$0
066062	COZEEP Contract	LS	1	x	60,000.00	=	\$60,000
066838	Reflective Numbers and Edge Sealer	LS	0	x	0.00	=	\$0
066065	Tow Truck Service Patrol	LS	0	x	0.00	=	\$0
066916	Annual Construction General Permit Fee	LS	1	x	500.00	=	\$500
Total Section 1-8			\$ 2,869,000			= \$	-
<b>TOTAL STATE FURNISHED</b>							<b>\$110,500</b>

**SECTION 12: TIME-RELATED OVERHEAD**

Total of Roadway and Structures Contract Items excluding Mobilization \$2,869,000 (used to calculate TRO)  
 Total Construction Cost (excluding TRO and Contingency) \$3,433,400 (used to check if project is greater than \$5 million excluding contingency)

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **10%**

Item code		Unit	Quantity		Unit Price (\$)	=	Cost
070018	Time-Related Overhead	WD	140	X	\$0	=	\$0
<b>TOTAL TIME-RELATED OVERHEAD</b>							<b>\$286,900</b>

Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

**SECTION 13: ROADWAY CONTINGENCY**

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-12	\$	3,720,300	x	20%	=	\$744,060	
<b>TOTAL CONTINGENCY</b>							<b>\$744,100</b>

## II. STRUCTURE ITEMS

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$0		\$0		\$0
<b>COST OF EACH</b>	<b>\$0</b>		<b>\$0</b>		<b>\$0</b>

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100		\$0		\$0
<b>COST OF EACH</b>	<b>\$0</b>		<b>\$0</b>		<b>\$0</b>

<b>TOTAL COST OF BRIDGES</b>	<b>\$0</b>
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<b>TOTAL COST OF BUILDINGS</b>	<b>\$0</b>
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Structures Mobilization Percentage	10%	<b>\$0</b>
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	10%	<b>\$0</b>
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<b>TOTAL COST OF STRUCTURES</b>	<b>\$0</b>
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Estimate Prepared By: \_\_\_\_\_  
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

\_\_\_\_\_ Date

### III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	125,000
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	0
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements	\$	0
		_____ 0%		
J)		Design Appreciation Factor	\$	0
		_____ 0%		
K)		Utility Relocation (Construction Cost)	\$	0

L) 

<b>TOTAL RIGHT OF WAY ESTIMATE</b>	<b>\$125,000</b>
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M) 

<b>TOTAL R/W ESTIMATE: Escalated</b>	<b>\$135,000</b>
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N) 

<b>RIGHT OF WAY SUPPORT</b>	<b>\$60,000</b>
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Support Cost Estimate Prepared By \_\_\_\_\_  
Project Coordinator<sup>1</sup> Phone \_\_\_\_\_

Utility Estimate Prepared By \_\_\_\_\_  
Utility Coordinator<sup>2</sup> Phone \_\_\_\_\_

R/W Acquisition Estimate Prepared By \_\_\_\_\_  
Right of Way Estimator<sup>3</sup> Phone \_\_\_\_\_

Note: Items G & H applied to items A + B

<sup>1</sup> When estimate has Support Costs only

<sup>2</sup> When estimate has Utility Relocation

<sup>3</sup> When R/W Acquisition is required

### IV. SUPPORT COST ESTIMATE SUMMARY

Note: Use PRSM project data.

Total by FY		Escalated Support Cost for Estimate To Completion (ETC)				Total \$
		PA&ED	PS&E	RW	CON	
<b>&lt; 2010</b>	Expended					
	ETC					
<b>2011</b>	Expended					
	ETC					
<b>2012</b>	Expended					
	ETC					
<b>2013</b>	Expended					
	ETC					
<b>2014</b>	Expended					
	ETC					
<b>2015</b>	Expended					
	ETC					
<b>2016</b>	Expended					
	ETC					
<b>2017</b>	Expended					
	ETC					
<b>2018</b>	Expended					
	ETC					
<b>2019</b>	Expended					
	ETC					
<b>2020</b>	Expended					
	ETC					
<b>2021</b>	Expended					
	ETC					
<b>2022</b>	Expended					
	ETC					
<b>2023</b>	Expended					
	ETC					
<b>2024</b>	Expended					
	ETC					
<b>2025 &gt;</b>	Expended					
	ETC					
<b>EAC (Expended + ETC)</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Approved Budget (PRSM)</b>						
<b>Difference (Budget - EAC)</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Support Ratio (EAC / Cap Cost)</b>		<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>

<b>Total Capital Cost:</b>	<b>\$4,590,000</b>
<b>Total Capital Outlay Support Cost:</b>	<b>\$0</b>
<b>Overall Percent Support Cost:</b>	<b>0.00%</b>

PRSM workplan hours/costs verified against approved MWA:

\_\_\_\_\_ Date

Office Chief -

Approved by: \_\_\_\_\_ Date

Project Control -

## **APPENDIX F – COLLISION COST ANALYSIS**



### Intersection Control Evaluation Collision Cost Analysis and B/C

-- Fill in tan boxes along with 'Area' --

<b>County</b>	<b>Rte</b>	<b>Postmile</b>	<b>Location Description</b>		
Butte	99		Eaton Rd/NB Ramps/Hicks Ln		
<b>Existing Condition</b>			<b># of Years for Analysis</b>	<b>Rate Group</b>	
All Way Stop, Type F, M or S			20	18	
<b>Existing ADT (x1000)</b>		<b>Future ADT (x1000)</b>			
<b>Mainline</b>	<b>Cross St</b>	<b>Mainline</b>	<b>Cross St</b>	<b>Average ADT</b>	<b>VCF</b>
9.0	18.5	14.7	25.7	33.9	1.24

**Area**

Rural

Suburban

Urban

**Intersection Types:**

F - Four-Legged

M - Multi-Legged

S - Offset-Tee

Y - "Y" Wye

<b>Est. Capital Cost (x1000) for Desired Improvement</b>				<b>Existing Collision Data</b>			
<b>Desired Improvement</b>	<b>Const</b>	<b>R/W</b>	<b>Total</b>	<b>Number of Years</b>	5	<b>Total Collisions</b>	26
Yield Control (Roundabout 1-Lane)			\$ -	<b>Injury</b>	5	<b>PDO</b>	20
Yield Control (Roundabout 2-Lane)			\$ -	<b>Fatal</b>	1	<b>Fat + Inj</b>	6
Traffic Signal, Type F, M or S			\$ -				
All Way Stop, Type F, M or S		\$ -	\$ -				

	<b>Collision Cost (x1000)</b>					<b>B/C</b>
	<b>Existing Condition</b>	<b>Desired Improvement</b>		<b>Projected Savings</b>		
<b>1</b>	All Way Stop, Type F, M or S	\$22,072	Yield Control (Roundabout 1-Lane)	\$2,419	\$19,653	0.00
<b>2</b>	All Way Stop, Type F, M or S	\$22,072	Yield Control (Roundabout 2-Lane)	\$6,093	\$15,979	0.00
<b>3</b>	All Way Stop, Type F, M or S	\$22,072	Traffic Signal, Type F, M or S	\$12,837	\$9,235	0.00
<b>4</b>	All Way Stop, Type F, M or S	\$22,072	All Way Stop, Type F, M or S	\$10,594	\$11,478	0.00

v1.00

**NOTE: Only average collision costs are used for calculation purposes.**

**APPENDIX G – CALTRANS ROUNDABOUT SUPPORT  
LETTER**

**DEPARTMENT OF TRANSPORTATION**  
**DISTRICT 3**  
703 B STREET  
MARYSVILLE, CA 95901  
PHONE (530) 741-4233  
FAX (530) 741-4245  
TTY 711  
www.dot.ca.gov/dist3

**RECEIVED**

AUG 01 2016

CITY OF CHICO  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

*Serious Drought.  
Serious drought.  
Help save water!*

July 26, 2016

Mr. Martin Villanueva  
Division of Local Assistance  
CA Department of Transportation – District 3  
703 B Street  
Marysville, CA 95901

Dear Mr. Villanueva:

This letter is in support of the City of Chico's HSIP Cycle 8 funding application that proposes improvements at the Eaton Road interchange on State Route 99 in Chico. The project proposes to build roundabouts at the ramp intersections.

Intersection improvements at the Eaton Road interchange are necessary to improve the local and regional transportation system. Hicks Lane is very close to the northbound ramp intersection and presents a challenge trying to signalize the intersection. A roundabout can reduce existing congestion, improve traffic operations and accommodate anticipated travel demand.

Caltrans supports roundabouts at this interchange. The City of Chico has provided the appropriate analysis to show that the roundabouts will operate acceptably. Caltrans looks forward to continue working with the City on this worthwhile project.

Sincerely,

A handwritten signature in blue ink that reads "M. Parkinson".

*for* RICK MONTRE  
Chief, Rural Highway Operations