ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT

SR 49 Multimodal Corridor Improvements, Nevada City

Resolution ATP-P-2526-13B

(to be completed by CTC)

1. FUNDING PROGRAM

- ☑ Active Transportation Program
- ☐ Local Partnership Program (Competitive)
- ☐ Solutions for Congested Corridors Program
- ☐ State Highway Operation and Protection Program
- ☐ Trade Corridor Enhancement Program

2. PARTIES AND DATE

2.1 This Project Baseline Agreement (Agreement) effective on 05/14/2026 (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, Nevada County Transportation Commission, and the Implementing Agency, California Department of Transportation, sometimes collectively referred to as the "Parties".

3. RECITAL

3.1 Whereas at its 12/7/2022 meeting the Commission approved the Active Transportation Program and included in this program of projects the SR 49 Multimodal Corridor Improvements, Nevada City, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as ***Exhibit A***, the Project Report attached hereto as ***Exhibit B***, the Performance Metrics Form, if applicable, attached hereto as ***Exhibit C***, as the baseline for project monitoring by the Commission.

3.2 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.

4.2 To adhere, as applicable, to the provisions of the Commission:

- ■ Resolution G-22-70, "Adoption of Program of Projects for the Active Transportation Program", dated 12/7/2022
- ☐ Resolution ______, "Adoption of Program of Projects for the Local Partnership Program", dated ______
- ☐ Resolution ______, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated ______
- ☐ Resolution ______, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated ______
- ☐ Resolution ______, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated ______

4.3 All signatories agree to adhere to the Commission's Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.

4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.

4.5 Nevada County Transportation Commission agrees to secure funds for any additional costs of the project.

4.6 California Department of Transportation agrees to report to Caltrans on a quarterly basis; on the progress made toward the implementation of the project, including scope, cost, schedule, and anticipated benefits/performance metric outcomes.

4.7 Caltrans agrees to prepare program progress reports on a on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.

4.8 California Department of Transportation agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.

4.9 Nevada County Transportation Commission agrees to submit a timely Project Performance Analysis as specified in the Commission's SB 1 Accountability and Transparency Guidelines.

4.10 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits and performance metric outcomes during the course of the project, and retain those records for six years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.

4.11 The Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for six years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

5.1 Project Schedule and Cost
See Project Programming Request Form, attached as Exhibit A.

5.2 Project Scope
See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.

5.3 Performance Metrics
See Performance Metrics Form, if applicable, attached as Exhibit C.

5.4 Additional Provisions and Conditions *(Please attach an additional page if additional space is needed.)*

Attachments:

Exhibit A: Project Programming Request Form
Exhibit B: Project Report
Exhibit C: Performance Metrics Form *(if applicable)*

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

Project Name: SR 49 Multimodal Corridor Improvements, Nevada City

Resolution: ATP-P-2526-13B

(to be completed by CTC)

Digitally signed by Mike Woodman
Date: 2026.03.20 08:28:37 -07'00'

3/26/2026
Date

Mke Woodman, Executive Director

Nevada County Transportation Commission

Project Applicant

Sergio Aceves (Mar 27, 2026 11:47:21 PDT)

03/27/2026
Date

Sergio Aceves, District Director

California Department of Transportation

Implementing Agency

Sergio Aceves (Mar 27, 2026 11:47:21 PDT)

03/27/2026
Date

Sergio Aceves

District Director
California Department of Transportation

Cory Binns (May 19, 2026 18:09:49 PDT)

05/19/2026
Date

FOR Dina El-Tawansy

Director
California Department of Transportation

06/09/2026
Date

Tanisha Taylor

Executive Director
California Transportation Commission

2365 - Baseline Agreement

Final Audit Report 2026-03-27

Created:	2026-03-27
By:	Trinity Russell (s157467@dot.ca.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAArTO2NBOsl-bmE6-pZONm-2pWg-BhhZsY

"2365 - Baseline Agreement" History

Document created by Trinity Russell (s157467@dot.ca.gov)
2026-03-27 - 6:29:31 PM GMT- IP address: 149.136.17.249

Document emailed to Sergio Aceves (sergio.aceves@dot.ca.gov) for signature
2026-03-27 - 6:32:09 PM GMT

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2026-03-27 - 6:32:30 PM GMT- IP address: 149.136.17.247

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Agreement completed.
2026-03-27 - 6:47:21 PM GMT

Baseline Agreement Fact Sheet

<table>
<tr><td>Project Title:</td><td>SR 49 Multimodal Corridor Improvements, Nevada City</td></tr>
<tr><td>Location:</td><td>Located in Nevada County and Nevada City on State Route 49 from the Nevada County Juvenile Hall driveway, past the Eric Rood Government Center (Government Center) to SR 20.</td></tr>
<tr><td>Work Description:</td><td>Install RRFBs, enhanced crossings with refuge islands, shared-use paths, sidewalk, lighting, addition of two roundabouts, reconfiguration of one intersection.</td></tr>
<tr><td>On-System Location</td><td><table><tr><th>County</th><th>Route/Corridor</th><th>PM Bk</th><th>PM Ahd</th></tr><tr><td>NEV</td><td>49</td><td>15.07</td><td>16.10</td></tr></table></td></tr>
<tr><td>Project Cost:</td><td>$17,357,000 (Total ATP Request: $13,863,000)</td></tr>
<tr><td>Performance Measure:</td><td><table><tr><th rowspan="2">ATP Indicator</th><th rowspan="2">Measures/Outcomes</th><th rowspan="2">Unit</th><th rowspan="2">Current</th><th colspan="2">Projected</th></tr><tr><th>Outcome</th><th>Year</th></tr><tr><td rowspan="2">Counts</td><td>Bicycle Counts</td><td>Each</td><td>54</td><td>65</td><td>2029</td></tr><tr><td>Pedestrian Counts</td><td>Each</td><td>150</td><td>199</td><td>2029</td></tr></table>
Spanning SR 49 between the intersections of SR 20/SR 49 and the County Juvenile Hall driveway/SR 49, this project will result in safe connectivity along a high-stress corridor by implementing new shared-use paths, sidewalks, enhanced crossings, and four intersection improvements, allowing active users to travel along and across the SR 49 corridor safely and comfortably while accessing destinations.
Bicycle and Pedestrian counts were obtained from the Nevada City SR 49 Multimodal Corridor Plan, 2019. Mio vision cameras were set up at six intersections in the project corridor and captured bicyclists and pedestrians over an eight-hour period midweek in October 2019. The projected bicycle and pedestrian use were estimated based on the anticipated change in commute biking and walking mode share documented in the Nevada County Active Transportation Plan, 2019. The Nevada County ATP estimated that with the full implementation of the plan, biking to work would increase by 4.5% and walking to work would increase by 2.0%. However, US Census data on commute mode share to work by walking decreased from 3.3% in 2010 to 1.9% in 2021, a 73% reduction. The bike to work mode-share remained flat at 0.5%. Therefore, the projected additional biking trips were projected using the ATP percentage of 4.5%, while the projected additional walking trips were projected by decreasing the ATP percent change factored down by the US Census Bureau reduction in walk to work trips. The 2045 Nevada County Regional Transportation Plan financial constraints analysis estimates that $142 million of the total $294 million projected ATP needs could reasonably be constructed by 2045. </td></tr>
</table>

Notes:

Category	Outputs	Unit	Total
Active Transportation	Pedestrian/Bicycle facilities miles constructed	Feet	7,117
Active Transportation	Crosswalk	EA	14
Active Transportation	Lighting	EA	30
Active Transportation	Crossing-Surface Improvements	EA	15
Active Transportation	Roundabout	EA	2

CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION DETERMINATION FORM (rev. 06/2022)

Project Information

Project Name (if applicable): NEV-49 Multimodal Corridor Project

DIST-CO-RTE: 03-NEV-049 **PM/PM:** 15.07/16.10

EA: 03-0N780 **Federal-Aid Project Number:** N/A

Project Description:

Nevada County Transportation Commission (NCTC) in coordination with Caltrans propose to address mobility and safety concerns along State Route (SR) 49 from the SR 20/SR 49 junction to the Nevada County Juvenile Hall by implementing new multi-use paths, sidewalks, enhanced crossings, and intersections improvements. This project is necessary to address transportation needs and improve accessibility and safety along SR 49. This SR 49 corridor lacks continuous bicycle and pedestrian infrastructure as well as safe crossing locations, limiting the ability of residents to safely access the Government Center, recreation destinations, and the commercial areas in Nevada City. The project will establish connectivity to destinations between residential, municipal and recreational areas and connect to existing and future pedestrian/bicycle facilities.

Caltrans CEQA Determination (Check one)

☐ **Not Applicable** – Caltrans is not the CEQA Lead Agency

☐ **Not Applicable** – Caltrans has prepared an IS or EIR under CEQA

Based on an examination of this proposal and supporting information, the project is:

☐ **Exempt by Statute.** (PRC 21080[b]; 14 CCR 15260 et seq.)

☒ **Categorically Exempt. Class** 1. (PRC 21084; 14 CCR 15300 et seq.)

☐ No exceptions apply that would bar the use of a categorical exemption (PRC 21084 and 14 CCR 15300.2). See the SER Chapter 34 for exceptions.

☐ **Covered by the Common Sense Exemption**. This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (14 CCR 15061[b][3].)

Senior Environmental Planner or Environmental Branch Chief

Mundeep Purewal	Mundeep Purewal	3/19/26
Print Name	Signature	Date

Project Manager

Sam Vandell	Sam Vandell	3/19/26
Print Name	Signature	Date

CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION DETERMINATION FORM

Caltrans NEPA Determination (Check one)

☐ **Not Applicable**

Caltrans has determined that this project has no significant impacts on the environment as defined by NEPA, and that there are no unusual circumstances as described in 23 CFR 771.117(b). See SER Chapter 30 for unusual circumstances. As such, the project is categorically excluded from the requirements to prepare an EA or EIS under NEPA and is included under the following:

☒ **23 USC 326:** Caltrans has been assigned, and hereby certifies that it has carried out the responsibility to make this determination pursuant to 23 USC 326 and the Memorandum of Understanding dated April 18, 2022, executed between FHWA and Caltrans. Caltrans has determined that the project is a Categorical Exclusion under:

- ☒ **23 CFR 771.117(c): activity (c)(26)**
- ☐ **23 CFR 771.117(d): activity (d)(Enter activity number)**
- ☐ **Activity Enter activity number listed in Appendix A of the MOU between FHWA and Caltrans**

☐ **23 USC 327:** Based on an examination of this proposal and supporting information, Caltrans has determined that the project is a Categorical Exclusion under 23 USC 327. The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated May 27, 2022, and executed by FHWA and Caltrans.

Senior Environmental Planner or Environmental Branch Chief

Mundeep Purewal	Mundeep Purewal	3/19/26
Print Name	Signature	Date

Project Manager/ DLA Engineer

Sam Vandell	Sam Vandell	3/19/26
Print Name	Signature	Date

Date of Categorical Exclusion Checklist completion (if applicable): 3/19/26
Date of Environmental Commitment Record or equivalent: 3/19/26

Briefly list environmental commitments on continuation sheet if needed (i.e., not necessary if included on an attached ECR). Reference additional information, as appropriate (e.g., additional studies and design conditions).

EA: 03-0N780
Federal-Aid Project Number: N/A

Continuation sheet:

Project scope includes:

- One roundabout:
  - SR 49/Cement Hill Road/West Broad Street
- Intersection Improvements:
  - SR 49/Coyote Street: Add new lighting, 2 high-visibility crosswalks, and Rectangular Rapid Flashing Beacons (RRFBs) on SR 49 in both directions, and Americans with Disabilities Act (ADA) compliant curb ramps.
  - North Bloomfield Road/East Broad Street: Add 4 new high-visibility crosswalk pavement markings and new ADA compliant curb ramps.
  - Maidu Ave/Orchard Street: Add new lighting, 2 high-visibility crosswalks, and Rectangular Rapid Flashing Beacons (RRFBs) on SR 49 in both directions, and ADA compliant curb ramps.
  - Cement Hill Road/West Broad Street: Single-lane roundabout, new lighting, sidewalks along the roundabout perimeter, and high-visibility crosswalks with median refuge islands at each intersection leg.
- Sidewalks:
  - Sidewalk along Cement Hill Road from Cement Hill Road/West Broad Street northeast corner of the intersection to Hirschman's Trail.
  - Sidewalks around the roundabout perimeter.
- Multi-use paths:
  - Multi-use path on the north side of SR 49 starts from about 200 feet west of SR 20/49 junction to Cement Hill Road, passing through both North Bloomfield Road and Maidu Avenue.
  - Multi-use path on the south side of SR 49 starts from Chief Kelly Drive to Juvenile Hall driveway.

<u>Staging/Right-of-Way</u>

Two temporary construction easements (TCEs) will be needed along with one parcel acquisition.

<u>Disposal/Borrow</u>

No disposal/borrow will be required.

Consultation/Coordination

N/A

Permits

1600 (California Department of Fish and Wildlife), 401(Reginal Water Quality Control Board) and 404 (United States Army Corps of Engineers) permits will be required.

Utilities

The project will require some utility relocations. Based on the mapping and information provided, the following utility facilities exist and may be impacted:

- AT&T (Overhead/Underground)
- California Water Service (CWS)
- Comcast (Overhead/Underground)
- PG&E – Electric (Overhead)
- PG&E – Gas (Underground)
- City of Nevada City – Sewer
- Nevada Irrigation District – Water

Active Transportation Program
Benefits Form

Project Information		
Project Title:	SR 49 Multimodal Corridor Improvements, Nevada City	Date: 3/19/2026
Project Identifier (EA, PPNO, etc):	0N780, 6128A	

Contact Information			
Nominating Agency: Nevada County Transportation Planning Agency		Agency Completing Form:	Caltrans District 3
Contact Person: Mike Woodman	Phone: 530-265-3202	Contact Person: Sam Vandell	Phone: 530-682-6478
Email Address: mwoodman@nccn.net		Email Address: Sam.Vandell@dot.ca.gov	

ATP Indicator	Measures/Outcomes	Unit	Current	Projected	
				Outcome	Year
Counts	Bicycle Counts	Each	54	65	2029
	Pedestrian Counts	Each	150	199	2029

In the space below, qualitatively explain the assumptions and methodologies used for the proposed outcomes.

Bicycle and Pedestrian counts were obtained from the Nevada City SR 49 Multimodal Corridor Plan, 2019. Miovision cameras were set up at six intersections in the project corridor and captured bicyclists and pedestrians over an eight hour period midweek in October 2019. The projected bicycle and pedestrian use was estimated based on the anticipated change in commute biking and walking mode share documented in the Nevada County Active Transportation Plan, 2019. The Nevada County ATP estimated that with the full implementation of the plan, biking to work would increase by 4.5% and walking to work would increase by 2.0%. However, US Census data on commute mode share to work by walking decreased from 3.3% in 2010 to 1.9% in 2021, a 73% reduction. The bike to work mode share remained flat at 0.5%. Therefore the projected additional biking trips were projected using the ATP percentage of 4.5%, while the projected additional walking trips were projected by decreasing the ATP percent change factored down by the US Census Bureau reduction in walk to work trips. The 2045 Nevada County Regional Transportation Plan financial constraints analysis estimates that $142 million of the total $294 million projected ATP needs could reasonably be constructed by 2045.

Project Report

For
Project Approval

In Nevada County and in the City of Nevada City on Route 49
From The Route 20/49 Junction (PM 15.07)
To Nevada County Juvenile Hall (PM 16.1)

I have reviewed the right-of-way information contained in this report and the right-of-way data sheet attached hereto, and find the data to be complete, current and accurate:

For: John Ballantyne, Chief, North Region Right of Way

APPROVAL RECOMMENDED:

Sam Vandell, Project Manager

PROJECT APPROVED:

Sergio Aceves (Mar 27, 2026 10:41:14 PDT)

Sergio E. Aceves, District 3 Director

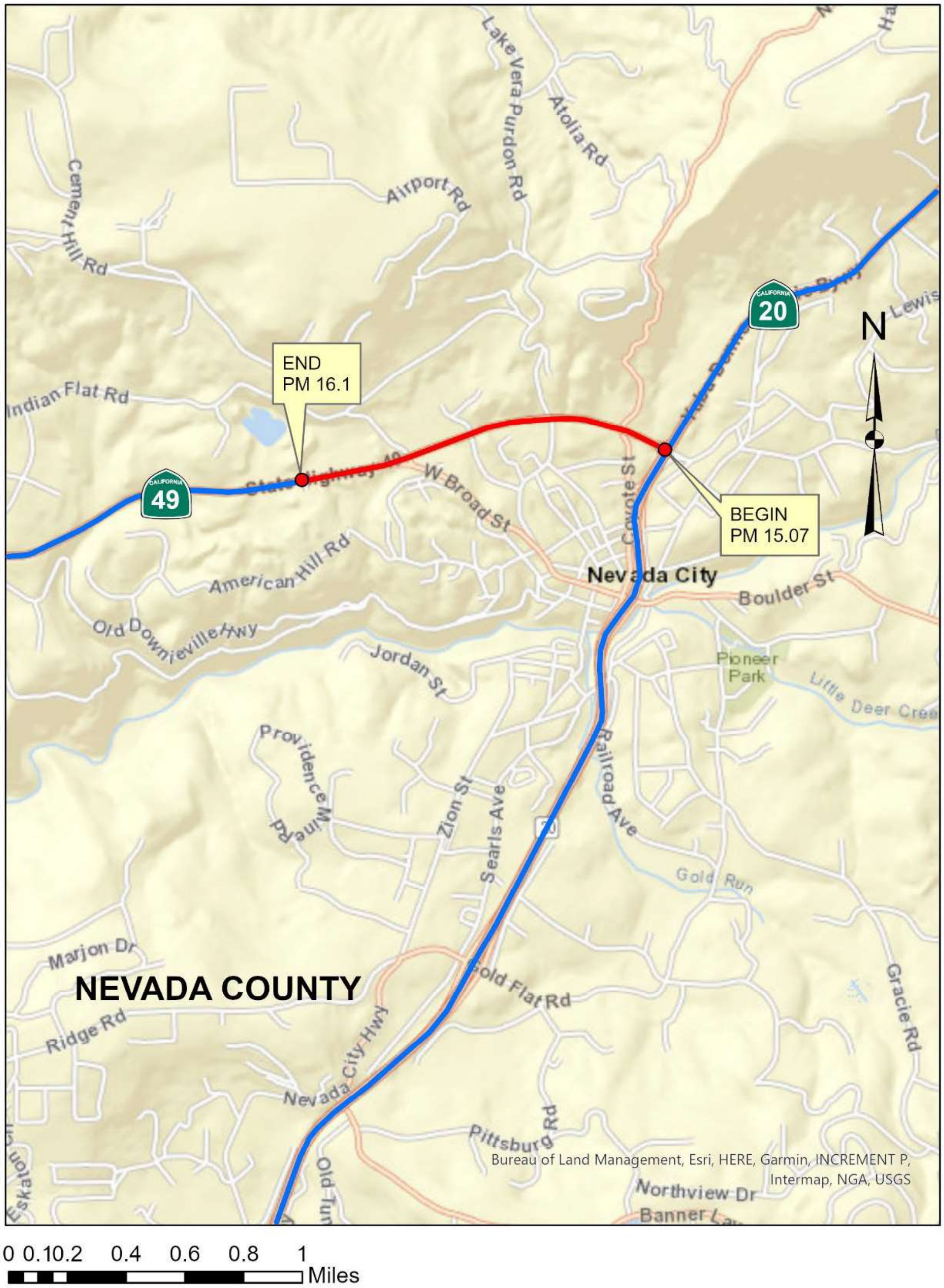
03/27/2026

Date

VICINITY MAP
NEVADA 49

NEV PM 15.07/16.1

EA 03-0N780



This project report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

R Scott Foster 03/19/2026

REGISTERED CIVIL ENGINEER *DATE*

Table of Contents

1. INTRODUCTION

Nevada County Transportation Commission (NCTC) in coordination with the California Department of Transportation (Caltrans) proposes to address mobility and safety concerns along State Route (SR) 49 from the SR 20/49 junction to the County Juvenile Hall. This corridor improvement project is identified as Nev-49 Multimodal Corridor Improvements Project. The project was initiated by NCTC and is proposed to be funded with a combination of Active Transportation Program (ATP) and Congestion Mitigation and Air Quality (CMAQ) funds.

Project Description:

The proposed project is located in Nevada County on SR 49 from the SR 49/20 junction, past the Eric Rood Administrative Center (Government Center) to the Nevada County Juvenile Hall. This project will improve pedestrian and bicycle mobility and result in safe connectivity along this corridor by implementing the following:

- Intersection Improvements:
  - SR 49/Coyote Street: Add new lighting, 2 high-visibility crosswalks, and Rectangular Rapid Flashing Beacons (RRFBs) on SR 49 in both directions, and ADA compliant curb ramps.
  - North Bloomfield Road/East Broad Street: Add 4 new high-visibility crosswalk pavement markings, and new ADA compliant curb ramps.
  - Maidu Ave/Orchard Street: Add new lighting, 2 high-visibility crosswalks, and Rectangular Rapid Flashing Beacons (RRFBs) on SR 49 in both directions, and ADA compliant curb ramps.
  - Cement Hill Road/West Broad Street: Single-lane roundabout, new lighting, sidewalks along the roundabout perimeter, and high-visibility crosswalks with median refuge islands at each intersection leg.
- Sidewalks:
  - Sidewalk along Cement Hill Road from Cement Hill Road/West Broad Street northeast corner of the intersection to Hirschman's Trail.
  - Sidewalks around the roundabout perimeter.
- Multi-use paths:
  - Multi-use path on the north side of SR 49 starts from about 200 feet west of SR 20/49 junction to Cement Hill Road, passing through both North Bloomfield Road and Maidu Avenue.
  - Multi-use path on the south side of SR 49 starts from Chief Kelly Drive to Juvenile Hall driveway.

See **Attachment A**, *Location Map*, **Attachment B**, *Typical Cross Section,* and **Attachment C**, *Layouts*, for more information.

The following table summarizes the key attributes of the proposed project.

Project Limits	03-Nev-49 PM 15.07/16.1	
Number of Alternatives	2 (Including No-Build)	
	Current Cost Estimate:	**Escalated Cost Estimate:**
Capital Outlay Support		$4,603,000
Capital Outlay Construction	$11,314,000	$12,073,000
Capital Outlay Right-of-Way	$439,900	$466,000
Funding Source	Active Transportation Program (ATP), Congestion Mitigation and Air Quality (CMAQ) Funds	
Funding Year	2026/2027	
Type of Facility	2-Lane Conventional Highway	
Number of Structures	0	
Environmental Determination or Document	CEQA – Categorical Exemption NEPA – Categorical Exclusion	
Legal Description	Nev-49 Multimodal Corridor Improvements, Nevada City. Install Roundabout, RRFBs, enhanced crossings with refuge islands, shared-use paths, sidewalk, and lighting.	
Project Development Category	Category 5	

2. RECOMMENDATION

It is recommended that this report be approved and the project move to the PS&E phase using the estimate and schedule for the preferred alternative.

3. BACKGROUND

SR 49 extends approximately 146 miles. The route begins at the Amador/El Dorado County line, traveling north in El Dorado County, traversing Placer, Nevada, Yuba and Sierra Counties, and ending at the Sierra/Plumas County line north of the City of Loyalton. A route break occurs in Nevada County at the junction of SR 20 and in Sierra County at the junction of SR 89. SR 49 provides access to towns and cities such as El Dorado, Diamond Springs, Placerville, Coloma, Auburn, Grass Valley, Nevada City, Downieville, Loyalton, and many communities in the Gold Country area. SR 49 intersects US 50 near Placerville, SR 193 in Placerville and Cool, I-80 in Auburn, SR 20 in Grass Valley, and Nevada City, and joins with SR 89 between Sierraville and Sattley.

The project segment acts as the gateway to the City of Nevada City and is a crucial connection for accessing important destinations such as municipals, recreational areas, communities, and residential neighborhoods. Residential land use is mostly concentrated south of SR 49. Project area destinations include Nevada County Madelyn Helling Library, Nevada County Jail/Juvenile Hall, the Rood Government Center, Sugar Loaf Trail/Open Space, Tobiassen Park, Hirschman's Pond/Trail, Elks

Lodge, Sierra Academy of Expeditionary Learning, transit stops, and churches. Further south toward Downtown Nevada City, travelers can access Nevada County Court and commercial areas.

Within the project limits, SR 49 is a two-lane conventional highway with 12-foot lanes, narrow shoulders, and left turn and right turn pockets at various intersections. The existing posted speed limit ranges from 45 mph to 55 mph. There are no sidewalks or bicycle facilities along either side of SR 49.

Projects in the Area

Caltrans (EA 03-4J890) "Nev-49 Vision Zero Shoulder Widening" in Nevada County near Nevada City, from 0.4 mile north of Old Downieville Highway (PM 17.4) to Crooked Arrow Lane (PM 17.95), will widen shoulders, rehabilitate drainage systems, and upgrade signs and lighting. The project is currently in the planning phase and has a proposed Construction Contract Acceptance (CCA) date of 09/29/2028.

Caltrans (EA 03-1N900) "Uren Street Intersection Improvement" project is proposing to construct a roundabout or install a traffic signal at the intersection of SR 49 and Uren Street. The project is currently in the planning phase and has a proposed CCA date of 01/02/2030.

Caltrans culvert maintenance project (EA 03-4G170) will replace, or line culverts deemed in poor condition in construction season 2026/2027.

Community Interaction

The community is interested in and supports the project due to safety concerns. A majority of the survey responses were safety related. Residents in the area expressed concerns related to limited safe crossing at key intersections, speeding vehicles, and lack of dedicated pedestrian and bicycle facilities on SR 49. At the time this report was prepared, the following community interactions have occurred:

- The Nevada City SR 49 Multimodal Corridor Plan (SR 49 MMCP) was commissioned by Nevada County Transportation Commission (NCTC) at an NCTC governing board meeting held in May 2018.

- The first community workshop was conducted by NCTC on May 28, 2019, to introduce the project to the public and gather input on pedestrian and bicycle travel along the corridor.

- The second community workshop was conducted by NCTC on July 23, 2019, to present draft recommendations and project plans.

- A public outreach meeting was conducted by Caltrans and NCTC in Nevada

City on October 2, 2025.

- NCTC presented the project to the City Council on December 11, 2025, summarizing the project and community feedback.

- Caltrans engagement portal was created, and it was presented to the community at the outreach meetings for another form of feedback and engagement.

4. PURPOSE AND NEED

Purpose:

The purpose of the proposed project is to improve accessibility and safety along the SR 49 corridor spanning the SR 20/49 junction and Nevada County Juvenile Hall by implementing new multi-use paths, sidewalks, enhanced crossings, and intersection improvements. The project will establish connectivity between residential, municipal, and recreational areas and connect to existing and future pedestrian and bicycle facilities.

Need:

The project is necessary to address transportation needs and improve accessibility and safety along SR 49. The SR 49 corridor in the project limit lacks continuous bicycle and pedestrian infrastructure as well as safe crossing locations, limiting the ability of residents to safely access the Government Center, recreational destinations, and the commercial areas in Nevada City. The only existing marked crosswalk along the one-mile project corridor is at the North Bloomfield/East Broad Street intersection. There are no existing bicycle facilities along SR 49 or on the local streets. Some sidewalks exist on a few local streets in the project area, but not along SR 49. Pedestrians are observed walking on the narrow highway shoulders.

A. Problem, Deficiencies, Justification

In addition to the needs outlined above, drainage systems identified in poor condition within the project limits require replacement or rehabilitation to maintain and preserve in a state of good repair. Curb ramps, roadside signs and lighting need to be replaced or constructed to meet current safety standards.

B. Regional and System Planning

<u>State Planning</u>
This project follows Caltrans' System Planning and 2017 Transportation Concept Report (TCR) State Route 49, which assesses current and future conditions along the roadway and communicates the vision for its development. It also aligns with

Caltrans Active Transportation Plan 2022.

Regional Planning
The proposed project aligns with Nevada County Regional Transportation Plan (RTP) 2025-2045 and Nevada County Active Transportation Plan (ATP) 2019.

Local Planning
The proposed project is consistent with Nevada City SR 49 Multimodal Corridor Plan (SR 49 MMCP) 2019.

C. Traffic

Current and Forecasted Traffic

Traffic Data – NEV-49-PM 15.1/16.1					
Year		Annual ADT	Peak Hour	ESAL	Traffic Index
Base Year	2019	8,100	820	22,900	5.5
Current Year	2025	8,340	840	23,800	6.0
Construction Year	2029	8,510	860	24,100	6.0
10-Year	2039	8,910	900	240,000	7.5
20-Year	2049	9,320	940	481,000	8.0
40-Year	2069	10,100	1,020	962,000	9.0

Directional – 62%, Design Hour Truck – 2%

Collision Analysis
Collision data was queried from the Traffic Accident Surveillance and Analysis System (TASAS) Table B for a 5-year period from January 1, 2020, to December 31, 2024. The data is presented in the following table. The data provided is protected by 23 U.S.C § 407, and shall not be subject to discovery, nor admitted as evidence in any applicable legal proceeding against the State of California. By the release of this information, pursuant to subpoena or public records request, the State of California, Department of Transportation does not waive any rights it has under 23 U.S.C. § 407.

County-Route (post mile range)	Number of Accidents			Actual Rate (Acc/Million Vehicle Miles)			Average per million miles		
	F[1]	F+I[2]	Total[3]	F[1]	F+I[2]	Total[3]	F[1]	F+I[2]	Total[3]
Nev-49 (PM 15.1/16.1)	0	10	30	0.000	0.32	0.95	0.020	0.50	1.10

Notes:
1. Fatal accidents
2. Fatal accidents plus injury accidents
3. All reported accidents (includes Property Damage Only (PDO) Collisions)

5. ALTERNATIVES

5A. Viable Alternatives

Alternative 1– Roundabouts and Multi-Use Path

Proposed Engineering Features
One single-lane roundabout is proposed to be constructed at the intersections of SR 49/Cement Hill Road/West Broad Street. The roundabout is designed to allow for 65-foot CA Legal Truck to perform all movements and have an Inscribed Circle Diameter (ICD) of 130 feet with a single lane in all four directions. To help with the speed reduction on SR 49, a combination of successive curves (chicanes) on the westbound and eastbound approaches to the roundabouts are proposed. The roundabouts also have a 20-foot-wide truck apron, and one 20-foot-wide circulatory lane. New lighting, sidewalks along the roundabout perimeter, ADA compliant curb ramps, and high-visibility crosswalks with median refuge islands at each intersection leg are proposed at the roundabout.

At the intersection of SR 49/Coyote Street, the proposed work includes new lighting, high-visibility crosswalks, and Rectangular Rapid Flashing Beacons (RRFBs) on SR 49 in both directions, and ADA compliant curb ramps.

At the intersection of North Bloomfield Road/East Broad Street, the proposed work includes new high-visibility crosswalk pavement marking, and ADA compliant curb ramps.

At the intersection of SR 49/Maidu Avenue/Orchard Street, the proposed work includes new lighting, high-visibility crosswalks, and Rectangular Rapid Flashing Beacons (RRFBs) on SR 49 in both directions, and ADA compliant curb ramps.

The proposed multi-use path starts from the west of SR 20 and extends all the way to the Nevada County Juvenile Hall. The multi-use path is 10-foot wide with a 2-foot buffer (shoulder) at each side for both pedestrian and bicyclist use and guide pedestrians/bicyclists to the correct crossing locations.

New sidewalk is proposed along Cement Hill Road, connecting Cement Hill Road/West Broad Street intersection’s northeast corner to Hirschman’s Trail.

The project scope also includes:
- Widen the existing roadbed to provide 4-foot shoulders.
- Construct full structural sections at the roundabout.
- Rehabilitate and upgrade existing drainage systems as needed.
- Place new roadway signs.
- Delineate new traffic striping, pavement markings, and high visibility cross walks.
- Relocate conflicting utilities.

- Install one Radar Speed Feedback Sign
- Replace two Census Stations' vehicle detection loops (PM: 15.07 & 15.81)
- Replace impacted traffic signal detection loops at the intersection of North Bloomfield Road/East Broad Street with Hybrid (Radar/Video) Cameras.

Nonstandard Design Features

The proposed design exceptions to Boldface and Underlined Standards for this Alternative are summarized in the table below. A summarized risk assessment of design standards is provided in table below.

Design Standards Risk Assessment			
Alternative	Design Standard from Highway Design Manual Tables 82.1A & 82.1B	Probability of Nonstandard Design Feature Approval (None, Low, Medium, High,)	Justification for Probability Rating
1	HDM 302.1: **The shoulder widths given in Table 302.1 shall be the minimum continuous usable width of paved shoulder on highways.**	Medium	It is proposed to construct 4-foot shoulders to eliminate the need for additional right of way acquisition along SR 49. It is recommended to minimize permanent right of way takes for this project due to the high risk associated with the scheduled lead time from M200 PA&ED to M410 Right of Way Certification.
	HDM 304.1: For new construction, widening, or where slopes are otherwise being modified, embankment (fill) slopes should be 4:1 or flatter.	High	It is proposed to have fill slopes at 1.5:1 or flatter to reduce the environmental, biological, and R/W acquisition impacts along SR 49.

Utility Involvement

Due to the proposed project's design features, there will be utility relocation required for the proposed alternative. Existing utilities around the project area include overhead fiber optics, telephone/communication lines, and electrical power lines, underground fiber optics and telephone lines, as well as underground gas, sewer and water. Multiple underground utilities are in conflict. Utility relocation work will not require additional right of way.

Based on the mapping and information provided, the following utility facilities exist within the project location:

- AT&T (Overhead/Underground)
- California Water Service (CWS)
- Comcast (Overhead/Underground)
- PG&E – Electric (Overhead)

- PG&E – Gas (Underground)
- City of Nevada City – Sewer
- Nevada Irrigation District – Water

Railroad Involvement
There are no railroads within the project limits, therefore there is no railroad involvement.

Highway Planting and Erosion Control
Within the project limits, ground disturbance is assumed around the proposed drainage, roundabout, ADA curb ramps, sidewalks, and multi-use path construction. Erosion control measures will be applied, as appropriate. Hardscaping is proposed for the roundabout median island.

See **Attachment D,** *Landscape Architecture Assessment Sheet (LAAS)*, for more information.

Non-motorized and Pedestrian Features
There are no existing bicycle facilities along SR 49 within the project limit. The new multi-use paths would provide a Class I Bike/Pedestrian facility.

This project will include the following pedestrian features:

- ADA-compliant curb ramps
- Rectangular Rapid Flashing Beacons (RRFBs) at Coyote St/SR 49 intersection and Maidu Avenue/SR 49 intersection.
- High visibility crosswalks

Cost Estimates
The estimated escalated construction and right of way costs are $12,073,000 and $466,000 respectively. Details on estimated vs. programmed costs are discussed in Section 8, Funding, Programming and Estimate.

See **Attachment E**, *Preliminary Cost Estimate*, for more information.

Right-of-Way
Two Temporary Construction Easements (TCEs) and one fee acquisition will be required to construct the project. Details on Right-of-Way costs and issues are discussed in Section 6D, Right-of-Way Issues.

5B. Rejected Alternatives

No Build Alternative

The No-Build alternative retains the existing condition of the facility.

The Project Development Team (PDT) recommends rejecting the No-Build alternative because this alternative does not make any improvements to address the project purpose and need to improve operations and safety.

6. CONSIDERATIONS REQUIRING DISCUSSION

6A. Hazardous Waste

An Initial Site Assessment (ISA) was prepared for this project. The potential for hazardous waste exists within the Environmental Study Limits (ESL).

Lead contaminated soil may exist within and near State R/W due to the historical use of leaded gasoline, leaded airline fuels, and waste incineration. The areas of primary concern in relation to highway facilities are soils along routes with historically high vehicle emissions due to large traffic volumes, congestion, or stop and go situations. The only way to know how much lead exists is to perform a site investigation.

Hazardous levels of lead and chromium are known to exist in the yellow color traffic stripes. Since these traffic stripes will be cold planned along with the roadway, the levels of lead and chromium will become non-hazardous. These grindings (which consist of the roadway material and the yellow color traffic stripes) shall be removed and disposed of in accordance with Standard Special Provision 36-4 (Residue Containing Lead from Paints) which requires a Lead Compliance Plan (LCP). Non-hazardous levels of lead are known to exist in the white traffic striping. As such, these grindings shall be removed and disposed of in accordance with the same specification.

For any right of way acquisitions (including easements), a Hazardous Materials Disclosure Document (HMDD) will be required for attachment to the Certificate of Sufficiency (COS) before any right of way can be acquired. To provide the HMDD, Design will need to provide our office with final R/W mapping as soon as it is available.

Hazardous chemicals are known to exist in wood posts associated with metal beam guardrail and signposts. As such, if wood posts are removed, they shall be disposed of in accordance with Standard Special Provision 14-11.14 (Treated Wood Waste).

In the event that cured-in-place pipe (CIPP) will be used to rehabilitate/replace drainage facilities, the potential for hazardous waste may exist with styrene (a highly volatile chemical used in the main liner). Non-styrene CIPP is also an available choice. If groundwater is known to be present in the vicinity of a culvert or perched/spring water permeates to the inside of the culvert, North Region Office of Environmental Engineer (NROEE) recommends the use of a pre-liner instead of patching the deteriorated culvert.

A Naturally Occurring Asbestos (NOA) study is required where any ground disturbance will occur.

See **Attachment F**, *Initial Site Assessment*, for more information.

6B. Value Analysis
Projects under $25 million are not required to have a Value Analysis Study as part of their project development. The value of this project is less than $25 million and therefore a value analysis study is not required.

6C. Resource Conservation
Resources will be conserved to the maximum extent feasible, including the use of crumb rubber in the asphalt paving mix, use of removed roadway as fill material, and reuse of existing traffic signage whenever possible.

6D. Right-of-Way Issues
To minimize impact to adjacent properties, the project proposes obtaining two Temporary Construction Easements and one Fee acquisition to complete the roundabout, drainage, sidewalk, multi-use path and ADA curb ramps proposed in the preferred alternative. Additional encroachment permits will be required from Nevada City. Current Right of Way cost is estimated to be $466,000.

See **Attachment G**, *Right-of-Way Data Sheet (RWDS)*, for more information.

6E. Environmental Compliance
The anticipated environmental approval will be achieved with a California Environmental Quality Act (CEQA) Categorical Exemption (CE) and a National Environmental Policy Act (NEPA) Categorical Exclusion (CE) (23 USC 326). This document has been selected based on preliminary environmental studies. The Department is the lead agency to prepare NEPA/CEQA environmental documents.

See **Attachment H**, *Environmental Document*, for more information.

6F. Air Quality Conformity
Western Nevada County is designated as an isolated rural area for the 8-hour ozone National Ambient Air Quality Standard. Isolated rural non-attainment areas are required to demonstrate air quality conformity when federal approval is required on a regionally significant non-exempt transportation project. This project is not regionally significant and is exempt from regional air quality conformity analysis requirements per Table 3 of 40 CFR 93.127. Therefore, conformity requirements have been met.

6G. Title VI Considerations

All programs or activities in relation to this project shall adhere to Title VI of the Civil Rights Act of 1964. Discrimination on the basis of race, color, or national origin is prohibited. This project will provide ADA compliant sidewalks, curb ramps and crosswalks to facilitate pedestrian accessibility and improve pedestrian safety.

6H. Noise Abatement Decision Report

The proposed roadway profile is not substantially changing the shielding between the source and the receptor, no additional through lanes are proposed, and the roadway alignment will not substantially change. Therefore, this project meets the criteria for a Type III project as defined in 23CFR772. Noise abatement measures are not required for Type III projects.

6I. Life-Cycle Cost Analysis

Life-Cycle Cost Analysis is not applicable for this project.

7. OTHER CONSIDERATIONS AS APPROPRIATE

7A. Route Matters

There are no new or revised freeway agreements, new connection approvals, route adoptions or relinquishments required as part of this project.

7B. Transportation Management Plan

A Transportation Management Plan (TMP) has been prepared for this project. Recommended measures for the project include:

- On SR 49 in Nevada County, work will be limited to nighttime hours or shall be under stage construction. No lane closures will be allowed during daytime and peak commute hours on weekdays.
- A minimum of one paved traffic lane, not less than 11 feet wide, shall be open for use by public traffic with reversible traffic control.
- When closures occur within 200 feet of an intersection, flaggers shall be deployed to control all legs of the intersection.
- No lane, shoulder closures, or any other traffic restrictions will be allowed on special days, designated holidays and the day preceding designated holidays, and when construction operations are not actively in progress.
- Lane closures at the construction locations will be performed in accordance with Standard Plan Sheets:
    - T13 “Traffic Control System for Lane Closure on Two Lane Conventional Highways”
- The maximum length of any lane closure shall be limited to 0.5 mile.
- The maximum delay to public traffic during nighttime reversing control closures shall not exceed 10 minutes. After each closure, accumulated traffic shall pass through the work before another closure is made.
- Portable changeable message signs (PCMS) will be required in each direction of travel during construction for each lane closure, shoulder closure and must be placed prior to any closure.

- Access to cross streets and driveways shall be maintained during construction or agreed upon by the local agencies for road closures.
- Bicycle access must be maintained during construction.
- Work at this location may require assistance of COZEEP. However, a full-time COZEEP is not anticipated.
- Coordination with projects within, or nearby the project limits will be required to avoid conflicts.
- Lane closure charts will be developed prior to PS&E.

See **Attachment I**, *Transportation Management Plan (TMP) Data Sheet and Checklist*, for more information.

7C. Stage Construction
Stage Construction will be utilized to minimize impacts on the traveling public during construction. A conceptual stage construction plan has been developed to verify the constructability of the project. A detailed stage construction and traffic handling plan will be developed during the Plans Specifications and Estimate (PS&E) phase of this project. Therefore, the discussion below is conceptual and subject to change.

The proposed project is anticipated to be constructed over one construction season with five different stages. Stage one includes shoulder widening, and construction of temporary detour roads for stage two traffic handling. Stage two includes the construction of the roundabout. Caltrans is working closely with Nevada City and Nevada County to pursue the possibility of West Broad Street closures during the roundabout construction. This will speed up the construction process in return lessens the impact on the highway users. Temporary railing system and traffic drums are used to direct traffic and provide safe work area. Stage three includes the construction of multi-use path and sidewalk. Stage four removes temporary paving. Stage five includes final cleanup paving, delineation and signage.

7D. Storm Water Management
The project meets the one-acre threshold for treatment, and a long form Stormwater Data Report (SWDR) was prepared for this project. Appropriate BMPs, both temporary and permanent, will be implemented during construction.

See **Attachment J**, *Stormwater Data Report*, for additional information.

7E. Graffiti Control
Graffiti Control will not be needed for this project.

7F. Materials Recommendation
A Preliminary Structural Section Recommendation was prepared on October 2025 and is provided in **Attachment K,** *Preliminary Structural Section Recommendation*.

7G. Asset Management
The project has following assets; one roundabout, approximately 4600 feet multiuse

path, approximately 940 feet sidewalk, 15 new crosswalks, ADA curb ramps, four rectangular rapid flashing beacons, one radar speed feedback sign, 26 new streetlights, a bus stop, roadside signs, culverts, and two TMS census stations.

7H. Complete Streets

The proposed improvements will be developed in compliance with Directors Policy 37 (DP-37) to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists appropriate to the function and context of the facility. Pedestrian facilities include ADA compliant curb ramps, sidewalks, pedestrian push buttons, crosswalks, and Rectangular Rapid Flashing Beacons (RRFBs). Bicycle facilities include a Class I multi-use path spanning the entire corridor within project limits.

7I. Climate Change Considerations

Report findings for the project include moderate forecasted increases in temperature and precipitation and moderate to high level of concern for wildfire in the western project limits and surrounding the project vicinity outside of the directly urbanized area (Vulnerability Assessment 2019). Considerations from the report are in line with project intent.

See **Attachment L**, *Climate Change Risk and Adaptation Report*, for additional information.

7J. Geotechnical

A Preliminary Geotechnical Design Report has been prepared for this project.

See **Attachment M**, *Preliminary Geotechnical Design Report,* for additional information.

7K. Maintenance Agreement

A Project-Specific Maintenance Agreement (MA) with the City of Nevada City and/or the County of Nevada will be required for certain proposed improvements located within State Right of Way. While negotiations have not yet begun, the agreement must be fully executed prior to advertising the project for construction.

It is anticipated that the Local Agency will assume responsibility for the maintenance and associated costs of the following improvements:

1. Multi-use path
2. Buffer area between the edge of pavement and the multi-use path
3. Bus shelter
4. Hardscaped island at one roundabout
5. Sidewalks
6. Curb ramps (except at N. Bloomfield Road / East Broad Street)

7L. Traffic Study

The Intersection Safety and Operational Assessment Process (ISOAP) applies to the project due to major modifications of existing intersections on SR49 at Maidu/Orchard Street, Cement Hill/West Broad Street, and Coyote Street. A Roadside Safety Audit (RSA) was completed in 2019 as part of the ATP grant application. The RSA included required elements of the ISOAP and will serve as the ISOAP document for the project.

The RSA findings for the intersection of SR 49/ Coyote Street recommended a single lane roundabout, shared used path along the north side, high visibility marked crosswalks with refuge islands, and RRFBs. As a lower cost alternative, a raised center median with restricted right-in and right-out only access was recommended. The ATP proposal proceeded with the raised center median option as a preferred alternative. However, discussion with the Project Development Team raised concerns that the elimination of left-turn movements at Coyote Street would impede emergency vehicles and inhibit the use of Coyote Street as an evacuation route. The PDT, with concurrence from NCTC, eliminated the raised center median as part of the preferred alternative. Existing condition remains for Coyote Street intersection. Shared-use paths, high visibility crosswalks, and RRFB's remain part of the preferred alternative for Coyote Street.

RSA findings for the intersection of SR 49 and East Broad Street/North Bloomfield Rd. recommended high visibility crosswalk markings. Single-lane roundabouts with high visibility crosswalks were recommended at the intersections at Maidu/Orchard St and Cement Hill/West Broad Street. The proposed roundabout improvement for Cement Hill/West Broad Street will be carried forward in the preferred alternative described in section 5A of this report.

See **Attachment N,** *Nevada City SR 49 Multimodal Corridor Plan*, for additional information.

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding

The project will be funded through a combination of Active Transportation Program (ATP) 26/27 fiscal year and Congestion Mitigation and Air Quality (CMAQ) funds in 2026 fiscal year. The local agency will provide additional STIP share for construction.

It has been determined that this project is eligible for Federal-aid funding.

Programming

The following tables show the estimated vs. programmed support and capital cost associated with the project for the Preferred Alternative.

Fund Source	Fiscal Year Estimate							
20.xx.720.100	Prior	25/26	26/27	27/28	28/29	29/30	Future	Total
Component	In thousands of dollars ($1,000)							
PA&ED Support	1,041	208						1,250
PS&E Support		422	1,291	34				1,747
Right-of-Way Support		4	10	5	5	2		25
Construction Support				903	596	82		1,581
Right-of-Way		466						466
Construction			12,073					12,073
Total	1,041	1,100	13,374	942	601	84		17,142

The support cost ratio is 36.71% and a 3.30% escalation rate applied to capital costs.

See **Attachment O**, *Programming Sheet*, for more information.

Estimate

The current estimated cost for the preferred alternative is as follows and shown in **Attachment E**, Preliminary *Cost Estimate*. A summary of the estimated cost in 2025 dollars is:

Roadway Items	$11,314,000
Right of Way	$466,000
Total Capital Cost	**$11,780,000**

9. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
PROGRAM PROJECT	M015	06/02/2024	A
BEGIN ENVIRONMENTAL	M020	07/17/2024	A
PA & ED	M200	03/18/2026	T
RIGHT OF WAY REQUEST	M224	03/04/2026	A
REGULAR RIGHT OF WAY	M225	03/18/2026	T
BEGIN STRUCTURE	M215	04/28/2026	T
PS&E TO DOE	M377	02/22/2027	T
DRAFT STRUCTURES PS&E	M378	11/30/2026	T
PROJECT PS&E	M380	03/22/2027	T
RIGHT OF WAY CERTIFICATION	M410	04/05/2027	T
READY TO LIST	M460	04/30/2027	T
FUND ALLOCATION	M470	06/25/2027	T
HEADQUARTERS ADVERTISE	M480	07/26/2027	T
AWARD	M495	09/30/2027	T
APPROVE CONTRACT	M500	11/08/2027	T
CONTRACT ACCEPTANCE	M600	11/08/2028	T
END PROJECT EXPENDITURES	M800	05/08/2030	T
FINAL PROJECT CLOSEOUT	M900	04/08/2031	T

10. RISKS

The Risk Register was prepared to assess, respond, and monitor identified Project risks that may occur throughout the life of the Project. The risk registry is designed as a tool to help the PDT and Project sponsor in their decisions regarding the project and objectives and encourages the Project team to take appropriate measures to minimize adverse impacts to the Project scope, schedule, or cost. However, the risk register cannot identify all risks in advance of occurrence for a project, as some risks are unknown.

The risk register identifies separate active risks to the Project. Risk Managers will be assigned for all key project risks, and each key risk will be managed to minimize potential cost, scope, and/or schedule impacts.

See **Attachment P**, *Risk Register*, for more information.

11. EXTERNAL AGENCY COORDINATION

Federal Highway Administration (FHWA)
This project has not been identified as an FHWA project of interest nor has any coordination between Caltrans and FHWA occurred.

The project requires the following coordination:

US Army Corps of Engineers
Department of the Army Permit for:
Clean Water Act Section 404

California Department of Fish and Wildlife
California Fish and Game Code Section1602
Lake or Streambed Alteration Agreement

Central Valley Regional Water Quality Control Board
Clean Water Act Section 401
Water Quality Certification

Local Agency
Cooperative Agreements with Nevada County Transportation Commission (NCTC)

Local Agency
Coordination with NCTC, Nevada County, and Nevada City.

12. PROJECT REVIEWS

Review	Name	Date
Scoping team field review		10/02/2025
District Maintenance	Thomas Mutunga	06/07/2024
Headquarters Project Delivery Coordinator	John Roccanova	12/17/2025
Project Manager:	Sam Vandell	11/05/2025
FHWA	N/A	
District Safety Review		01/14/2026
Constructability Review		01/14/2026

13. PROJECT PERSONNEL

Name	Title	Division/Office	Phone Number
Sam Vandell	Project Manager	Project Management	(530) 682-6478
Antoinette Medina	Project Manager Assistant	Project Management	(530) 649-4880
Elizabeth Wood	Associate Transportation Planner	Local Development Review and Complete Street	(530) 789-0192
Catherine Chiu	Aso. Governmental Program Analyst	Regional Planning	(530) 821-8404
R. Scott Foster	Senior Transportation Engineer	Design	(530) 821-8031
Eva Karam	Transportation Engineer	Design	(530) 821-8023
Jennifer Key	Senior Transportation Engineer	Traffic Safety	(530) 649-7239
Svetla Mitova	Transportation Engineer	Traffic Safety	(530) 741-4430
Hector Vega	Senior Transportation Surveyor	Right of Way Engineer	(530) 812-6200
Lyneda Lincoln	Right of Way Agent	Right of Way Utilities	(530) 649-7558
Moges Tilahun	Environmental Specialist Coordinator	Environmental	(530) 821-8326
Tim Yassa	Transportation Engineer	Highway Operations	(530) 649-4878
Thomas Mutunga	Maintenance Liaison	Maintenance Engineering	(530) 635-5246
Jeff Johnson	Area Construction Engineer	Construction	(530) 632-6714
Jeremy Linder	Information Officer	Public Information Office	(530) 701-5209
Mundeep Purewal	Senior Environmental Scientist	Environmental RM	(530) 812-4370
Hieu Nguyen	Transportation Engineer	Electrical Design	(916) 666-2975
Sumandeep Sudini	Senior Transportation Engineer	Utility Engineering Workgroup	(530) 821-3899
Andrii Melnyk	Transportation Engineer	Utility Engineering Workgroup	(530) 720-6930
Shobhita Rajashekar	Transportation Engineer	Transportation Management System Operations	(530) 821-8479
Eric Royer	Senior Transportation Engineer	Highway Operations	(530) 741-5713
Stacey Sannar	Associate Right of Way Agent	Project Coordinator	(530) 821-8356
Kathyryn Lugo	Landscape Associate	Landscape Architecture	(530) 821-8433
Pedro (Tony) A Diaz	Senior Transportation Electrical Engineer	Signal Operations Traffic Census	(530) 218-2475
Joan Davis	Senior Transportation Planner	Planning/Modal Programs/Sustainability	(530) 821-8456

14. ATTACHMENTS

A. Location map
B. Typical Cross Section
C. Layouts
D. Landscape Architecture Assessment Sheet (LAAS)
E. Preliminary Cost Estimate
F. Initial Site Assessment (ISA)
G. Right of Way Datasheet (RWDS)
H. Environmental Document
I. Transportation Management Plan (TMP) Data Sheet and Checklist
J. Stormwater Data Report (SWDR)
K. Preliminary Structural Section Recommendation
L. Climate Change Risk and Adaptation Report
M. Preliminary Geotechnical Design Report
N. Nevada City SR 49 Multimodal Corridor Plan
O. Programming Sheet
P. Risk Register

Attachment A

Location Map

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	15.07/16.1		

STATE OF CALIFORNIA

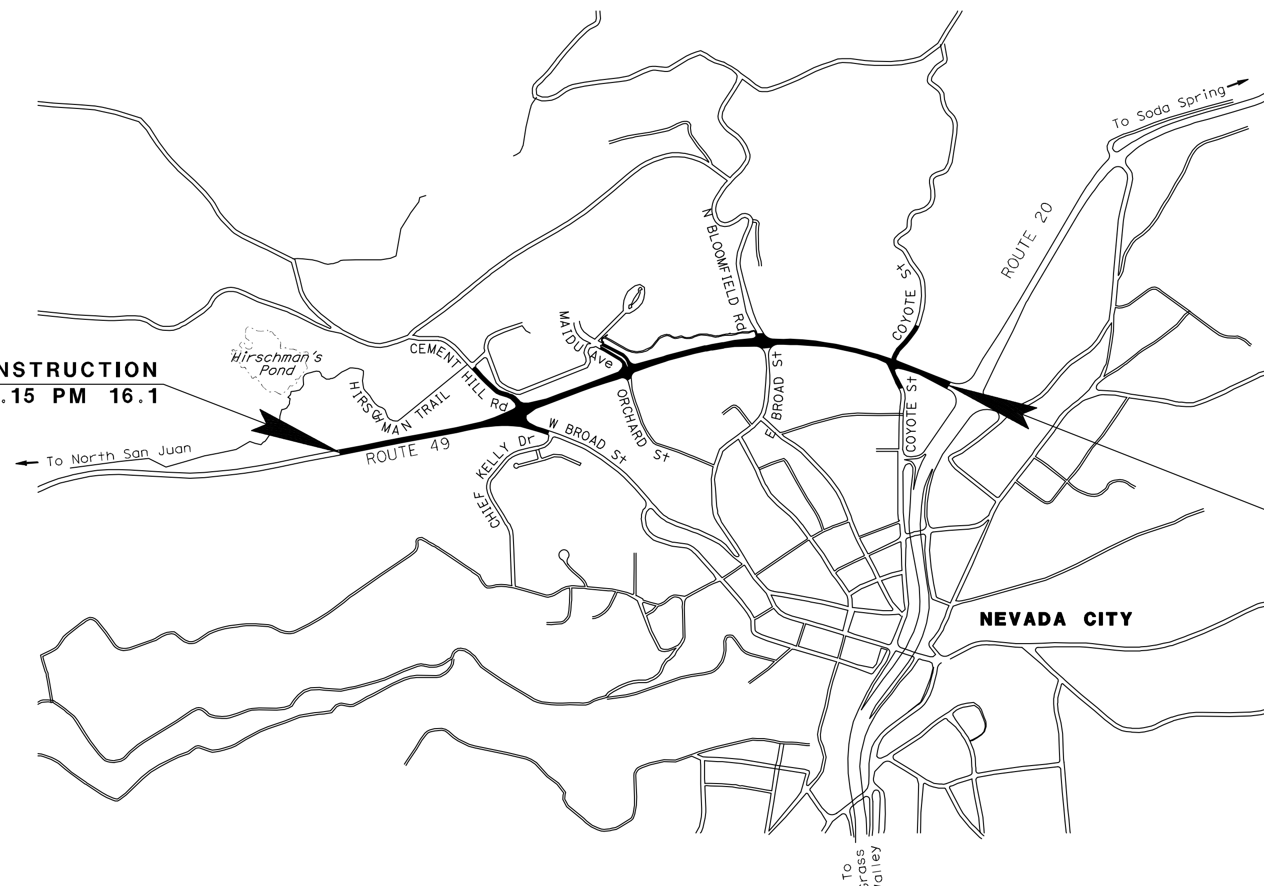
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN NEVADA COUNTY
IN NEVADA CITY
FROM THE NEVADA COUNTY JUVENILE HALL DRIVEWAY
TO ROUTE 20

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2024



THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

PROJECT ENGINEER
REGISTERED CIVIL ENGINEER
DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA

CONTRACT No.	03-0N7804
PROJECT ID	0324000189

DESIGN MANAGER: R SCOTT FOSTER
PROJECT MANAGER: SAM VANDELL

LAST REVISION 00-00-00
DATE PLOTTED => 5/29/2025
TIME PLOTTED => 2:45:52 PM

Attachment B

Typical Cross Section

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	15.1/16.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

NOTES:
1. DIMENSIONS OF THE PAVEMENT STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.

STRUCTURAL SECTIONS:

1 — 0.20' RHMA-G, 0.40' HMA (TYPE A), 0.50' CLASS 2 AB

2 — 0.20' RHMA-G

3 — 0.67' PCC, 0.50 CLASS 2 AB

4 — 0.30' HMA (TYPE A), 0.35' CLASS 2 AB

5 — 0.33' MINOR CONCRETE (SIDEWALK), 0.33' CLASS 2 AB

DESIGN DESIGNATION

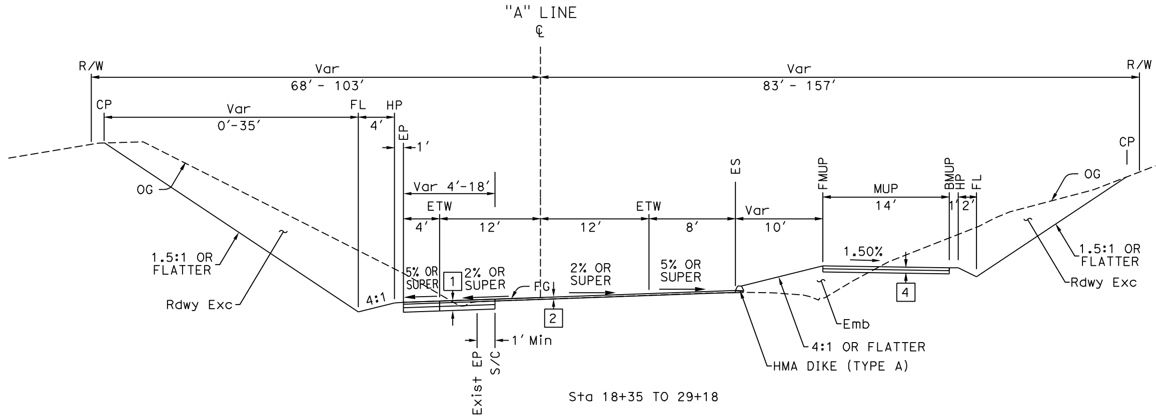
ADT (2025)	9,200	D	62.3%
ADT (2049)	14,000	T	1.7%
DHV	930	V	25-55 mph
ESAL	580,000	TI_{20}	8.5

PAVEMENT CLIMATE REGION:

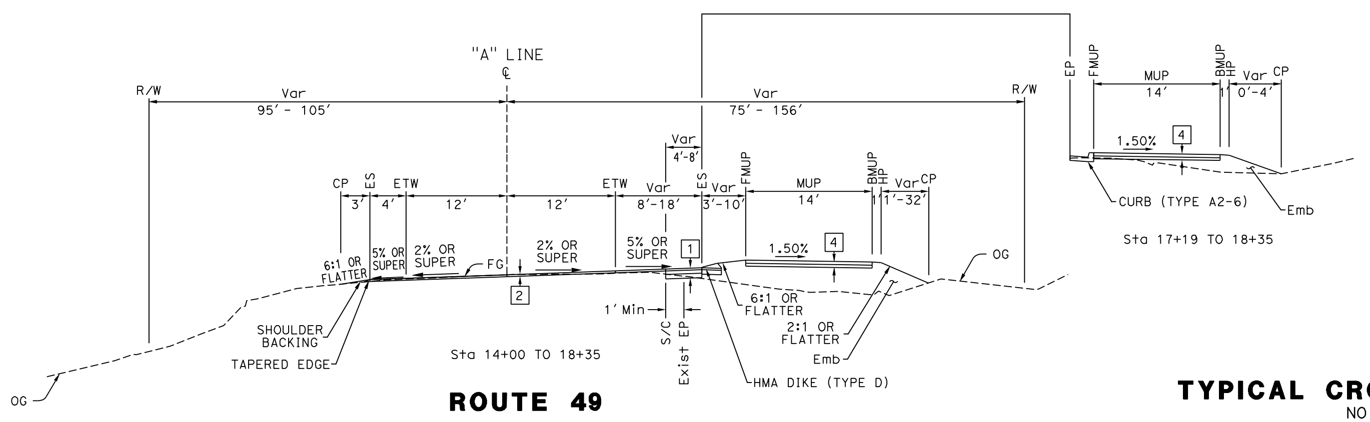
LOW MOUNTAIN

ABBREVIATIONS:

BKSW	BACK OF SIDEWALK
BMUP	BACK OF MULTI-USE PATH
BOC	BACK OF CURB
CPACP	COLD PLANE AC PAVEMENT
FMUP	FRONT OF MULTI-USE PATH
FSW	FRONT OF SIDEWALK
MUP	MULTI-USE PATH
RHMA-G	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)



Sta 18+35 TO 29+18



Sta 14+00 TO 18+35

ROUTE 49

TYPICAL CROSS SECTIONS

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	SIMRANJEET BAINS	REVISED BY	EVA KARAM
	CHECKED BY	SCOTT FOSTER	DATE REVISED	02/11/26

BORDER LAST REVISED 7/2/2010

USERNAME => s146832
DGN FILE => 0324000189ca001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0305

PROJECT NUMBER & PHASE 03240001890

LAST REVISION 11-18-25

DATE PLOTTED => 12-FEB-2026
TIME PLOTTED => 09:48

FILE PATH => P:\proj2\03\0n780\design\500 Contract Preparation\510_Plans\Drafting\0324000189ca001.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	15.1/16.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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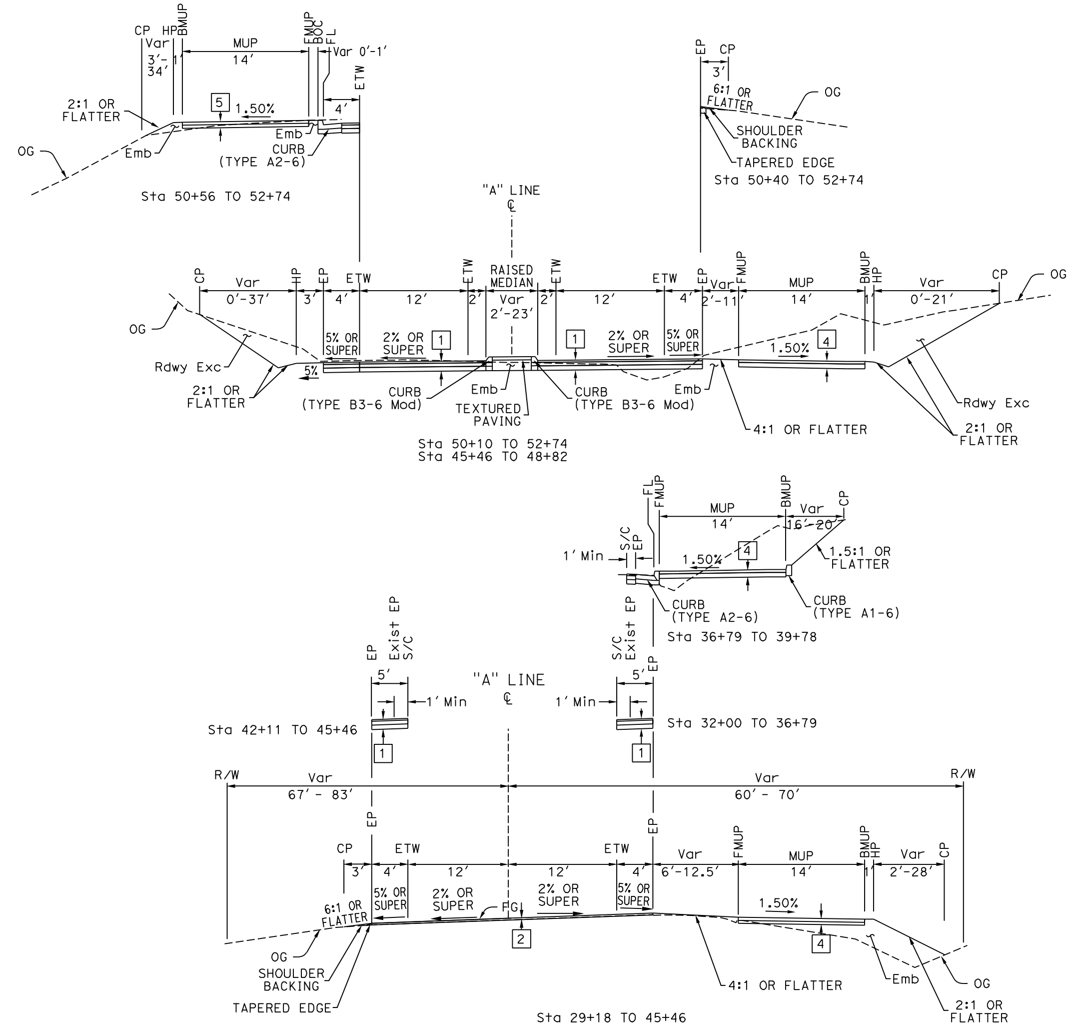
REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA



ROUTE 49

TYPICAL CROSS SECTIONS

NO SCALE

X-2

FUNCTIONAL SUPERVISOR	SCOTT FOSTER
CALCULATED-DESIGNED BY	SIMRANJEET BAINS
CHECKED BY	EVA KARAM
REVISED BY	EVA KARAM
DATE REVISED	02/11/26

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 11-20-25 DATE PLOTTED => 12-FEB-2026 TIME PLOTTED => 09:46

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	15.1/16.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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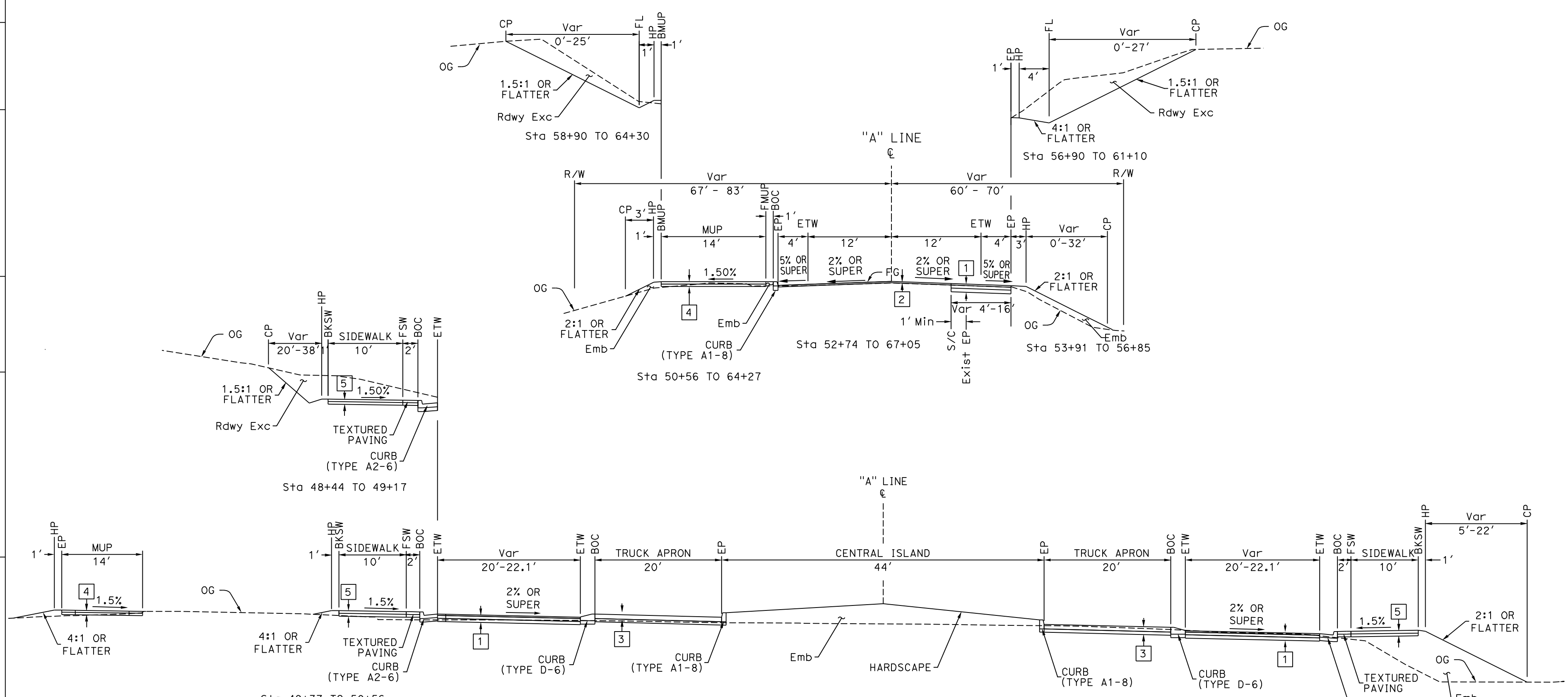
REGISTERED PROFESSIONAL ENGINEER
No. ____
Exp. ____
CIVIL
STATE OF CALIFORNIA



CEMENT HILL RD ROUNDABOUT

Sta 48+82 TO 50+10

ROUTE 49

TYPICAL CROSS SECTIONS

NO SCALE

X-3

LAST REVISION 11-20-25 | DATE PLOTTED => 11-FEB-2026 | TIME PLOTTED => 16:00

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
SCOTT FOSTER	SIMRANJEET BAINS	EVA KARAM	EVA KARAM	02/11/26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	15.1/16.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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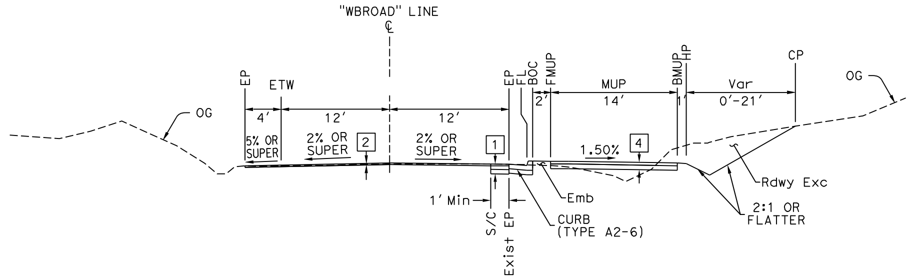
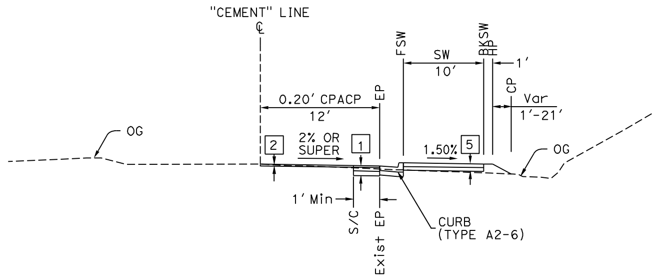
REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA



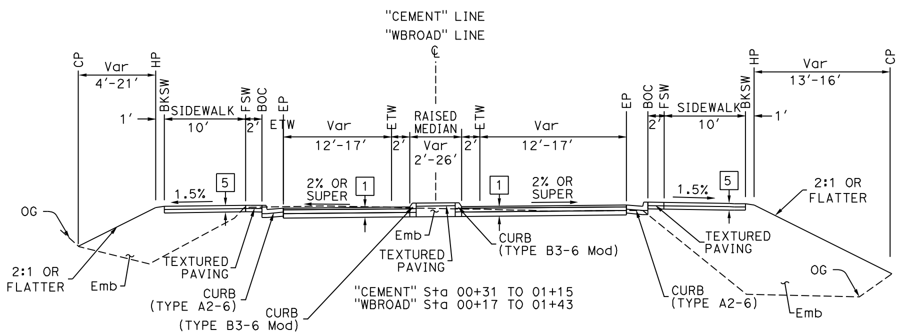
"WBROAD" Sta 01+43 TO 02+88

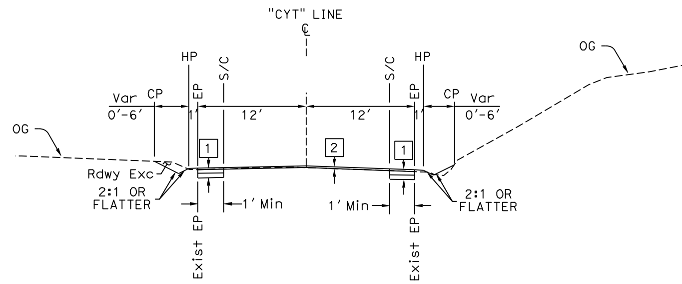
WEST BROAD STREET



"CEMENT" Sta 0+98 to 6+37

CEMENT HILL ROAD





Sta 18+75 TO 20+20

COYOTE STREET

TYPICAL CROSS SECTIONS

NO SCALE

X-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
Caltrans	SCOTT FOSTER	TANNER SAKURAI	EVA KARAM	EVA KARAM	02/11/26

LAST REVISION 11-20-25 DATE PLOTTED => 12-FEB-2026 TIME PLOTTED => 09:53

BORDER LAST REVISED 7/2/2010 | USERNAME => s146832 DGN FILE => 0324000189ca004.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0305 | PROJECT NUMBER & PHASE 03240001890

Attachment C

Layouts

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	15.1/16.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

NOTE:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

CURVE DATA

No. #	R	Δ	T	L
1	1,500.00	04°38'20"	60.76	121.45

LAYOUT

SCALE: 1" = 50'

L-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans® DESIGN

FUNCTIONAL SUPERVISOR: R. SCOTT FOSTER

CALCULATED-DESIGNED BY: TANNER SAKURAI

CHECKED BY: EVA KARAM

REVISED BY

DATE REVISED

LAST REVISION 02-03-26

DATE PLOTTED => 10-FEB-2026
TIME PLOTTED => 14:21

BORDER LAST REVISED 7/2/2010

USERNAME => s156568
DGN FILE => 0324000189ea001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0305

PROJECT NUMBER & PHASE 03240001890

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	15.1/16.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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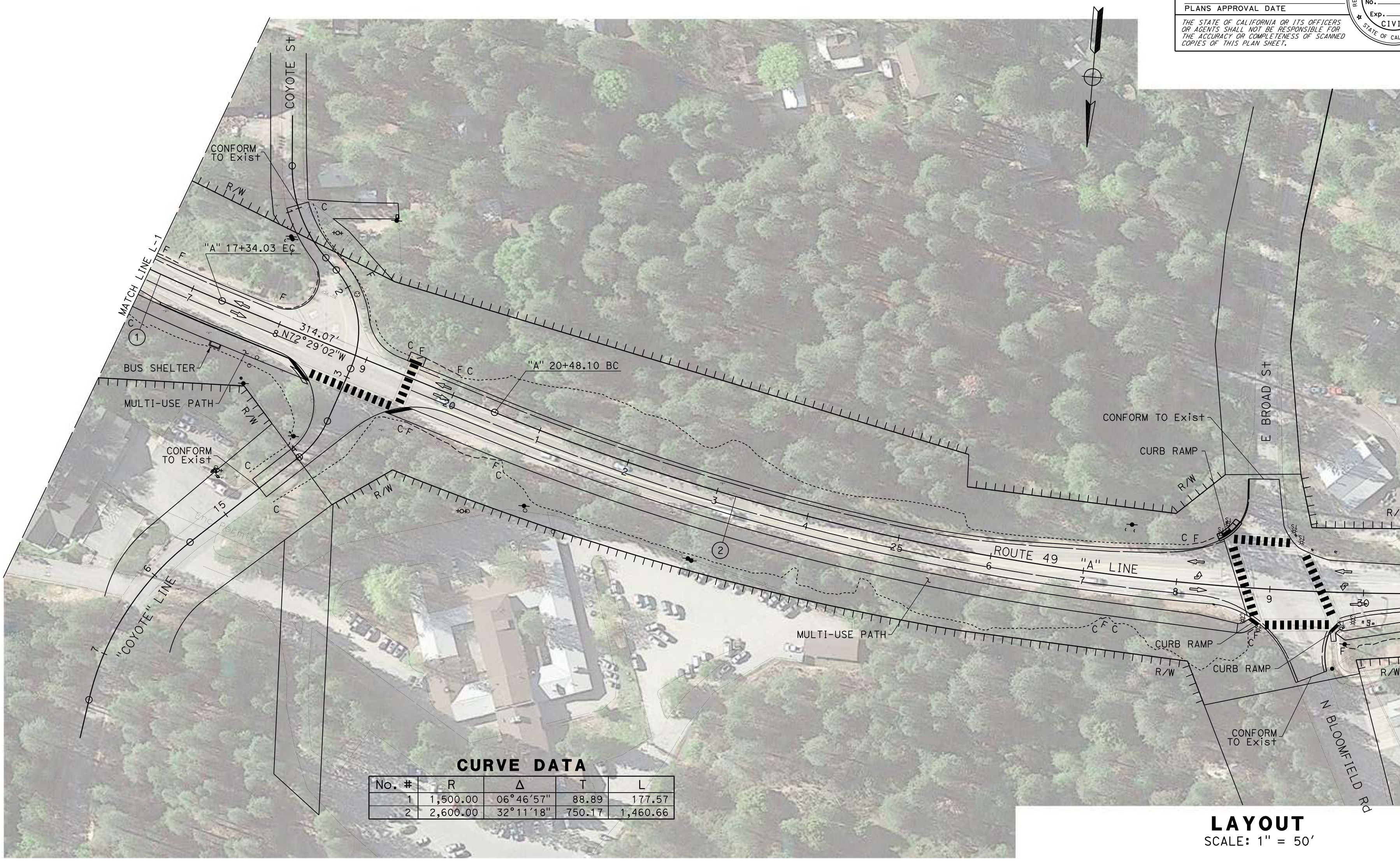
NOTE:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



CURVE DATA

No. #	R	Δ	T	L
1	1,500.00	06°46'57"	88.89	177.57
2	2,600.00	32°11'18"	750.17	1,460.66

LAYOUT

SCALE: 1" = 50'

L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

DESIGN

FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
R. SCOTT FOSTER	CHECKED BY	DATE REVISED

LAST REVISION 02-03-26 DATE PLOTTED => 10-FEB-2026 TIME PLOTTED => 14:37

BORDER LAST REVISED 7/2/2010 USERNAME => s156568 DGN FILE => 0324000189ea002.dgn RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 UNIT 0305 PROJECT NUMBER & PHASE 03240001890

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	15.1/16.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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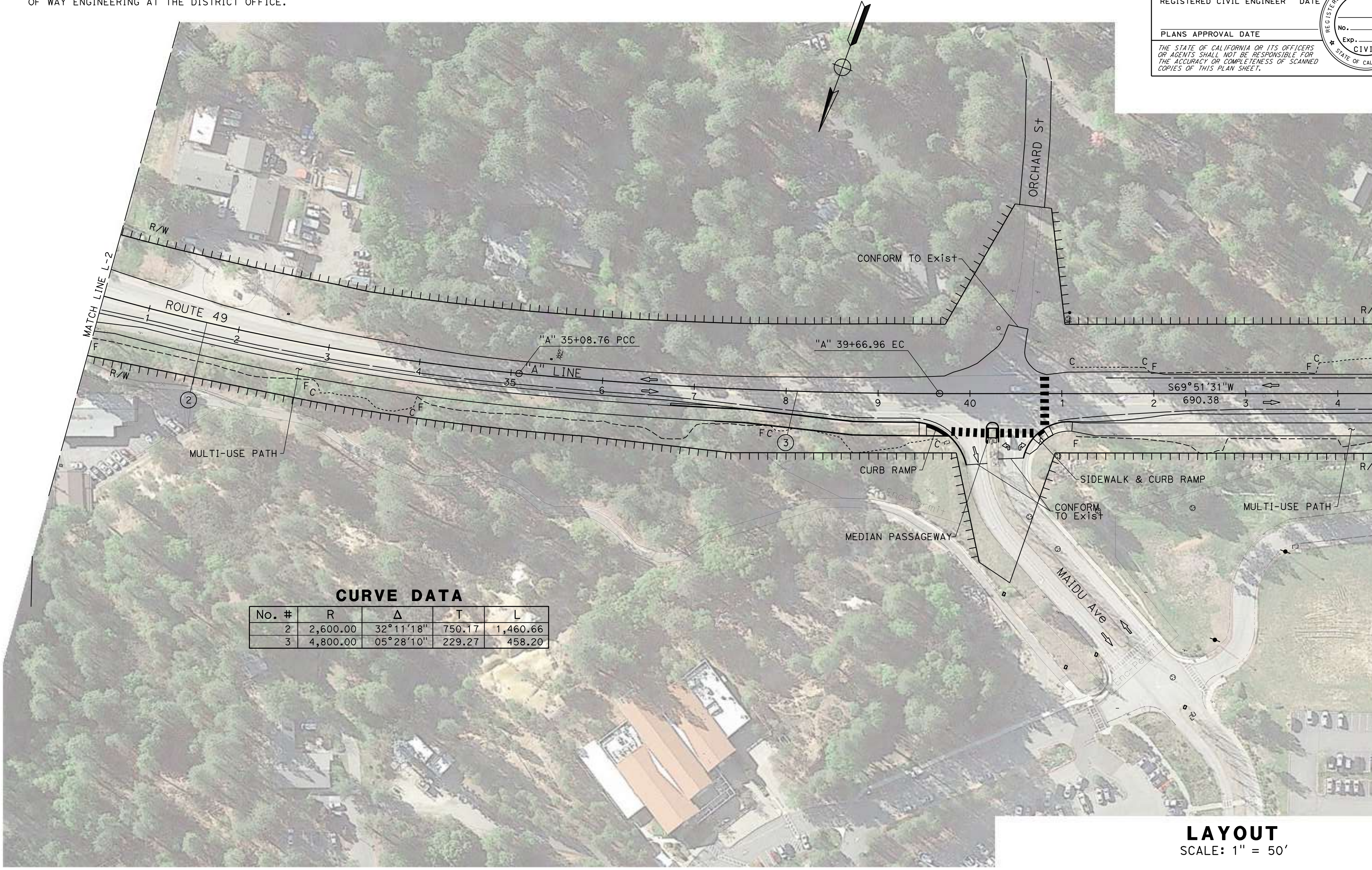
REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA

NOTE:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



CURVE DATA

No. #	R	Δ	T	L
2	2,600.00	32°11'18"	750.17	1,460.66
3	4,800.00	05°28'10"	229.27	458.20

LAYOUT
SCALE: 1" = 50'

L-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®

FUNCTIONAL SUPERVISOR | CALCULATED-DESIGNED BY | CHECKED BY | REVISED BY | DATE REVISED

LAST REVISION 02-03-26 | DATE PLOTTED => 11-FEB-2026 | TIME PLOTTED => 13:07

BORDER LAST REVISED 7/2/2010 | USERNAME => s156568 | DGN FILE => 0324000189ea003.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0305 | PROJECT NUMBER & PHASE 03240001890

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	15.1/16.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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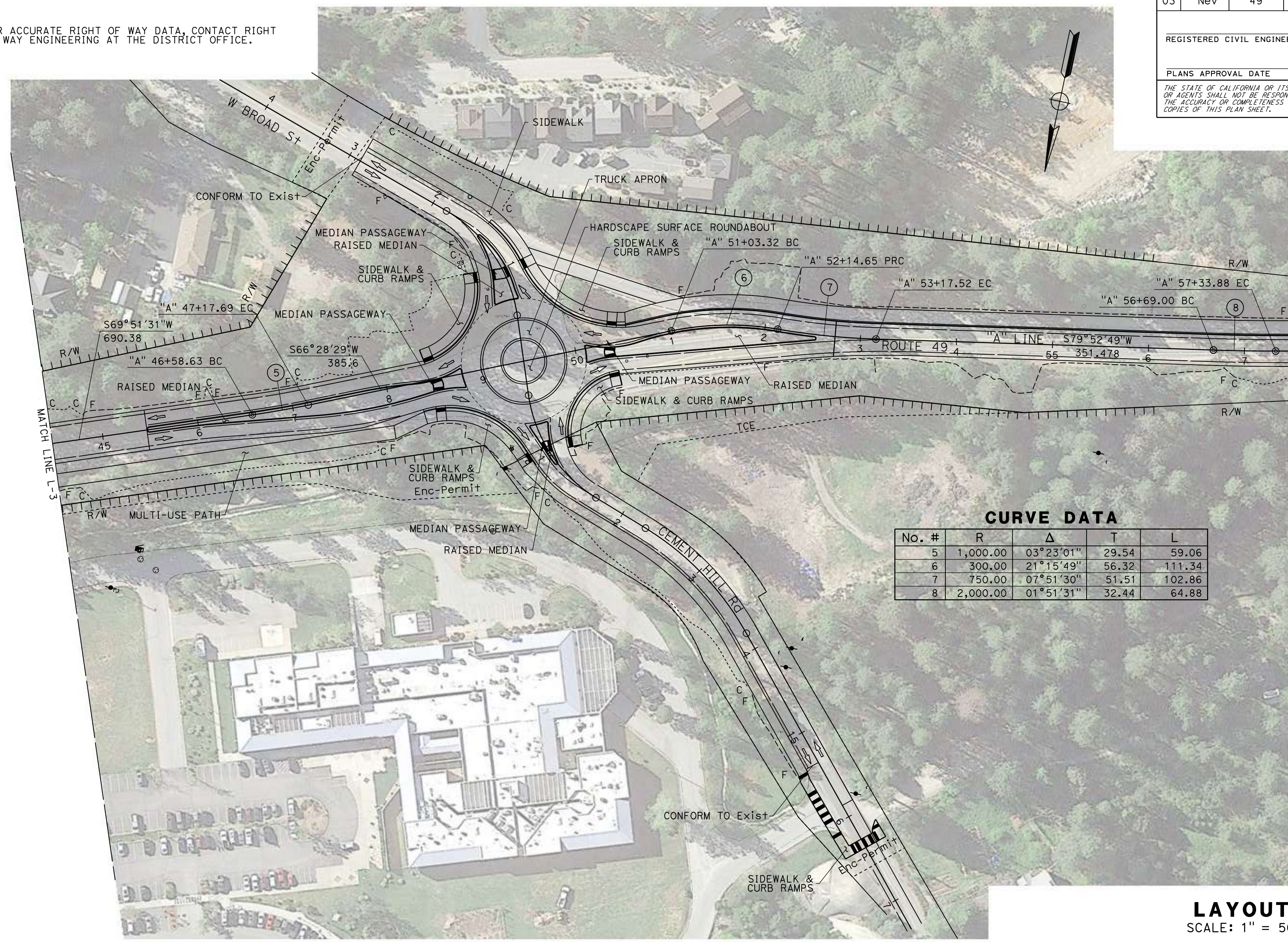
REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

NOTE:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



CURVE DATA

No. #	R	Δ	T	L
5	1,000.00	03°23'01"	29.54	59.06
6	300.00	21°15'49"	56.32	111.34
7	750.00	07°51'30"	51.51	102.86
8	2,000.00	01°51'31"	32.44	64.88

LAYOUT

SCALE: 1" = 50'

L-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans®

DESIGN

FUNCTIONAL SUPERVISOR: R. SCOTT FOSTER

CALCULATED-DESIGNED BY | CHECKED BY

REVISED BY | DATE REVISED

LAST REVISION 02-03-26 | DATE PLOTTED => 11-FEB-2026 | TIME PLOTTED => 13:13

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	15.1/16.1		

REGISTERED CIVIL ENGINEER DATE

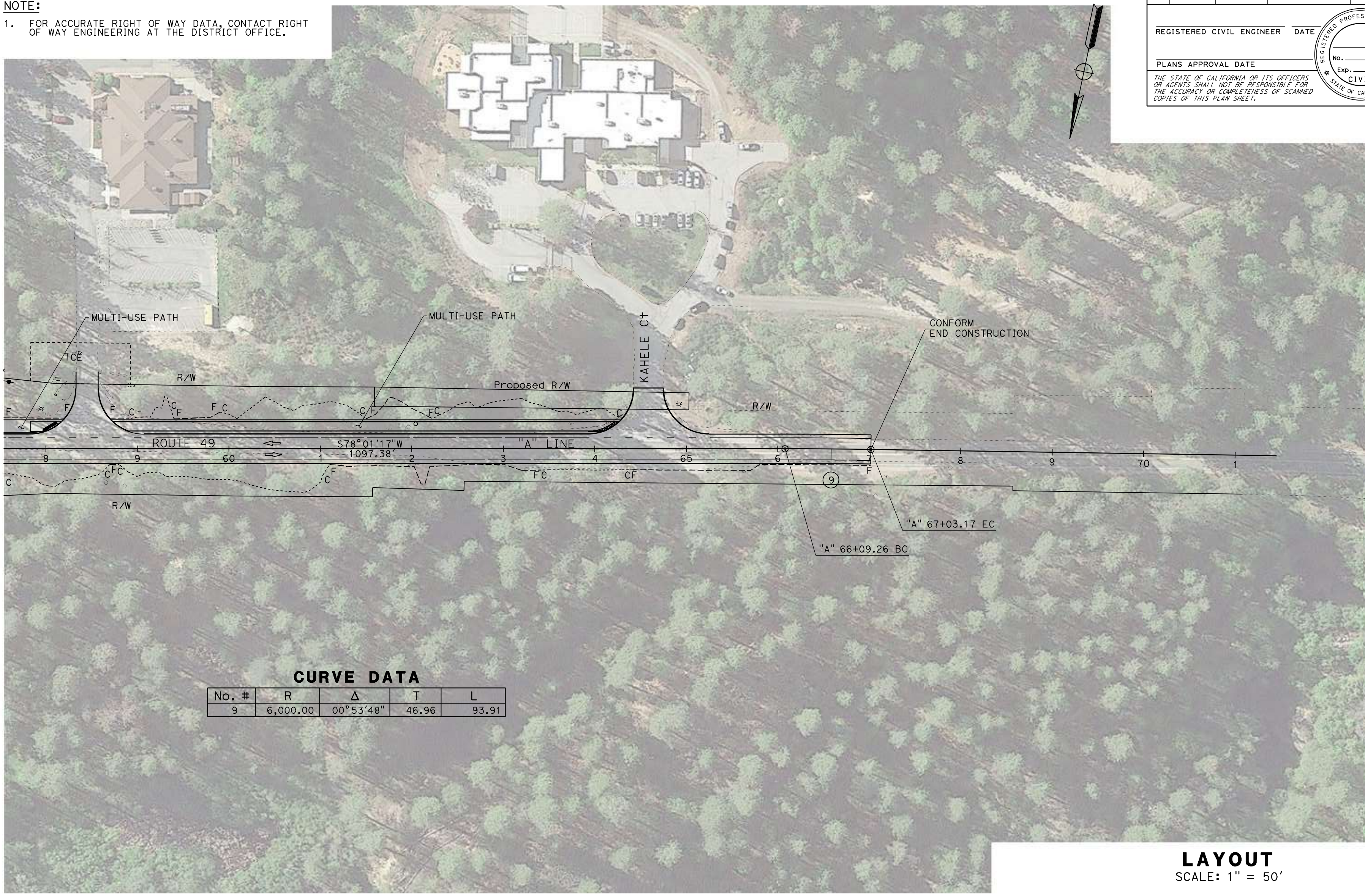
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



CURVE DATA

No. #	R	Δ	T	L
9	6,000.00	00°53'48"	46.96	93.91

LAYOUT

SCALE: 1" = 50'

L-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
Caltrans® DESIGN	R. SCOTT FOSTER	CHECKED BY	DATE REVISED

LAST REVISION 02-03-26 DATE PLOTTED => 10-FEB-2026 TIME PLOTTED => 14:51

BORDER LAST REVISED 7/2/2010 | USERNAME => s156568 DGN FILE => 0324000189ea005.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0305 | PROJECT NUMBER & PHASE 03240001890

Attachment D

Landscape Architecture Assessment Sheet (LAAS)

NORTH REGION
LANDSCAPE ARCHITECTURE ASSESSMENT STUDY
03-LAND-0002 (Rev. 2023-October)

To: EVA KARAM **From:** KATHYRYN LUGO **Unit/Senior:** SCOTT FOSTER **Project Manager:** SAM VANDELL	**DISTRICT:** 03 **DATE:**10-23-24 **EA:** 03-0N780 **ID:** 0324000189	**CO:** NEV	**RTE:** 49	**PM:** 15.07-16.1

CONTRACT SEPARATION:

☒ Roadside work as part of roadway work EA

☐ Roadside work for roadway project to follow under separate EA

PROJECT: SR 49 Multimodal Corridor Improvement Project

FUNDING SOURCE: ATP

PROJECT MILESTONE: ☐ PID ☒ PA&ED

PROJECT COST (In thousands):

DISTRICT (x1000) $10,637 **STRUCTURES (x1000)** $0

PROJECT DESCRIPTION

**Updated Scope of Work only per Design (3/17/26)

The purpose of this project is to improve accessibility and safety along the State Route 49 (SR 49) corridor spanning between the intersections of SR 20/SR 49 and the County Juvenile Hall driveway/SR 49. The project proposes to implement one roundabout, new shared-use paths, sidewalks, enhanced crossings, and improvements to lighting and signage.

The project will establish connectivity between residential, municipal, and recreation areas and connect it to existing and future pedestrian and bicycle facilities. It will also provide improved access to destinations within the project area, including transit stops, government services buildings, parks/recreation areas, community facilities and residential neighborhoods.

The project proposes the following:

- One single-lane roundabout at SR 49/Cement Hill Rd and W Broad St. intersection with new lighting, shared-use paths around the roundabout perimeter, high-visibility crosswalks with refuge islands
- Intersection Improvements includes:
  - At SR 49/Coyote Street: New lighting and high-visibility crosswalks with flashing beacons
  - At North Bloomfield Road/East Broad Street: New high-visibility crosswalk markings and ADA curb ramp improvements
  - At Maidu Avenue/Orchard Street on the north side: New lighting and high-visibility crosswalks with flashing beacons
- Pedestrian and Bicycle connectivity along SR 49 corridor from SR 20 and SR 49 to the Nevada County Juvenile Hall driveway

SCENIC HIGHWAY STATUS ☐ Officially Designated ☒ Eligible ☐ Not Designated

HIGHWAY PLANTING/IRRIGATION BACKGROUND INFORMATION

CLASSIFIED LANDSCAPE FREEWAY STATUS	☐ Yes	☒ No	
WARRANTED HIGHWAY PLANTING	☐ Yes	☒ No	
EXISTING H2O & POWER AVAILABLE	☒ Yes	☐ No	Where: TBD
EXISTING IRRIGATION IMPACTED	☐ Yes	☒ No	Where: ______
COOP. MAINT. AGREEMENTS	☐ Yes	☒ No	
ADJACENT TO OUTDOOR ADVERTISING	☐ Yes	☒ No	

AREA (Ft^2/ACRE) FOR HIGHWAY PLANTING: Approx. 12,000 SQFT

The cost estimate includes potential highway planting, inert materials, and irrigation facilities.

EROSION CONTROL BACKGROUND INFORMATION

SOIL DISTURBANCE	☒ Yes	☐ No
CONCENTRATED FLOW AREAS	☒ Yes	☐ No
SLOPE LOCATIONS	☒ Yes	☐ No
SLOPES > 2:1	☐ Yes	☒ No

AREA (Ft^2/ACRE) FOR EROSION CONTROL: 46,000 SQFT (approximate)

MITIGATION BACKGROUND INFORMATION

PROJECT BIOLOGIST: Riley Towne

Contact Date: 10/23/24
Applicable Permits: 1600, 401, 404

BIOLOGICAL REVEG. REQUIRED	☐ Yes	☒ No
VISUAL IMPACT MIT. REQUIRED	☐ Yes	☒ No
UNIT TASKED w/ BIO. REVEG.	☐ Landscape Architecture	☐ Stewardship

AREA (Ft^2/ACRE) FOR MITIGATION PLANTING: No anticipated revegetation or mitigation

The project is located in an Eligible Scenic Highway. A Visual Impact Assessment (VIA) and Scenic Resource Evaluation (SRE) will be prepared for this project to determine the visual effects.

ROADSIDE MAINTENANCE SAFETY NEEDS: N/A

ROADSIDE VEGETATION MANAGEMENT TREATMENT NEEDS: N/A

ROADSIDE VEGETATION CONTROL NEEDS: N/A

CONTEXT SENSITIVITY

☒ It is determined that the project may involve consideration of community and local involvement.
☐ No foreseen issues with community and local involvement

CONSIDER ADDITIONAL AESTHETIC TREATMENT FOR: N/A

LANDSCAPE ARCHITECTURE COST ESTIMATE

Item	Unit	QTY	Unit Price	Estimated Cost
EROSION CONTROL				
Bonded Fiber Matrix (BFM)	SQFT	46,000	$ 0.40	$ 18,400
Rolled Erosion Control Product (Netting)	SQFT	$ 46,000	$ 1.50	$ 69,000
Compost (1")	CY	142	$ 150	$ 21,300
Fiber Rolls	LF	5,300	$ 5.00	$ 26,500
	Subtotal Cost for Erosion Control			**$ 135,200**
HIGHWAY PLANTING/IRRIGATION ITEMS				
Wood Mulch	CY	100	$ 105	$ 10,500
Decorative Boulders	LS	1	$ 15,000	$ 15,000
Decorative Cobble	LS	1	$ 40.00	$ 110,000
Irrigation System	LS	1	$ 45,000	$ 45,000
Highway Planting	LS	1	$ 25,000	$ 25,000
Plant Establishment Period	LS	1	$ 20,000	$ 20,000
Subtotal Cost for Highway Planting/Irrigation Facilities				**$ 225,500**
ESTIMATED COST (Erosion Control, Highway Planting and Irrigaiton)				**$ 360,700**

PREPARED BY: Kathyryn Lugo — DATE: 11/27/2024
(Kathyryn Lugo - Landscape Associate)

CONCURRED BY: Nicki Johnson — DATE: 11/27/2024
(Nicki Johnson - DLA)

APPROVED BY: Sam Vandell — DATE: 11/27/2024
(SAM VANDELL - Project Manager)

Attachment E

Preliminary Cost Estimate

PROJECT

PLANNING COST ESTIMATE©

EA: 03-0N780 PID: 324000189

EA: **03-0N780**

PID: **324000189**

District-County-Route: 03-NEV-49

PM: 15.07-16.1

Type of Estimate : Project Report

Program Code : ATP

Project Limits : 03-NEV-49-PM L15.07/16.1

Project Description: In Nevada county on State Route 20/ Route 49 Junction and Nevada County Juvenile Hall Driveway/SR 49

Scope : Construct one roundabouts, pedestrian crossings, multi-use paths, sidewalks, lighting, and signage

Alternative : Alternative # 1

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost		Escalated Cost	
TOTAL ROADWAY COST	$	11,313,900	$	12,072,938
TOTAL STRUCTURES COST	$	-	$	-
SUBTOTAL CONSTRUCTION COST	$	11,313,900	$	12,072,938
TOTAL RIGHT OF WAY COST	$	439,900	$	466,000
TOTAL CAPITAL OUTLAY COSTS	$	11,754,000	$	12,539,000
PA/ED SUPPORT	$	-	$	-
PS&E SUPPORT	$	-	$	-
RIGHT OF WAY SUPPORT	$	-	$	-
CONSTRUCTION SUPPORT	$	-	$	-
TOTAL SUPPORT COST	$	-	$	-
TOTAL PROJECT COST	$	11,754,000	$	12,539,000 *

Programmed Amount

	Month	/	Year
Date of Estimate (Month/Year)	2	/	2026
Estimated Construction Start (Month/Year)	11	/	2027
Number of Working Days =			120
Estimated Mid-Point of Construction (Month/Year)	5	/	2028
Estimated Construction End (Month/Year)	11	/	2028
Number of Plant Establishment Days			

Estimated Project Schedule	
PID Approval	N/A
PA/ED Approval	3/18/2026
PS&E	2/22/2027
RTL	4/30/2027
Begin Construction	11/8/2027

	Name	Date	Phone
Reviewed by District O.E. or Cost Estimate Certifier	Tyler Smith	9/11/2025	(530) 821-8351
	Office Engineer / Cost Estimate Certifier	**Date**	**Phone**
Approved by Project Manager	Samuel Vandell	xx/xx/xxxx	(530) 682-6478
	Project Manager	**Date**	**Phone**

I. ROADWAY ITEMS SUMMARY

	Section	Cost
1	**Earthwork**	$ 1,619,600
2	**Pavement Structural Section**	$ 2,481,000
3	**Drainage**	$ 1,001,600
4	**Specialty Items**	$ 43,700
5	**Environmental**	$ 597,000
6	**Traffic Items**	$ 1,847,400
7	**Detours**	$ 294,600
8	**Minor Items**	$ 78,900
9	**Roadway Mobilization**	$ 796,400
10	**Supplemental Work**	$ 318,600
11	**State Furnished**	$ 159,300
12	**Time-Related Overhead**	$ 600,000
13	**Total Roadway Contingency**	$ 1,475,800

TOTAL ROADWAY ITEMS $ 11,313,900

Estimate Prepared By :

Name and Title Date Phone

Estimate Reviewed By :

Name and Title Date Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

EA: 03-0N780 PID: 324000189

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price ($)			Cost
190101	Roadway Excavation	CY	19,500	x	80.00	=	$	1,560,000
19010X	Roadway Excavation (Insert Type) ADL	CY		x		=	$	-
198010	Imported Borrow	CY	0	x	100.00	=	$	-
194001	Ditch Excavation	CY		x		=	$	-
192037	Structure Excavation (Retaining Wall)	CY		x		=	$	-
193013	Structure Backfill (Retaining Wall)	CY		x		=	$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		=	$	-
170103	Clearing & Grubbing	LS	1	x	21,000.00	=	$	21,000
100100	Develop Water Supply	LS	1	x	10,000.00	=	$	10,000
21012X	Duff	\CRE/SQFT		x		=	$	-
190185	Shoulder Backing	Ton	130	x	220.00	=	$	28,600
XXXXXX	Some Item	Unit		x		=	$	-

TOTAL EARTHWORK SECTION ITEMS	**$**	**1,619,600**

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price ($)			Cost
401050	Jointed Plain Concrete Pavement	CY		x		=	$	-
400050	Continuously Reinforced Concrete Pavement	CY	100	x	1,500.00	=	$	150,000
390132	Hot Mix Asphalt (Type A)	TON	3,800	x	160.00	=	$	608,000
260203	Class 2 Aggregate Base	CY	2,900	x	140.00	=	$	406,000
205034	Decomposed Granite	SQFT		x		=	$	-
414240	Isolation Joint Seal (Asphalt Rubber)	LF		x		=	$	-
414241	Isolation Joint Seal (Silicone)	LF		x		=	$	-
280010	Rapid Strength Concrete Base	CY		x		=	$	-
410096	Drill and Bond (Dowel Bar)	EA		x		=	$	-
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	4,000	x	170.00	=	$	680,000
391006	Asphalt Binder (Geosynthetic Pavement Interlayer)	TON		x		=	$	-
290201	Asphalt Treated Permeable Base	CY		x		=	$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		=	$	-
397005	Tack Coat	TON	14	x	1,200.00	=	$	16,800
377501	Slurry Seal	TON		x		=	$	-
374493	Polymer Asphaltic Emulsion (Seal Coat)	TON		x		=	$	-
370001	Sand Cover (Seal)	TON		x		=	$	-
731504	Minor Concrete (Curb and Gutter)	CY	195	x	1,400.00	=	$	273,000
731530	Minor Concrete (Textured Paving)	CY	120	x	1,000.00	=	$	120,000
731502	Minor Concrete (Miscellaneous Construction)	CY		x		=	$	-
731521	Minor Concrete (Sidewalk)	CY	200	x	1,000.00	=	$	200,000
39407X	Place Hot Mix Asphalt Dike (Insert Type)	LF		x		=	$	-
394073	Place Hot Mix Asphalt Dike (Type A)	LF	940	x	8.00	=	$	7,520
394075	Place Hot Mix Asphalt Dike (Type D)	LF	420	x	15.00	=	$	6,300
394076	Place Hot Mix Asphalt Dike (Type E)	LF		x	8.00	=	$	-
398100	Remove Asphalt Concrete Dike	LF	420	x	8.00	=	$	3,360
420201	Grind Existing Concrete Pavement	SQYD		x		=	$	-
398300	Remove Base and Surfacing	CY		x		=	$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		=	$	-
41800X	Remove Concrete Pavement	SQYD/CY		x		=	$	-
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD		x		=	$	-
398200	Cold Plane Asphalt Concrete Pavement	SQYD	1,660	x	6.00	=	$	9,960
846046	6" Rumble Strip (Asphalt Concrete Pavement)	STA		x		=	$	-
846049	6" Rumble Strip (Concrete Pavement)	STA		x		=	$	-
846051	12" Rumble Strip (Asphalt Concrete Pavement)	STA		x		=	$	-
846052	12" Rumble Strip (Concrete Pavement)	STA		x		=	$	-
420102	Groove Existing Concrete Pavement	SQYD		x		=	$	-
394095	Roadside Paving (Miscellaneous Areas)	SQYD		x		=	$	-
390136	Minor Hot Mix Asphalt	TON		x		=	$	-
XXXXXX	Some Item	Unit		x		=	$	-

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	**$**	**2,481,000**

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SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price ($)			Cost
710132	Remove Culvert	LF	620	x	100.00	=	$	62,000
710150	Remove Inlet	EA	2	x	2,300.00	=	$	4,600
710152	Remove Headwall	EA	6	x	3,300.00	=	$	19,800
710165	Remove Concrete Flared End Section	EA		x	900.00	=	$	-
710167	Remove Flared End Section	EA	3	x	900.00	=	$	2,700
710240	Modify Inlet	EA		x		=	$	-
710370	Sand Backfill	CY		x		=	$	-
71010X	Abandon Culvert	EA/LF		x		=	$	-
710196	Adjust Inlet	LF		x		=	$	-
710262	Cap Inlet	EA		x		=	$	-
510092	Structural Concrete, Headwall	CY	35	x	3,900.00	=	$	136,500
510094	Structural Concrete, DI	CY	30	x	4,600.00	=	$	138,000
510501	Minor Concrete	CY		x		=	$	-
510502	Minor Concrete (Minor Structure)	CY	20	x	3,000.00	=	$	60,000
731627	Minor Concrete (Curb, Sidewalk, and Curb Ramp)	CY		x		=	$	-
6101XX	XX" Alternative Pipe Culvert (Insert Type)	LF		x		=	$	-
650014	18" Reinforced Concrete Pipe	LF	23	x	280.00	=	$	6,440
650018	24" Reinforced Concrete Pipe	LF	130	x	300.00	=	$	39,000
650022	30" Reinforced Concrete Pipe	LF	83	x	600.00	=	$	49,800
610121	36" Alternative Pipe Culvert	LF		x	850.00	=	$	-
650030	42" Reinforced Concrete Pipe	LF	110	x	800.00	=	$	88,000
6411XX	XX" Plastic Pipe	LF		x		=	$	-
665018	18" Corrugated Steel Pipe (.109" Thick)	LF	170	x	310.00	=	$	52,700
665025	24" Corrugated Steel Pipe (.109" Thick)	LF	250	x	500.00	=	$	125,000
665033	30" Corrugated Steel Pipe (.138" Thick)	LF	83	x	650.00	=	$	53,950
6901XX	XX" Corrugated Steel Pipe Downdrain (0.XXX" Thi	LF		x		=	$	-
700617	Drainage Inlet Marker	EA	9	x	150.00	=	$	1,350
703233	Grated Line Drain	LF		x		=	$	-
705011	18" Steel Flared End Section	EA	2	x	1,800.00	=	$	3,600
705015	24" Steel Flared End Section	EA	4	x	3,200.00	=	$	12,800
705206	24" Concrete Flared End Section	EA	2	x	3,201.00	=	$	6,402
705208	30" Concrete Flared End Section	EA	2	x	3,700.00	=	$	7,400
705212	42" Concrete Flared End Section	EA	3	x	9,000.00	=	$	27,000
710380	18" Cured-in-place Pipeliner	LF		x	380.00	=	$	-
710384	24" Cured-in-place Pipeliner	LF		x	400.00	=	$	-
723070	Rock Slope Protection (150 LB, CLASS III, METHOD B) (CY)	CY	110	x	386.00	=	$	42,460
729011	Rock Slope Protection Fabric (Class 8)	SQYD	505	x	15.00	=	$	7,575
721420	Concrete (Ditch Lining)	CY		x		=	$	-
721430	Concrete (Channel Lining)	CY		x		=	$	-
750001	Miscellaneous Iron and Steel	LB	2,256	x	5.00	=	$	11,280
750030	Inlet Frame and Grate	EA	12	x	3,600.00	=	$	43,200
XXXXXX	Additional Drainage	LS		x		=	$	-

TOTAL DRAINAGE ITEMS $ 1,001,600

SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price ($)			Cost	
520103	Bar Reinforced Steel (Retaining Wall)	LB		x		=	$	-	PRSM quantity input for Look Ahead report.
5100XX	Structural Concrete	CY		x		=	$	-	PRSM quantity input for Look Ahead report.
510060	Structural Concrete, Retaining Wall	CY		x		=	$	-	PRSM quantity input for Look Ahead report.
5201XX	Bar Reinforcing Steel	LB		x		=	$	-	PRSM quantity input for Look Ahead report.
080050	Progress Schedule (Critical Path Method)	LS	1	x	5,000.00	=	$	5,000	
582001	Sound Wall (Masonry Block)	SQFT		x		=	$	-	
510530	Minor Concrete (Wall)	CY		x		=	$	-	
60005X	Remove Sound Wall	LF/LS/SQFT		x		=	$	-	
070030	Lead Compliance Plan	LS	1	x	5,000.00	=	$	5,000	
141120	Treated Wood Waste	LB		x		=	$	-	
839750	Remove Barrier	LF		x		=	$	-	
839752	Remove Guardrail	LF		x		=	$	-	
8000XX	Chain Link Fence (Insert Type)	LF	650	x	50.00	=	$	32,500	
80XXXX	XX" Chain Link Gate (Type CL-X)	EA	1	x	1,200.00	=	$	1,200	
8320XX	Midwest Guardrail System (Insert Type)	LF		x		=	$	-	
839301	Single Thrie Beam Barrier	LF		x		=	$	-	
839310	Double Thrie Beam Barrier	LF		x		=	$	-	
839521	Cable Railing	LF		x		=	$	-	
839566	Terminal System (Type CAT)	EA		x		=	$	-	
839584	Alternative In-line Terminal System	EA		x		=	$	-	
839585	Alternative Flared Terminal System	EA		x		=	$	-	
4906XX	XX" Cast-In-Drilled-Hole Concrete Piling	LF		x		=	$	-	
8396XX	Crash Cushion (Insert Type)	EA		x		=	$	-	
8331XX	Concrete Barrier (Insert Type)	LF		x		=	$	-	
475010	Retaining Wall (Masonry Wall)	SQFT		x		=	$	-	
511035	Architectural Treatment	SQFT		x		=	$	-	
780460	Anti-Graffiti Coating	SQFT		x		=	$	-	
780450	Rock Stain	SQFT		x		=	$	-	
4730XX	Reinforced Concrete Crib Wall (Insert Type)	SQFT		x		=	$	-	
83954X	Transition Railing (Insert Type)	EA		x		=	$	-	
780440	Prepare and Stain Concrete	SQFT		x		=	$	-	
839561	Rail Tensioning Assembly	EA		x		=	$	-	
83958X	End Anchor Assembly (Insert Type)	EA							

TOTAL SPECIALTY ITEMS $ 43,700

Effective immediately, districts must input estimated item quantities in blue text above in the PRSM database for the pay items listed in the Design Memo, dated April 9, 2018, when Project Report is approved (Milestone 200). Link to Desgin Memo.

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SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost
	Biological Mitigation (on-site)	LS	1	x	60,000.00	=	$	60,000
80010X	Temporary Fence (Insert Type)	LF	1	x		=	$	-
130670	Temporary Reinforced Silt Fence	LF	1	x		=	$	-

Subtotal Environmental Mitigation *$* *60,000*

5B - LANDSCAPE AND IRRIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost
20XXXX	Highway Planting	LS	1	x	25,000.00	=	$	25,000
20XXXX	Irrigation System	LS	1	x	45,000.00	=	$	45,000
204099	Plant Establishment Work	LS	1	x	20,000.00	=	$	20,000
20XXXX	Follow-up Landscape Project	LS		x		=	$	-
206405	Remove Irrigation Facility	LS		x		=	$	-
204096	Maintain Existing Planted Areas	LS		x		=	$	-
206400	Check and Test Existing Irrigation Facilities	LS		x		=	$	-
21011X	Imported Topsoil	CY/TON		x		=	$	-
200114	Rock Blanket	SQFT/SQYD		x		=	$	-
200122	Weed Germination	SQYD		x		=	$	-
995100	Water Meter Charges	LS		x		=	$	-
2087XX	XX" Conduit (Use for Irrigation x-overs)	LF		x		=	$	-
	Decorative Boulders	LS	1		15,000.00	=	$	15,000
	Devorative Cobble	LS	1		110,000.00	=	$	110,000
20890X	Extend X" Conduit (Use for Extension of Irrigation x-	LF		x		=	$	-
	Wood Mulch	CY	100	x	105.00	=	$	10,500

Subtotal Landscape and Irrigation *$* *225,500*

5C - EROSION CONTROL

Item code		Unit	Quantity		Unit Price ($)			Cost
211111	Permanent Erosion Control Establishment Work	LS		x		=	$	-
210010	Move-In/Move-Out (Erosion Control)	EA		x		=	$	-
210350	Fiber Rolls	LF	5,300	x	5.00	=	$	26,500
210360	Compost Sock	LF	1	x		=	$	-
2102XX	Rolled Erosion Control Product (Insert Type)	SQFT	46,000	x	1.50	=	$	69,000
21025X	Bonded Fiber Matrix	SQFT/ACRE	46,000	x	0.40	=	$	18,400
210300	Hydromulch	SQFT		x		=	$	-
210420	Straw	SQFT		x		=	$	-
210430	Hydroseed	SQFT		x		=	$	-
210610	Compost	CY	142	x	150.00	=	$	21,300
210630	Incorporate Materials	SQFT		x		=	$	-

Subtotal Erosion Control *$* *135,200*

5D - NPDES

Item code		Unit	Quantity		Unit Price ($)			Cost
130300	Prepare SWPPP	LS	1	x	4,500.00	=	$	4,500
130200	Prepare WPCP	LS		x		=	$	-
130100	Job Site Management	LS	1	x	20,000.00	=	$	20,000
130330	Storm Water Annual Report	EA	1	x	1,500.00	=	$	1,500
130310	Rain Event Action Plan	EA	40	x	500.00	=	$	20,000
130320	Storm Water Sampling and Analysis Day	EA	1	x		=	$	-
130520	Temporary Hydraulic Mulch	SQYD	1	x		=	$	-
130550	Temporary Hydroseed	SQYD		x		=	$	-
130505	Move-In/Move-Out (Temporary Erosion Control)	EA	4	x	1,000.00	=	$	4,000
130640	Temporary Fiber Roll	LF	5,300	x	5.00	=	$	26,500
130900	Temporary Concrete Washout	LS	1	x	15,000.00	=	$	15,000
130710	Temporary Construction Entrance	EA	4	x	5,000.00	=	$	20,000
130610	Temporary Check Dam	LF	1	x		=	$	-
130620	Temporary Drainage Inlet Protection	EA	12	x	400.00	=	$	4,800
130730	Street Sweeping	LS	1	x	10,000.00	=	$	10,000
XX	Erosion Control	LS	1	x	50,000.00	=	$	50,000

1.5%

Subtotal NPDES *$* *176,300*   11313900   169,709

TOTAL ENVIRONMENTAL $ 597,000

Supplemental Work for NPDES

Item code		Unit	Quantity		Unit Price ($)			Cost
066595	Water Pollution Control Maintenance Sharing*	LS	1	x		=	$	-
066596	Additional Water Pollution Control**	LS		x		=	$	-
066597	Storm Water Sampling and Analysis***	LS	1	x		=	$	-
XXXXXX	Some Item	LS		x		=	$	-

Subtotal Supplemental Work for NDPS *$* -

*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.

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SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code		Unit	Quantity		Unit Price ($)			Cost
870200	Lighting System	LS	1	x	530,000.00	=	$	530,000
870300	Sign Illumination System	LS		x		=	$	-
872133	Modifying Signal and Lighting System	LS	1	x	30,000.00	=	$	30,000
870510	Ramp Metering System	LS		x		=	$	-
87181X	Interconnection Conduit and Cable	LF/LS		x		=	$	-
5602XX	Furnish Sign Structure (Insert Type)	LB		x		=	$	-
5602XX	Install Sign Structure (Insert Type)	LB		x		=	$	-
4980XX	XX" CIDHC Pile (Sign Foundation)	LF		x		=	$	-
87011X	Inductive Loop Detector	EA/LS		x		=	$	-
870600	Traffic Monitoring Station System	LS		x		=	$	-
56804X	Remove Sign Structure	EA/LS		x		=	$	-
568054	Reconstruct Sign Structure	EA		x		=	$	-
568060	Modify Sign Structure	EA		x		=	$	-
870009	Elements During Construction	LS		x		=	$	-
86XXXX	Fiber Optic Conduit System	LS		x		=	$	-
872145	Modifying Traffic Monitoring Stations	LS	1	x	80,000.00	=	$	80,000
016126	Rectangular Rapid Flashing Beacon System	LS	1	x	180,000.00	=	$	180,000
871400	Radar Speed Feedback Sign Systems	LS	1	x	40,000.00	=	$	40,000

Subtotal Traffic Electrical $ 860,000

6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price ($)			Cost
820840	Roadside Sign - One Post	EA		x		=	$	-
820850	Roadside Sign - Two Post	EA		x		=	$	-
8208XX	Roadside Signs	LS	1	x	130,000.00	=	$	130,000
5602XX	Furnish Sign Structure (Insert Type)	SQFT		x		=	$	-
820890	Install Sign Panel on Existing Frame	SQFT		x		=	$	-
846020	Remove Painted Traffic Stripe	LF		x		=	$	-
141102	Remove Yellow Painted Traffic Stripe (Hazardous	LF		x		=	$	-
846025	Remove Painted Pavement Marking	SQFT		x		=	$	-
820250	Remove Roadside Sign	EA		x		=	$	-
820530	Reset Roadside Sign	EA		x		=	$	-
820610	Relocate Roadside Sign	EA		x		=	$	-
8101XX	Delineator (Insert Class)	EA		x		=	$	-
840502	Thermoplastic Traffic Stripe (Enhanced Wet Night	LF		x		=	$	-
846012	Thermoplastic Crosswalk and Pavement Marking (Enhanced Wet Night Visibility)	SQFT		x		=	$	-
120090	Construction Area Signs	LS	1	x	13,000.00	=	$	13,000
84XXXX	Permanent Pavement Delineation	LS	1	x	155,000.00	=	$	155,000

Subtotal Traffic Signing and Striping $ 298,000

6C - Traffic Management Plan

Item code		Unit	Quantity		Unit Price ($)			Cost
12865X	Portable Changeable Message Sign	EA/LS		x		=	$	-
12XXX	Traffic Management Plan	LS	1	x	$ 400,000	=	$	400,000

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Subtotal Traffic Management Plan $ 400,000

6C - Stage Construction and Traffic Handling

Item code		Unit	Quantity		Unit Price ($)			Cost
120198	Plastic Traffic Drums	EA		x		=	$	-
12016X	Channelizer (Insert Type)	EA		x		=	$	-
120165	Channelizer (Surface Mounted)	EA		x	55.00	=	$	-
120195	Traffic Drum	EA	100	x	70.00	=	$	7,000
120116	Type II Barricade	EA		x		=	$	-
120120	Type III Barricade	EA	4	x	150.00	=	$	600
129100	Temporary Crash Cushion Module	EA		x		=	$	-
120100	Traffic Control System	LS	1	x	50,000.00	=	$	50,000
129108	Temporary Crash Cushion TL-3	EA	10	x	5,000.00	=	$	50,000
120320	Temporary Barrier System	LF	2,540	x	50.00	=	$	127,000
120149	Temporary Pavement Marking (Paint)	SQFT	2,000	x	5.00	=	$	10,000
120152	Temporary Pavement Marking (Tape)	SQFT		x		=	$	-
120159	Temporary Traffic Stripe (Paint)	LF	56,000	x	0.80	=	$	44,800
8101XX	Delineator (Insert Class)	EA		x		=	$	-

Subtotal Stage Construction and Traffic Handling $ 289,400

TOTAL TRAFFIC ITEMS $ 1,847,400

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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity		Unit Price ($)			Cost
190101	Roadway Excavation	CY	700	x	80.00	=	$	56,000
19801X	Imported Borrow	CY/TON		x		=	$	-
390132	Hot Mix Asphalt (Type A)	TON	870	x	160.00	=	$	139,200
26020X	Class 2 Aggregate Base	CY/TON	710	x	140.00	=	$	99,400
250401	Class 4 Aggregate Subbase	CY		x		=	$	-
130620	Temporary Drainage Inlet Protection	EA		x		=	$	-
129000	Temporary Railing (Type K)	LF		x		=	$	-
128601	Temporary Signal System	LS		x		=	$	-
120149	Temporary Pavement Marking (Paint)	SQFT		x		=	$	-
80010X	Temporary Fence (Insert Type)	LF		x		=	$	-
XXXXXX	Some Item	LS		x		=	$	-

TOTAL DETOURS $ 294,600

SUBTOTAL SECTIONS 1 through 7 $ 7,884,900

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items								
	ADA Items				1.0%		$	78,849
8B - Bike Path Items								
	Bike Path Items						$	-
8C - Other Minor Items								
	Other Minor Items						$	-
	Total of Section 1-7	$	7,884,900	x	1.0%	=	$	78,849

TOTAL MINOR ITEMS $ 78,900

SECTIONS 9: ROADWAY MOBILIZATION *

Item code								
999990	Total Section 1-8	$	7,963,800	x	10%	=	$	796,380

TOTAL ROADWAY MOBILIZATION $ 796,400

SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price ($)			Cost
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x		=	$	-
066094	Value Analysis	LS	1	x		=	$	-
066070	Maintain Traffic	LS	1	x		=	$	-
066919	Dispute Resolution Board	LS	1	x		=	$	-
066921	Dispute Resolution Advisor	LS	1	x		=	$	-
066015	Federal Trainee Program	LS	1	x		=	$	-
066610	Partnering	LS	1	x		=	$	-
066204	Remove Rock and Debris	LS		x		=	$	-
066222	Locate Existing Crossover	LS		x		=	$	-
XXXXXX	Some Item	Unit		x		=	$	-
	*Cost of **NPDES** Supplemental Work specified in Section 5D*					=	$	-
	Total Section 1-8	$	7,963,800		4%	=	$	318,552

TOTAL SUPPLEMENTAL WORK $ 318,600

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price ($)		Cost
066105	Resident Engineers Office	LS	1	x		=	$0
066063	Traffic Management Plan - Public Information	LS	1	x		=	$0
066901	Water Expenses	LS		x		=	$0
8609XX	Traffic Monitoring Station (X)	LS		x		=	$0
066841	Traffic Controller Assembly	LS		x		=	$0
066840	Traffic Signal Controller Assembly	LS		x		=	$0
066062	COZEEP Contract	LS	1	x		=	$0
066838	Reflective Numbers and Edge Sealer	LS		x		=	$0
066065	Tow Truck Service Patrol	LS		x		=	$0
066916	Annual Construction General Permit Fee	LS	1	x		=	$0
XXXXXX	Some Item	Unit		x		=	$0
	Total Section 1-8	$	7,963,800		2%	= $	159,276

TOTAL STATE FURNISHED	$159,300

SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization $7,963,800 (used to calculate total TRO)

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **10%**

Item code		Unit	Quantity		Unit Price ($)		Cost
090100	Time-Related Overhead	WD	120	X	$6,637	=	$796,400

TOTAL TIME-RELATED OVERHEAD	$600,000

SECTION 13: ROADWAY CONTINGENCY*

Risk Amount from Risk Register		(for Known Risks)		0%		
Additional or Residual Contingency		(for Unknown/Undefined Risks)		15%		$1,475,715
Total Section 1-12	$	9,838,100	x	**15%**	=	$1,475,715

TOTAL CONTINGENCY*	$1,475,800

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II. STRUCTURE ITEMS

	Bridge 1		Bridge 2		
DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Bridge Name	xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Bridge 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)	xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$150		$150		$0
COST OF EACH	**$0**		**$0**		**$0**

	Building 1				
DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Building Name	xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Building 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)	xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$300		$0		$0
COST OF EACH	**$0**		**$0**		**$0**

TOTAL COST OF BRIDGES		**$0**
TOTAL COST OF BUILDINGS		**$0**
Time-Related Overhead	10%	**$0**
STRUCTURES MOBILIZATION	10%	**$0**
STRUCTURES CONTINGENCY*	25%	**$0**
TOTAL COST OF STRUCTURES		**$0**

Estimate Prepared By: ______________________________ ______________________

XXXXXXXXXXXXXXXXX ------ Division of Structures   Date

EA: 03-0N780 PID: 324000189

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way Data Sheet.

				Current Value Future Use		*Escalated Value*
A)	A1)	Acquisition, including Excess Land, Fees, Damages, Goodwill	$	86,825	$	91,736
	A2)	Acquisition of Offsite Mitigation	$		$	0
	A3)	Railroad Acquisition	$	0	$	0
B)	B1)	Utility Relocation (State Share)	$	350,000	$	371,004
	B2)	Potholing (Design Phase)	$	0	$	0
C)		Utility - Advance Engineering Estimate (Encumber with State Only Funds)	$	0	$	0
D)		RAP and/or Last Resort Housing	$	0	$	0
E)		Clearance & Demolition	$	0	$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	$	0	$	0
G)		Title and Escrow	$	3,000	$	3,180
H)		Environmental Review	$	0	$	0
I)		Condemnation Settlements 0%	$	0	$	0
J)		Design Appreciation Factor 0%	$	0	$	0
K)		Utility Relocation (Construction Cost)	$	0	$	0

L) **TOTAL RIGHT OF WAY ESTIMATE** **$439,900**

M) **TOTAL R/W ESTIMATE: Escalated** **$466,000**

N) **RIGHT OF WAY SUPPORT** **$0**

Support Cost Estimate Prepared By	Stacey Sanner Project Coordinator[1]	(530) 821-8356 Phone
Utility Estimate Prepared By	Utility Coordinator[2]	Phone
R/W Acquisition Estimate Prepared By	Tracy Fowler Right of Way Estimator[3]	(530) 821-8394 Phone

Note: Items G & H applied to items A + B

[1] When estimate has Support Costs only [2] When estimate has Utility Relocation [3] When R/W Acquisition is required

DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

EA: 03-0N780 PID: 324000189

IV. SUPPORT COST ESTIMATE SUMMARY

Run a Support Cost Estimate Summary report (D11 Project Management Support onramp) for component data.

		Unescalated-Risk Loaded					Escalated (4.2% per year for ETC, effective 1/2/2018)				
Total by FY		PA&ED	PS&E	RW	CON	Total $	PA&ED	PS&E	RW	CON	Total $
<2015/16	Expended										
	ETC										
2016/17	Expended										
	ETC										
2017/18	Expended										
	ETC										
2018/19	Expended										
	ETC										
2019/20	Expended										
	ETC										
2020/21	Expended										
	ETC										
2021/22	Expended										
	ETC										
2022/23	Expended										
	ETC										
2023/24	Expended										
	ETC										
2024/25	Expended										
	ETC										
2025/26	Expended										
	ETC										
2026/27	Expended										
	ETC										
2027/28	Expended										
	ETC										
2028/29	Expended										
	ETC										
>2029/30	Expended										
	ETC										
EAC (Expended + ETC)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Risk Amount from Risk Register						Escalated Risk Amount	$0	$0	$0	$0	$0
Support Escalation Rate											
Duration to mid-point component											
Total including Risk Amount		$0	$0	$0	$0	Total Esc. Support Cost	$0	$0	$0	$0	$0
Approved Budget (PRSM)											
Difference (Budget - EAC)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Support Ratio (EAC / Cap Cost)		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Total Capital Cost:	12,539,000
Total Capital Outlay Support Cost:	0
Overall Percent Support Cost:	0.0%

PRSM workplan hours/costs verified against approved MWA:

Office Chief - Date

Approved by:

Project Control - Date

Attachment F

Initial Site Assessment (ISA)

State of California **Business, Transportation and Housing Agency**

Memorandum

Date: August 15, 2025

File: 03-Nev-49
PM 15.1-16.1
EA 03-0N780

To: Scott Foster
Project Engineer

From: Rajive Chadha
North Region Office of Environmental Engineering (NROEE) - South

Subject: Initial Site Assessment

It is understood that this project proposes to construct 2 roundabouts, do intersection improvements, new paths and sidewalks, remove traffic striping and guardrail posts and acquire new right of way as detailed in your study request.

The review for potential hazardous waste impacts involved the following;

1. A review of the project study request submittals;
2. Discussions with project personnel;
3. A review of Geotracker (a database of haz waste sites).

Based on this review, the potential for hazardous waste exists as follows;

1) Lead contaminated soil may exist within and near our R/W due to the historical use of leaded gasoline, leaded airline fuels, waste incineration, and et-cetera. The areas of primary concern in relation to highway facilities are soils along routes with historically high vehicle emissions due to large traffic volumes, congestion, or stop and go situations. The only way to know how much lead exists is to perform a site investigation.

2) Hazardous levels of lead and chromium are known to exist in the yellow color traffic stripes. Since these traffic stripes will be cold planned along with the roadway, the levels of lead and chromium will become non-hazardous. These grindings (which consist of the roadway material and the yellow color traffic stripes) shall be removed and disposed of in accordance with Standard Special Provision 36-4 (Residue Containing Lead from Paints) which requires a Lead Compliance Plan (LCP). Non-hazardous levels of lead are known to exist in the white traffic striping. As such, these grindings shall be removed and disposed of in accordance with the same specification.

3) For any right of way acquisitions (including easements), a Hazardous Materials Disclosure Document (HMDD) will be required for attachment to the Certificate of Sufficiency (COS) before any right of way can be acquired. To provide the HMDD, Design will need to provide our office with final R/W mapping as soon as it is available.

4) Hazardous chemicals are known to exist in the wood posts associated with metal beam guard-rail and signposts. As such, if wood posts are removed, they shall be disposed of in accordance with Standard Special Provision 14-11.14 (Treated Wood Waste).

5) In the event that cured in place pipe (CIPP) will be used to rehabilitate/replace drainage facilities, the potential for hazardous waste may exist with styrene (a highly volatile chemical used in the main liner). If groundwater is known to be present in the vicinity of a culvert or perched/spring water permeates to the inside of the culvert, NROEE recommends the use of a pre-liner instead of patching the deteriorated culvert.

6) A Naturally Occurring Asbestos (NOA) study is required where any ground disturbance will occur.

Since construction of the proposed project cannot avoid disturbing soils, a Site Investigation (SI) is required for ADL and NOA. A SI needs to be requested by the PE or PM and takes 2 to 5 months to complete since a task order has to be prepared, approved, and issued to a contractor. The contractor is then required to prepare work plans, health and safety plans, conduct site investigations, and prepare site investigation reports for Caltrans review and approval.

The following support costs will be needed for this project;

Unit 0386 NROEE (Hazardous Waste) Resource Hour Needs		
ISA	**Site Investigation**	**Specs Prep**
165.1050	**235.10**	**230.35**
	$50,000	
8	**80**	**8**

This project site does not appear to be listed on the Cortese List. Should this project take place at locations other than those specified, another review will be required. Should you require further information or have any questions, I can be reached at (530) 720-4250.

c.c. Moges Tilahun , Environmental Co-ordinator
Sam Vandell, Project Manager
Chris Dennis, NROEE - South

Attachment G

Right of Way Datasheet
(RWDS)

MEMORANDUM

To: SCOTT FOSTER
Design Engineer
Department of Transportation

Attention: EVA KARAM
Project Engineer

Date: February 11, 2026

File: 03-NEV-49-15.1/16.1
EFIS No.: 03 2400 0189
EA: 03-0N780
ALTERNATIVE: 1

From: ROBERT ODOM
Assistant Chief
North Region Right of Way
Marysville

Subject: CURRENT ESTIMATED RIGHT OF WAY COSTS

Project Description: The project proposes construction of one roundabout, intersection improvements, and addition of pedestrian and bicycle facilities along the SR 49 corridor from the intersection of SR20/SR49 to the Nevada County Juvenile Hall driveway.

We have completed an estimate of the right of way costs for the above referenced project based on information received from you on January 28, 2026.

Right of Way Lead Time will require a minimum of 21 months to deliver a Right of Way Certification once final right of way requirements and mapping have been received, necessary environmental clearances have been obtained, and requested resources are available. This schedule is based on a Right of Way Certification #1 with an anticipated cert date of
April 23, 2027.

Right of Way Certification is at risk. The current project schedule does not provide Right of Way with sufficient lead time.
Areas of Concern:

*<u>**Parcel Acquisition and Clearance**</u> will require 21 months after PA&ED achievement, receipt of Appraisal Maps, COS, and HMDD.

Attachment:

Right of Way Data Sheet

cc. Sam Vandell

California State Transportation Agency

RIGHT OF WAY DATASHEET

EA: 03-0N780
PROJECT NO.: 03 2400 0189
LOCATION: 03-NEV-49-15.1/16.1
DESCRIPTION: Intersection improvements, location dependent, include new lighting, high-visibility crosswalks, RRFBs, one single-lane roundabout, high-visibility pavement markings as well as a multi-use path. The project will be overlayed. Drainage facilities will be replaced or extended as needed. Census stations in poor condition will be replaced. Non-standard ADA curb ramp will be upgraded.
ALTERNATIVE: 1
DATE: 2/11/2026
DATASHEET TYPE: Revision

1. Right of Way Cost Estimate:

	Current Value Future Use	Escalation Rate	Escalated Value
A. Total Acquisition Cost	$31,825	5%	$33,735
B. Appraisal Fees Estimate	$5,000	N/A	$5,000
C. Mitigation Acquisition & Credits	$20,000	5%	$21,200
D. Project Development Permit Fees	$30,000	5%	$31,800
Subtotal	$86,825		$91,736
E. Utility Relocation (State's Share)	$350,000	5%	$371,004
(Owner's Share: $250,000)			
F. Relocation Assistance (RAP)	$0		$0
G. Clearance/Demolition	$0		$0
H. Title & Escrow	$3,000	5%	$3,180
I. Total Estimated Right of Way Cost	$439,825	**Rounded**	**$466,000** *
J. Phase 4 estimated expenses			
Railroad	$0		
Construction Contract Work	$8,000		

2. Current Date of Project Approval (PA&ED) March 11, 2026

Current Date of Right of Way Certification April 23, 2027

3. Parcel Data:

Type		Dual/Appr	Utilities		Railroad	
X	0		U4 - 1	5	C&M Agreement	0
A	2		- 2	0	Service Contract	0
B	1		- 3	0	Easements	0
C	0	0	- 4	0	Rights of Entry	0
D	0	0	U5 - 7	3	Clauses	0
RR	0		- 8	0		
Total	**3**		- 9	5		

Excess 0

Areas:		Mitigation		Misc. R/W Work	
R/W	7285 SQ FT	Impacts	0	RAP Displacees	N/A
TCE	14621 SQ FT	Parcels	0	Clear/Demo	N/A
Excess	N/A	Credits	0	PTE Construct	N/A
Mitigation	N/A	Lump Sum	0	Condemnation	1
		Env PTE	0	USA Involvement	No

4. **Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).**

One fee parcel is needed from a Nevada County owned parcel and two TCE's are needed from private owners. An identified tree memorial near one TCE is in the County Right of Way and will not be impacted by the project.

5. **Are any properties acquired for this project expected to be rented, leased, or sold?**

Yes ______ No **X**

6. **Are RAP displacements required?**

Yes ______ No **X**

No. of single family N/A — No. of business/nonprofit N/A

No. of multi-family N/A — No. of farms N/A

Based on Draft/Final Relocation Impact Statement/Study dated N/A

N/A Sufficient replacement housing will be available without last resort housing.

N/A Sufficient replacement housing will not be available without last resort housing.

7. **Is there an effect on assessed valuation?**

Yes ______ No **X** Not Significant ______

8. **Are there any items of Construction Contract Work?**

Yes **X** No ______

There are two driveway conforms. One in a TCE area and one in the Fee parcel.

9. **Are utility facilities or rights of way affected?**

Yes **X** No ______

Names of Utility Companies requiring verification only.

PG&E Electric, Comcast, AT&T Distribution

Names of Utility Companies requiring involvements.

PG&E Gas, City of Nevada City Water, City of Nevada City Sewer, Nevada Irrigation District, CVIN

Additional information concerning Utility Involvement on this project.

Based on the scope of work for the single-lane roundabout at Cement Hill Road/West Broadway Street, a review of facility mapping and pos loc data indicates there could be underground utility conflicts with PG&E Gas, City of Nevada City Water, Nevada Irrigation District, and CVIN. City of Nevada City Sewer is anticipated to have covers in conflict requiring adjustment to grade. Following re-design due to scope reduction, overhead conflicts are no longer anticipated.

10. **Are railroad facilities or rights of way affected?**

Yes ______ No **X** Phase 4 Capital **$0**

11. **Are USA Lands or Rights Affected?**

Yes ______ No **X** Phase 4 Capital **$0**

Agencies Involved:

US Forest Service ______ BLM ______ Army Corps of Engineers ______

National Parks ______ BIA ______ Veterans Administration ______

US Fish & Wildlife ______ GSA ______ ______

Rights or Permissions to acquire:

Easement ______ Special Use Permit ______ Courtesy Letter ______

Right of Way Grant ______ Cooperative Work Agreement ______ Cost Recovery ______

Mineral Agreement ______ Letter of Concurrence ______ Timber Sale ______

There is no Federal Land on this project.

12. **Is an RE Office required for the project?**

Yes ______ No **X**

13. **Were any previously unidentified sites with hazardous waste and/or material found?**

Yes ______ None Evident **X**

14. **Are there material borrow and/or disposal sites required?**

No **X** Optional ______ Mandatory ______

15. **Are there potential relinquishments and/or abandonments?**

Yes ______ No ___X___

16. **Are there any existing and/or potential airspace sites?**

Yes ______ No ___X___

17. **What type of mitigation is required for the project?**

Permit-driven mitigation will be required

18. **Is it anticipated that Caltrans will perform all Right of Way work?**

Yes __X__ No ______

19. **Indicate the anticipated Right of Way schedule and lead time requirements.**

Right of Way Lead Time will require a minimum of **21** months after we receive first appraisal maps, utility conflict maps, necessary environmental clearances and freeway agreements have been approved and obtained. Additionally a minimum of **18** months will be required after receiving the last appraisal map to Right of Way for certification.

20. **Assumptions and limiting conditions: (Check boxes that apply.)**

- ☑ Design will secure necessary encroachment permits from local agencies, Reclamation Districts, Central Valley Flood Protection Board, etc. in advance of construction.
- ☑ This estimate is based off of preliminary Environmental information.
- ☑ Utility lead time begins after PA&ED is met and we have received conflict maps.
- ☑ Right of Way Certification is at risk. The current project schedule does not provide Right of Way with sufficient lead time.
- ☑ If the contractor requires a staging area, Standard Specifications (Sections 5-1.32) indicates that the contractor will be responsible for securing locations for staging and storage.

Evaluation Prepared By:

Right of Way: *Natalie Springer* Date 3/19/2026

NATALIE SPRINGER
Right of Way Agent

Recommended: *Tracy Fowler* Date 03/19/2026

TRACY FOWLER
Senior Right of Way Agent
D3 Condemnation, Planning & Management, and Estimating
Marysville

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates and assumptions are reasonable and proper, subject to the limiting conditions set forth, and I find this Data Sheet to be complete and current.

Date 03/19/2026

ROBERT ODOM
Assistant Chief
North Region Right of Way
Marysville

Reviewed By

RW Planning & Management: *Chua Vang* Date 03/19/2026

CHUA VANG

Attachment H

Environmental Document

CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION DETERMINATION FORM (rev. 06/2022)

Project Information

Project Name (if applicable): NEV-49 Multimodal Corridor Project

DIST-CO-RTE: 03-NEV-049 **PM/PM:** 15.07/16.10

EA: 03-0N780 **Federal-Aid Project Number:** N/A

Project Description:

Nevada County Transportation Commission (NCTC) in coordination with Caltrans propose to address mobility and safety concerns along State Route (SR) 49 from the SR 20/SR 49 junction to the Nevada County Juvenile Hall by implementing new multi-use paths, sidewalks, enhanced crossings, and intersections improvements. This project is necessary to address transportation needs and improve accessibility and safety along SR 49. This SR 49 corridor lacks continuous bicycle and pedestrian infrastructure as well as safe crossing locations, limiting the ability of residents to safely access the Government Center, recreation destinations, and the commercial areas in Nevada City. The project will establish connectivity to destinations between residential, municipal and recreational areas and connect to existing and future pedestrian/bicycle facilities.

Caltrans CEQA Determination (Check one)

☐ **Not Applicable** – Caltrans is not the CEQA Lead Agency
☐ **Not Applicable** – Caltrans has prepared an IS or EIR under CEQA

Based on an examination of this proposal and supporting information, the project is:
☐ **Exempt by Statute.** (PRC 21080[b]; 14 CCR 15260 et seq.)
☒ **Categorically Exempt. Class** 1. (PRC 21084; 14 CCR 15300 et seq.)
  ☐ No exceptions apply that would bar the use of a categorical exemption (PRC 21084 and 14 CCR 15300.2). See the SER Chapter 34 for exceptions.
☐ **Covered by the Common Sense Exemption**. This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (14 CCR 15061[b][3].)

Senior Environmental Planner or Environmental Branch Chief

Mundeep Purewal	Mundeep Purewal	3/19/26
Print Name	Signature	Date

Project Manager

Sam Vandell		3/19/26
Print Name	Signature	Date

CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION DETERMINATION FORM

Caltrans NEPA Determination (Check one)

☐ **Not Applicable**

Caltrans has determined that this project has no significant impacts on the environment as defined by NEPA, and that there are no unusual circumstances as described in 23 CFR 771.117(b). See SER Chapter 30 for unusual circumstances. As such, the project is categorically excluded from the requirements to prepare an EA or EIS under NEPA and is included under the following:

☒ **23 USC 326:** Caltrans has been assigned, and hereby certifies that it has carried out the responsibility to make this determination pursuant to 23 USC 326 and the Memorandum of Understanding dated April 18, 2022, executed between FHWA and Caltrans. Caltrans has determined that the project is a Categorical Exclusion under:

- ☒ **23 CFR 771.117(c): activity (c)(26)**
- ☐ **23 CFR 771.117(d): activity (d)(Enter activity number)**
- ☐ **Activity Enter activity number listed in Appendix A of the MOU between FHWA and Caltrans**

☐ **23 USC 327:** Based on an examination of this proposal and supporting information, Caltrans has determined that the project is a Categorical Exclusion under 23 USC 327. The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated May 27, 2022, and executed by FHWA and Caltrans.

Senior Environmental Planner or Environmental Branch Chief

Mundeep Purewal	Mundeep Purewal	3/19/26
Print Name	Signature	Date

Project Manager/ DLA Engineer

Sam Vandell	Sam Vandell	3/19/26
Print Name	Signature	Date

Date of Categorical Exclusion Checklist completion (if applicable): 3/19/26
Date of Environmental Commitment Record or equivalent: 3/19/26

Briefly list environmental commitments on continuation sheet if needed (i.e., not necessary if included on an attached ECR). Reference additional information, as appropriate (e.g., additional studies and design conditions).

EA: 03-0N780
Federal-Aid Project Number: N/A

Continuation sheet:

Project scope includes:

- One roundabout:
  - SR 49/Cement Hill Road/West Broad Street
- Intersection Improvements:
  - SR 49/Coyote Street: Add new lighting, 2 high-visibility crosswalks, and Rectangular Rapid Flashing Beacons (RRFBs) on SR 49 in both directions, and Americans with Disabilities Act (ADA) compliant curb ramps.
  - North Bloomfield Road/East Broad Street: Add 4 new high-visibility crosswalk pavement markings and new ADA compliant curb ramps.
  - Maidu Ave/Orchard Street: Add new lighting, 2 high-visibility crosswalks, and Rectangular Rapid Flashing Beacons (RRFBs) on SR 49 in both directions, and ADA compliant curb ramps.
  - Cement Hill Road/West Broad Street: Single-lane roundabout, new lighting, sidewalks along the roundabout perimeter, and high-visibility crosswalks with median refuge islands at each intersection leg.
- Sidewalks:
  - Sidewalk along Cement Hill Road from Cement Hill Road/West Broad Street northeast corner of the intersection to Hirschman's Trail.
  - Sidewalks around the roundabout perimeter.
- Multi-use paths:
  - Multi-use path on the north side of SR 49 starts from about 200 feet west of SR 20/49 junction to Cement Hill Road, passing through both North Bloomfield Road and Maidu Avenue.
  - Multi-use path on the south side of SR 49 starts from Chief Kelly Drive to Juvenile Hall driveway.

<u>Staging/Right-of-Way</u>

Two temporary construction easements (TCEs) will be needed along with one parcel acquisition.

<u>Disposal/Borrow</u>

No disposal/borrow will be required.

Consultation/Coordination

N/A

Permits

1600 (California Department of Fish and Wildlife), 401(Reginal Water Quality Control Board) and 404 (United States Army Corps of Engineers) permits will be required.

Utilities

The project will require some utility relocations. Based on the mapping and information provided, the following utility facilities exist and may be impacted:

- AT&T (Overhead/Underground)
- California Water Service (CWS)
- Comcast (Overhead/Underground)
- PG&E – Electric (Overhead)
- PG&E – Gas (Underground)
- City of Nevada City – Sewer
- Nevada Irrigation District – Water

Attachment I

Transportation Management Plan (TMP) Data Sheet and Checklist

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

Serious drought.
Help Save Water!

To: Eva Karam
Project Engineer

Date: 9/4/2025

File: 03-0N780
03-Nev-49-PM
15.1/16.1

From: Nhan Vu
TMP Coordinator
D3-Transportation Management Planning Office

Subject: **Transportation Management Plan (TMP) Data Sheet**

Background

This project is located on SR49 between the intersections of SR20/SR49 and the County Juvenile Hall. Caltrans proposes to construct roundabouts, pedestrian crossings, shared-use paths, sidewalks, lighting and signage along and across the SR49 corridor safely and comfortable while accessing destinations.

For traffic volumes refer to Table-1.

Table-1: Traffic Volumes
(2023 Traffic Volumes on California State Highways)

Location Description	***Type of Roadway***	***Peak-Hour (both directions combined) (vph)***	***% Truck Traffic***	***AADT (vpd)***
03-Nev 49- PM 15.1/16.1	*2-lane, 2-way Conventional*	*3000*	*2.61*	*29,500*

Recommendations

- *On route 49 in Nevada County, work will be limited to nighttime hours. No lane closures will be allowed during daytime and peak commute hours on weekdays.*
- *A minimum of one paved traffic lane, not less than 11 feet wide, shall be open for use by public traffic with reversible traffic control.*

- *When closures occur within 200 feet of an intersection, flaggers shall be deployed to control all legs of the intersection.*
- *No lane, shoulder closures, or any other traffic restrictions will be allowed on special days, designated holidays and the day preceding designated holidays, and when construction operations are not actively in progress.*
- *Lane closures at the construction locations will be performed in accordance with Standard Plan Sheets:*
  - *T13 "Traffic Control System for Lane Closure on Two Lane Conventional Highways"*
- *The maximum length of any lane closure shall be limited to 0.5 mile.*
- *The maximum delay to public traffic during nighttime reversing control closures shall not exceed 10 minutes. After each closure, accumulated traffic shall pass through the work before another closure is made.*
- *Portable changeable message signs (PCMS) will be required in each direction of travel during construction for each lane closure, shoulder closure and must be placed prior to any closure.*
- *Access to cross streets and driveways shall be maintained during constructions.*
- *Bicycle access must be maintained during construction.*
- *Work at this location may require the assistance of COZEEP. However, a full time COZEEP is not anticipated.*
- *Coordination with projects within, or nearby the project limits will be required to avoid conflicts.*
- *Lane closure charts will be developed prior to PS&E*

<u>Cost</u>

- *For contract bid item estimating purposes, use $5,000 per working day that requires traffic control for the following items:*
  - *Traffic Control System (TCS)*
  - *Portable Changeable Message Signs (PCMS)*
  - *Automated Flagger Assistance Device (AFAD)*
  - *Maintain Traffic*
  - *TMP-Public Information*

- *COZEEP is estimated at $1,600 per working day and $3,200 per working night whenever CHP involvement is needed during construction operations.*

If there is a change in the scope of the project or the order of work (schedule), please advise the TMP unit so that the data sheet may be revised.

P & E Requirement

To complete a TMP for this project, please provide the following to the Office of Traffic Management Planning at least three months prior to P&E:

- *Project Description*
- *Title Sheet*
- *Typical cross sections*
- *Layout Sheets*
- *Stage Construction*
- *Traffic Handling Plans*
- *Construction Cost Estimates*
- *Number of Working Days*
- *Number of Traffic Control Days*
- *Project Schedule*
- *Contact Person*

List of Attachments:

- *TMP Checklist*

D-3 TRANSPORTATION MANAGEMENT PLAN CHECKLIST

District / EA: 03-0N780
Date Prepared: September 4, 2025
Prepared By: Nhan Vu

Co.Rte.-PM. Nev 49 - PM 15.1/16.1
Location: Nev 49

Description: Constructing roundabouts pedestrian crossings, shared-use paths, sidewalks, lighting and signage.

Item		REQUIRED	RECOMMENDED	NOT APPLICABLE	BEES Item No.	COMMENTS	UNIT COST	REQUIRED IN SPEC.
1.0	**Public Information Strategies**							
1.1	Brochures and Mailers		X					
1.2	Media Releases (& minority media sources)		X					
1.3	Paid Advertising			X				
1.4	Public Information Center			X				
1.5	Public Meetings/Speakers Bureau			X				
1.6	Project Telephone Hotline			X				
1.7	Internet, E-Mail			X				
1.8	Local cable TV and News			X				
1.9	Notification to Impacted groups	X						X
	(i.e. bicycle users, pedestrians with disabilities, others)							
1.10	Project Web Page			X				
1.11	Caltrans Public Information Office		X					
1.12	Consultant Public Information Office			X				
1.13	Other items			X		As determined		
2.0	**Traveler Information Strategies**							
2.1	Changeable Message Signs (permanent)			X				
2.2	Changeable Message Signs (portable)	X				$130 per sign per day		X
2.3	Special Construction Signs			X				
2.4	Traveler Information Systems (CHIN/Internet)			X				
2.5	Highway Advisory Radio "HAR" (fixed or mobile)			X				
2.6	Radar Speed Sign			X				
2.7	Traffic Management Team			X				
2.8	Revised Transit Schedules/ Maps			X				
2.9	Bicycle community information		X					
2.10	Other item			X		As determined		
3.0	**Incident Management**							
3.1	COZEEP		X			$1600 per day and $3200 per night		
3.2	Freeway Service Patrol (tow truck service patrol)			X				
3.3	Traffic Surveillance Stations (loops or CCTV)			X				
3.4	Transportation Management Center			X				
3.5	Traffic Control Inspector (Caltrans)	X						X
3.6	Traffic Management Team			X				
3.7	On-site Traffic Advisor (contractor)			X				
3.8	Other Items			X		As determined		
4.0	**Construction Strategies**							
4.1	Delay damage clause			X				
4.2	Night work	X				Per Lane Closure Charts		X
4.3	Weekend Work			X				
4.4	Extended Weekend Closures			X				
4.5	Planned Lane Closures	X				Per Lane Closure Charts		X
4.6	Planned Ramp/Connector Closures			X				
4.7	Total Facility Closure			X				
4.8	Project Phasing			X				
4.9	Truck Traffic Restrictions			X				
4.10	Reduced Lane Widths			X				

4.0 Construction Strategies (Continued)	REQUIRED	RECOMMENDED	NOT APPLICABLE	BEES Item No.	COMMENTS	UNIT COST	REQUIRED IN SPEC.
4.11 Temporary Barrier			X				
4.12 Temporary Traffic Screens			X				
4.13 Reduced Speed Zones			X				
4.14 Traffic Control Improvements			X				
4.15 Contingency Plans	X						
4.15.1 Material Plant on standby			X				
4.15.2 Extra Critical Equipment on site		X					
4.15.3 Material Testing Plan			X				
4.15.4 Alternate Material on site			X				
(In case of failure or major delays)							
4.15.5 Emergency Detour Plan			X				
4.15.6 Emergency Notification Plan		X					
4.15.7 Weather Conditions Plan		X					
4.15.8 Delay Timing and Documentation Plan			X				
4.15.9 Late Closure Reopening Notification	X						X
4.16 Signal timing modification			X				
4.17 Coordination with adjacent construction	X						X
4.18 Double Fine Zone (signs)		X					
4.19 Right of Way Delay			X				
4.20 Other Items			X		As determined		

5.0 Demand Management	REQUIRED	RECOMMENDED	NOT APPLICABLE	BEES Item No.	COMMENTS	UNIT COST	REQUIRED IN SPEC.
5.1 HOV Lanes/Ramps			X				
5.2 Ramp metering			X				
5.3 Park-and-Ride Lots			X				
5.4 Parking Management/Pricing			X				
5.5 Rideshare Incentives			X				
5.6 Rideshare Marketing			X				
5.7 Transit, Train, or Light-Rail Incentives			X				
5.8 Transit Service Modification			X				
5.9 Variable Work Hours			X				
5.10 Telecommute			X				
5.11 Other Items			X		As determined		

6.0 Alternate Route Strategies	REQUIRED	RECOMMENDED	NOT APPLICABLE	BEES Item No.	COMMENTS	UNIT COST	REQUIRED IN SPEC.
6.1 Ramp Closures			X				
6.2 Street Improvements			X				
6.3 Reversible Lanes			X				
6.4 Temporary Lanes or Shoulders Use			X				
6.5 Freeway to freeway connector closures			X				
6.6 Encroachment Permit from City/County			X				

7.0 Other Strategies	REQUIRED	RECOMMENDED	NOT APPLICABLE	BEES Item No.	COMMENTS	UNIT COST	REQUIRED IN SPEC.
7.1 Application of new technology			X				
7.2 Other Items			X		As determined		

Comments:

Attachment J

Stormwater Data Report
(SWDR)

Dist-County-Route: 03-NEV-49

Post Mile Limits: 15.07/16.1

Type of Work: Multi Model Corridor Improvements Project

Project ID (EA): 0324000189 (03-0N780)

Phase: ☐ PID ☒ PA/ED ☐ PS&E

Applicable Caltrans Post Construction Treatment Requirement: 2012 ☐ 2022 ☒

Regional Water Quality Control Board(s): Central Valley

Total Disturbed Soil Area: 8.6 Acres PCTA: 1.86 Acres

Alternative Compliance (acres): ATA 2 (50% Rule)? Yes ☐ No ☒

Estimated Const. Start Date: 11/8/2027 Estimated Const. Completion Date: 11/8/2028

Risk Level: RL 1 ☐ RL 2 ☒ RL 3 ☐ WPCP ☐ Other: ____________

Is (M)WELO applicable?	Yes ☐	No ☒	
Is the Project within a TMDL watershed?	Yes ☐	No ☒	
Does the project require trash treatment?	Yes ☐	No ☒	
Notification of ADL reuse (if yes, provide date):	Yes ☐	Date: ____________	No ☒

This Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the date upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E only.

R Scott Foster 03/16/2026

Scott Foster, Registered Project Engineer Date

I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:

03/16/2026

Sam Vandell, Project Manager *Date*

Chi Wong 03/16/2026

John Wong, District Maintenance Representative *Date*

03/16/2026

Nicki Johnson, Designated Landscape Architect Representative *Date*

Tony Her (Mar 16, 2026 13:36:39 PDT) 03/16/2026

[Stamp Required at PS&E only] *Tony Her, District Design SW Coordinator* *Date*

1. Project Description

- The proposed project is located in Nevada County on SR 49 from the SR 49/20 junction, past the Eric Rood Administrative Center (Government Center) to the Nevada County Juvenile Hall. This project will improve pedestrian and bicycle mobility and result in safe connectivity along this corridor by implementing the following:
  - One roundabout:
    - SR 49/Cement Hill Rd/W Broad St.
  - Intersection Improvements:
    - SR 49/Coyote Street: Add new lighting, 2 high-visibility crosswalks, and Rectangular Rapid Flashing Beacons (RRFBs) on SR 49 in facing both directions, and ADA compliant curb ramps.
    - North Bloomfield Road/East Broad Street: Add 4 new high-visibility crosswalk pavement markings, and new ADA compliant curb ramps.
    - Maidu Ave/Orchard Street: Add new lighting, 2 high-visibility crosswalks, and Rectangular Rapid Flashing Beacons (RRFBs) on SR 49 in facing both directions, and ADA compliant curb ramps.
    - Cement Hill Road/West Broad Street: Single-lane roundabouts, new lighting, sidewalks along the roundabout perimeter, and high-visibility crosswalks with median refuge islands at each intersection leg.
  - Sidewalks:
    - Sidewalk along Cement Hill Road from Cement Hill Road/West Broad Street northeast corner of the intersection to Hirschman's Trail.
    - Sidewalks around the roundabout perimeter.
  - Multi-use paths:
    - Multi-use path on the north side of SR 49 starts from about 200 feet west of SR 20/49 junction to Cement Hill Road, passing through both North Bloomfield Road and Maidu Avenue.
    - Multi-use path on the south side of SR 49 starts from Chief Kelly Drive to Juvenile Hall driveway.

- The total project area is 20.64 acres with a total Disturbed Soil Area (DSA) of 8.57 acres. The proposed cut/fill limits, roadway geometry, and Right-of-Way (R/W) lines were used to create shapes representing the project area, DSA, Net New Impervious (NNI), Replaced Impervious Surface (RIS), and Excluded Impervious Area (EIA). Staging area was not included in the calculation of the DSA.

  DSA calculations included areas where new slopes and roadway excavation that exposes underlying soil will be required for the construction of the roundabout, shoulder widening, and multi-use paths. The NNI is largely attributed to the increased pavement area for widened shoulders and the roundabout at the intersection of Cement Hill Rd/W. Broad Street. RIS includes areas of existing pavement within the footprint of the roundabout and multiuse paths that will have new impervious area reconstructed from subgrade. New sidewalks and multi-use paths are accounted for as EIA. No Additional Treatment Areas (ATAs) were identified. See Table 1 below for a summary of the impervious surfaces and calculations for NIS and Post Construction Treatment Area (PCTA).

Table 1 – Project DSA and New Impervious Surfaces

Exist Impervious Area (Acres)	Post Impervious Area (Acres)	NNI (acres)	RIS (acres)	EIA (acres)	NIS (acres)	ATA #1 (acres)	ATA #2 (acres)	PCTA (acres)
7.06	9.10	2.04	1.51	1.69	1.86	0.00	0.00	1.86

Per Section 4.3 Step 7 of the PPDG, July 2017, post-construction treatment area (PCTA) is required for New Impervious Surface (NIS) that equals or exceeds one acre or more or 5,000 sf on non-highway projects (2012 CT MS4 permit)

PCTA = NIS + ATA #1 + ATA #2

NIS = NNI + RIS- EIA

Excluded Impervious Area (EIA)= Sidewalks, Pedestrian Ramps, Separate Bike Lanes, and areas of intersection of bridges over impervious areas

ATA = Additional Treated Area

PCTA = Post Construction Treatment Area

- NNI is not more than 50% of post project impervious area, therefore the entire impervious area shall not be included in the PCTA, per PPDG Section 4.4.1. Therefore, ATA #2 = 0.0
- There are no existing treatment BMPs according to the maintenance TBMP inventory, therefore we do not trigger ATA #1, per PPDG page 4-6. Therefore ATA #1 = 0.0
- The project is subject to the treatment thresholds requirements of the 2022 CT MS4 permit.

2. Site Data and Stormwater Quality Design Issues

- The Central Valley Water Quality Control Board has jurisdiction within the project's limits. The project falls within an unidentified Hydrologic Sub-Area (HSA) No. 517.20 in Nevada City Hydraulic Area (HA) in Yuba River Hydrologic Unit (HU).
- The Watershed is Deer Creek, Sub watershed is Little Deer Creek-deer Creek, and hydraulic Unit Code is No. 180201250802.
- The nearest receiving bodies of water are Deer Creek to the south, which is 303(d) listed water for Mercury and pH, TMDL required. Two bodies of water north of the project, Hirschman's Pond and Charles March Pond, were identified as receiving waters in the Water Quality Assessment Report (WQAR).
- For the Total Maximum Daily Loads (TMDLs) identified above, Caltrans has not been named a stakeholder or a contributor, nor is the Department required to address these pollutants by implementing specific treatment BMPs.

Watershed Information

CALWATER WATERSHED

Hydrologic Unit	YUBA RIVER	Hydrologic Area	Nevada City	Hydrologic Sub-Area #	517.20
Hydrologic Sub-Area Name	undefined	Planning Watershed	5517200102	HSA Area (acres)	54037
Latitude, Longitude	39.26744, -121.02483				

WATERSHED BOUNDARY DATASET

Watershed	Deer Creek	Subwatershed	Little Deer Creek-Deer Creek	Hydrologic Unit Code	180201250802
Average Annual Precipitation (inches)	49.04				

- According to Caltrans Integrated Maintenance Management System (IMMS) database (February 5, 2025) there are no existing Treatment BMPs within the project limits.
- The general weather of the project area can be difficult to predict in this portion of the Sierra Nevada due to the heterogeneous topographies and microclimates of this region. Winters are generally cold and wet, while summers are typically warm and dry. Scattered summer thunderstorms occur, but they account for less than 3% of the total annual precipitation. It is mostly dry and warm during the summer, and wet during the winter. The average annual rainfall is 49.04 inches.
- The topography of the project is ridges, valleys, and forested slopes, offering a mix of built-up areas and extensive natural landscapes. Per the WQAR, "Drainage features and topography, typical to this corridor, include the following: rolling grade, vegetated swales off of shoulders, cross culverts, stabilized shoulder backing, stabilized and vegetated cut and fill slopes".
- The surrounding land of the project limits consists mostly of forests, residential and structures occupied by the Nevada County Sheriffs Special Property Units, USDA Forest Service, Nevada's County Facilities management, County Jail, and Matteson Pump & Water system.
- According to the Stormwater Management Program District 3's work plan there are no drinking water reservoirs or recharge facilities identified in the project vicinity. Nevada city's domestic water comes primarily from Little Deer Creek that discharges into Lake Wildwood.
- The project limits do not lie within a Significant Trash Generating Area (STGA). Therefore, trash treatment BMPs are not required.
- 401 and 404 permits and 1600 Certification will be required as part of the project.
- Per the District Preliminary Geotechnical Design Report, the site surrounding the area are mapped as granite and granodiorite. Soils in the area were identified as primarily clayey sand and sandy clay with trance amounts of cobbles and boulders. There are no observations of groundwater and groundwater is not expected to be present in the proposed slope excavations. Additional percolation tests will be required for proposed treatment BMP locations.
- Lead contaminated soils may exist within the project area due to historical use of leaded fuels.
- The Total DSA for the project is 8.57 Acres.
- No additional right-of-way will be needed to construct treatment BMPs.
- The project proposes to disturb existing slopes only when necessary and minimizes cut and fill areas to reduce slope lengths. The proposed cut and fill slopes, a maximum slope ratio of 1.5H:1V suggested on the "District Preliminary Geotechnical Design report". However, a detailed slope stability analysis will be performed by the Office of Geotechnical Design North (OGDN) once updated cross sections and layouts are prepared.
- The project cannot be relocated or realigned to avoid/reduce impacts to receiving waters or to increase the preservation of critical areas such as floodplains, steep slopes, wetlands, and areas with erosive or unstable soil conditions.
- The following methods can be utilized to minimize erosion from slopes
    - Disturbing existing slopes
    - Minimizing cut and fill slope lengths
    - Acquiring right of way easements to reduce steepness of slopes

  - Providing cut and fill slopes flat enough to allow re-vegetation and limit erosion to pre-construction rates
  - Rounding and shaping slopes to reduce concentrated flow
  - Collecting concentrated flows in stabilized drains and channels

- The project design will allow for the ease of maintenance for all BMPs. Right of Way acquisitions and easements are not anticipated for construction or maintenance of BMPs.

- The project can be scheduled or phased to minimize soil-disturbing work during any rainy season.

- Permanent stormwater pollution controls such as paved slopes, vegetated slopes, basins, and conveyance systems are installed early in the construction process to provide additional protection and to possibly utilize them addressing construction stormwater impacts.

- The project does not fall within an Urban MS4 Permit Area according to the Caltrans Water Quality Planning Tool (WQPT).

3. Construction Site BMPs to be used on Project

- The project will be completed in 1 construction season. The Contractor is responsible for securing locations for staging and storage that are approved by the Resident Engineer (RE). Temporary Construction Site BMPs will be deployed under Caltrans RE approved Storm Water Pollution Prevention Plan (SWPPP) that will be prepared by the contractor. Temporary fiber rolls, street sweeping, drainage inlet protection, and concrete washout have been identified as bid line items. Additional BMPs might be identified during the design phase. All remaining Water Pollution Control items will be included under the “Job Site Management” lump sum bid item.

- Dewatering operations for the project are not anticipated. The project is scheduled to be completed during 1 non-rainy season with construction spanning part of one rainy season.

- Project specific BMP measures will be specified and quantified during the design phase. Temporary construction BMPs have been estimated at 1.5% of the total $12 Million project cost in accordance with the PPDG appendix F (Table F-2) Guidelines for a total of $176,000. The annual Construction General Permit Fees are anticipated to be approximately $1000 based on a DSA of 9 acres.

- The Project has been identified as a Risk Level 2 using the GIS Map Method. The Watershed Erosion Estimate is 16.63 tons/acre, which is medium Sediment Risk. The LS Factor Value is 6.02, K factor value is 0.1 and the R Factor value is 136. The receiving water risk is low.

4. Maintenance BMPs

- The project is not within an Urban Municipal Separate Storm Sewer System (MS4) Permit Area.
- Pedestrians and cyclists are permitted within project limits at certain locations. This project will modify existing pedestrian facilities. Drain stenciling is required at locations which pedestrians and bicyclists are permitted.
- The project has no existing or proposed Maintenance Vehicle Pullouts (MVPs).

5. Other Water Quality Requirements and Agreements

- There are no negotiated agreements or understanding with Central Valley Regional Water Quality Control Board for this project to date.

6. Permanent BMPs

Rapid Stability Assessment

- The project will add more than 10,000 SQFT of Net New Impervious (NNI), therefore this project requires an RSA. According to the Caltrans Hydromodification Requirements Guidance, since the New Impervious is not within a threshold drainage area, RSA will not be required.

Design Pollution Prevention (DPP) BMP Strategy

- The project proposes to increase the amount of impervious area within the project limits, which will have effects on downstream flows. Increased flow velocity and volumes will be quantified and mitigated during the PS&E phase of the project. The Drainage Report will evaluate options to reduce runoff to preconditions.

- The project will incorporate design pollution prevention BMPs to minimize impacts to water quality related to downstream erosion, stabilizing existing and proposed DSAs, and maximizing vegetated surfaces to the extent feasible.
- New slopes of 1.5V:1H or flatter and Disturbed Soil Areas (DSA) will be stabilized and vegetated in accordance with plans approved by the District Landscape Architect. The stabilization process may also integrate features that will increase the site perviousness to the degree practicable. New slopes will be analyzed and performed by the OGDN once updated cross sections and layouts are provided.

Treatment BMP Strategy

Complete this section to document Treatment BMPs and credits; otherwise, state not applicable.

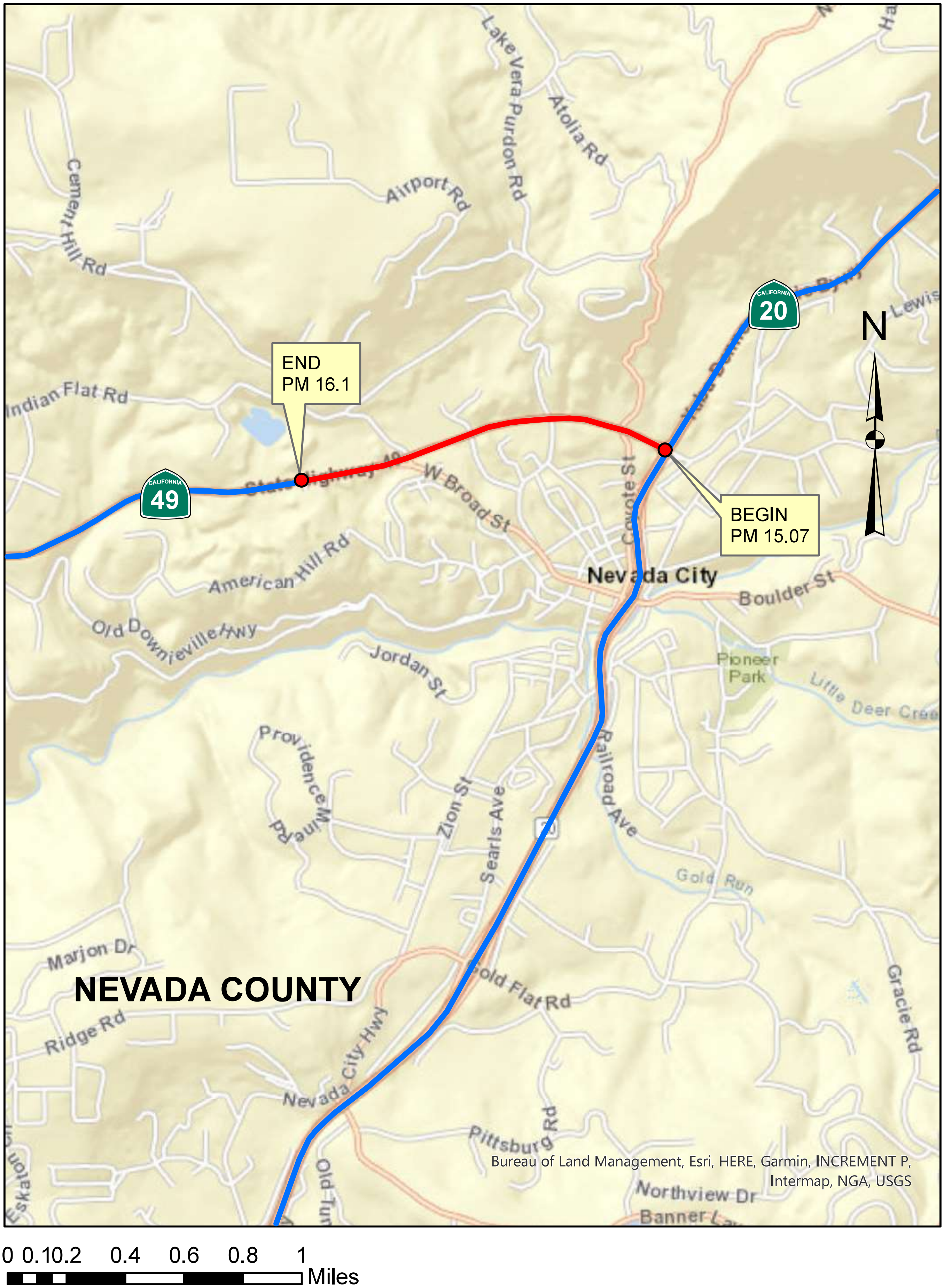
- The project is required to consider Treatment BMPs in accordance with the attached Evaluation Documentation Form. No Caltrans Targeted Design Constituents (TDC) were identified. The current treatment BMP strategy is to treat 100% of the WQV/WQF by maximizing site perviousness.
- In accordance with the threshold requirements of the 2022 CT MS4 Permit, the Post Construction Treatment Area (PCTA) is 1.86 acres. If permanent BMP requirements cannot be met for this project, a State and Regional Water Quality Control Board approved alternative compliance plan will be required within the impacted watershed to satisfy the Caltrans Statewide (2022) MS4 NDPES permit post construction treatment area (PCTA) mandate. If the required 1.86 acres of PCTA cannot be treated onsite, then it will have to be mitigated offsite, subject to approval by the RWQCB, at a potential cost of $785,400 excluding Right of Way if needed, in accordance with the estimating procedures of Appendix F of the 2023 PPDG.
- The current requirements for treatment BMPs in order of priority are:
    - Infiltrate, harvest, and reuse
    - Treat using existing BMPs (with an emphasis on low impact green BMPs)
    - Treat excess Runoff Using LID based flow through BMPs
    - Offsite Mitigation
- DPP Infiltration Areas will be considered as vegetated or non-vegetated areas, these areas provide infiltration. In addition, Biofiltration Swales/Strips and detention devices may be incorporated into the project. Exact location will be determined during later project time.
- Further options for Treatment BMP strategy will be looked at during PS&E phase. Currently, as mentioned above, Right of Way funds will be included in environmental mitigation to cover the cost of mitigating offsite.

Required Attachments

- Vicinity Map
- Evaluation Documentation Form
- Risk Level Determination Documentation
- Construction Site BMP Consideration Form

VICINITY MAP
NEVADA 49

NEV PM 15.07/16.1 EA 03-0N780



Evaluation Documentation Form

No.	Criteria	Yes ✓	No ✓	Supplemental Information for Evaluation
1.	Begin Project evaluation regarding requirement for implementation of Treatment BMPs	✓		Continue to 2.
2.	Is the scope of the Project to install Treatment BMPs (e.g., Alternative Compliance or TMDL requirement)?		✓	If **Yes**, go to 8. If **No**, continue to 3.
3.	Is there a direct or indirect discharge to surface waters?	✓		If **Yes**, continue to 4. If **No**, go to 9.
4.	As defined in the WQAR or ED, does the project: a. discharge to Areas of Special Biological Significance (ASBS), or	✓		If **Yes to any**, contact the District/Regional Design Stormwater Coordinator or District/Regional NPDES Coordinator to discuss the Department's obligations, go to 8 or 5. _________*(Dist./Reg. Coordinator initials)*
	b. discharge to a TMDL watershed where Caltrans is named stakeholder, or		✓	
	c. have other pollution control requirements for surface waters within the project limits (e.g. STGA)?		✓	If **No** to all, continue to 5.
5.	Are any existing Treatment BMPs partially or completely removed? (ATA Condition 1, Section 4.3.1)		✓	If **Yes**, go to 8 **AND** continue to 6. If **No**, continue to 6.
6.	Is this a Routine Maintenance Project?		✓	If **Yes**, go to 9. If **No**, continue to 7.
7.	Does the project result in an increase of 10,000 ft² or more of new impervious surface (NIS)?	✓		If **Yes**, go to 8. If **No**, go to 9.
8.	**Project is required to implement Treatment BMPs.**	**Complete Checklist T-1, Part 1.**		
9.	Project is not required to implement Treatment BMPs. TH *(Dist./Reg. Design SW Coord. Initials)* SF *(Project Engineer Initials)* 03/16/2026 *(Date)*	Document for Project Files by completing this form and attaching it to the SWDR.		

Version 10/17/13 CT 5/19/2020

Risk Determination Worksheet

Step 1 Determine Sediment Risk via one of the options listed:
1. GIS Map Method - EPA Rainfall Erosivity Calculator & GIS map
2. Individual Method - EPA Rainfall Erosivity Calculator & Individual Data

Step 2 Determine Receiving Water Risk via one of the options listed:
1. GIS map of Sediment Sensitive Watersheds provided
2. Site Specific Analysis (support documentation required)

Step 3 Determine Combined Risk Level

CDOT Project Information

EA:	**03-0N780**
	Pm 15.1 to Pm 16.1
	Multimodal Corridor Improvments Project
Lat	**39.26851**
Long	**-121.02471**
Const Start	**11/8/2029**
CCA Date	**11/8/2030**
Project Combined Risk	**Level 2**

Required at PSE only

DSA (ac)	6.52
Total Project Area (ac)	20.64
Total Pre Impervious (ac)	7.06
Total Post Impervious. (ac)	9.58

03-0N780/Pm 15.1 to Pm 16.1/Multimodal Corridor Improvments Project

Sediment Risk Factor Worksheet	**Entry**
A) R Factor	
Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site. https://lew.epa.gov/	
R Factor Value	124.13
B) K Factor (weighted average, by area, for all site soils)	
The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted. http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx	
K Factor Value	0.1
C) LS Factor (weighted average, by area, for all slopes)	
The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction. http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx	
LS Factor Value	6.02
Watershed Erosion Estimate (=RxKxLS) in tons/acre	74.73
Site Sediment Risk Factor Low Sediment Risk: < 15 tons/acre Medium Sediment Risk: >=15 and <75 tons/acre High Sediment Risk: >= 75 tons/acre	**Medium**

See Screenshots in BACKUP worksheet for value documentation

03-0N780/Pm 15.1 to Pm 16.1/Multimodal Corridor Improvments Project

Receiving Water (RW) Risk Factor Worksheet	Entry	Score
A. Watershed Characteristics	yes/no	
A.1. Does the disturbed area discharge (either directly or indirectly) to a **303(d)-listed waterbody impaired by sediment** (For help with impaired waterbodies please visit the link below) or has a **USEPA approved TMDL implementation plan for sediment**?: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml **OR** SPAWN & COLD & MIGRATORY? (For help please review the appropriate Regional Board Basin Plan) http://www.waterboards.ca.gov/waterboards_map.shtml	no	Low

Region 1 Basin Plan

Region 2 Basin Plan

Region 3 Basin Plan

Region 4 Basin Plan

Region 5 Basin Plan

Region 6 Basin Plan

Region 7 Basin Plan

Region 8 Basin Plan

Region 9 Basin Plan

[illegible]
Project

Combined Risk Level Matrix

Receiving Water Risk	Sediment Risk: Low	Sediment Risk: Medium	Sediment Risk: High
Low	Level 1	Level 2	Level 2
High	Level 2	Level 2	Level 3

Project Sediment Risk: Medium
Project RW Risk: Low
Project Combined Risk: Level 2

DATE: _12/12/2025__________________

Project ID / EA: ___0324000189________________

Project Evaluation Process for the Consideration of Construction Site BMPs

No.	Criteria	Yes ✓	No ✓	Supplemental Information
1.	Will construction of the project result in areas of disturbed soil as defined by the Project Planning and Design Guide (PPDG)?	✓		If Yes, Construction Site BMPs for Soil Stabilization (SS) will be required. Review CS-1, Part 1. Continue to 2. If No, Continue to 3.
2.	Is there a potential for disturbed soil areas within the project to discharge to storm drain inlets, drainage ditches, areas outside the RW, etc.?	✓		If Yes, Construction Site BMPs for Sediment Control (SC) will be required. Review CS-1, Part 2. Continue to 3.
3.	Is there a potential for sediment or construction related materials and wastes to be tracked offsite and deposited on private or public paved roads by construction vehicles and equipment?	✓		If Yes, Construction Site BMPs for Tracking Control (TC) will be required. Review CS-1, Part 3. Continue to 4.
4.	Is there a potential for wind to transport soil and dust offsite during the period of construction?	✓		If Yes, Construction Site BMPs for Wind Erosion Control (WE) will be required. Review CS-1, Part 4. Continue to 5.
5.	Is dewatering anticipated or will construction activities occur within or adjacent to a live channel or stream?		✓	If Yes, Construction Site BMPs for Non-Stormwater Management (NS) will be required. Review CS-1, Part 5. Continue to 6.
6.	Will construction include saw-cutting, grinding, drilling, concrete or mortar mixing, hydro-demolition, blasting, sandblasting, painting, paving, or other activities that produce residues?	✓		If Yes, Construction Site BMPs for Non-Stormwater Management (NS) will be required. Review CS-1, Parts 5 & 6. Continue to 7.
7.	Are stockpiles of soil, construction related materials, and/or wastes anticipated?		✓	If Yes, Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Review CS-1, Part 6. Continue to 8.
8.	Is there a potential for construction related materials and wastes to have direct contact with stormwater; be dispersed by wind; be dumped and/or spilled into storm drain systems?	✓		If Yes, Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Review CS-1, Part 6.

Attachment K

Preliminary
Structural Section Recommendation

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

M e m o r a n d u m

Serious drought.
Help Save Water!

To: Eva Karam
Design Branch M2
North Region Project Development

Date: October 24, 2025
File: 03-NEV-49
PM 15.07-16.1
EA 03-0N780
Revision 2

From: Addisu Workineh, District 3 Materials Engineer
Amar Otgonbayar**,** Assistant District 3 Materials Engineer
North Region – Materials Laboratory

Subject: Preliminary Structural Section Recommendation

As requested in your email to Addisu Workineh the following structural section recommendation revision is prepared for the above referenced project. The following assumptions have been made:

TI_{40} = 9.0 (Traffic Data)
R-Value = 15 (Historical)
Pavement Climate Region = Low Mountains
Elevation=2630'

Note: Following the guidelines in the Crumb Rubber Usage in Hot Mix Asphalt Pavements memo signed in March 2020 by Micheal D. Keever and Cory Binns. Rubberized hot mix asphalt (RHMA) is included in the structural section recommendation as all projects with estimated HMA quantity greater than 1,000 tons shall include RHMA.

Note: Asphalt binder used for HMA-A, RHMA-G, and RHMA-O shall be grade PG 64-16 and shall conform to sections 39 and 92 of the Standard Specifications and Special Provisions.

STRUCTURAL SECTION RECOMMENDATIONS

Minor Rehabilitation of Existing Roadway:

It is recommended to cold plane the existing roadway a minimum of 0.20’. Cracks wider than 0.25 inches should be sealed; loose and spalling pavement removed; potholes should be repaired. Routing the cracks before applying crack sealant. The width of the routing should be 0.25 inch wider than the crack width. The depth should be equal to the width of the routing plus 0.25 inch. To alleviate the potential bump in the overlay from the crack sealant, leave the crack sealant 0.25 inches below grade to allow for expansion and overlay with the following:

0.20’ RHMA-G
0.20’ Total Structural Section

New Construction for Mainline, Roundabout, and Shoulder (40-year Flexible Pavement):

TI_{40} = 9.0

Option 1:

0.20’ RHMA-G
0.40’ HMA-A
0.50’ AB (Class II)
1.10’ Total Structural Section

Option 2:

0.20’ RHMA-G
0.35’ HMA-A
0.80’ AB (Class II)
1.35’ Total Structural Section

New Construction for Mainline, and Shoulder (40-year Rigid Pavement):

Initial Year AADTT = 260

Option 1:

0.75’ JPCP
BB
0.35’ LCB
0.50’ AB (Class II)
1.60’ Total Structural Section

Option 2:

0.70’ JPCP
0.25’ HMA-A
0.50’ AB (Class II)
1.45’ Total Structural Section

Note: Base bond breaker should be applied between JPCP and LCB. Refer to standard specification section 36-2 for types of Base Bond Breakers (BB).

Note: - The above recommendations are for pavement with tied concrete shoulders. Tied concrete shoulders are shoulders that are built with rigid pavement that are tied to the adjacent lane with tie bars. These shoulders provide lateral support to the adjacent lane, which improves the long-term performance of the adjacent lane, reducing the need for maintenance or repair of the lane. For information regarding tied concrete shoulders please refer to HDM section 626.2.1

New Construction for Mainline (40-year Rigid Pavement):

Initial Year AADTT = 260

Option 1:

0.65’ JPCP
BB
0.35’ LCB
0.50’ AB (Class II)
1.50’ Total Structural Section

Option 2:

0.65’ JPCP
0.25’ HMA-A
0.50’ AB (Class II)
1.40’ Total Structural Section

Note: - The above recommendations are for pavement with widened slabs. Widened slabs involve constructing the concrete panel for the lane adjacent to the shoulder 14-feet wide on the outside and 13-feet wide on the inside in lieu of the prescribed lane width. The additional width becomes part of the shoulder width and provides lateral support to the adjacent lane. Widened slabs are most useful in areas where lateral support desired but future widening is not anticipated. For information regarding widened slab please refer to HDM section 626.2.2.

New Construction for Multi Use Path (MUP):

0.30’ HMA-A
0.35’ AB (Class II)
0.65’ Total Structural Section

New Construction for Roundabout Apron:

Construct the apron of the roundabout with the following:

0.67’ PCC
0.50’ AB (Class II)
1.17’ Total Structural Section

Note: - Consider using colored concrete for the apron part to differentiate it from the mainline.

Temporary structural section for 1 year: **TI = 6.0**

0.30’ HMA-A
0.50’ AB (Class II)
0.80’ Total Structural Section

Note: The above recommendation is good for only 1 year. If you plan to use the temporary section more than the specified years, request a new structural section.

MATERIALS SPECIFICATIONS

Hot Mix Asphalt (HMA) Type A – Shall conform to section 39 of the Standard Specifications and the Special Provisions.

Hot Mix Asphalt (HMA) Type O – Shall conform to section 39 of the Standard Specifications and the Special Provisions.

Rubberized Hot Mix Asphalt (RHMA) Type G – Shall conform to section 39 of the Standard Specifications and the Special Provisions.

Rubberized Hot Mix Asphalt (RHMA) Type O – Shall conform to section 39 of the Standard Specifications and the Special Provisions.

Aggregate Base (AB) – Class 2 – shall conform to section 26 of the Standard Specifications and the Special Provisions.

Asphalt Binder – Asphalt binder used for HMA-A shall be grade PG 64-16 or as specified and shall conform to sections 39 and 92 of the Standard Specifications and Special Provisions.

Asphalt Treated Permeable Base (ATPB) – Shall conform to section 29 of the Standard Specifications and the Special Provisions.

Paint Binder – shall conform to sections 39, 92 and 94 of the Standard Specifications and the Special Provisions.

Subgrade Enhancement Geogrid (SEG_G) – shall conform to section 96 of the Standard Specifications and the Special Provisions.

Lean Concrete Base (LCB) – Shall conform to section 28.2 of the Standard Specifications and the Special Provisions.

Base Bond Breaker (BB) – Shall conform to section 36-2 of the Standard Specifications and the Special Provisions.

Jointed Plain Concrete Pavement (JPCP) – Shall conform to section 40 and 90 of the Standard Specification and the Special Provision.

Continuously Reinforced Concrete Pavement (CRCP) - Shall conform to section 40 and 90 of the Standard Specification and the Special Provision.

If you have any questions or concerns, please contact Addisu Workineh at (530) 682-5504 or Amar Otgonbayar at (916) 799-0878.

Attachment L

Climate Change Risk and Adaptation Report

Climate Change Risk and Adaptation Report Cover Page

Preliminary Climate Change Screening:

1. Coastal Jurisdiction Boundary Determination

Is any portion of the proposed Project limits within the Coastal Zone (external coast or San Francisco Bay) or Legal Delta?

☐ Yes- The project location is within the _______________ jurisdiction.

(if yes, Section 1, 2, and 3 in Report must be completed)

☑ No

2. Was the project location or asset(s) within the project scope identified to be at preliminary risk to any climate stressors over the anticipated design life of the project in the following assessments?

Caltrans Climate Change Vulnerability Assessments

☑Yes ☐ No If yes, identify climate stressor(s): Temperature, precipitation, wildfire

Caltrans Adaptation Priority Reports

☑ Yes ☐ No If yes, list number of asset(s) identified: 1

3. Have the following documents/plans been scoped for climate change considerations? Check all that apply.

☐ Transportation Planning Scoping Information Sheet (TPSIS) – attach TPSIS to Climate Change Report

☐ Corridor Plan(s) – include if applicable

Section 1: Climate Exposure

Section 1.1 – Evaluate Baseline Climate Risks

Identify if the proposed project area is determined to be at risk to any climate stressors over the anticipated design life of the project the for the following:

☑ Changes in Temperature ☑ Changes in Precipitation

☑ Wildfire ☐ Sea Level Rise ☐ Storm Surge ☐ Cliff Retreat

Data sources that indicate climate risk – select all that apply:

☑ Caltrans Climate Change Vulnerability Assessment

☑ District Adaptation Priority Report

☐ Other climate sources (list any used; e.g., Cal-Adapt.org; CalFIRE Fire Hazard Severity Zones Map; etc.)

☐ Corridor Plan or other system plan

☐ TPSIS

☐ Other district study or plan (e.g., coastal hazards planning study or feasibility study)

Section 1.2 – Asset Types, Adaptation Priority Report, and Consequence

The following assets identified in Section 1.1(through the Adaptation Priority Reports) within the project limits are anticipated to be at risk of impact due to identified climate stressors

Asset Type	**Asset PM Location** (begin/end PM, if necessary)	**Climate Risk/Stressor(s)**	**Climate Stressor Score & Priority** (note all) (1 highest, 5 lowest)
Roadway	NEV-49-15.07/16.1	Temperature	5

Section 3 – Adaptation Alternatives

Adaptation measures should be chosen to align with the design life or expected lifetime of the assets at risk to projected climate impacts for this project. Given this, based on major assets at risk, select what time horizon adaptation alternatives are considered for:

☐ 0-10 Yrs ☐ 11-25 Yrs ☑26 – 50 Yrs ☐ 50 – 74 Yrs ☐ 75+ Yrs

☑ Temperature Change (including pavement, complete street elements and extreme heat days)

Adaptation Alternative(s): Consideration of shading opportunities for active transportation users

☑ Precipitation Change (e.g., riverine flooding, increase in extreme precipitation through rain or snow, drought conditions)

Adaptation Alternative(s): Consideration where feasible of drainage element upgrades/improvements consistent with project intent

☑ Wildfire

Adaptation Alternative(s): Consideration of hardened materials and vegetation management practices in the project vicinity where feasible

Climate Change Risk and Adaptation Report Summary:

Report findings for 03-0N780 include moderate forecasted increases in temperature and precipitation and moderate to high level of concern for wildfire in the western project limits and surrounding the project vicinity outside of the directly urbanized area (Vulnerability Assessment 2019). Considerations from the report are in line with project intent.

Attachment M

Preliminary Geotechnical Design Report

Memorandum

To: SCOTT FOSTER
District 03 Design

Date: October 29, 2025

File: 03-NEV-49-15.07/16.1
03-0N780
0324000189
Nevada SR 49
Multimodal Corridor
Project

From: GEOTECHNICAL SERVICES
Office of Geotechnical Design North
Branch D

Subject: **DISTRICT PRELIMINARY GEOTECHNICAL REPORT FOR THE NEVADA STATE ROUTE 49 MULTIMODAL CORRIDOR PROJECT**

Introduction

Per the request dated September 18, 2025, this District Preliminary Geotechnical Report has been prepared for the proposed cuts and fills located between postmiles (PM) 15.1 and 16.1 on State Route 49. The recommendations presented in this report are based on the layout plans, cross sections dated May 27, 2025, and a site investigation in October 2025.

Project Description

The project proposes the construction of roundabouts, pedestrian crossings, shared-use paths, sidewalks, lighting, and signage to enhance pedestrian and bicycle mobility, connectivity, and safety. The proposed cuts and fills are required to accommodate these improvements. Fill slopes are anticipated to reach a maximum height of approximately 22 feet and cut slopes a maximum height of approximately 26 feet. A summary of the proposed cut and fills are provided in Table 1.

All elevations referenced within this report are based on the North American Vertical Datum of 1988 (NAVD88).

Table 1: Description of the Proposed Cut and Fill

Type	Begin Station & Offset	End Station & Offset	Proposed Slope Ratio (feet)
Fill	14+00 LT	19+43.66 LT	1.5
Fill	14+20.54 RT	15+50.30 RT	1.5
Fill	15+89.55 RT	20+70.08 RT	1.5
Cut	19+43.66 LT	28+68.20 LT	1.5
Fill	29+38.87 LT	37+37.89 LT	1.5
Fill	29+82.30 RT	38+11.10 RT	1.5
Cut	37+37.89	40+50	1.5
Fill	41+00	45+49.20	1.5
Fill	42+54.44 RT/LT	45+47.20 RT/LT	1.5
Cut	45+29.92 LT	48+82.94 LT	1.5
Cut	56+69.24 RT	66+98.20 RT	1.5

Geotechnical Investigation

The geotechnical investigation for the cut slopes and fill locations involved observing and sampling the existing cut slope surfaces, tops of slopes, and upslope areas to look for any signs of instability, seepage, groundwater or prominent erosion. Material was hand sampled, identified and angle of repose was measured at the site.

Geotechnical Conditions

Geology

The site and surrounding area are mapped as granite and granodiorite (Jgr) by Saucedo et al. (1992). A portion of this geologic map is shown in Figure 1 below.

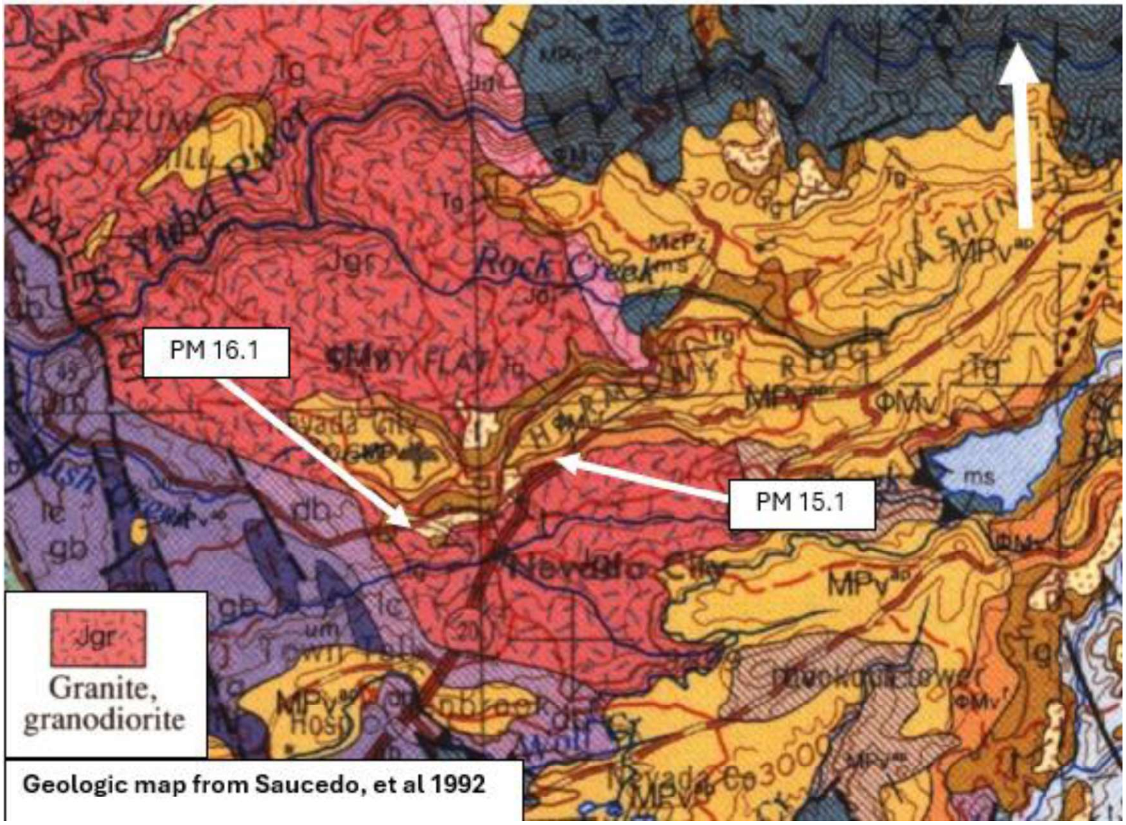


Figure 1. Geologic map of area surrounding the project site. Taken from Saucedo et al. (1992).

Surface Conditions

Existing cut slope faces within the project limits, where proposed cuts are planned, are moderately to heavily vegetated and consist predominantly of clayey sand and sandy clay with trace amounts of cobbles and boulders. Some boulders within these materials are notably large. No shallow slope instability was observed within the proposed cut locations, although minor surface erosion is present and considered typical of decomposed granodiorite. The maximum existing cut height is approximately 22 feet, with the steepest local slope ratio of about 1H:1V observed near the western extent of the project area.

The proposed fill locations are generally located in the drainage ditches adjacent to SR 49 which are generally flat and sparsely vegetated.

Subsurface Conditions

Within the limits of the proposed excavations, the existing cut slopes consist of saprolite, decomposed granodiorite and corestones. Hand sample classifications revealed that the decomposed granodiorite was composed of predominantly dense to very dense clayey sand and sandy clay and exhibited an in-situ angle of repose (ϕ) of at least 35º.

STA 20+00 to 29+39

Occasional cobbles and boulders comprise approximately five percent of the total volume within the proposed cut slope areas. Individual boulders up to about five feet in diameter were observed within the slopes and in adjacent terrain bordering the project area. A localized cluster of corestones, approximately 15 feet in width, is exposed along the cut slope face adjacent to the eastbound lane (see Figure 2). The presence of granodiorite corestones along the slope surface indicates that the existing materials lie within a transitional weathering zone between decomposed and potentially intact bedrock. Corestones represent remnants of less-weathered, competent granodiorite that have resisted decomposition, while the surrounding matrix has undergone weathering to decomposed granite. Their occurrence near the surface suggests that the depth to hard, unweathered bedrock or more likely, to large, isolated boulders or corestones may be relatively shallow in this area.

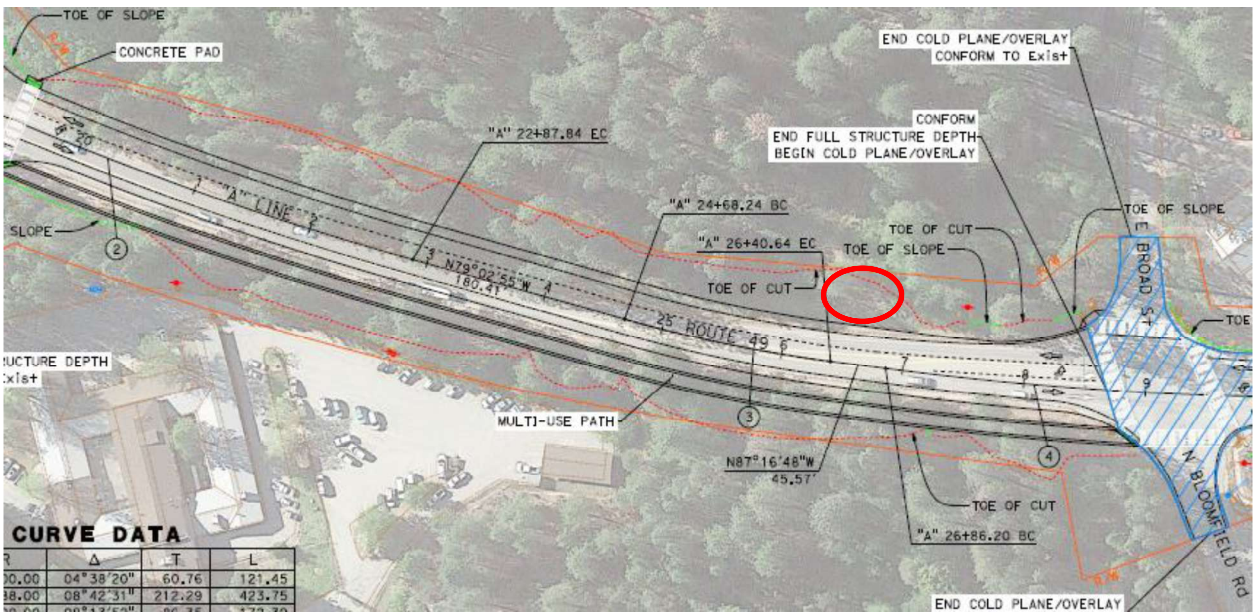


Figure 2. Plan view of the proposed cut slopes between Stations 20+00 and 29+39 with the red oval identifying the location of corestones.

Except for the localized corestone zone identified, hard bedrock was not encountered in hand excavations nor observed as outcrops along existing slope faces or crests within the project limits. Therefore, the presence of hard bedrock is not anticipated during excavation activities.

STA 56+80 to 66+98

Occasional cobbles and boulders comprise approximately one percent of the total volume within the proposed cut slope areas. Individual boulders up to about 10 feet in diameter were observed within the slopes just west of the project limits.

Hard bedrock was not encountered in hand excavations, nor was it observed as outcrops along existing slope faces or crests within the project limits. Therefore, hard bedrock is not expected to be encountered during the proposed excavation. However, this will be verified by using the recommended subsurface geophysical investigation.

Hand classification of surface soil samples collected from the proposed fill areas indicates that the soils generally consist of silty sand, sandy clay, and clayey sand.

Groundwater

Observations of the existing cuts did not reveal any elevated ground water levels present in the slope faces. Therefore, groundwater is not expected to be present in the proposed slope excavations during the late spring-summer construction season.

Geotechnical Recommendations

For the proposed cut and fill slopes, a maximum slope ratio of 1.5H:1V is considered feasible.

However, a detailed slope stability analysis is recommended and will be performed by OGDN once updated cross sections and layouts are provided by District Design.

OGDN recommends that a seismic refraction tomography survey be conducted approximately parallel to SR 299, along the crest of the slope at the corestone location shown in Figure 2. The purpose of this survey is to characterize the shallow subsurface conditions beneath the slope and to obtain information on bedrock depth, degree of weathering, and excavation characteristics, including material hardness and rippability.

Questions relating this report should be directed to Hakima Hossainzadeh at (213) 364-2383 or Yusuf Zaka at (916) 296-9454.

HAKIMA HOSSAINZADEH, P.E.
Transportation Engineer
Geotechnical Design North, Branch D

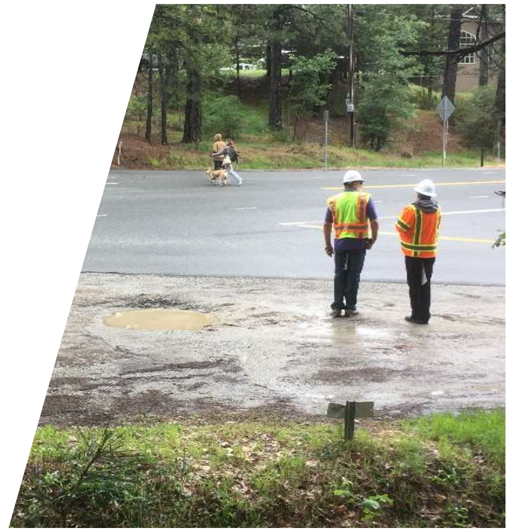
YUSUF ZAKA, P.G.
Engineering Geologist
Geotechnical Design North, Branch D

c: Samuel Vandell, Project Manager, District 3
Kadambari Toke - Project Liaison Engineer
Addisu Workineh, District Materials Engineer, District 3

Attachment N

Nevada City SR 49 Multimodal Corridor Plan

Nevada City SR 49 Multimodal Corridor Plan



Nevada County
Transportation Commission

GHD | 943 Reserve Drive Suite 100 Roseville, CA 95678 | 11194668 | November 7 2019

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1. Introduction

The Nevada County Transportation Commission (NCTC) commissioned a multimodal corridor plan for State Route (SR) 49 in Nevada City following input from the community at the May 2018 NCTC governing board meeting. As shown in Figure 1.1 through Figure 1.3, the study corridor is approximately one mile in length and extends from the intersection at SR 20 and Uren Street to the Nevada County Juvenile Hall driveway. There are four intersections and two driveways within these limits that provide access to SR 49 for residential, non-residential, and recreational land uses. One intersection within the study area is signalized, at East Broad Street/ North Bloomfield Road. The remaining intersections are two-way stop controlled where motorists traveling on SR 49 do not have to stop. Given that the posted speed limit entering the corridor is 55 mph and 45 mph within the corridor, the lack of stop controls and marked crosswalks can make crossing and traversing along SR 49 by bike or foot difficult. The driveways at the Nevada City Elks Lodge and The Nevada County Juvenile Hall feature stop control at each driveway egress.

Community members expressed the following concerns:

- safety concerns associated high vehicle speeds on SR 49;
- lack of pedestrian and bicycle treatments/accommodations along SR 49;
- need for improved crossings for those who desire to walk or bike across SR 49; and
- lack of pedestrian and bicycle connectivity to points of interest along the corridor.

This study examined infrastructure characteristics, corridor operations, and collision history to inform recommended improvements for safety, operational efficiency, and active transportation accommodation. Recommendations also include design elements that serve to calm traffic (i.e., reduce vehicle speeds) and improve visibility of pedestrians and bicyclists by motorists. Lastly, all recommended improvements include aesthetic treatments that reflect the historic character of Nevada City while accommodating vehicular traffic, including heavy vehicles.

Preferred and Lower Cost concepts are provided to offer NCTC flexibility in implementation, with Lower Cost Alternatives designed to offer economical solutions at selected locations that can be installed on short timelines. Preferred Recommended Improvements provide more robust safety and operations benefits but may be more challenging to implement due to right of way needs or other complexities. Analysis results and recommendations are presented in three corridor segments:

Segment 1: SR 20/Uren Street and Coyote Street intersections to North Bloomfield Road/East Broad Street intersections

Segment 2: North Bloomfield Road/East Broad Street intersection to Maidu Avenue/Orchard Street intersection

Segment 3: Cement Hill Road/West Broad Street intersection; Elks Lodge Driveway and Nevada County Juvenile Hall Driveway

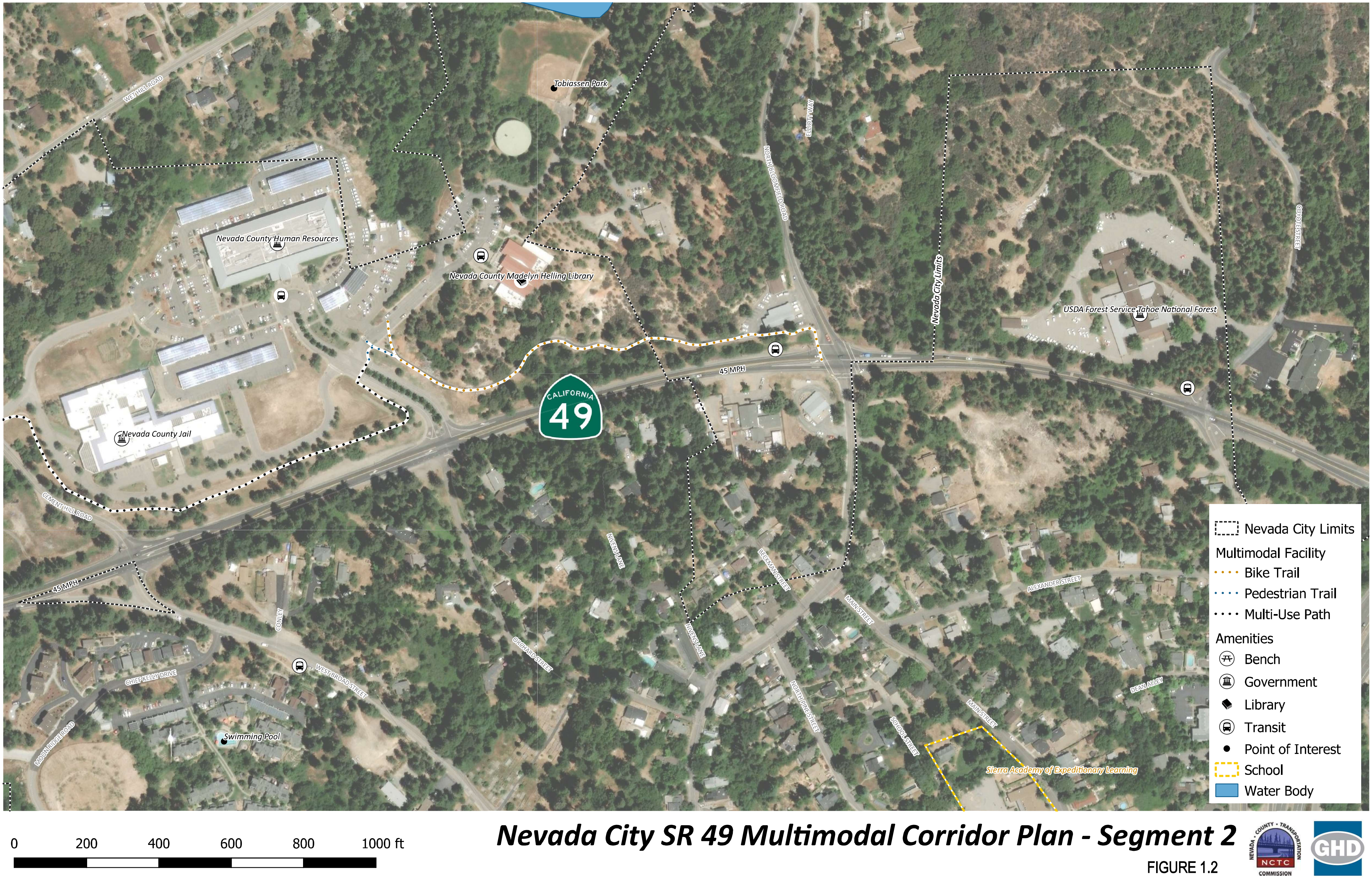
The conceptual drawings and designs in the SR 49 Multimodal Corridor Plan present a vision of potential transportation improvements in the plan area. A project, on the other hand, utilizes specific tasks within a scope, schedule and budget to construct transportation infrastructure such as a Class I bike path, sidewalk, or roadway improvement. Concepts presented in the SR 49 Multimodal Corridor Plan may become a project when one of the agencies in the plan area that have jurisdictional authority to implement a project are able to move forward with a project within their jurisdiction. The project would then follow an approximately five to ten year process of project development before it can be constructed. The process to deliver a transportation project includes the following phases:

- allocation of funding through all project phases including construction;
- execution of Project Initiation Documents (PID);
- completion of environmental documentation required for project development under CEQA and NEPA, which includes mandatory public review and comment periods;
- acquisition of any needed right-of-way;
- completion of 100% Plans, Specifications & Estimates; and
- construction of the project.

The recommended proposed improvement concepts will serve to inform and guide future infrastructure and programming decisions based on available funding. To facilitate implementation options, alternative improvement concept packages were developed and prioritized based on potential return on investment. Benefit-cost assessments were based on: safety; mobility; health; air quality; recreation; and decreased auto-use. These criteria are key drivers for a variety of transportation funding sources, including competitive grant funding programs such as ATP, HSIP, etc. Information presented in this plan will serve as a resource for NCTC, Nevada City or Nevada County for developing competitive grant applications.

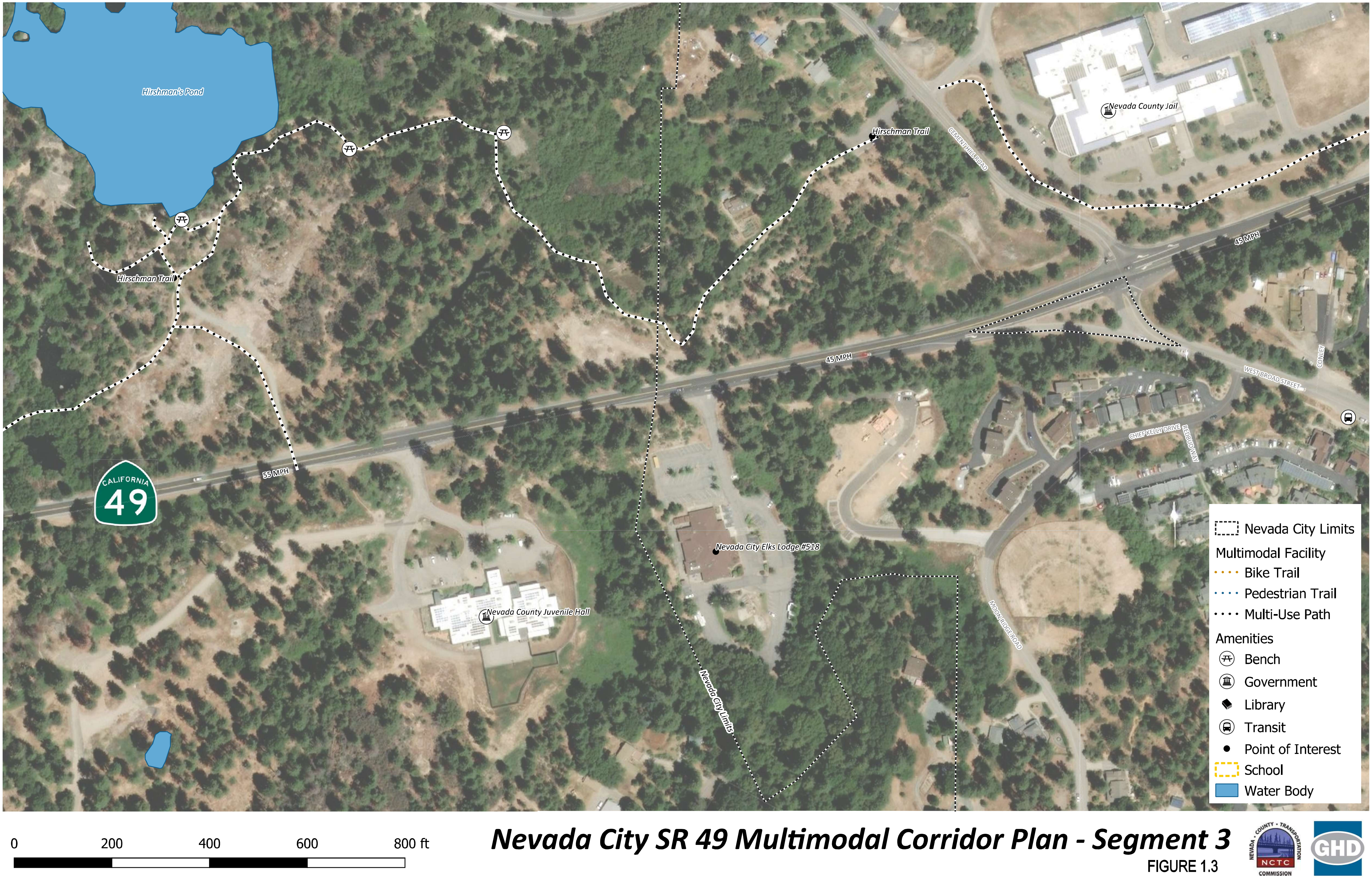
Nevada City SR 49 Multimodal Corridor Plan - Segment 1

FIGURE 1.1



Nevada City SR 49 Multimodal Corridor Plan - Segment 2

FIGURE 1.2



Nevada City SR 49 Multimodal Corridor Plan - Segment 3

FIGURE 1.3

2. Analysis

2.1 Roadside Safety Audit – Lite

A modified version of a Roadside Safety Audit (RSA) was conducted on May 21, 2019 to review bicycle and pedestrian conditions along the project corridor and identify challenging locations to be addressed with improvements. Participants in the modified RSA included staff from NCTC, Nevada City, Nevada County, the Federal Highway Administration (FHWA), Caltrans, and the consultant team, in addition to a walkability advocate from the public.

A couple crosses SR 49 at Coyote Street

No facilities are provided for people walking or bicycling along SR 49, and curves in the roadway create sight distance challenges

A free right turn lane from SR 49 onto W Broad Street allows for high-speed turns

The methodology for this RSA is based on a process developed by the FHWA. The FHWA process is centered on two questions:

- What elements of the road may present a safety concern: to what extent, to which road users, and under what circumstances?
- What opportunities exist to eliminate or mitigate identified safety concerns?

In addition to prescribing that RSAs be conducted by an independent team of multidisciplinary reviewers, the FHWA process emphasizes a proactive approach that considers all potential road users and modes of transportation. Participants are encouraged to consider not only challenges demonstrated by collision data or documented in near-miss reports, but to identify safety issues that may occur in the future as a result of the roadway design, road user behavior or expectations, or other factors like weather or lighting conditions. All modes of transportation are considered in an RSA, including people walking, bicycling, driving, or riding transit. Reviewers are also directed to consider unique challenges faced by elderly people, children, and those with vision or mobility impairments as well as transportation, recreation, commercial, and agricultural trips.

Prior to conducting the RSA, the team reviewed available collision data and comments from the public to inform the audit. Members of the RSA team then drove and walked along the corridor to observe conditions. Emphasis was placed on observing intersections, which had higher rates of collisions than segments between intersections.

Discussion items and findings were summarized following the field visit and circulated to the RSA team for review. These results were then used in conjunction with the technical analyses to inform the recommended improvement concepts.

2.1.1 Summary of Roadway Safety Audit Lite

A Road and Pedestrian Safety Assessment (RPSA) was planned and conducted to identify missing infrastructure, a range of practical traffic and speed control strategies, and treatments focused on improving the safety and mobility of pedestrians and cyclists.

A multi-disciplinary team with diverse perspectives (but common goal) was formed and met to walk and drive throughout the corridor. The team “stopped” at each access/conflict point (a total of 7 intersections), in order to observe, discuss and more quickly reach a general consensus on the following list of findings and viable improvement concepts.

Based on the severe crash (type) history, a significant pedestrian crossing demand, and the existing vehicle-centric geometry at the Cement Hill Road intersection, the RSA team assigned top priority to improvement of the rural and highest-speed segment of SR 49 - upstream, approaching (from the west), and including the Cement Hill Road intersection.

For this top-priority area, the team identified three infrastructure improvement concepts - each focused on reducing speed, producing effective traffic control, and complete pedestrian crossings. The team reached a strong consensus on implementation of a roundabout intersection.

Once vehicle speed and the awareness of drivers was improved at and approaching Cement Hill Road (from the west), the team’s top objective shifted to maintaining vehicle speed throughout the rest of the study corridor, and a further reduction of the speed differential among conflicting intersection movements and travelers.

Ultimately, the preferred solution is the appropriate number (and spacing) of single-lane roundabouts. Investment in converting to roundabout control will:

- reduce and limit vehicle speeds, and pavement width throughout the corridor;
- reduce speed differential and pavement (crossing) width at each conflict point;
- calm vehicular traffic without incurring noticeable or significant impacts to motor vehicle travel time and the natural environment (throughout the corridor); and
- facilitate implementation of phased and low-cost improvements with minimal “throwaway” costs.

The conversion of all existing two-way stop-controlled intersections to a single-lane roundabout is an effective, practical and justified solution alternative. Additionally, roundabouts have been proven to reduce severe crashes and transform car-centric operating and infrastructure conditions in order to make it easier and safer for all users to cross major streets and highways.

2.2 Roadway Operations

2.2.1 Overview

Based on Caltrans most recently published traffic volumes (2017), annual average daily traffic on SR 49 ranges between roughly 6,500 and 8,000 vehicles within the study area depending on location. Peak hour volumes on SR 49 within the study area on a typical weekday range between 650 and 1300 peak hour vehicles depending on location and peak hour (i.e., AM, Midday or PM peak). Average daily traffic on SR 20 at the juncture of SR 49 ranges between 16,000 and 17,000. Peak hour volumes at SR 20/ SR 49 on a typical weekday range between 1,400 and 1,600 peak hour vehicles depending on peak hour (i.e., AM, Midday or PM peak).

Future growth was projected using the 2035 NCTC travel demand model. Projected volumes along the study corridor were forecast to grow to between roughly 6,500 and 14,000 vehicles per day, depending on location. Peak hour volumes were projected to range between roughly 1,000 and 7,000 peak hour vehicles depending on peak period and location.

Operational conditions at seven key intersections along the SR 49 corridor were analyzed. These intersections include:

- SR 20/SR 49/Uren St;
- SR 49/Coyote St;
- SR 49/East Broad Street/Bloomfield Road;
- SR 49 Orchard Street/Maidu Avenue;
- SR 49/West Broad Street/Cement Hill Road;
- SR 49/Elks Lodge Entrance; and
- SR 49/Juvenile Hall Entrance.

Intersection operations were based on existing peak hour traffic counts collected by Caltrans in 2019. These counts are provided in Appendix A. Existing AM, Noon, and PM peak hour intersection operations were analyzed utilizing the existing intersection lane geometrics and controls and the existing peak hour traffic volumes. Details on technical analysis parameters, methodology, and assumptions are provided in the following sections.

2.2.2 Level of Service Methodology

Traffic operations are measured through “Level of Service” (LOS), a qualitative metric for traffic conditions. Letter grades A through F are assigned to intersections or roadway segments and represent progressively worsening traffic conditions. In general, LOS A represents free-flow conditions with very little delay, and LOS F represents over-capacity conditions with long delays and queues.

The project intersections were analyzed using the procedures and methodologies in the *Highway Capacity Manual (HCM)* (Transportation Research Board, 2016). The methodology for the roundabout alternative is based on the 6th edition of the HCM which draws from an FHWA report on capacity modeling for roundabouts.[1] At signalized intersections and roundabouts, the HCM specifies that LOS is based on the average control delay for the entire intersection. At intersections with two-way stop controls, the HCM specifies that LOS and vehicle delay are based on the worst minor street approach. Table 2.1 displays the control delay range associated with each LOS grade.

Table 2.1 Intersection Level of Service Criteria

Level of Service	Average Control Delay (Seconds/Vehicle)		Description
	Signalized	Two-Way or All-Way Stop Control	
A	<10.0	<10.0	Very low delay. At signalized intersections, most vehicles do not stop.
B	10.0 to 20.0	10.0 to 15.0	Generally good progression of vehicles. Slight delays.
C	20.1 to 35.0	15.1 to 25.0	Fair progression. At signalized intersections, increased number of stopped vehicles.
D	35.1 to 55.0	25.1 to 35.0	Noticeable congestion. At signalized intersections, large portion of vehicles stopped.
E	55.1 to 80.0	35.1 to 50.0	Poor progression. High delays and frequent cycle failure.
F	>80.0	>50.0	Oversaturation. Forced flow. Extensive queuing.

Highway Capacity Manual (Transportation Research Board 2016)

2.2.3 Level of Service Policies and Thresholds

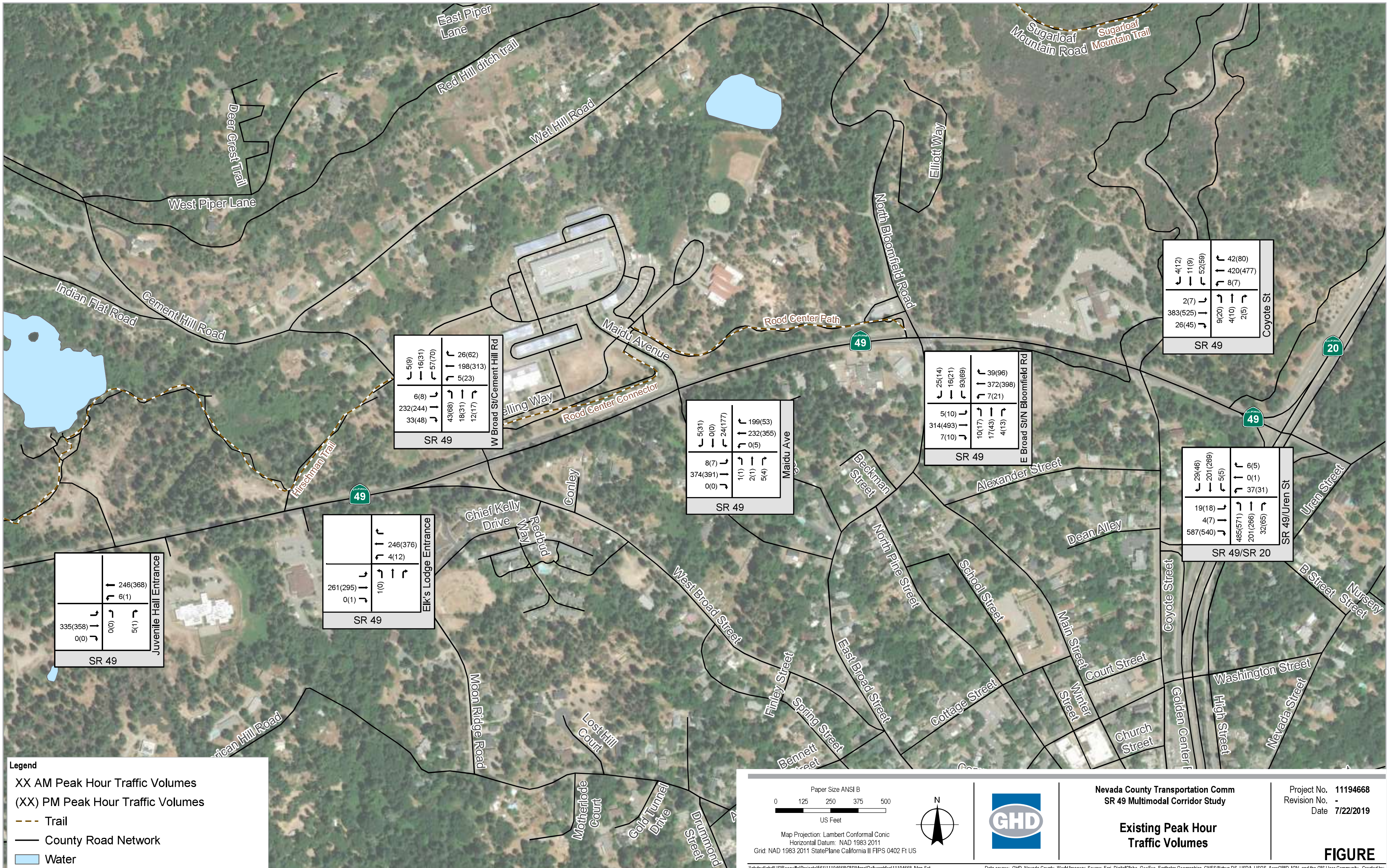
Caltrans' Guide for the Preparation of Traffic Impact Studies contains the following policy pertaining to LOS standards within Caltrans jurisdiction:

> *Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities, however, Caltrans acknowledges that this may not always be feasible and recommends the lead agency consult with Caltrans to determine the appropriate target LOS.*

2.2.4 Existing Traffic Operations

Caltrans performed the AM and PM peak hour turn movement counts for each study intersection. These turn movements are shown in Figure 2.1. The intersection count data sheets are provided in Appendix A. Delay and LOS results by intersection are summarized in Table 2.2. The Synchro LOS worksheets are provided in Appendix B.

[1] Assessment of Roundabout Capacity Models for the Highway Capacity Manual: Volume 2 of Accelerating Roundabout Implementation in the United States (Report FHWA-SA-15-070)



Nevada County Transportation Comm
SR 49 Multimodal Corridor Study

Existing Peak Hour Traffic Volumes

Project No. 11194668
Revision No. -
Date 7/22/2019

FIGURE

\\ghdnet\ghd\US\Roseville\Projects\561\11194668\GIS\Maps\Deliverables\11194668_Map Set\11194668_Map Set.aprx
Print date: 22 Jul 2019 - 17:07

Data source: GHD, Nevada County, World Imagery: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Created by: bnamsaly

Table 2.2 Existing Traffic Operations for SR 49 Study Area

Cross Street	Control[1]	AM		PM	
		Delay[2]	LOS[3]	Delay[2]	LOS[3]
SR 20/Uren Street	SSSC	112.3	F	355.2	F
Coyote Street	SSSC	34.7	D	39.5	E
East Broad Street/ North Bloomfield Road	Signal	6.9	A	7.0	A
Orchard Street/Maidu Avenue	SSSC	16.3	C	37.9	E
West Broad Street/Cement Hill Road	SSSC	14.4	B	24.8	C
Elks Lodge Entrance	SSSC	10.8	B	10.2	B
Juvenile Hall Entrance	SSSC	10.6	B	10.4	B

1 SSSC = Side Street Stop Control

2 Delay is reported in seconds per vehicle

3 Overall LOS is based on worst minor street approach for SSSC intersections and average for all approaches for signalized intersections

In the study area, most intersections currently operate within the established LOS C threshold for both the AM and PM peak hours. The intersection at Orchard Street/Maidu Avenue meets the LOS threshold during the AM peak at LOS C but not during the PM peak hour at LOS E. The intersection at Coyote Street currently exceeds the LOS threshold during the AM peak (LOS D) and during PM peak (LOS E). The intersection with SR 20/Uren Street currently operates at LOS F during both AM and PM peak hours, indicating long delays for motorists waiting for an acceptable gap to either access SR 20 or cross it from Uren Street or SR 49.

2.3 Bicycle Level of Traffic Stress

Traffic stress is the perceived risk or comfort level experienced by a person bicycling in or adjacent to motor vehicle traffic. Because high traffic stress is one of the most common deterrents to bicycling, providing more comfortable bikeways can encourage more people to bicycle for more trips.

Bikeways that are considered low-stress minimize potential conflicts with motor vehicles by providing greater separation between people bicycling and driving. As vehicle speeds and traffic volumes on a roadway increase, a higher level of separation is necessary to create a low-stress experience.

2.3.1 Bicycle LTS Methodology

Bicycle Level of Traffic Stress (LTS) is a data-driven evaluation of the comfort experienced in different roadway environments, based on research conducted by the Mineta Transportation Institute, which can be found in *MTI Report 11-19 Low-Stress Bicycling and Network Connectivity*. Streets are evaluated based on a variety of characteristics including the posted speed limit, number of vehicle lanes, presence and type of bikeway, curb radii and design speed at corners, and the number of driveways and other potential conflicts. This study considered Bicycle LTS for three categories:

- **Segments** 1, 2, and 3
- **Approaches** to intersections where right turn lanes may increase stress for bicyclists, especially when bicycle facilities end to accommodate these lanes
- **Crossings** at unsignalized intersections

Based on this evaluation, street segments, approaches, and crossings are assigned a score from 1 to 4 with 1 being the most comfortable and 4 being the most stressful.

- LTS 1 includes roads that are likely to be suitable for most children, as well as shared use paths that are completely separate from the roadway
- LTS 2 includes roads that are likely comfortable for most adults
- LTS 3 includes roads that are comfortable for confident, experienced bicyclists but are likely not appealing to others
- LTS 4 includes roads tolerable only to highly skilled and fearless riders who are comfortable bicycling in high-traffic situations and mixing with vehicle traffic

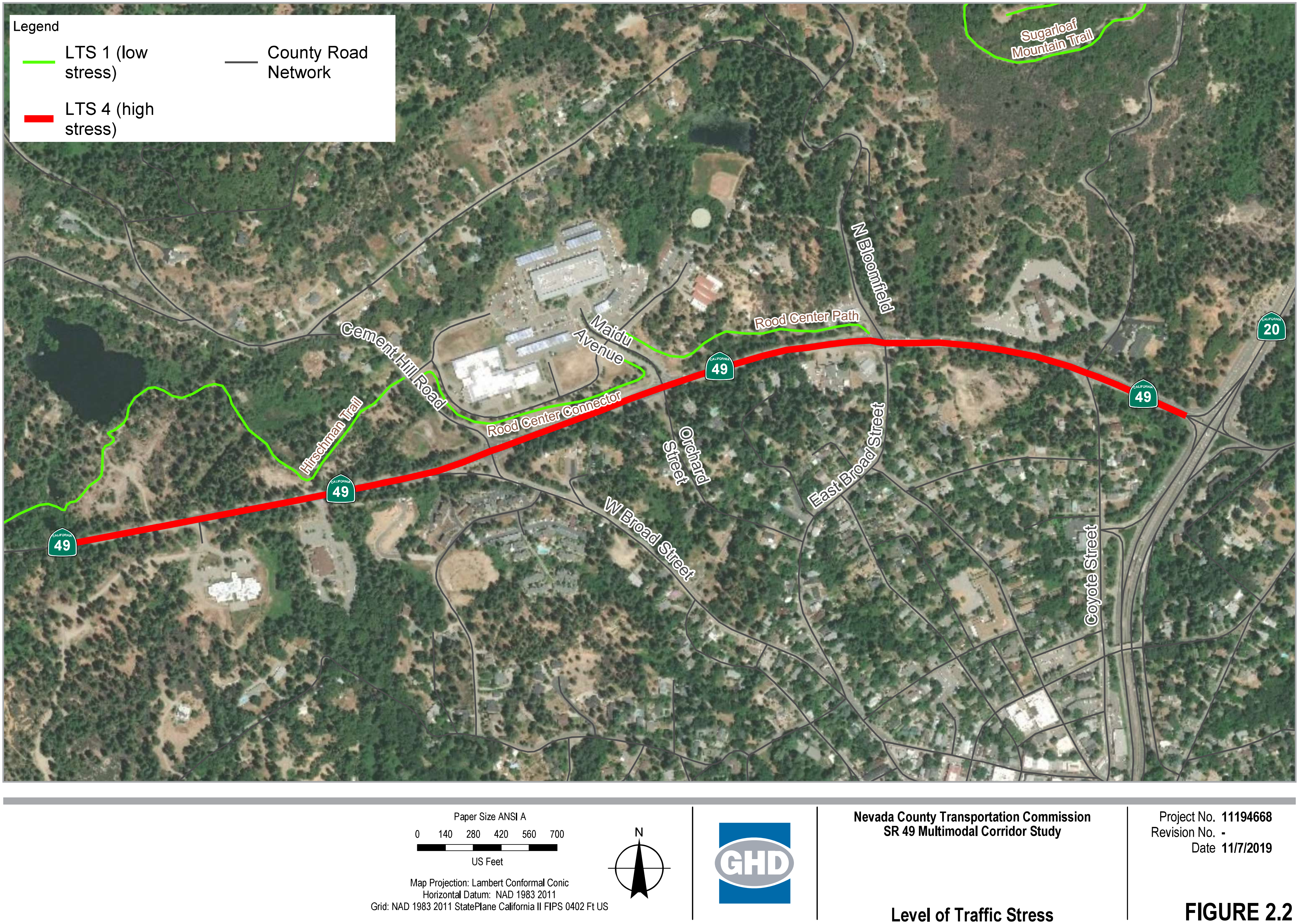
For the purposes of this study, LTS 1 and 2 are considered acceptable “Low-Stress” environments. LTS 3 and 4 are considered “High-Stress” environments that can discourage bicycling and should be improved to reduce stress where possible.

2.3.2 Existing Bicycle LTS

Segments 1, 2, and 3 along the study corridor all received a High-Stress score, indicating an experience tolerable only to the most confident and experienced bicyclists. A lack of bicycle facilities combined with a posted speed limit of 45 mph contribute to this High-Stress designation. Segment LTS scores are shown in Figure 2.1.

All approaches on the study corridor received a High-Stress score.

For a bicyclist traveling along SR 49, all side-street crossings received Low-Stress scores. For a bicyclist traveling along a side street and attempting to cross SR 49, all unsignalized intersections received a High-Stress score.



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SR 49 Multimodal Corridor Study

Level of Traffic Stress

Project No. 11194668
Revision No. -
Date 11/7/2019

FIGURE 2.2

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\11194668_Map Set.aprx
Print date: 07 Nov 2019 - 14:52

Data source: SWITRS (2013-2017), GHD 2019, Nevada County Open Data Portal 2019 World Imagery: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Created by: jclark2

2.4 Safety

A safety assessment and collision analysis was performed to identify the concentration, severity, and contributing factors of collisions within the study area. Collision data for roadways and intersections was obtained from Caltrans TASAS tables and TSAR reports, and California Highway Patrol SWITRS data. Caltrans data for a five-year period was reviewed, from 2014 through 2018, while SWITRS data was reviewed for the five-year period between 2013 and 2017. There is discrepancy between the two data sources, which is partially attributed to difference in study years as well as processing differences. SWITRS is subject to reporting-level inaccuracies. Thus, the two data sources are not directly comparable.

2.4.1 Caltrans TASAS and TSAR Collision Data

Between 2014 and 2018, 47 collisions were reported along the corridor. Of these, one was fatal and 21 resulted in injuries. Only two collisions occurred at a location other than an intersection, one of which resulted in an injury. A summary of collisions and injuries reported by Caltrans TASAS and TSAR reports by intersection is provided in Table 2.3 below and mapped in Figure 2.2 and Figure 2.3.

Table 2.3 TSAS and TSAR Collisions by Intersection

Intersection with SR 49	Total Collisions	Injuries	Fatalities
SR 20/Uren Street	20	9	-
Coyote Street	7	3	-
East Broad Street/ North Bloomfield Road	8	3	-
Orchard Street/Maidu Avenue	3	1	1
West Broad Street/Cement Hill Road	7	4	-

The only fatal collision on the corridor occurred at the intersection with Orchard Street/Maidu Avenue. The intersection with SR 20 had the highest number of collisions and injuries on the corridor, with 20 collisions resulting in nine injuries.

2.4.2 California Highway Patrol SWITRS Collision Data

Between 2013 and 2017, there were a total of 29 collisions reported by CHP within the study area. Of these collisions, none were reported as fatal, while 4 injuries were reported. The remaining collisions resulted in property damage only. A summary of collisions by intersection reported by CHP by intersection is provided in Table 2.4 and mapped in Figure 2.4.

Table 2.4 SWITRS Collisions by Intersection

Intersection with SR 49	Total Collisions	Injuries	Fatalities
SR 20/Uren Street	16	2	-
Coyote Street	2	-	-
East Broad Street/ North Bloomfield Road	5	1	-
Orchard Street/Maidu Avenue	3	1	-
West Broad Street/Cement Hill Road	3	2	-

2.4.3 Safety Conclusions

Taken together, the two collision analysis data sources highlight opportunities to improve safety in several locations. Both data sources iterate the opportunities to improve safety at each intersection, with a specific emphasis on the intersection of SR 20 and SR 49, and the intersection and eastbound approach at Cement Hill Road/ SR 49. Note that these locations bookend the corridor. Safety improvements at these locations will provide opportunity to temper speeds at each end of the corridor, which should improve safety throughout the corridor.

Paper Size ANSI A

0 140 280 420 560 700

US Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: NAD 1983 2011
Grid: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US

Nevada County Transportation Commission
SR 49 Multimodal Corridor Study

Collisions 2014-2018

Project No. **11194668**
Revision No. **-**
Date **11/7/2019**

FIGURE 2.3

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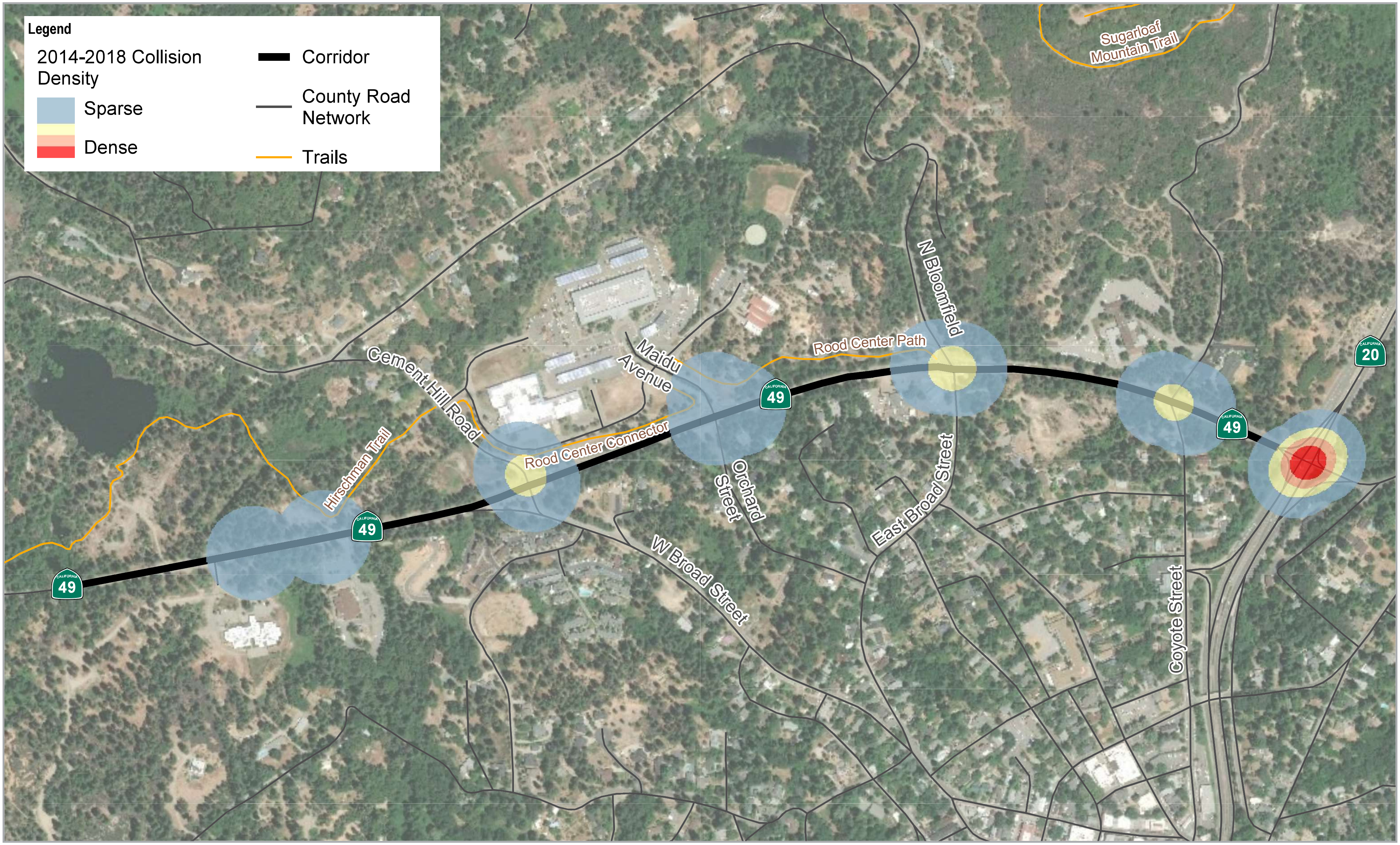
Print date: 07 Nov 2019 - 14:52

Data source: SWITRS (2013-2017), GHD 2019, Nevada County Open Data Portal 2019 World Imagery: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Created by: jclark2



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US Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: NAD 1983 2011
Grid: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US

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Nevada County Transportation Commission
SR 49 Multimodal Corridor Study

Collision Heat Map
2014-2018

Project No. 11194668
Revision No. -
Date 11/7/2019

FIGURE 2.4

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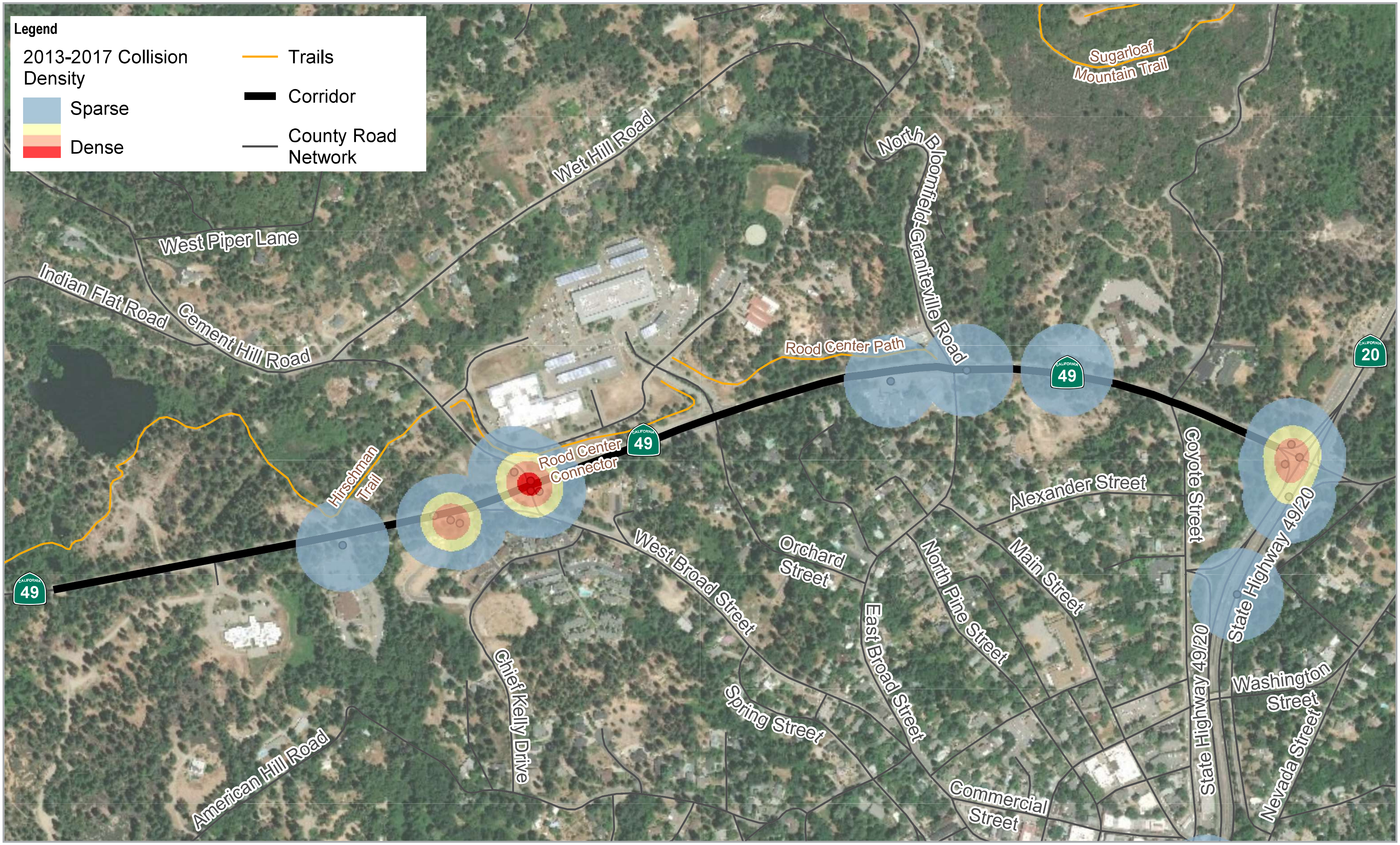
Print date: 07 Nov 2019 - 14:52

Data source: SWITRS (2013-2017), GHD 2019, Nevada County Open Data Portal 2019 World Imagery: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Created by: jclark2



Paper Size ANSI A
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US Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: NAD 1983 2011
Grid: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US

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GHD

Nevada County Transportation Commission
SR 49 Multimodal Corridor Study

Collision Heat Map
2013-2017

Project No. **11194668**
Revision No. **-**
Date **11/7/2019**

FIGURE 2.5

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Print date: 07 Nov 2019 - 14:51

Data source: SWITRS (2013-2017), GHD 2019, Nevada County Open Data Portal 2019 World Imagery: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Created by: jclark2

3. Outreach

3.1 Community Workshop #1

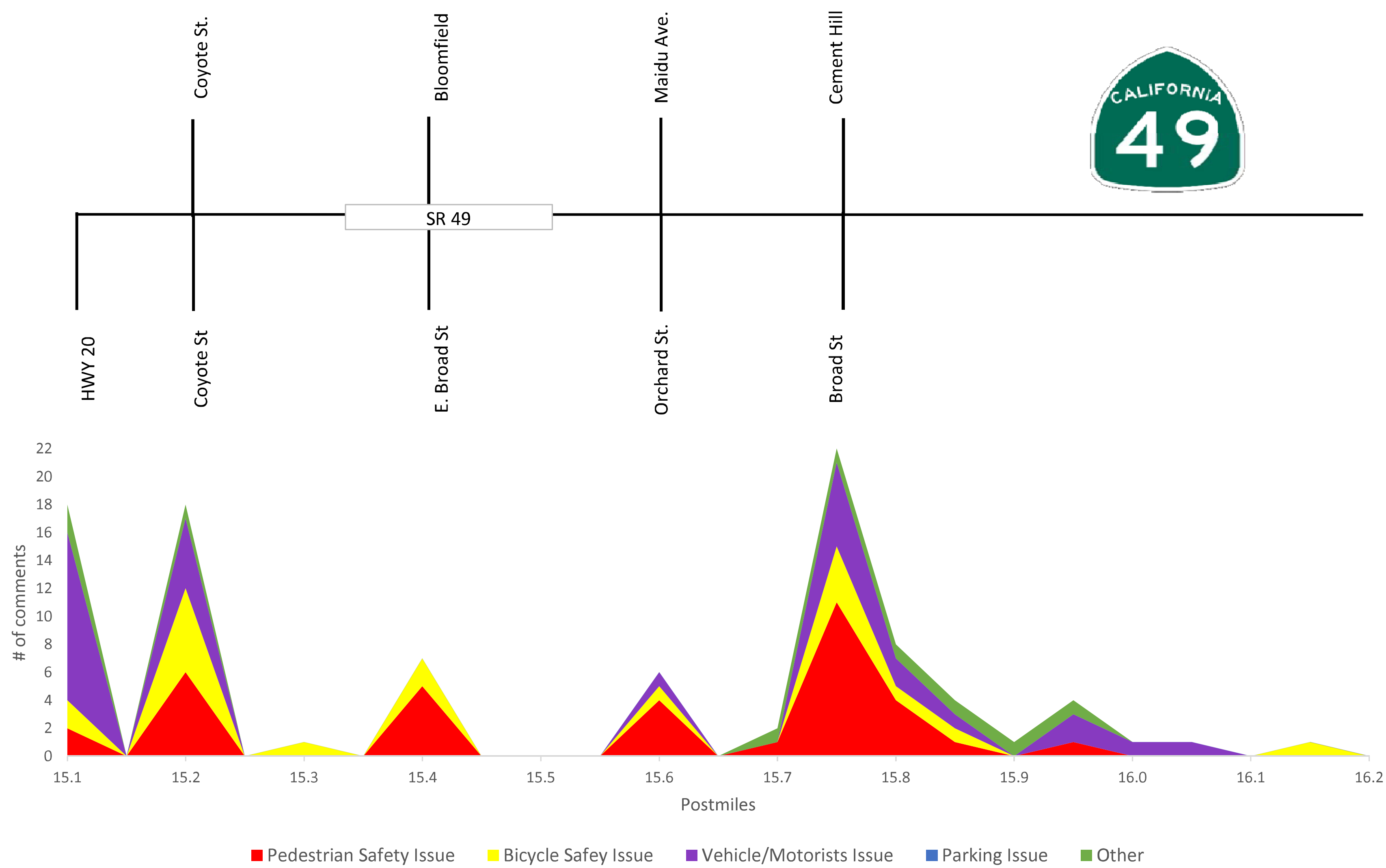
NCTC hosted a community open house on May 28, 2019 to introduce the project to the public and gather input on pedestrian and bicycle travel along the corridor. The workshop was attended by approximately 30 community members.

As part of the workshop, community members were encouraged to place comments on study area maps to indicate locations of challenges and opportunities for improvement. Colors indicate the type of concern, and the height of the cartogram at a given location indicates the number of comments received. The colors correspond to the following concerns:

- Red reflects a pedestrian safety concern
- Yellow reflects a bicycle safety concern
- Purple reflects vehicle or motorist concerns, or operational issues
- Blue reflects a parking concern
- Green reflects “other” issues that do not fit into other categories

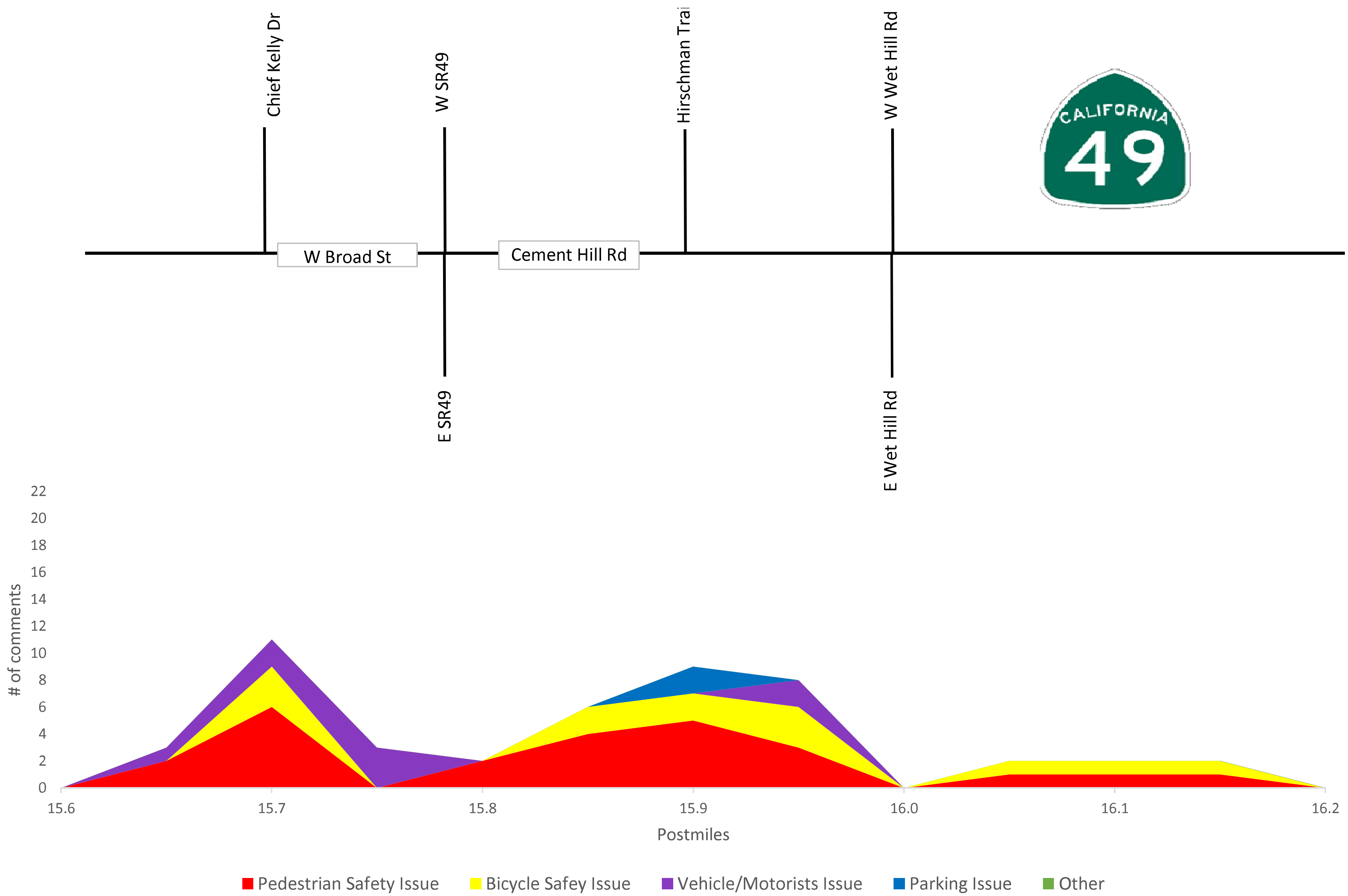
Those comments were geo-coded and are shown in cartograms in Figure 3.1 and Figure 3.2.

Most concerns reported by the community involved the intersections of SR 49 with Coyote Street and with West Broad Street/Cement Hill Road. Both locations show reported concerns about driving, bicycling, and walking, with pedestrian concerns making up the overwhelming majority of comments about the West Broad Street/Cement Hill Road location. Concerns about speeding were reported near SR 20 and near Cement Hill Road, where a free-right turn is configured to allow high speed turns.



SR 49 Cartogram

FIGURE 3.1



Cement Hill/ West Broad
Cartogram

FIGURE 3.2

Concerns along Cement Hill Road were primarily related to walking or bicycling, with the largest numbers of comments focused around Chief Kelly Drive and Hirschman Trail. Some concerns about driving were also documented at these locations, and parking issues were noted near Hirschman Trail.

In addition to these location-based comments, workshop attendees expressed a need for vegetation maintenance throughout the corridor to improve visibility of signs.

3.2 Community Workshop #2

Draft recommendations were presented to the community for feedback at a workshop on July 23, 2019. The workshop was attended by about 12 members of the community. General themes of the feedback included:

- Concerns about vehicle speeds and potential conflicts with pedestrians crossing SR 49 at uncontrolled locations
- Desire for off-street bicycle and pedestrian paths along the corridor
- Need for bicycle and pedestrian connectivity to the Sugarloaf Trail and Hirschman's Pond north of the Cement Hill Street and West Broad Street intersection
- Concerns about truck speeds and brakes overheating on the downhill southbound approach to a proposed roundabout at SR 49 and SR 20/Uren Street

The recommended improvements were refined based on comments received at this event, and input from the RSA-Lite team.

4. Improvement Recommendations

Recommendations were developed based on the stated objectives of the study, technical analyses and findings, RSA findings, and input from the community. All recommended improvements are based on current best practices in transportation planning and engineering with the goal of improving safety, operational efficiency, and accommodating bicyclists and pedestrians.

Recommendations are presented for three corridor segments:

- **Segment 1:**
    - SR 20/Uren Street Intersection
- **Segment 2:**
    - Coyote Street Intersection
    - North Bloomfield Road/East Broad Street Intersection
    - Maidu Avenue/Orchard Street Intersection
    - Cement Hill Road/West Broad Street Intersection
- **Segment 3:**

- Elks Lodge Driveway
- Nevada County Juvenile Hall Driveway

For some locations, lower cost alternatives are shown in addition to the preferred project concepts. These are intended to provide NCTC with lower-cost options that may be implemented on a shorter timeline compared to the preferred concepts. A corridor map showing Preferred Recommended Improvements is presented in Figure 4.1. Lower Cost Alternatives are summarized in Figure 4.2.

Conceptual renderings of preferred recommended improvements are presented at the end of this section in Figure 4.3 through Figure 4.6. Lower cost alternative concepts are presented in Appendix C.

4.1 Segment 1 Improvement Recommendations

4.1.1 Preferred Recommended Improvements

Single-lane roundabouts are proposed at the intersection of SR 49/SR 20 and SR 49/Coyote Street. Due to concerns about downhill speeds on southbound SR 20, particularly for trucks and large vehicles, the proposed improvements include plateaus to moderate speeds. Upstream speed reduction measures should also be considered. A roundabout at the intersection of SR 49 and SR 20 will improve traffic operations compared to the existing two-way stop configuration. This will be achieved by reducing high speeds of vehicles traveling on SR 20 and SR 49 and making it easier for drivers to cross or turn at each leg of these intersections. Moreover, this will improve crossing safety and connectivity for bicyclists and pedestrians. Converting to roundabout control at this location would also improve safety by reducing the number of potential conflict points at the intersection, and would likely reduce the severity of collisions that occur due to lower speeds and angles of impact.

A shared use path along the north side of SR 49 is proposed from Coyote Street to SR 20. This would eliminate a critical connectivity gap for pedestrian and bicycle movements along SR 49. The path would improve safety and connectivity for bicyclists and pedestrians by providing a path completely separated from motor vehicle traffic. Moreover, this facility would provide continuity between the existing Rood Center Path, Rood Center Connector Path, and Hirschman Trail, as well as the proposed Sugar Loaf Trail Realignment.

All four legs of the roundabouts include high visibility marked crosswalks, with splitter islands that create refuge areas. Connectivity for people bicycling and walking is provided by shared use paths between all crosswalks, and a shared use path on the north side of SR 49 that is proposed to connect to the intersection at East Broad Street/North Bloomfield Road. In addition to providing pedestrian connectivity, these paths provide an option for bicyclists who would prefer not to merge with traffic to navigate the roundabout. This will improve safety and connectivity for bicyclists and pedestrians by providing a path completely separated from motor vehicle traffic.

A rectangular rapid flashing beacon (RRFB) or high-intensity activated crosswalk (HAWK) beacon is proposed for both the north and south legs of the roundabout to enhance visibility of the marked crosswalks across SR 20 and SR 49.

Segment one preferred recommended improvements are displayed in Figures 4.1, 4.3 and 4.4.

4.1.2 Lower Cost Alternatives

Several viable lower-cost options exist for the intersection of SR 49 and SR 20 using striping to reconfigure approaches, and/or providing high visibility crosswalks for two-stage crossings from Uren Street to SR 49.

At the intersection of SR 49 and Coyote Street, a raised center median and "pork chop" islands at free-right turn lanes would temper vehicle speeds and provide a refuge area for a pedestrian crossing west of the intersection. This restricts access to Coyote Street to right-in and right-out only, with emergency vehicle access accommodated by a low place in the center median. A HAWK beacon or RRFB is proposed for the crosswalk west of Coyote Street to increase visibility of the crossing and improve motorist yielding to pedestrians.

4.2 Segment 2 Improvement Recommendations

4.2.1 Preferred Recommended Improvements

A single-lane roundabout is proposed at the intersection of Orchard Street/Maidu Avenue. A roundabout will improve traffic operations compared to the existing two-way stop configurations by reducing speeds of vehicles traveling on SR 49 and making it easier for drivers on side streets to cross or turn onto SR 49. Roundabouts also improve safety by reducing the number of potential conflict points at each intersection, and reducing the severity of collisions that occur due to lower speeds and angles of impact.

Marked high visibility crosswalks are proposed on all legs, with shared use paths providing connections between the crosswalks. In addition to providing pedestrian connectivity, these paths provide an option for bicyclists who would prefer not to merge with traffic to navigate the roundabouts.

At the signalized intersection of SR 49 and North Bloomfield Road/East Broad Street, the existing marked crosswalks are recommended to be improved with high visibility markings.

Segment two preferred recommended improvements are displayed in Figures 4.1, 4.4 and 4.5.

4.2.2 Lower Cost Alternatives

At East Broad Street/ North Bloomfield Road, improvements to the existing traffic signal and a new marked crosswalk on the north leg of the intersection are proposed. This will improve connectivity for pedestrians and increase visibility of crossings for oncoming motorists.

At the intersection of SR 49 and Orchard Street/Maidu Avenue, marked crosswalks are proposed on the north, west, and east legs of the intersection. Two "pork chop" islands on the northwest and northeast corners will formalize right-turn lanes and provide a refuge area for pedestrians waiting to cross. A HAWK beacon or RRFB should be installed on the west leg of the intersection to aid pedestrians crossing SR 49.

4.3 Segment 3 Improvement Recommendations

4.3.1 Preferred Recommended Improvements

A Single-lane roundabout is proposed at the intersection of West Broad Street/Cement Hill Road. Additionally, the free right turn lane for eastbound SR 49 onto southbound West Broad Street will be closed to motor vehicles and converted to a shared use path. Closing this high-speed free right-turn lane will improve safety at the intersection by reducing speeds and eliminating additional conflict points.

A sidewalk is also proposed on the west side of Cement Hill Road to provide connectivity to the Hirschman Trail.

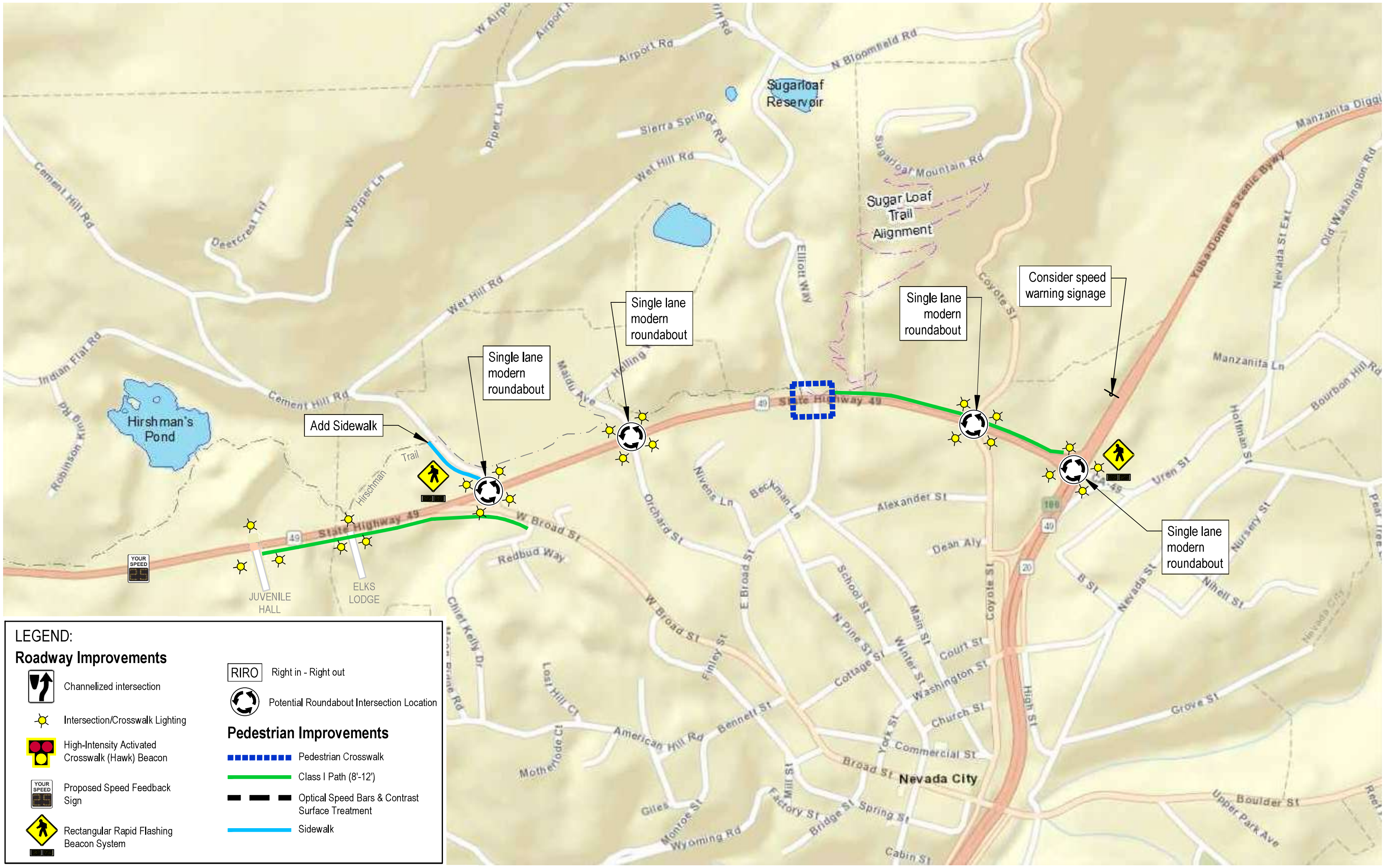
A shared use path is proposed along the south side of SR 49 from the intersection with West Broad Street/Cement Hill Road to the Juvenile Hall Driveway. This will improve safety and connectivity for bicyclists and pedestrians by providing a path separated from motor vehicle traffic.

Segment two preferred recommended improvements are displayed in Figures 4.1, 4.5 and 4.6.

4.3.2 Lower Cost Alternatives

A speed feedback sign is proposed for eastbound traffic on SR 49. Additional lighting near the two driveways is also proposed to improve visibility.

At the intersection of SR 49 and West Broad Street/Cement Hill Road, the free right turn onto West Broad Street is proposed to be closed to motor vehicles and converted to a shared use path. A new marked crosswalk with a HAWK beacon or RRFB is proposed on the west leg of the intersection to aid pedestrians crossing SR 49. In addition, optical speed bars are proposed for eastbound traffic on SR 49 to reduce driver speeds.



N

Nevada County Transportation Comm
SR 49 Multimodal Corridor Study

VICINITY MAP OF RECOMMENDED ULTIMATE IMPROVEMENT CONCEPTS

Project No. 11194668
Report No.
Date 09.04.2019

FIGURE 4.1

Filename: \\ghdnet\ghd\US\Roseville\Projects\561\11194668\Digital_Design\2646EX003.dwg Plot Date: 4 September 2019 - 11:37 AM

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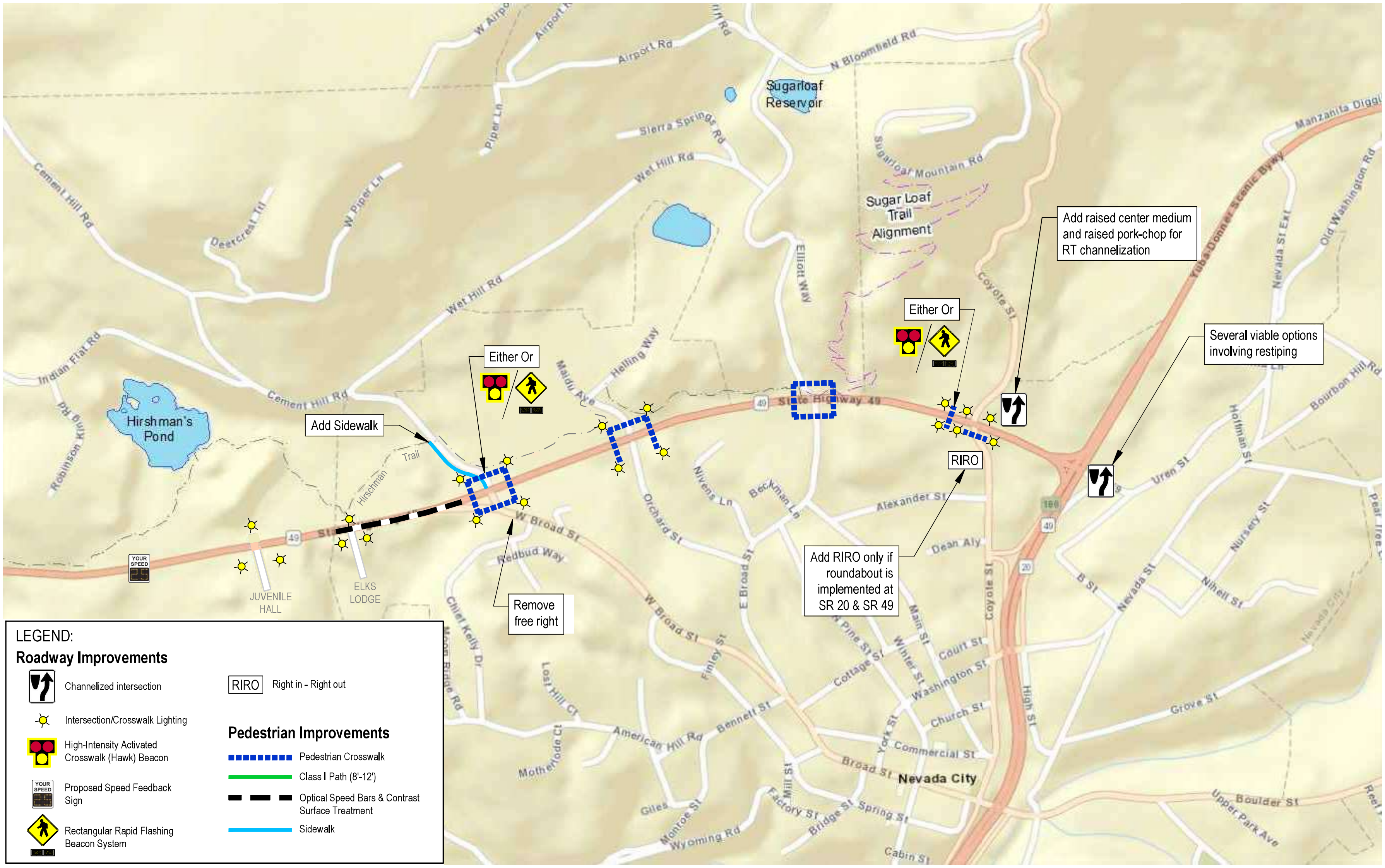

Nevada County Transportation Comm
SR 49 Multimodal Corridor Study

VICINITY MAP OF RECOMMENDED LOW-COST IMPROVEMENT CONCEPTS

Project No. 11194668
Report No.
Date 09.04.2019

FIGURE 4.2

Filename: \\ghdnet\ghd\US\Roseville\Projects\561\11194668\Digital_Design\2646EX003.dwg Plot Date: 4 September 2019 - 10:28 AM

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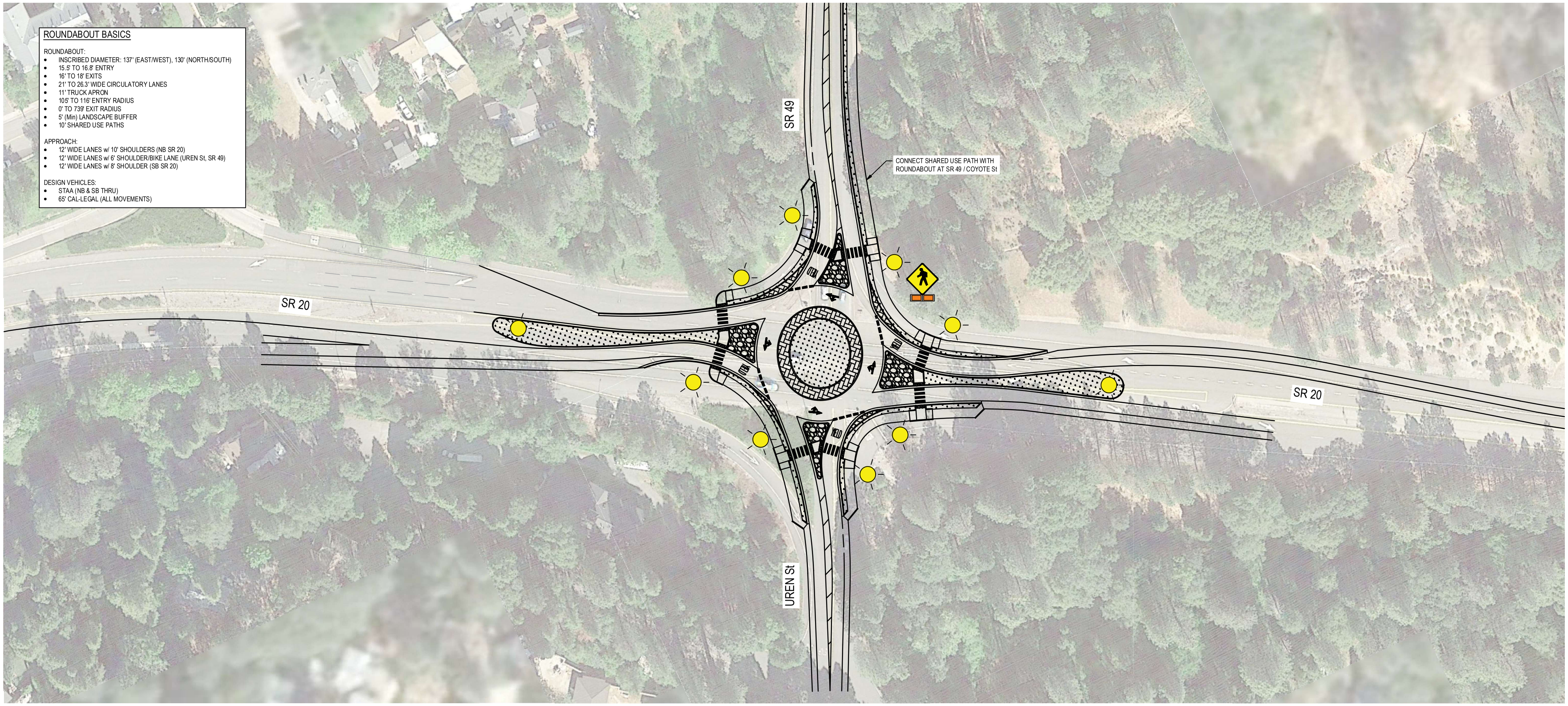
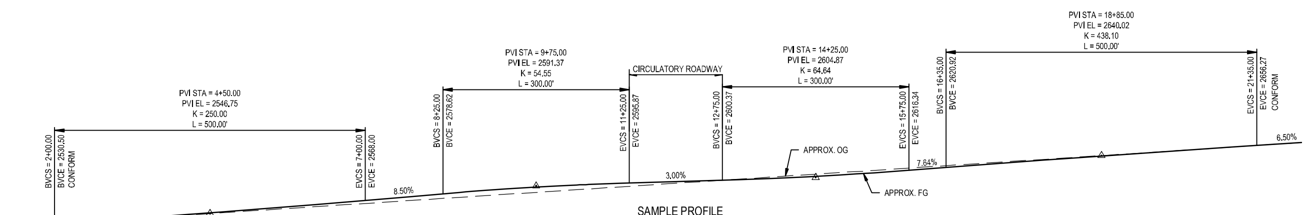




SAMPLE PROFILE
NO SCALE

LEGEND

- MOUNTABLE TRUCK APRONS AND BLISTERS
- POTENTIAL LANDSCAPING AREA
- POTENTIAL HARDSCAPING AREA
- DETECTABLE WARNING SURFACE
- RECTANGULAR RAPID FLASHING BEACON (RRFB)
- INTERSECTION / CROSSWALK LIGHTING

0 50' 100'

NEVADA COUNTY TRANSPORTATION COMMISSION
STATE ROUTE 49 MULTIMODAL CORRIDOR STUDY
ULTIMATE IMPROVEMENT CONCEPT

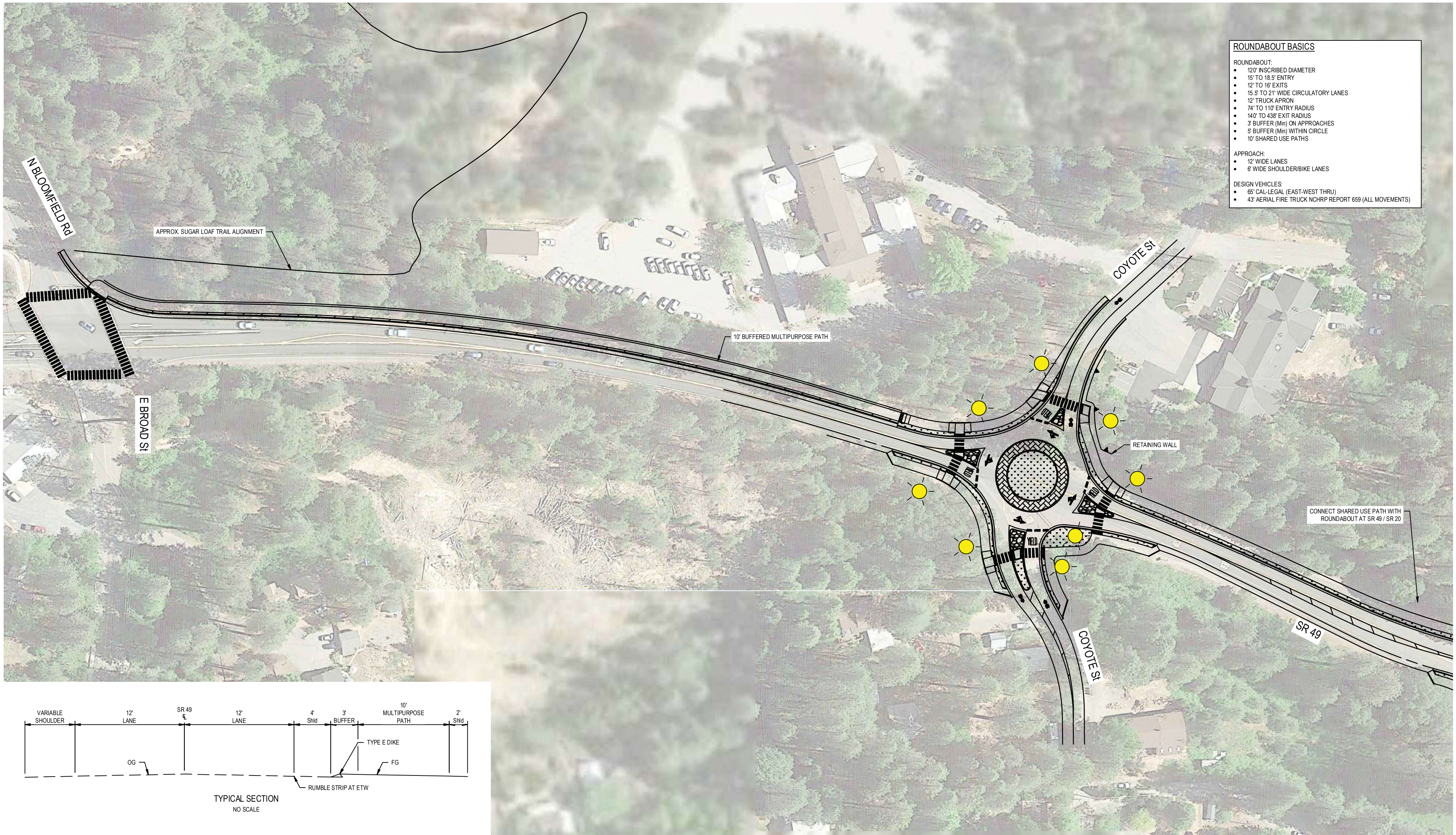
SR 49 / SR 20

Project No. 11194668
Comp. No. 2646
Date AUGUST 2019

FIGURE 4.3

Filename: \\ghdnet\ghd\US\Roseville\Projects\561\11194668\Digital_Design\2646EX002.dwg
Plot Date: 28 August 2019 2:40 PM

Data Source: Google



LEGEND

- MOUNTABLE TRUCK APRONS AND BLISTERS
- POTENTIAL HARDSCAPING AREA
- RETAINING WALL
- POTENTIAL LANDSCAPING AREA
- DETECTABLE WARNING SURFACE
- INTERSECTION / CROSSWALK LIGHTING

N

0 50' 100'

GHD

NEVADA COUNTY TRANSPORTATION COMMISSION
STATE ROUTE 49 MULTIMODAL CORRIDOR STUDY
ULTIMATE IMPROVEMENT CONCEPT

SR 49 / COYOTE St
AND
SR 49 / N BLOOMFIELD Rd / E BROAD St

Project No. **11194668**
Comp. No. **2646**
Date **AUGUST 2019**

FIGURE 4.4

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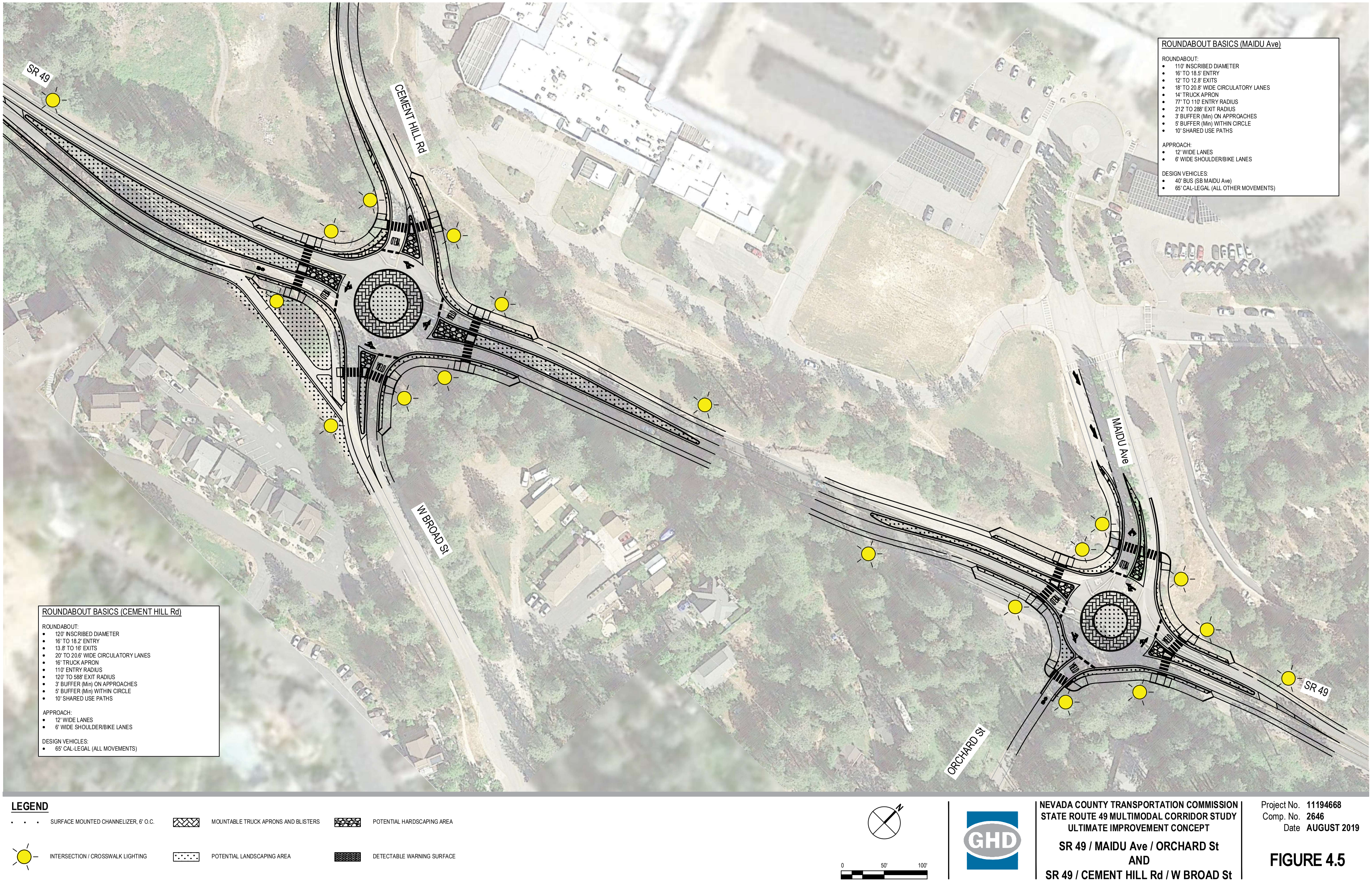
Data Source: Google



GHD

NEVADA COUNTY TRANSPORTATION COMMISSION
STATE ROUTE 49 MULTIMODAL CORRIDOR STUDY
ULTIMATE IMPROVEMENT CONCEPT

SR 49 / MAIDU Ave / ORCHARD St AND SR 49 / CEMENT HILL Rd / W BROAD St

Project No. 11194668
Comp. No. 2646
Date AUGUST 2019

FIGURE 4.5

Filename: \\ghdnet\ghd\US\Roseville\Projects\561\11194668\Digital_Design\2646EX002.dwg
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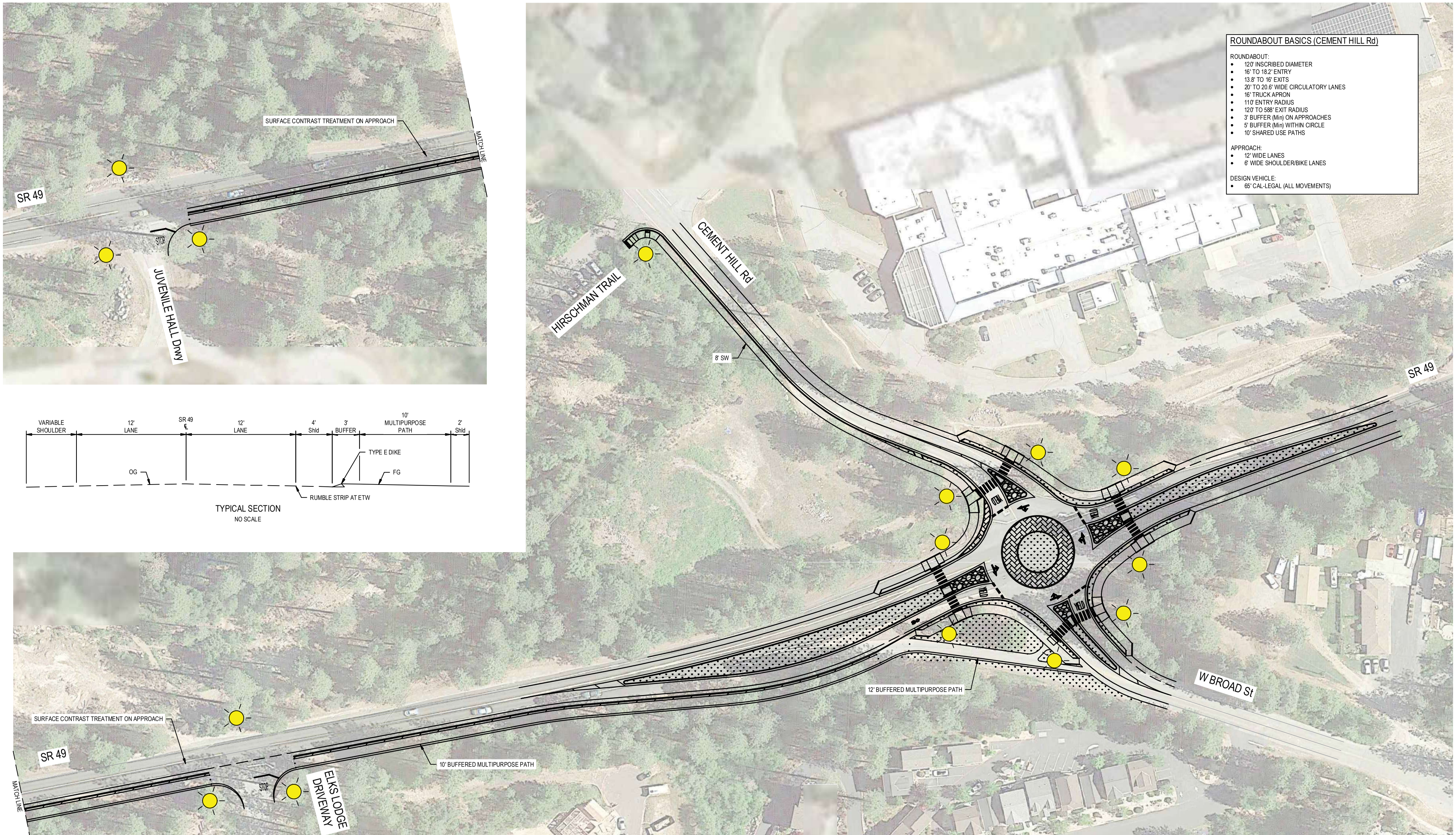
Data Source: Google



LEGEND

- SURFACE MOUNTED CHANNELIZER, 6' O.C.
- MOUNTABLE TRUCK APRONS AND BLISTERS
- POTENTIAL HARDSCAPING AREA
- INTERSECTION / CROSSWALK LIGHTING
- POTENTIAL LANDSCAPING AREA
- DETECTABLE WARNING SURFACE

N

0 50' 100'

GHD

NEVADA COUNTY TRANSPORTATION COMMISSION
STATE ROUTE 49 MULTIMODAL CORRIDOR STUDY
ULTIMATE IMPROVEMENT CONCEPT

SR 49 / CEMENT HILL Rd / W BROAD St AND ELKS LODGE / JUVENILE HALL DRIVEWAYS

Project No. 11194668
Comp. No. 2646
Date AUGUST 2019

FIGURE 4.6

Filename: \\ghdnet\ghd\US\Roseville\Projects\561\11194668\Digital_Design\2646EX002.dwg
Plot Date: 28 August 2019 1:30 PM

Data Source: Google

5. Improvement Assessments

5.1 Intersection Operations

Intersection operations with roundabout control improvements in the AM and PM peak periods are summarized in Table 5.1. As shown, the proposed roundabouts would improve operations at all intersections. The most significant improvement would result at SR 20/Uren Street from LOS F (reported in Table 2.2), to LOS B reported below. Moreover, the remaining intersections would improve to LOS A with the implementation of roundabouts.

Table 5.1 Traffic Operations with Roundabout Improvements

Cross Street	Control[1]	AM		PM	
		Delay[2]	LOS[3]	Delay[2]	LOS[3]
SR 20/Uren Street	RAB	13	B	17.4	B
Coyote Street	RAB	7.4	A	8.0	A
Orchard Street/Maidu Avenue	RAB	6.6	A	6.6	A
West Broad Street/Cement Hill Road	RAB	4.7	A	6.1	A

1 RAB = Roundabout

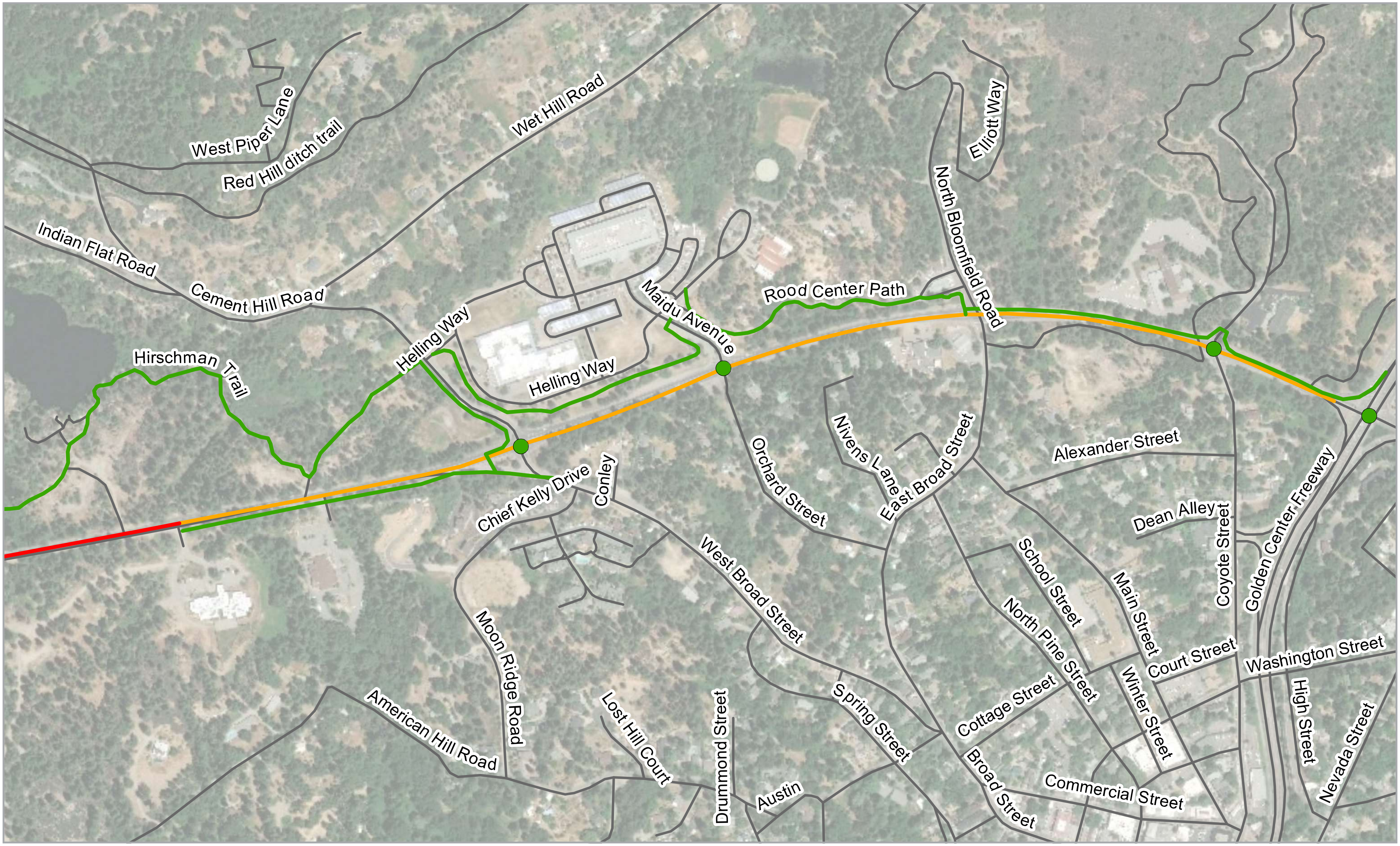
2 Delay is reported in seconds per vehicle

3 Overall LOS is based on worst minor street approach for SSSC intersections and average for all approaches for signalized intersections

5.2 Bicycle Level of Traffic Stress

Bicycle Level of Traffic Stress improvements are mapped in Figure 5.2. As displayed, the corridor-wide high level of traffic stress is reduced significantly. This is achieved by a connected network of Class I Paths, Class II bike lanes, widened shoulders and foot trails. The Class I path proposed from SR 20/ SR 49 to North Bloomfield Road connects to the existing Rood Center Path. Furthermore, an existing connector footway path traversing the frontage of the Rood Center provides connectivity to the existing Hirschman Trail, and a proposed 10-foot shared use concrete paths at Cement Hill and SR 49. While this path provides connectivity between low-stress proposed improvements, it should be noted that this path illustrates a well-used desire line, is not paved, and is not ADA compliant. The path on Rood Center property exists as an opportunity to improve accessible, safe and low-stress connectivity within the study area. A Class I path proposed from the juvenile hall driveway and extending through the repurposed free right turn lane at the West Broad Street intersection will provide low stress connectivity through the remainder of the study area.

Additionally, each roundabout intersection includes 10-foot shared use concrete sidewalks/ paths. Striped crosswalks at each leg of the roundabout provides safe and connected access to the low stress proposed improvements throughout the corridor. Moreover, if approaches at roundabouts are striped, this will provide Class II bike lanes and/ or ample room for shoulder-riding along SR 49, resulting in a moderate stress environment for stronger and more confident riders.



Legend

- LTS 1 (line)
- LTS 4
- LTS 3
- LTS 1 (crossing)
- Road Network

Data disclaimer: crossing scores include unsignalized crossings only

Paper Size ANSI A

0 0.03 0.06 0.09 0.12

Miles

N

Map Projection: Lambert Conformal Conic
Horizontal Datum: NAD 1983 2011
Grid: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US

GHD

Nevada County Transportatio Comm
SR 49 Multimodal Corridor Study

Improved Level of Traffic Stress

Project No. **11194668**
Revision No. **-**
Date **09/04/2019**

FIGURE 5.1

\\ghdnet\ghd\US\Roseville\Projects\561\11194668\GIS\Maps\Working\Improvements LTS.mxd
Print date: 05 Sep 2019 - 11:06

Data source: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Created by: pthornton

6. Benefit-Cost Analysis

A comprehensive benefit-cost analysis incorporated air quality, safety, and demand-related impacts to monetize the benefits likely to result from the improvements recommended in this report. Analysis of monetized benefits was based on the societal cost information from Caltrans' 2016 Economic Parameters. This analysis was completed for the overall study area, as well as each identified segment area. Additionally, by accounting for operations and maintenance costs associated with improvements over a 20-year life cycle, the results of the benefit-cost analysis was annualized and projected to reflect a 20-year design condition.

6.1 Benefits

6.1.1 Demand Benefits

To estimate the induced demand associated with the improvements proposed in the SR 49 MMCP, the methodology described in the National Cooperative High Way Research Program (NCHRP) *Report 552: Guidelines for Analysis of Investments in Bicycle Facilities* was employed.

Bicyclists are more likely to utilize a facility if they live within a 1.5 mile buffer than if they live outside of this distance. Moreover, the highest likelihood of a member of the population to use the facility exists if they live within a 0.5 mile buffer around the facility. The NCHRP 552 methodology suggests that bicycle commute mode share can be utilized to estimate the number of existing and future bicycle ridership based on the population, and low, moderate, and high likelihood multipliers at 1.5 mile, 1 mile, and 0.5 mile buffers that surround a facility. Benefit values are based on the following assumptions:

- Existing bicyclists near a new facility will shift from a nearby facility to a new facility
- The new facility will induce new bicyclists as a function of the number of existing bicyclists relative to the attractiveness of the proposed facilities

The benefits of the induced demand resulting from improvements were monetized into mobility, health, recreation, and decreased auto-use benefits. These benefits were compared against the estimated costs of improvements to calculate a benefit-cost ratio on a project area-wide basis and by segment.

Each buffer area—at 0.5, 1, and 1.5 miles from the proposed improvements were created using a network-based analysis in a GIS environment. Nevada County parcel data was utilized to estimate the population associated with each buffer area by multiplying occupied parcels by a factor of 2.9, which represents that average number of persons per household.

A summary of monetized bicycle facility benefits is presented in Table 6.1. Annual benefits are estimated to be between $494,517 and $758,977.

Table 6.1 Bicycle Facility Benefits

Benefit	Value
Annual Mobility Benefit	
Off-Street Trail	$82,807
Bicycle Lane without Parking	$218,793
Annual Health Benefit	
High Estimate	$19,840
Moderate Estimate	$12,416
Low Estimate	$10,880
Annual Recreation Benefit	
High Estimate	$427,050
Moderate Estimate	$215,350
Low Estimate	$171,550
Annual Decreased Auto Use Benefit	**$10,487**
Total Annual Benefit, High	**$758,977**
Total Annual Benefit, Moderate	**$539,853**
Total Annual Benefit, Low	**$494,517**

6.1.2 Safety Benefits

The Highway Safety Improvement Program (HSIP) is a fundamental program providing federal aid under the Fixing America's Surface Transportation (FAST) Act, enacted in 2015. The programmatic purpose of HSIP is to reduce the number of serious and fatal traffic crashes on all public roads. While a federal program, HSIP funds are funneled through state Departments of Transportation to disperse funding. Caltrans' Division of Local Assistance (DLA) manages California's local share of HSIP funds.

In order to estimate the safety benefits associated with proposed improvements, a collision modification factor (CMF) analysis was performed using Caltrans' Highway Safety Improvement Program (HSIP) Analyzer tool. Collision modification factors are multiplicative factors used to calculate the expected reduction in collisions associated with a particular countermeasure. Crash Modification Factors (CMFs) have been established based on safety research over the last several decades; however, CMFs may not be available for all countermeasure types—despite the safety improvements provided by the improvement. The HSIP analyzer utilizes the CMFs published in the Local Roadway Safety Manual (Version 1.4, June 2018) and the societal crash cost based on the California 2016 Economic Parameters, which are also resident in Cal B/C—the statewide analysis tool for cost-benefit analyses. Completed HSIP Analyzer documents are provided in Appendix E.

The proposed improvements, collision data and estimated costs were utilized to compute benefit-cost ratios for roadway and intersection control improvements within each concept area. A maximum of three safety countermeasures are allowed for selection when applying for HSIP funding, and each are chosen based on the Collision Modification Factor (CMF) associated with the selected countermeasure and applicable crash data. This reduction in collisions is translated to a monetized safety benefit, which is compared against the countermeasure cost to produce a benefit-cost ratio.

6.1.3 Delay and Air Quality Benefits

In addition to mode shift and collision reduction benefits, two additional performance metrics were evaluated at each study intersection proposed for conversion to roundabout control. Consistent with the Caltrans Intersection Control Evaluation (ICE) process, the additional performance measures used to calculate the benefits of a roundabout compared to a stop control are:

- Delay Reduction Benefit (of a roundabout); and,
- Emissions Reduction Benefit (criteria pollutants only)

Delay measures the societal cost associated with the number of person-hours of delay at the intersection during the study period. Analysis tools used to calculate delay were developed using SIDRA (roundabouts and unsignalized intersections). The lower the delay cost the greater the relative benefit associated with the estimated amount of person hours of delay at a given intersection. Consistent with the Caltrans Life-Cycle Benefit-Cost Analysis Economic Parameters 2018, vehicle occupancy of 1.15 is used to convert delay to person-hours of delay at a value of $17.35 per vehicle-hour of delay.

The emissions performance measure calculates the societal cost associated with exposure to health based pollutants emitted by motor vehicles. Pollutant emissions are running emissions based on the average speed of vehicles traveling through the intersection during the study period. Given that average vehicular speed is the key on-road activity input for estimating emissions, the effects of delay (vehicle idling) are not explicitly captured by this analysis. Pollutant emissions evaluated include carbon monoxide (CO) and nitrogen oxides (NOx). The societal cost of emissions is calculated using emission data from the SIDRA software and cost per ton data from Caltrans Life-Cycle Benefit-Cost Analysis Economic Parameters 2018 for emissions.

Tables 6.2, 6.3, 6.4, and 6.5 provide the life-cycle monetized delay and emissions reduction benefit results for each intersection proposed for roundabout control (compares the life-cycle benefit of the estimated delay and emissions reduction costs between a stop control versus roundabout control type).

Table 6.2 SR 20/ SR 49 Life Cycle Roundabout Comparison (Segment 1)

Life Cycle Costs (20 year design)	No Build Alternative (Signal Controlled)	Roundabout Alternative
Mobility Costs		
Delay Costs	$35,100,000	$1,060,000
Fuel and GHG Costs	$2,101,000	$2,041,000
Total Life Cycle Costs (Opening Year $ - Net Present Value)	**$37,201,000**	**$3,101,000**

Table 6.3 SR 49/ Coyote Life Cycle Roundabout Comparison (Segment 1)

Life Cycle Costs (20 year design)	No Build Alternative (Signal Controlled)	Roundabout Alternative
Mobility Costs		
Delay Costs	$7,290,000	$270,000
Fuel and GHG Costs	$458,000	$633,000
Total Life Cycle Costs (Opening Year $ - Net Present Value)	**$7,748,000**	**$903,000**

Table 6.4 SR 49/Maidu/ Orchard Life Cycle Roundabout Comparison (Segment 2)

Life Cycle Costs (20 year design)	No Build Alternative (Signal Controlled)	Roundabout Alternative
Mobility Costs		
Delay Costs	$3,560,000	$190,000
Fuel and GHG Costs	$433,000	$609,000
Total Life Cycle Costs (Opening Year $ - Net Present Value)	**$3,993,000**	**$799,000**

Table 6.5 SR 49/Cement Hill/ West Broad Life Cycle Roundabout Comparison (Segment 3)

Life Cycle Costs (20 year design)	No Build Alternative (Signal Controlled)	Roundabout Alternative
Mobility Costs		
Delay Costs	$860,000	$140,000
Fuel and GHG Costs	$462,000	$571,000
Total Life Cycle Costs (Opening Year $ - Net Present Value)	**$1,322,000**	**$711,000**

6.2 Costs

Planning level cost estimates were developed based on per unit costs, quantities and right-of-way needs of overall improvements and by each segment. Unit costs were derived using the Caltrans cost database and industry standard values. Additionally, operations and maintenance costs were determined in order to calculate the projected cost of improvements over a 20-year design life cycle. Cost estimates for the overall project area and each intersection comprising the segment area, as well as operations and maintenance costs are provided in Appendix E.

Overall, the preferred recommended improvements for the entire corridor are estimated to cost approximately $20,725,000 to construct. Annual operations and maintenance costs are estimated at approximately $3 million.

6.3 Benefit-Cost Analysis

Table 6.6, Table 6.5, Table 6.6 and Table 6.7 summarize the results of the mode shift, and safety-associated benefit-cost analyses completed for the comprehensive study area, and each segment area in 2019. Additionally, these results were annualized to reflect a 20-year life cycle, which is also summarized in the following sections.

6.3.1 Corridor-Wide Benefit-Cost Analysis

Table 6.6 displays the benefit-cost summary for the overall study area. The selected counter measures associated with safety benefits result in an overall B/C of 1.66 in 2019 and through the 20-year cycle. This static safety benefit-cost is due to the 20-year life cycle of all of the selected countermeasures. While roundabouts yielded the highest costs associated the safety B/C analysis, these proposed improvements also provided the highest safety benefits, supporting strong safety B/C ratios throughout the study area.

The benefit-cost related to bicycle mode shift is nominal in 2019; however, the annualized benefit over a 20-year life cycle reflect a robust B/C of 1.33. Taken together, the total benefit-cost associated with the preferred recommended improvement concepts offer strong B/C calculations under existing and projected conditions, at 1.80 and 2.96, respectively.

Table 6.6 Benefit-Cost Summary (Comprehensive Study Area)

Total Annualized Benefit	2019		B/C	20 Year Adjusted		B/C
	Benefit	Cost		Benefit	Cost	
Bicycle Mode Shift Benefit	$758,977	$4,895,036	0.16	$10,587,686	$7,959,176	1.33
Safety Benefit	$35,600,261	$21,460,200	1.66	$35,600,261	$21,460,200	1.66
Delay	$2,237,500	$9,165,000	0.24	$44,750,000	$14,679,000	3.05
Total Benefit	**$38,596,738**	**$21,460,200**	**1.80**	**$90,937,947**	**$30,763,340**	**2.96**

Notes:

1. *Mode shift to Bicycle Transportation induced demand benefit was calculated using NCHRP 552 methodology; 20-year benefit estimated by multiplying the annualized benefit by a factor of 20 and applying a 4% year of year discount rate to account for the present worth of future dollars.*
2. *20-year life cycle cost was estimated using planning-level cost estimates and include 20 year life cycle of Class I shared use paths and Class II bicycle lanes*
3. *Safety Benefit analyzed using Caltrans HSIP analyzer and considers full project costs including set-aside for pedestrian improvements*
4. *This calculation was derived by adding the total project cost to the operations & maintenance costs associated with Class I paths*

6.3.2 Segment 1 Benefit-Cost Analysis

Table 6.7 displays the benefit-cost associated with Segment One preferred improvements. As displayed, the mode shift benefits under existing conditions are low at a B/C ratio of .16, due to the high-cost proposed Class I multi-purpose path in the segment area. The 20-year life cycle adjustment increases this B/C to 1.78. The safety benefit is a strong 1.92 over the 20-year life cycle, which buttresses the 2019 total B/C at 4.23.

Table 6.7 Benefit-Cost Summary (Segment 1)

Total Annualized Benefit	2019		B/C	20 Year Adjusted		B/C
	Benefit	Cost		Benefit	Cost	
Bicycle Mode Shift Benefit	$758,977	$4,745,583	0.16	$10,587,686	$5,934,213	1.78
Safety Benefit	$24,541,406	$12,813,000	1.92	$24,541,406	$12,813,000	1.92
Delay, Fuel & GHG Benefit	$2,047,250	$4,795,000	0.43	$40,945,000	$8,799,000	4.65
Total Benefit	**$27,347,633**	**$12,813,000**	**2.13**	**$76,074,092**	**$18,005,630**	**4.23**

Notes:

1. *Mode shift to Bicycle Transportation induced demand benefit was calculated using NCHRP 552 methodology; 20-year benefit estimated by multiplying the annualized benefit by a factor of 20 and applying a 4% year of year discount rate to account for the present worth of future dollars.*
2. *20-year life cycle cost was estimated using planning-level cost estimates and include 20 year life cycle of Class I shared use paths and Class II bicycle lanes*
3. *Safety Benefit analyzed using Caltrans HSIP analyzer and considers full project costs including set-aside for pedestrian improvements*
4. *This calculation was derived by adding the total project cost to the operations & maintenance costs associated with Class I paths*

6.3.3 Segment 2 Benefit-Cost Analysis

Table 6.8 displays the benefit-cost summary associated with Segment Two improvements. The safety benefit analysis results in a strong B/C of 1.46 over the 20-year life cycle. Similar to the comprehensive study area and segment one, the mode shift-associated benefit-cost becomes much stronger with a 20-year life cycle adjustment. However, in segment two, the B/C under existing is also strong. This is due to the Class I paths being comprised of concrete material—rather than decomposed granite—which have no associated operations and maintenance costs. This results in a much higher B/C of 15.36 with the 20-year adjustment. This strong B/C associated with both mode shift and safety benefits results in promising total benefit-cost ratios of 1.75 and 3.97 under existing and projected conditions, respectively.

Table 6.8 Benefit-Cost Summary (Segment 2)

Total Annualized Benefit	2019		B/C	20 Year Adjusted		B/C
	Benefit	Cost		Benefit	Cost	
Bicycle Mode Shift Benefit	$758,977	$689,347	1.10	$10,587,686	$689,347	15.36
Safety Benefit	$4,481,260	$3,079,400	1.46	$4,481,260	$3,079,400	1.46
Delay, Fuel & GHG Benefit	$159,700	$2,185,000	0.07	$3,194,000	$2,984,000	1.07
Total Benefit	**$5,399,937**	**$3,079,400**	**1.75**	**$18,262,946**	**$4,603,400**	**3.97**

Notes:

1. *Mode shift to Bicycle Transportation induced demand benefit was calculated using NCHRP 552 methodology; 20-year benefit estimated by multiplying the annualized benefit by a factor of 20 and applying a 4% year of year discount rate to account for the present worth of future dollars.*
2. *20-year life cycle cost was estimated using planning-level cost estimates and include 20 year life cycle of Class I shared use paths and Class II bicycle lanes*
3. *Safety Benefit analyzed using Caltrans HSIP analyzer and considers full project costs including set-aside for pedestrian improvements*
4. *This calculation was derived by adding the total project cost to the operations & maintenance costs associated with Class I paths*

6.3.4 Segment 3 Benefit-Cost Analysis

Table 6.9 displays the benefit-cost for Segment Three improvements. A 20-year adjustment results in a robust B/C of 3.10 for mode shift associated benefits, while existing conditions result in a weak B/C of .49. However, safety benefits support a strong total B/C of 2.18 throughout the 20-year life cycle, and 1.32 under existing conditions.

Table 6.9 Benefit-Cost Summary (Segment 3)

Total Annualized Benefit	2019		B/C	20 Year Adjusted		B/C
	Benefit	Cost		Benefit	Cost	
Bicycle Mode Shift Benefit	$758,977	$1,538,121	0.49	$10,587,686	$3,413,631	3.10
Safety Benefit	$6,577,595	$5,567,800	1.18	$6,577,595	$5,567,800	1.18
Delay, Fuel & GHG Benefit	$30,550	$2,185,000	0.01	$611,000	$2,896,000	0.21
Total Benefit	$7,367,122	$5,567,800	1.32	$17,776,281	$8,154,310	2.18

Notes:

1. *Mode shift to Bicycle Transportation induced demand benefit was calculated using NCHRP 552 methodology; 20-year benefit estimated by multiplying the annualized benefit by a factor of 20 and applying a 4% year of year discount rate to account for the present worth of future dollars.*
2. *20-year life cycle cost was estimated using planning-level cost estimates and include 20 year life cycle of Class I shared use paths and Class II bicycle lanes*
3. *Safety Benefit analyzed using Caltrans HSIP analyzer and considers full project costs including set-aside for pedestrian improvements*
4. *This calculation was derived by adding the total project cost to the operations & maintenance costs associated with Class I paths*

about

GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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Attachment O

Programming Sheet

Programming Sheet with Risk and OE

AMS ID: 0324000189 EA: 03-0N780 COUNTY: NEV ROUTE: 049 POSTMILE: 15.07/16.1

Project Manager:	VANDELL, SAMUEL L	PM Assistant:	MEDINA, ANTOINETTE M	Project Nickname:	Nev-49 Multimodal Corridor Project
Project Description - Long:	On SR 49 in Nevada County from the Nevada County Juvenile Hall driveway to SR 20.				
Work Description - Long:	Construct two roundabouts, pedestrian crossings, shared-use paths, sidewalks, lighting, and signage				

PPNO: 6128A | Program: other-local | RPT: No | Funding Candidate: No | PROGRAM YR: 2027 | Working Days: 120

Open for Time: Yes | Subprogram: Locally Generated Funds | CT Status: APL | RMP: | RMP Date:

10 Yr SHOPP: No | AADD: No | Dist Category: 25/26 DP | FED Aid Eligible:

MS	MS Description	MS Date	
C113	60% Staging/CR Review	12/22/2025	(A)
M010	APPROVE PID	12/15/2023	(A)
M015	PROG PROJ	06/02/2024	(A)
M020	BEGIN ENVIRO	07/17/2024	(A)
M040	BEGIN PROJ	06/07/2024	(A)
M120	CIRC DPR & DED EXT	09/10/2025	(A)
M200	PA&ED	03/18/2026	(T)
M215	BEGIN STRUC	04/28/2026	(T)
M221	RECEIVE COMPLETE	06/29/2026	(T)
M224	R/W REQTS	03/04/2026	(A)
M225	REGULAR R/W	03/18/2026	(T)
M275	GENERAL PLANS	08/28/2026	(T)
M300	CIRC PLANS IN DIST	11/30/2026	(T)
M313	60% CONST REVIEW	07/17/2026	(T)
M377	PS&E TO DOE	02/22/2027	(T)
M378	DRAFT STRUC PS&E	11/30/2026	(T)
M380	PROJ PS&E	03/22/2027	(T)
M410	R/W CERT	04/05/2027	(T)
M430	DCR	04/05/2027	(T)
M460	RTL	04/30/2027	(T)
M470	FUND ALLOCATION	06/25/2027	(T)
M480	HQ ADVERT	07/26/2027	(T)
M490	BIDS OPEN	08/30/2027	(T)
M495	AWARD	09/30/2027	(T)
M500	APPROVE CONTRACT	11/08/2027	(T)
M600	CONTRACT ACCEPT	11/08/2028	(T)
M700	FINAL REPORT	11/08/2029	(T)
M800	END PROJ EXP	05/08/2030	(T)
M900	FINAL PROJ	04/08/2031	(T)

Env Doc: NEPA:CE(23 USC 326) | CEQA:CE

Capital Cost Estimates ($k)

	Amount $k	EST Date
Roadway	11314	02/20/26
Structures	0	
Const Total	11314	
ROW	466	02/11/26
Total	11780	

Risk & Operating Expense Budget

	Risk Bud. ($k)	OE ($k)
Phase 0 - PAED	$0	$0
Phase 1 - PS&E	$0	$0
Phase 2 - RW	$0	$0
Phase 3 - Con	$0	$0
Phase 4 - Con Cap	$0	$0
Phase 9 - RW Cap	$0	$0
Total	$0	$0

Note: For Phase 0, 1, 2 and 3, only enter Risk Budget amount if not already entered in PRSM Workplan.

Funding Info ($k)

Fund Source	PA&ED	PS&E	ROW	CON	ROW CAP	CON CAP
2010720.100	1250	1750	25	2250	125	0
Total:	**1,250**	**1,750**	**25**	**2,250**	**125**	**0**

	Capital Cost Est.($k)
FY Mid M500-M600	2028
CC Esca. FY2 %:	3.30%
CC Esca. FY2 $:	11,687
CC Esca. Future %:	3.30%
CC Esca. Future $:	12,073
ROW CAPITAL $:	466
TOTAL $:	12,539

PROJECT SUPPORT COSTS ($k)

Phase Esc. Rate	PRIOR ACT $	ETC FY25/26 (0.00%)	FY26/27 (3.50%)	FY27/28 (3.50%)	FY28/29 (3.50%)	FY29/30 (3.50%)	Future (3.50%)	Total	Sup/Cap %
0	**1,041**	**208**	**0**	**0**	**0**	**0**	**0**	**1,250**	**9.97%**
1	**0**	**422**	**1,291**	**34**	**0**	**0**	**0**	**1,747**	**13.93%**
2	**0**	**4**	**10**	**5**	**5**	**2**	**0**	**25**	**0.20%**
3	**0**	**0**	**0**	**903**	**596**	**82**	**0**	**1,581**	**12.61%**
							TOTAL SUPPORT COSTS:	4,603	36.71%
							TOTAL PROJECT COSTS:	17,142	

PROJECT SUPPORT PYs

	Division	PRIOR ACT PYS	2026 ETC PYs	2027 ETC PYs	2028 ETC PYs	2029 ETC PYs	2030 ETC PYs	Future ETC PYs	Total ETC PYs
03	ADMN	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.10
03	CONS	0.06	0.00	0.00	4.53	2.50	0.00	0.00	7.09
03	ENVM	1.15	0.04	0.00	0.31	0.17	0.00	0.00	1.67
03	ESRV	0.41	0.10	0.18	0.10	0.06	0.00	0.00	0.85
03	MTCE	0.02	0.00	0.00	0.10	0.06	0.00	0.00	0.17
03	PPAM	0.02	0.25	0.32	0.35	0.37	0.31	0.00	1.63
03	PRJD	0.98	1.93	4.86	0.24	0.13	0.00	0.00	8.15
03	RWLS	0.28	0.01	0.04	0.06	0.04	0.00	0.00	0.42
03	SURV	0.57	0.00	0.01	0.06	0.04	0.00	0.00	0.69
03	TPLN	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.07
03	TROP	0.18	0.29	0.37	0.17	0.09	0.00	0.00	1.10
03	**TOTALS :**	3.81	2.65	5.78	5.92	3.46	0.31	0.00	21.94

	Division	PRIOR ACT PYS	2026 ETC PYs	2027 ETC PYs	2028 ETC PYs	2029 ETC PYs	2030 ETC PYs	Future ETC PYs	Total ETC PYs
59	GS	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.12
59	**TOTALS :**	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.12

AMS ID: 0324000189 EA: 03-0N780 COUNTY: NEV ROUTE: 049 POSTMILE: 15.07/16.1

Division	PRIOR ACT PYS	2026 ETC PYs	2027 ETC PYs	2028 ETC PYs	2029 ETC PYs	2030 ETC PYs	Future ETC PYs	Total ETC PYs
	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.72
TOTALS :	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.72
PROJECT TOTALS:	4.65	2.65	5.78	5.92	3.46	0.31	0.00	22.78

Comments:

Attachment P

Risk Register

Qualitative Risk Register

District: 03
EA:
EFIS:
Project Nickname: Nev-49 Multimodal Corridor Project
District: 03
EA: 0N780
EFIS: 0324000189
Status: APL
County: NEV
Route: 049
Program: OTHER-LOCAL
PM: VANDELL, SAMUEL L
Sort By: Probability/Impact Score
Risk Status: Active
Risk Owner: All

Export

New Risk

Risk 002 RBS: Owner: Updated:

Status: Active | Right of Way Leadtime | R/W | Stacey Sannar | 03-20-2026

Retire Edit

Description	Right of Way requested a lead time of 21 months and the current schedule provides 12.5 months from PA&ED to RW Cert. Due to the reduced lead time, there is insufficient time to initiate condemnation. Therefore, RW Cert could be delayed.
Status	
Response Options Type: Threat Strategy: Accept	Accept the risk and if condemnation is required, PM to seek an extension vote to provide RW with sufficient time to obtain an effective OP for Construction.

Impacts	Probability	Cost Impact		Schedule Impact		Probability/Impact			
		Cap	Sup	Dev	Con	Cap	Sup	Dev	Con
	Moderate	Moderate	Moderate	Moderate	Moderate	M	M	M	M

Assessment Notes	Parcel acquisitions are low-moderate risk

Site managed by North Region Data Management Unit. Contact [Jose Basa] for support.

Exhibit 25-R ATP Non-Infrastructure Project Work

Fill in the following items:

Date: (1)	19-05-22
Implementing Agency Name: (2)	Nevada County Transportation Commission
Project Number: (3)	
Project Location(s): (4a)	Nevada City: Sierra Academy of Expeditionary Learning
" " (4b)	Nevada City: Deer Creek Elementary School
" " (4c)	Nevada City: Eric Rood Government Center
" " (4d)	Nevada City: Nevada County Library
Project Description: (5)	The Safe & Healthy Mobility for All Education and Outreach Program will leverage th encourage residents of the Nevada City community to develop healthy active transp corridor is being imporoved to make travelling along it and crossing it safer and more increased walking and bicycling in the area. Several different types of community ed campaigns to spread educational content with students, families, and older adults in

Enter information in each Task Tab, as it applies (Task A, Task B, Task C, Task C, etc.)

For Department use only

You will not be able to fill in the following items. Items will auto-populate once you've entered all "Task" tabs that appl

Task Summary:

Click the links below to navigate to "Task Details" tabs:

Task	Task Name
Task "A"	Project Initiation and Management
Task "B"	Material Development and Outreach Campaign
Task "C"	Safe & Healthy Mobility for All Education and Outreach Program Events
Task "D"	Evaluation
Task "E"	
Task "F"	
Task "G"	
Task "H"	
Task "I"	
Task "J"	
	ATP
	Non-ATP
	GRAND T

ATP V.11 (04/27/2018)

TASK "A" DETAIL

Task Name (5a):	**Project Initiation and Management**			
Task Summary (5b):	Internal project kick-off, consultant selection and kick-off, ongoing project management			

	Start Date	End Date	Task Activities (6a):	
1.	Mar-27	Mar-27	Project Kick-Off Meeting with Caltrans	
2.	Apr-27	Apr-27	Request for Proposals	Copy of Procur
3.	Jun-27	Jun-27	Project Initiation Meeting with Consultant	
4.	Aug-27	Aug-27	Project Management Meetings	M
5.				
6.				
7.				
8.				
9.				
10.				

Staff Costs (7):

Staff Time (Agency) (7a):		ATP or Non-ATP (select one)	Staff Hours	Rate Per Hou
Party 1 -	NCTC Project Manager	ATP	30	$160.00
Party 2 -				
Party 3 -				
Party 4 -				
Party 5 -				
Party 6 -				
				Subtotal Agency (

Staff Time (Consultant) (7b):		ATP or Non-ATP (select one)	Staff Hours	Rate Per Hou
Party 1 -	Project Manager	ATP	10	$160.00
Party 2 -				
Party 3 -				
				Subtotal Consultant (

Total Staff Costs (Agency & Consultant) (7c):

Indirect Costs (8)

Approved ICAP (8a)?	☐	**If Approved ICAP box is checked, provide Rate** (8b):	

Task Notes (9):

Other Costs (10):
You will not be able to fill in the following items. The totals for each "Other Costs" category listed below will automati other costs tab:

To fill out an itemized cost for each "Other Cost", click below: Itemized "Other Costs" Section	Travel (10a):
	Equipment (10b):
	Supplies/Materials (10c):
	Incentives (10d):
	Other Direct Costs (10e):
	Other Direct Costs (10f):
	Total Other Costs (
	TASK GRAND TOTAL

Task "A" Other Costs:

Itemized Travel Cost (10a)

Please provide an itemized "travel" cost estimate for all travel costs appl

Travel (10a)

	Type of Travel	ATP or Non-ATP (select one)	Quantity
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Itemized Equipment Cost (10b)

Please provide an itemized "equipment" cost estimate for all equipment cost

Equipment (10b)

	Type of Equipment	ATP or Non-ATP (select one)
1.		
2.		
3.		
4.		
5.		

6.		
7.		
8.		
9.		
10.		
11.		
12.		

Itemized Supplies/Materials Cost (10c)		
Please provide an itemized "supplies/materials" cost estimate for all supplies/materi		
Supplies/Materials (10c)		
	Type of Supplies/Materials	**ATP or Non-ATP (select one)**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Task "A" Other Costs:

Itemized Incentives Cost (10d)		
Please provide an itemized "incentives" cost estimate for all incentives costs		
Incentives (10d)		
	Type of Incentives	**ATP or Non-ATP (select one)**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Itemized Other Direct Costs (10e)		
Please provide an itemized "other direct" cost estimate for all other costs a		
Other Direct Costs (10e)		
Type of Other Direct Costs		**ATP or Non-ATP (select one)**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Itemized Other Direct Costs (10f)		
Please provide an itemized "other direct" cost estimate for all other costs a		
Other Direct Costs (10f)		
Type of Other Direct Costs		**ATP or Non-ATP (select one)**
1.		
2.		
3.		
4.		
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12.		
TASK "B" DETAIL		
Task Name (5a):	**Material Development and Outreach Campa**	

Task Summary (5b):	**NCTC and the selected consultant will develop outreach materials to support the Safe & Healthy Mol follow templates developed by the Active Transportation Resource Center as appropriate, and will fe information as well as information about the SR 49 Corridor improvements. The Outreach Campaig residents of the immediate project area, and older adults who have expressed interes**

	Start Date	End Date	Activities (6a):	
1.	Jul-27	Aug-27	Develop Campaign Plan with Material Distribution Strategy and Event Plan	Campaign Plan PD
2.	Aug-27	Sep-27	Develop Outreach Materials for 3 Audiences: School Community, Nearby Residents, Older Adults/Wellness Enthusiasts	Editable PDF Even Media Content and Tab
3.	Aug-27	Sep-27	Develop event plan for community events hosted at the two schools and at the two general community locations (Govt. Center and Library)	PDF Plan for two e set up information,
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Staff Costs (7):

Staff Time (Agency) (7a):		**ATP or Non-ATP (select one)**	**Staff Hours**	**Rate Per Hour**
Party 1 -	NCTC Project Manager	ATP	10	$160.00
Party 2 -				
Party 3 -				
Party 4 -				
Party 5 -				
Party 6 -				
				Subtotal Agency Costs:

Staff Time (Consultant) (7b):		**ATP or Non-ATP (select one)**	**Staff Hours**	**Rate Per Hour**
Party 1 -	Project Manger	ATP	20	$160.00
Party 2 -	Project Implementation Staff	ATP	40	$120.00
Party 3 -	Administrative Support	ATP	8	$90.00
				Subtotal Consultant Cost):

Total Staff Costs (Agency & Consultant) (7c)**:**

Indirect Costs (8)

Approved ICAP (8a)**?**	☐	**If Approved ICAP box is checked, provide Rate** (8b)**:**	

Task Notes (9):

Other Costs (10):	
You will not be able to fill in the following items. The totals for each "Other Costs" category listed below will automati itemized other costs tab:	
To fill out an itemized cost for each "Other Cost", click below: Itemized "Other Costs" Section	Travel (10a):
	Equipment (10b):
	Supplies/Materials (10c):
	Incentives (10d):
	Other Direct Costs (10e):
	Other Direct Costs (10f):
	Total Other Costs (9g):
	TASK GRAND TOTAL (10):

Task "B" Other Costs:

Itemized Travel Cost (10a)

Please provide an itemized "travel" cost estimate for all travel costs applic

Travel (10a)

	Type of Travel	ATP or Non-ATP (select one)	Quantity
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Itemized Equipment Cost (10b)

Please provide an itemized "equipment" cost estimate for all equipment cost a

Equipment (10b)

	Type of Equipment	ATP or Non-ATP (select one)
1.		
2.		
3.		
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12.		

Itemized Supplies/Materials Cost (10c)		
Please provide an itemized "supplies/materials" cost estimate for all supplies/material		
Supplies/Materials (10c)		
	Type of Supplies/Materials	**ATP or Non-ATP (select one)**
1.	Black & White copies of event materials	ATP
2.	Color copies of flyers and event materials	ATP
3.	Flyers to post in community locations	ATP
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Task "B" Other Costs:

Itemized Incentives Cost (10d)		
Please provide an itemized "incentives" cost estimate for all incentives costs a		
Incentives (10d)		
	Type of Incentives	**ATP or Non-ATP (select one)**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Itemized Other Direct Costs (10e)

Please provide an itemized "other direct" cost estimate for all other costs ap

Other Direct Costs (10e)		
Type of Other Direct Costs		**ATP or Non-ATP (select one)**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Itemized Other Direct Costs (10f)

Please provide an itemized "other direct" cost estimate for all other costs ap

Other Direct Costs (10f)		
Type of Other Direct Costs		**ATP or Non-ATP (select one)**
1.		
2.		
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TASK "C" DETAIL

Task Name (5a):	**Safe & Healthy Mobility for All Education and Outreach Program Events**
Task Summary (5b):	Events will be held for the community surrounding the project area with a dual focus: provide bicycle and pede and introduce the community to the improved facility. Events will be held at two schools and two community fa or on weekends).

	Start Date	**End Date**	**Task Activities (6a):**	

1.	Feb-28	Jun-29	Active transportation safety education events at schools in the project vicinity (Sierra Academy of Expeditionary Learning and Deer Creek Elementary) - open to school communities and other local families	4 events (1 pe up of events
2.	Oct-27	May-29	Walk and Bike to School Day Encouragement Events at Sierra Academy and Deer Creek Elementary	4 events: 1 V school per
3.	Jun-28	Jun-29	Community bike rodeo education/engagement events to reach community near the project, teach them about the improved SR 49 corridor, and generally provide safe bicycle and pedestrian education	2 events (1 ev photos/write u
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Staff Costs (7):

Staff Time (Agency) (7a):		**ATP or Non-ATP (select one)**	**Staff Hours**	**Rate Per Hou**
Party 1 -	NCTC Project Manager	ATP	40	$160.00
Party 2 -				
Party 3 -				
Party 4 -				
Party 5 -				
Party 6 -				
				Subtotal Agency Cos

Staff Time (Consultant) (7b):		**ATP or Non-ATP (select one)**	**Staff Hours**	**Rate Per Hou**
Party 1 -	Project Manager	ATP	40	$160.00
Party 2 -	Project Implementation Staff	ATP	300	$120.00
Party 3 -	Administrative Support	ATP	20	$90.00
				Subtotal Consultant Cos

Total Staff Costs (Agency & Consultant) (7c):

Indirect Costs (8)

Approved ICAP (8a)**?**	☐	**If Approved ICAP box is checked, provide Rate** (8b)**:**	

Task Notes (9):

Other Costs (10):

You will not be able to fill in the following items. The totals for each "Other Costs" category listed below will automati **other costs tab:**

To fill out an itemized cost for each "Other Cost", click below: Itemized "Other Costs" Section	Travel (10a):
	Equipment (10b):
	Supplies/Materials (10c):
	Incentives (10d):
	Other Direct Costs (10e):
	Other Direct Costs (10f):
	Total Other Costs (10
	TASK GRAND TOTAL (1

Task "C" Other Costs:

Itemized Travel Cost (10a)

Please provide an itemized "travel" cost estimate for all travel costs applic

Travel (10a)

	Type of Travel	ATP or Non-ATP (select one)	Quantity
1.	Mileage to/from events (multiple staff, move supplies, etc)	ATP	1200
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Itemized Equipment Cost (10b)

Please provide an itemized "equipment" cost estimate for all equipment costs a

Equipment (10b)

	Type of Equipment	ATP or Non-ATP (select one)
1.	Traffic cones (Bike Rodeo)	ATP
2.	Mini Marker Cones Cones Set (Bike Rodeo)	ATP
3.	Stop Sign Paddle (Bike Rodeo)	ATP
4.		
5.		
6.		
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12.		

Itemized Supplies/Materials Cost (10c)

Please provide an itemized "supplies/materials" cost estimate for all supplies/materials

Supplies/Materials (10c)		
	Type of Supplies/Materials	**ATP or Non-ATP (select one)**
1.	Event craft supplies such as: Poster Board, Paint/Markers, Construction paper	ATP
2.	Bike Rodeo supplies such as: chalk, tape, sponges (obstacles), cardboard	ATP
3.		
4.		
5.		
6.		
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12.		
		Tot

Task "C" Other Costs:

Itemized Incentives Cost (10d)

Please provide an itemized "incentives" cost estimate for all incentives costs a

Incentives (10d)		
	Type of Incentives	**ATP or Non-ATP (select one)**
1.	Incentives for participants such as reflective zipper pull, "Spoke cards" or other bike decoration, reflective bracelet for successfully completing the lesson or bike rodeo (1 per student per year)	ATP
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Itemized Other Direct Costs (10e)	
Please provide an itemized "other direct" cost estimate for all other costs app	
Other Direct Costs (10e)	
Type of Other Direct Costs	ATP or Non-ATP (select one)
1.	
2.	
3.	
4.	
5.	
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7.	
8.	
9.	
10.	
11.	
12.	

Itemized Other Direct Costs (10f)	
Please provide an itemized "other direct" cost estimate for all other costs app	
Other Direct Costs (10f)	
Type of Other Direct Costs	ATP or Non-ATP (select one)
1.	
2.	
3.	
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9.	
10.	
11.	
12.	

TASK "D" DETAIL

Task Name (5a):	**Evaluation**
Task Summary (5b):	Conduct before and after active transportation user counts at project location

	Start Date	End Date	Task Activities (6a):	

1.	Apr-27	Jun-29	Active transportation user counts (screen line) before and after project	Sum
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Staff Costs (7):

Staff Time (Agency) (7a):		**ATP or Non-ATP (select one)**	**Staff Hours**	**Rate Per Hou**
Party 1 -	NCTC Project Manager	ATP	4	$160.00
Party 2 -				
Party 3 -				
Party 4 -				
Party 5 -				
Party 6 -				
				Subtotal Agency Cos

Staff Time (Consultant) (7b):		**ATP or Non-ATP (select one)**	**Staff Hours**	**Rate Per Hou**
Party 1 -	Project Manager	ATP	2	$160.00
Party 2 -	Project Implementation Staff	ATP	8	$120.00
Party 3 -	Administrative Support	ATP	10	$90.00
				Subtotal Consultant Cos

Total Staff Costs (Agency & Consultant) (7c):

Indirect Costs (8)

Approved ICAP (8a)**?**	☐	**If Approved ICAP box is checked, provide Rate** (8b)**:**	

Task Notes (9):

Other Costs (10):

You will not be able to fill in the following items. The totals for each "Other Costs" category listed below will automatical other costs tab:

To fill out an itemized cost for each "Other Cost", click below: Itemized "Other Costs" Section	Travel (10a):
	Equipment (10b):
	Supplies/Materials (10c):
	Incentives (10d):
	Other Direct Costs (10e):
	Other Direct Costs (10f):

	Total Other Costs (10g
	TASK GRAND TOTAL (1

Task "D" Other Costs:

Itemized Travel Cost (10a)

Please provide an itemized "travel" cost estimate for all travel costs applic

Travel (10a)				
	Type of Travel	ATP or Non-ATP (select one)	Quantity	
1.	Milage for screen line counts	ATP	200	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

Itemized Equipment Cost (10b)

Please provide an itemized "equipment" cost estimate for all equipment costs a

Equipment (10b)		
	Type of Equipment	ATP or Non-ATP (select one)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Itemized Supplies/Materials Cost (10c)

Please provide an itemized "supplies/materials" cost estimate for all supplies/materials

Supplies/Materials (10c)

	Type of Supplies/Materials	ATP or Non-ATP (select one)
1.	Black & White copies of count forms	ATP
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
		Tot

Task "D" Other Costs:

Itemized Incentives Cost (10d)

Please provide an itemized "incentives" cost estimate for all incentives costs a

Incentives (10d)

	Type of Incentives	ATP or Non-ATP (select one)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Itemized Other Direct Costs (10e)

Please provide an itemized "other direct" cost estimate for all other costs app

Other Direct Costs (10e)

	Type of Other Direct Costs	ATP or Non-ATP (select one)
1.		
2.		
3.		
4.		

5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Itemized Other Direct Costs (10f)		
Please provide an itemized "other direct" cost estimate for all other costs app		
Other Direct Costs (10f)		
Type of Other Direct Costs		**ATP or Non-ATP (select one)**
1.		
2.		
3.		
4.		
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12.		

k Plan

e infrastructure improvements on State Route 49 to ortation habits. By spreading the word that the SR 49 e convenient, the Program will work to spark ucation and encouragement events and outreach the community.

lies:

	ATP Cost	Non-ATP Cost
	$ 6,400.00	$ -
	$ 13,370.00	$ -
	$ 52,902.00	$ -
	$ 2,942.00	$ -
	$ -	$ -
	$ -	$ -
	$ -	$ -
	$ -	$ -
	$ -	$ -
	$ -	$ -
P Total:	$ 75,614.00	
P Total:		$ -
TOTAL	**$ 75,614.00**	

Deliverables (6b):
Meeting Notes
ement Procedures and Executed Consultant Contract
Meeting Notes
eeting Notes (10 meetings anticipated)

ur	ATP Total $	Non-ATP Total $
	$ 4,800.00	
Costs:	$ 4,800.00	$ -
ur	**ATP Total $**	**Non-ATP Total $**
	$ 1,600.00	
Costs:	$ 1,600.00	$ -
	$ 6,400.00	**$ -**
	ATP Indirect Costs (8c):	

cally calculate from information entered in the itemized

	ATP Total $	Non-ATP Total $
	$ -	$ -
	$ -	$ -
	$ -	$ -
	$ -	$ -
	$ -	$ -
	$ -	$ -
(10g):	$ -	$ -
. (11):	**$ 6,400.00**	**$ -**

licable to this task

	Units	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Travel Cost:	**$ -**	

applicable to this task

	Quantity	Cost $	ATP Total $	Non-ATP Total $

		Total:	$ -	$ -
		Total Equipment Cost:	$ -	

als cost applicable to this task

	Quantity	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Supplies/Materials Cost:	$ -	

applicable to this task

	Quantity	Cost $	ATP Total $	Non-ATP Total $

		Total:	$ -	$ -
		Total Incentives Cost:	$ -	

pplicable to this task				
	Quantity	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Other Direct Cost:	$ -	

pplicable to this task				
	Quantity	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Other Direct Cost:	$ -	

ign

bility for All Education and Outreach Program. Materials will
eature both active transportation safety and encouragement
n will have multiple audiences: students and their families,
st in improved active transportation options.

Deliverables (6b)**:**

)F

it Flyers (3); 11x17 Event Poster PDF (1); Email and Social
i Images (3); Printed copies for distribution as listed on OC

event types, approximately 5 pages each with supply and
facilitator notes

ATP Total $	Non-ATP Total $
$ 1,600.00	
$ 1,600.00	$ -
ATP Total $	**Non-ATP Total $**
$ 3,200.00	
$ 4,800.00	
$ 720.00	
$ 8,720.00	$ -
$ 10,320.00	**$ -**

ATP Indirect Costs (8c):	

ically calculate from information entered in the

ATP Total $	Non-ATP Total $
$ -	$ -
$ -	$ -
$ 3,050.00	$ -
$ -	$ -
$ -	$ -
$ -	$ -
$ 3,050.00	$ -
$ 13,370.00	**$ -**

cable to this task

	Units	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Travel Cost:	**$ -**	

pplicable to this task

	Quantity	Cost $	ATP Total $	Non-ATP Total $

		Total:	$ -	$ -
		Total Equipment Cost:	$ -	

s cost applicable to this task

	Quantity	Cost $	ATP Total $	Non-ATP Total $
	500	0.10	$ 50.00	
	2000	1.00	$ 2,000.00	
	200	5.00	$ 1,000.00	
		Total:	$ 3,050.00	$ -
		Total Supplies/Materials Cost:	$ 3,050.00	

ıpplicable to this task

	Quantity	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Incentives Cost:	$ -	

plicable to this task				
	Quantity	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Other Direct Cost:	$ -	

plicable to this task				
	Quantity	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Other Direct Cost:	$ -	

estrian safety education and encourage increased walking and bicycling, acilities, with attendance open to all (school events will be held after hours

Deliverables (6b):

er school per semester), flyers promoting events and photos/write

Walk to School (October) and 1 Bike to School (May) event per
year, flyers promoting events and photos/write up of events,
registration on National Event Database

vent at each community site), flyers promoting events and
ups of events

ır	ATP Total $	Non-ATP Total $
	$ 6,400.00	
ts:	$ 6,400.00	$ -

ır	ATP Total $	Non-ATP Total $
	$ 6,400.00	
	$ 36,000.00	
	$ 1,800.00	
ts:	$ 44,200.00	$ -
	$ 50,600.00	**$ -**

	ATP Indirect Costs (8c):	

cally calculate from information entered in the itemized

	ATP Total $	Non-ATP Total $
	$ 702.00	$ -
	$ 300.00	$ -
	$ 500.00	$ -
	$ 800.00	$ -
	$ -	$ -
	$ -	$ -
g):	$ 2,302.00	$ -
1):	**$ 52,902.00**	**$ -**

able to this task

	Units	Cost $	ATP Total $	Non-ATP Total $
	mi	$0.59	$ 702.00	
		Total:	$ 702.00	$ -
		Total Travel Cost:	**$ 702.00**	

pplicable to this task

	Quantity	Cost $	ATP Total $	Non-ATP Total $
	10	20.00	$ 200.00	
	2	25.00	$ 50.00	
	2	25.00	$ 50.00	

		Total:	$ 300.00	$ -
		Total Equipment Cost:	$ 300.00	

costs applicable to this task				
	Quantity	Cost $	ATP Total $	Non-ATP Total $
	8	50.00	$ 400.00	
	2	50.00	$ 100.00	
		Total:	$ 500.00	$ -
		al Supplies/Materials Cost:	$ 500.00	

oplicable to this task				
	Quantity	Cost $	ATP Total $	Non-ATP Total $
	800	1.00	$ 800.00	
		Total:	$ 800.00	$ -
		Total Incentives Cost:	$ 800.00	

licable to this task

	Quantity	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Other Direct Cost:	**$ -**	

licable to this task

	Quantity	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Other Direct Cost:	**$ -**	

Deliverables (6b):

nmary report and data collection tables

ur	ATP Total $	Non-ATP Total $
	$ 640.00	
ts:	$ 640.00	$ -

ur	ATP Total $	Non-ATP Total $
	$ 320.00	
	$ 960.00	
	$ 900.00	
ts:	$ 2,180.00	$ -
	$ 2,820.00	**$ -**

	ATP Indirect Costs (8c):	

lly calculate from information entered in the itemized

	ATP Total $	Non-ATP Total $
	$ 117.00	$ -
	$ -	$ -
	$ 5.00	$ -
	$ -	$ -
	$ -	$ -
	$ -	$ -

g):	$ 122.00	$ -
1):	**$ 2,942.00**	**$ -**

able to this task

	Units	Cost $	ATP Total $	Non-ATP Total $
	mi	$0.59	$ 117.00	
		Total:	$ 117.00	$ -
		Total Travel Cost:	**$ 117.00**	

pplicable to this task

	Quantity	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Equipment Cost:	**$ -**	

costs applicable to this task

Quantity	Cost $	ATP Total $	Non-ATP Total $
50	0.10	$ 5.00	
	Total:	$ 5.00	$ -
	al Supplies/Materials Cost:	**$ 5.00**	

pplicable to this task

Quantity	Cost $	ATP Total $	Non-ATP Total $
	Total:	$ -	$ -
	Total Incentives Cost:	**$ -**	

licable to this task

Quantity	Cost $	ATP Total $	Non-ATP Total $

		Total:	$ -	$ -
		Total Other Direct Cost:	$ -	

licable to this task

	Quantity	Cost $	ATP Total $	Non-ATP Total $
		Total:	$ -	$ -
		Total Other Direct Cost:	$ -	

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
ePPR-D03-2023-0006 v0

Amendment (Existing Project) ☒ YES ☐ NO — Date 04/08/2026

Programs ☐ LPP-C ☐ LPP-F ☐ SCCP ☐ TCEP ☐ STIP ☐ Other

District	EA	Project ID	PPNO	Nominating Agency	
03	0N780	0324000189	6128A	Caltrans District 3	
County	Route	PM Back	PM Ahead	Co-Nominating Agency	
Nevada County	49	15.070	16.100	Nevada County Transportation Commission	
				MPO	Element
				NON-MPO	Capital Outlay

Project Manager/Contact	Phone	Email Address
Sam Vandell	530-682-6478	sam.vandell@dot.ca.gov

Project Title

SR 49 Multimodal Corridor Improvements, Nevada City

Location (Project Limits), Description (Scope of Work)

In Nevada County in Nevada City from the Nevada County Juvenile Hall Driveway to Route 20. Install RRFBs, enhanced crossings with refuge islands, shared-use paths, sidewalk, lighting, addition of two roundabouts, reconfiguration of one intersection.

Component	Implementing Agency
PA&ED	Caltrans District 3
PS&E	Caltrans District 3
Right of Way	Caltrans District 3
Construction	Caltrans District 3

Legislative Districts

Assembly:	1	Senate:	1	Congressional:	1

Project Milestone		Existing	Proposed
Project Study Report Approved			
Begin Environmental (PA&ED) Phase		05/01/2024	
Circulate Draft Environmental Document	Document Type CE/CE		
Draft Project Report			
End Environmental Phase (PA&ED Milestone)		12/21/2025	
Begin Design (PS&E) Phase		02/23/2026	
End Design Phase (Ready to List for Advertisement Milestone)		04/19/2027	
Begin Right of Way Phase		02/23/2026	
End Right of Way Phase (Right of Way Certification Milestone)		04/19/2027	
Begin Construction Phase (Contract Award Milestone)		07/01/2027	
End Construction Phase (Construction Contract Acceptance Milestone)		06/20/2029	
Begin Closeout Phase		05/08/2030	
End Closeout Phase (Closeout Report)		04/08/2031	

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
PROJECT PROGRAMMING REQUEST (PPR)
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Date 04/08/2026

Purpose and Need

The SR 49 corridor in the project area lacks continuous bicycle or pedestrian infrastructure as well as safe crossings, limiting the ability of residents to safely access the Rood Government Center, recreation destinations, or connect from those facilities into Nevada City.

NHS Improvements ☐ YES ☒ NO	Roadway Class NA	Reversible Lane Analysis ☐ YES ☒ NO

Inc. Sustainable Communities Strategy Goals ☒ YES ☐ NO   Reduce Greenhouse Gas Emissions ☒ YES ☐ NO

Project Outputs

Category	Outputs	Unit	Total
Active Transportation	Crosswalk	EA	14
Operational Improvement	Intersection / Signal improvements	EA	2
Active Transportation	Pedestrian/Bicycle facilities miles constructed	Miles	1.35
Active Transportation	# Signs, lights, greenway, or other safety / beautification	EA	32

PPR ID
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Date 04/08/2026

Additional Information

Bike/Ped is checked

Performance Indicators and Measures						
Measure	**Required For**	**Indicator/Measure**	**Unit**	**Build**	**Future No Build**	**Change**
Congestion Reduction	LPPC, SCCP, LPPF	Change in Daily Vehicle Miles Travelled	Miles	0	0	0
			VMT per Capita	0	0	0

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST (PPR)

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ePPR-D03-2023-0006 v0

District	County	Route	EA	Project ID	PPNO
03	Nevada County	49	0N780	0324000189	6128A

Project Title

SR 49 Multimodal Corridor Improvements, Nevada City

Existing Total Project Cost ($1,000s)									
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Implementing Agency
E&P (PA&ED)		1,250						1,250	Caltrans District 3
PS&E				1,750				1,750	Caltrans District 3
R/W SUP (CT)									Caltrans District 3
CON SUP (CT)									Caltrans District 3
R/W				150				150	Caltrans District 3
CON					10,713			10,713	Caltrans District 3
TOTAL		1,250		1,900	10,713			13,863	
Proposed Total Project Cost ($1,000s)									Notes
E&P (PA&ED)		1,250						1,250	
PS&E				1,750				1,750	
R/W SUP (CT)									
CON SUP (CT)									
R/W				150				150	
CON					14,207			14,207	
TOTAL		1,250		1,900	14,207			17,357	

Fund #1:	ATP - Active Transportation Program (RMR-ATP) – SB1 (Committed)								Program Code
Existing Funding ($1,000s)									20.XX.720.100
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)		1,250						1,250	
PS&E				1,750				1,750	$1250 PAED voted 03/21/24
R/W SUP (CT)									
CON SUP (CT)									
R/W				150				150	
CON					10,713			10,713	
TOTAL		1,250		1,900	10,713			13,863	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)		1,250						1,250	
PS&E				1,750				1,750	
R/W SUP (CT)									
CON SUP (CT)									
R/W				150				150	
CON					10,713			10,713	
TOTAL		1,250		1,900	10,713			13,863	

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
PROJECT PROGRAMMING REQUEST (PPR)
PRG-0010 (REV 08/2020)

PPR ID
ePPR-D03-2023-0006 v0

Fund #2:	CMAQ - Congestion Mitigation (Committed)								Program Code
Existing Funding ($1,000s)									
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									Nevada County Transportation Comm
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON					3,494			3,494	
TOTAL					3,494			3,494	

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
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Complete this page for amendments only Date 04/08/2026

District	County	Route	EA	Project ID	PPNO
03	Nevada County	49	0N780	0324000189	6128A

SECTION 1 - All Projects

Project Background

The SR 49 corridor in the project area lacks continuous bicycle or pedestrian infrastructure as well as safe crossings, limiting the ability of residents to safely access the Rood Government Center, recreation destinations, or connect from those facilities into Nevada City.

Programming Change Requested

Reason for Proposed Change

Baseline Agreement

If proposed change will delay one or more components, clearly explain 1) reason for the delay, 2) cost increase related to the delay, and 3) how cost increase will be funded

Other Significant Information

SECTION 2 - For SB1 Project Only

Project Amendment Request (Please follow the individual SB1 program guidelines for specific criteria)

n/a

Approvals

I hereby certify that the above information is complete and accurate and all approvals have been obtained for the processing of this amendment request.

Name (Print or Type)	Signature	Title	Date
Sam Vandell		Project Manager	4/9/2026

SECTION 3 - All Projects

Attachments
1) Concurrence from Implementing Agency and/or Regional Transportation Planning Agency
2) Project Location Map

File: 71.0

MEMORANDUM

TO: Sam Vandell, Caltrans District 3, Project Manager

FROM: Michael Woodman, Executive Director

SUBJECT: Concurrence PPR - 0N780

DATE: April 09, 2026

The Nevada County Transportation Commission, as the Regional Transportation Planning Agency for Nevada County has reviewed the PPR for the SR 49 Multimodal Corridor Improvement Project - 0N780 and provides concurrence.

101 Providence Mine Road, Suite 102, Nevada City, California 95959 • (530) 265-3202 • Fax (530) 265-3260
E-mail: nctc@nccn.net • Web Site: www.nctc.ca.gov

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	15.07/16.1		

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

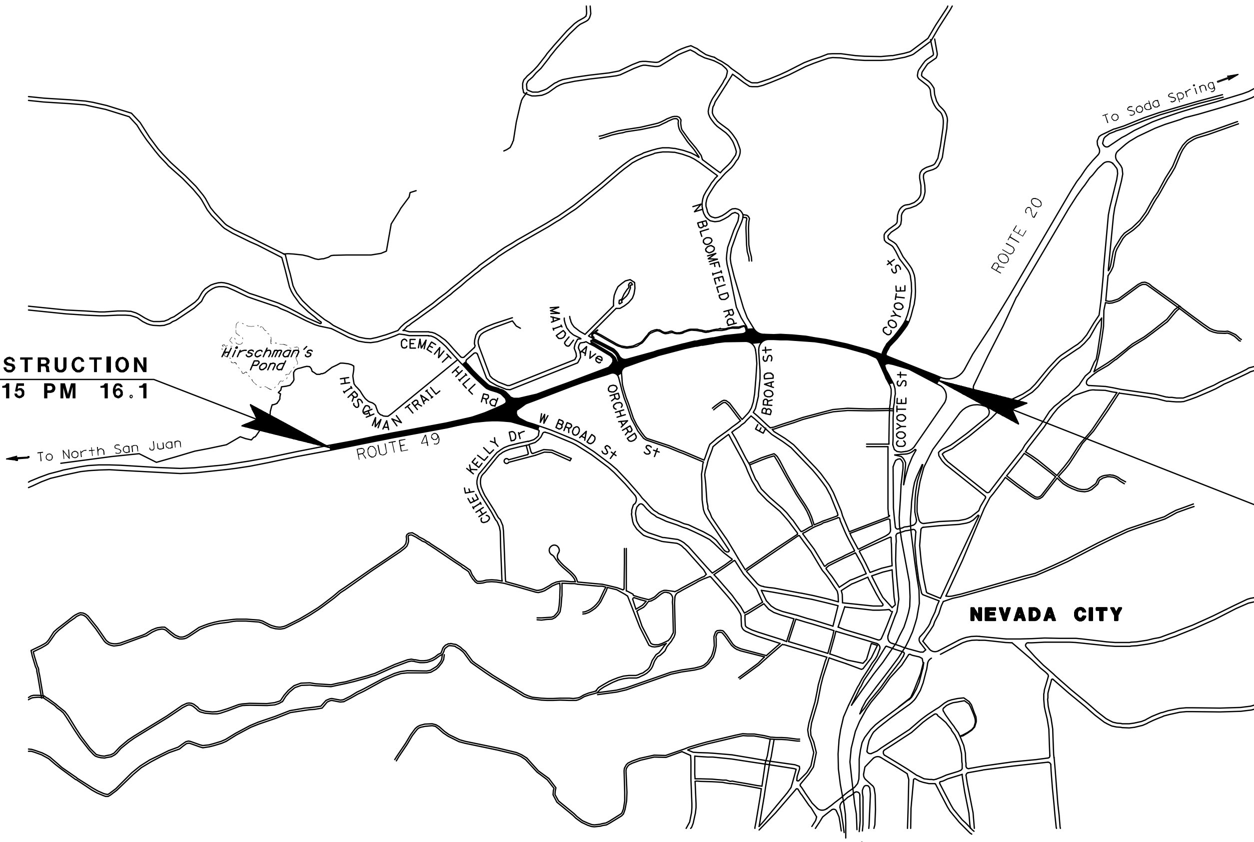
PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN NEVADA COUNTY
IN NEVADA CITY
FROM THE NEVADA COUNTY JUVENILE HALL DRIVEWAY
TO ROUTE 20

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2024

END CONSTRUCTION
Sta "A" 66+98.15 PM 16.1



BEGIN CONSTRUCTION
Sta "A" 14+00.00 PM 15.1

NO SCALE

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

PROJECT MANAGER	DESIGN MANAGER
SAM VANDELL	R SCOTT FOSTER

PROJECT ENGINEER — DATE
REGISTERED CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CONTRACT No.	**03-0N7804**
PROJECT ID	**0324000189**

DATE PLOTTED => 5/29/2025
TIME PLOTTED => 2:45:52 PM

LAST REVISION 00-00-00